

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
	)	

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

LISA A. GROW





1 career, I held many engineering positions throughout the  
2 Company.

3 Q. What is the purpose of your testimony in this  
4 matter?

5 A. The purpose of my testimony is to 1) provide a  
6 general overview of Idaho Power and its core business  
7 practices, 2) generally discuss Idaho Power's business  
8 management and other financial considerations, 3) present  
9 the Company's request in this case and inform the Idaho  
10 Public Utilities Commission ("Commission") of the financial  
11 and economic factors driving the need for the requested  
12 base revenue adjustment, and 4) detail proposed rate  
13 mitigation steps taken by the Company and the options  
14 available to customers seeking assistance in managing their  
15 energy costs.

16 Q. Are you the witness that can address overall  
17 Company policy?

18 A. Yes.

19 Q. Please summarize your testimony.

20 A. The Company's last general rate case ("GRC")  
21 was in 2011, and the number of Idaho Power customers has  
22 increased by about 23 percent over the past decade. To  
23 serve that growing customer base, the Company has made  
24 significant investments in its infrastructure to maintain,  
25 improve, and protect the electrical system. Idaho Power

1 will continue to have considerable ongoing investments in  
2 response to rapid customer and load growth, as well as  
3 aging infrastructure.

4 The Company has worked hard to keep Operations &  
5 Maintenance ("O&M") expenses low for the past decade, with  
6 an average annual growth rate of only 1 percent since 2012.  
7 This equates to a total increase of just over \$50 million  
8 to serve approximately 117,000 new customers, which  
9 represents an average annual growth rate of 2 percent since  
10 Idaho Power's last GRC. The request in this case is largely  
11 focused on the rate base additions needed to reliably serve  
12 our customers and, to a lesser extent, growth in O&M  
13 expenses.

14 Our case demonstrates a strong track record of  
15 managing expenses and presents the necessary investments to  
16 continue providing safe, reliable electric service to our  
17 growing customer base. In recognition that price increases  
18 can be difficult for customers to manage in today's  
19 economic environment, Idaho Power will present several ways  
20 it was able to mitigate the requested increase in this  
21 case.

## 22 I. COMPANY OVERVIEW

23 Q. Please provide an overview of Idaho Power.

24 A. Idaho Power Company is headquartered in Boise,  
25 Idaho, and has been a locally operated energy company since

1 1916. The Company has approximately 2,000 employees that  
2 proudly serve approximately 620,000 customers over a  
3 24,000-square-mile service area in Idaho and Oregon. With  
4 17 low-cost hydropower projects at the core of its diverse  
5 energy mix, Idaho Power's residential, business, and  
6 agricultural customers pay among the nation's lowest prices  
7 for electricity.

8 Q. What is Idaho Power's overall business focus?

9 A. Idaho Power endeavors to remain a financially  
10 strong, independent, vertically integrated utility  
11 supported by a safe and engaged work force dedicated to  
12 providing safe, reliable, and affordable electric service  
13 to our customers.

14 Q. What are the key elements that guide Idaho  
15 Power's company culture?

16 A. Idaho Power's culture is guided by our  
17 purpose, values, and our commitment to each other. We are  
18 passionate about powering lives with reliable, affordable,  
19 clean energy, while developing innovative solutions every  
20 day. Serving those who depend on us is at the center of  
21 everything we do. We prosper by committing to the needs,  
22 safety and success of our customers, communities,  
23 employees, and owners.

24 Our Company's three core values are Safety First,  
25 Integrity Always, and Respect for All. Safety First - We

1 are committed to the safety of our employees, our  
2 customers, and the communities we serve. Integrity Always -  
3 Customers, owners, and employees can count on us to be fair  
4 and ethical. Respect for All - We treat our customers,  
5 partners, employees, and the environment with care and  
6 dignity.

7 And finally, we are committed to an inclusive  
8 environment where we are all valued, respected, and given  
9 equal consideration for our contributions. We believe that  
10 to be successful as a company we must be able to innovate  
11 and adapt, which only happens when we seek out and value  
12 diverse backgrounds, opinions, and perspectives.

13 Q. What is Idaho Power's philosophy regarding  
14 safety?

15 A. Because safety is a core value at Idaho Power,  
16 the Company embraces and fosters a Safety First culture.  
17 The Safety First culture recognizes that Idaho Power's  
18 family of employees is the Company's greatest asset and  
19 emphasizes that each employee's most important  
20 responsibility in their daily work is safety and that no  
21 work is so critical that safety should be disregarded. The  
22 Company is committed to the safety of its employees,  
23 customers, and the public.

24 Q. How does Idaho Power measure the reliability  
25 of its distribution system?

A. Idaho Power primarily uses four reliability indices to measure reliability of the system:

SAIFI: System Average Interruption Frequency Index

SAIDI: System Average Interruption Duration Index

## CEMI: Customers Experiencing Multiple Interruptions

MAIFI: Momentary Average Interruption Frequency  
Index.

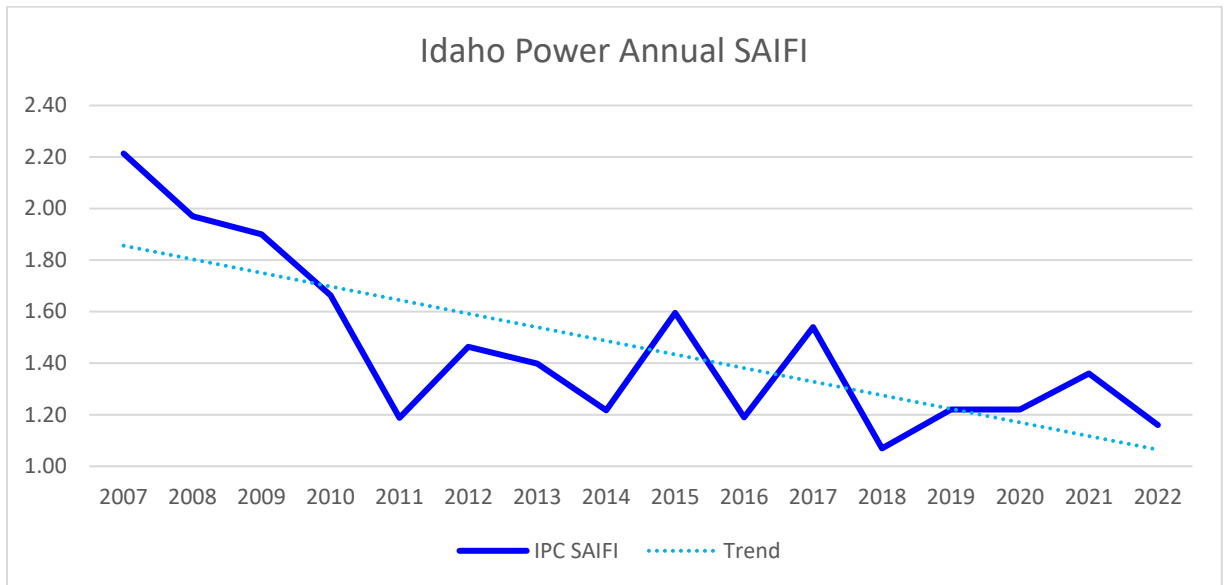
SAIFI, SAIDI, and CEMI are indices that measure sustained outages. A sustained outage is defined as customers out of power for five minutes or longer. MAIFI is an index that measures momentary interruptions. Momentary interruptions are when customers are out of power for fewer than five minutes.

Idaho Power tracks performance for all of the indices I just noted, but the primary focus of Idaho Power's distribution reliability programs over the years has been to reduce the number of customer outages as measured by SAIFI.

Q. What are Idaho Power's reliability results?

A. Figure 1 shows Idaho Power's improvement in annual SAIFI since 2007. In 2022, Idaho Power customers experienced an average of 1.16 sustained outages, which was about 47 percent lower than 2007 when SAIFI was about 2.20 and 20 percent lower than in 2013 (10 years prior) when SAIFI was 1.40.

1 **FIGURE 1**  
2 IDAHO POWER ANNUAL SAIFI



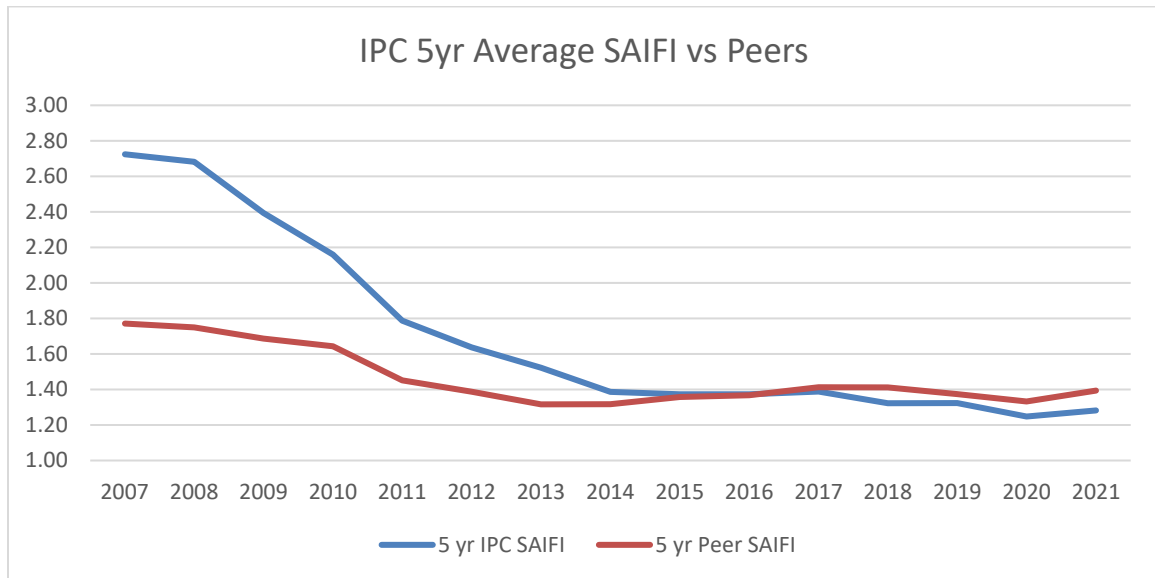
3  
4 System reliability can be dependent on major weather  
5 events, specifically major wind or winter storms. Because  
6 of the variation in reliability results due to weather, it  
7 is helpful to look at five-year average SAIFI values to see  
8 trends in performance.

9 Idaho Power also performs annual reliability  
10 benchmarking with its northwest peer utilities. FIGURE 2  
11 shows the five-year average of Idaho Power's SAIFI compared  
12 to the five-year average SAIFI of our seven peer utilities:  
13 NorthWestern Energy, Pacific Power, Rocky Mountain Power,  
14 Avista, Sierra Pacific Power, Portland General Electric,  
15 and Puget Sound Energy. In the earlier years, shown on  
16 Figure 2, Idaho Power lagged behind its peer utilities by  
17 more than 50 percent and by about 15 percent in 2013. Over  
18 the past four years, Idaho Power leads the peer utility

1 group by an average of 11 percent.<sup>1</sup>

2 **FIGURE 2**

3 FIVE-YEAR AVERAGE SAIFI: IDAHO POWER VS PEERS



4

5 Q. Where does Idaho Power focus its efforts to  
6 maintain and improve reliability?

7 A. Idaho Power makes significant efforts toward,  
8 and investment in, improving and maintaining reliable  
9 service to its customers. The Company recognizes that  
10 providing safe, reliable service is among its highest  
11 operational priorities for our customers. Idaho Power has  
12 completed many projects in recent years to either maintain  
13 or improve reliability.

14 At the generation level, Idaho Power must ensure it  
15 has sufficient resources to fulfill its obligation to  
16 reliably and safely serve customers, especially in light of

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<sup>1</sup> The data is through 2021. Idaho Power does not have all peer data through 2022 at this point in time.

1 the unprecedented growth Idaho Power has experienced over  
2 the past decade. In their testimonies, Company Witnesses  
3 Mr. Eric Hackett and Ms. Lindsay Barretto provide detailed  
4 discussions of investments Idaho Power has made in new and  
5 existing generation resources to ensure sufficient,  
6 reliable generation capacity to serve customers.

7 With regard to the transmission and distribution  
8 ("T&D") systems, Idaho Power has made significant  
9 investments to maintain aging infrastructure while  
10 accommodating growth at the local level. These projects  
11 include work such as the replacement of distribution wood  
12 cross-arms and associated wood pins, the injection and  
13 replacement of certain underground distribution cables,  
14 vegetation management, and improvements to portions of the  
15 transmission system and substations. Company Witness Mr.  
16 Mitch Colburn describes in greater detail the Company's  
17 reliability-related investments and activities in his  
18 testimony.

19 Q. What is the Company's overall approach to  
20 providing a positive customer experience?

21 A. Idaho Power strives to be regarded as an  
22 exceptional utility by the customers it serves. To  
23 accomplish this, the Company must provide superior and  
24 satisfying customer service and experiences that meet or  
25 exceed its customers' needs and expectations.



1           The Company continually focuses on ways to cost-  
2 effectively improve its relationships with customers by  
3 assessing customer perception of the Company, identifying  
4 performance and experience gaps based on customer feedback,  
5 and reviewing industry best practices and trends.

6           Q.     What recent initiatives has Idaho Power  
7 undertaken to enhance customer satisfaction?

8           A.     The Company has recently implemented  
9 enhancements to its digital offerings and solutions to  
10 better align with industry trends and evolving customer  
11 preferences and expectations. Most notably, the Company's  
12 investment in modernizing its My Account platform stemmed  
13 from customers' desire to digitally self-serve and manage  
14 their accounts. By customers using their preferred method  
15 of self-service through My Account, the Company was able to  
16 manage customer service employee growth while our number of  
17 customers grew over the past decade. Further, in early  
18 2022, the Company released a Mobile Application ("App") on  
19 the Apple and Google Play stores in response to the  
20 increasing shift in customers' preferences toward accessing  
21 their account and service-related information on the go. The  
22 App provides enrolled customers with real-time alerts  
23 regarding important billing information and connection or  
24 outage status affecting one of their registered addresses.

25           The Direct Testimony of Company Witness Mr. Bo

1 Hanchey describes more fully the Company's efforts to  
2 enhance customers' experiences with our Company.

3 **II. IDAHO POWER'S BUSINESS MANAGEMENT OVERVIEW**

4 **AND FINANCIAL STATUS**

5 Q. When was Idaho Power's last GRC in Idaho?

6 A. Idaho Power's last Idaho GRC, Case No. IPC-E-  
7 11-08, was filed on June 1, 2011, with rates becoming  
8 effective January 1, 2012.

9 Q. What are the primary factors that have  
10 contributed to the Company's ability to avoid filing a  
11 general rate case for the last 12 years?

12 A. There are a number of factors that have  
13 contributed to the Company's ability to avoid a GRC over  
14 the last 12 years. First, the Company has diligently  
15 managed its O&M expenses by creating a cost-conscious  
16 culture among employees. As I mentioned earlier in my  
17 testimony, O&M increased an average of 1 percent since  
18 2012, while inflation averaged approximately 2 percent a  
19 year and customers grew by approximately 2 percent a year-  
20 for a combined 4 percent increase.

21 Second, customer growth, and the associated growth  
22 in sales revenue, has helped reduce the financial impact of  
23 increasing costs over that period. Third, the Company's  
24 annual adjustment mechanisms, the Power Cost Adjustment  
25 ("PCA") and Fixed Cost Adjustment ("FCA"), have provided

1 timely revenue support addressing increases in power costs  
2 and decreases in residential use-per-customer,  
3 respectively. Finally, the Commission has approved several  
4 single-issue adjustments to rate recovery, including, but  
5 not limited to, the addition of the Langley Gulch natural  
6 gas-fired power plant, the establishment of rate mechanisms  
7 to recover the cost of early coal plant exits, recovery of  
8 Energy Imbalance Market costs, as well as deferred  
9 accounting treatment for certain incremental costs,  
10 including those related to wildfire mitigation.

11 Q. Beyond the benefit to customers of avoiding  
12 filing a GRC for the last 12 years, will the factors you  
13 listed impact this case?

14 A. Yes, customers benefit from each of the items  
15 that I listed in this case, as each of those benefits are  
16 built into our request.

17 Q. Please describe the Company's efforts to  
18 reduce expenses related to hiring employees.

19 A. All new, un-budgeted positions must be  
20 reviewed and approved by the vice president responsible for  
21 each business unit. Despite adding approximately 117,000  
22 customers between 2012 and 2022, employee headcount has  
23 actually decreased by a total of 17 people over the same  
24 time period.

1           Q.       What is Idaho Power's general compensation  
2 philosophy?

3           A.       As described more fully by Company Witness Ms.  
4 Sarah Griffin in her testimony, Idaho Power's compensation  
5 philosophy is to provide a balanced, competitive, and  
6 sustainable total compensation or "total rewards" package,  
7 ensuring it attracts and retains high quality employees and  
8 motivates them to achieve performance goals that benefit  
9 customers and shareholders. Maintaining a competitive total  
10 rewards package allows the Company to recruit and retain  
11 its highly skilled workforce. The competitiveness of Idaho  
12 Power's total rewards package also supports the Company's  
13 intent to maintain a flexible workforce that can easily  
14 adjust work duties and assignments to meet changing demands  
15 and operational needs, which in turn keep the Company's  
16 costs of service lower.

17          Q.       Please describe the Company's efforts to  
18 control budgets.

19          A.       Idaho Power employs a robust capital and O&M  
20 budgeting process. The capital budget process begins with  
21 maintenance personnel, planners, and others within the  
22 business identifying needs and submitting projects to  
23 business unit management. Business unit management reviews  
24 submitted projects and prioritizes them based on spending  
25 guidelines provided by senior management.

1 O&M budgets are established based on extensive  
2 discussions between the business units and senior  
3 management and represent a combination of prior year  
4 experience plus or minus identified changes and  
5 adjustments. As the Company prepared its O&M budgets for  
6 2023, the target was based on holding to a 2022 budget  
7 adjusted down for known items and with only identified  
8 unavoidable increases allowed as an adjustment.

9 Throughout the year, senior management reviews the  
10 status of spending for both O&M and capital against updated  
11 estimates as well as original budget. Variances are  
12 reviewed and analyzed in order to determine changes that  
13 may need to be made during the year to manage to budgeted  
14 levels of spend.

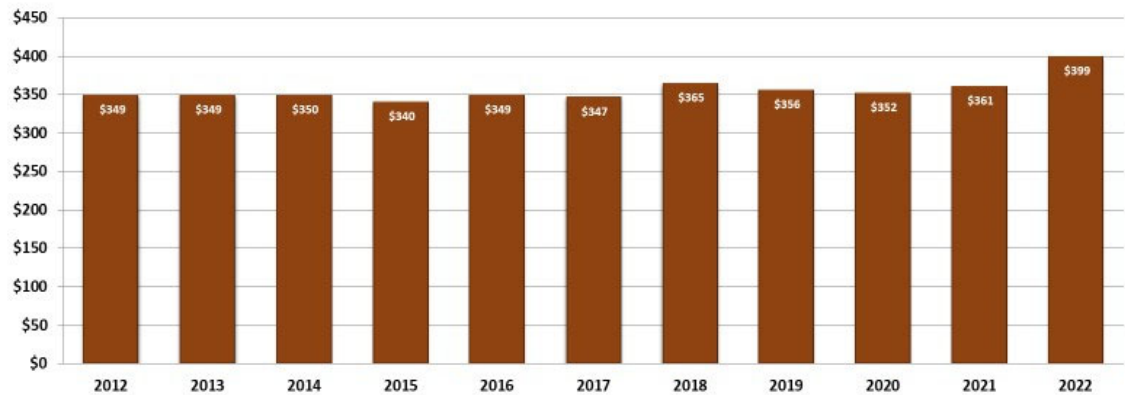
15 Q. Have the Company's cost-control measures  
16 applied over the last decade been successful?

17 A. Yes, very much so. As can be seen in Figure 3,  
18 the Company's overall O&M expenses, excluding power supply  
19 expenses and demand-side management expenses, have remained  
20 relatively flat between 2012 and 2021, with an uptick in  
21 2022 resulting from recent inflationary pressures. Even  
22 with those recent inflationary factors, the Company has  
23 held O&M expenses to an average annual growth rate of just  
24 1 percent over the last decade.

25

**FIGURE 3**  
2012-2022 OPERATING AND MAINTENANCE EXPENSES

Idaho Power  
2012-2022 Operating and Maintenance (O&M) Expenses (\$ Millions)  
Excludes Purchased Power, Fuel Expense, Power Cost Adjustment and DSM



Q. Are there any other factors that have

contributed to Idaho Power's ability to avoid a GRC over the last decade?

A. Yes. Since 2009, the Company has been subject to an Accumulated Deferred Investment Tax Credits ("ADITC")/Revenue Sharing Mechanism that includes provisions for the accelerated amortization of ADITC to help achieve a minimum specified percent Idaho-jurisdiction return on year-end equity ("Idaho ROE"), currently set at 9.4 percent. The mechanism also provides for the potential sharing between Idaho Power and Idaho customers of Idaho-jurisdictional earnings in excess of a 10.0 percent Idaho ROE. Under the current mechanism, the ADITC and sharing thresholds are to be reset at a GRC to align the sharing

1 threshold with the then-authorized ROE and the use of  
2 accelerated amortization of ADITC at 95 percent of the  
3 authorized ROE.

4 In addition to sharing earnings with customers over  
5 the 10.0 percent Idaho ROE threshold, this mechanism has  
6 created an additional incentive to the Company to preserve  
7 ADITCs to be available to support earnings for as long as  
8 possible. While the Company endeavors to thoughtfully  
9 manage its costs as a standard practice, this additional  
10 financial incentive has been beneficial for customers,  
11 because the Company has continually looked for creative  
12 ways to maximize its Idaho ROE without filing a GRC.

13 Because the Company has not used the full \$45 million of  
14 ADITC available, as of December 31, 2022, the credits can  
15 be utilized in future periods under the mechanism or the  
16 historical standard ITC amortization method.

17 Q. What is the amount of earnings Idaho Power has  
18 shared with its customers under the earnings sharing  
19 mechanism since its last general rate case?

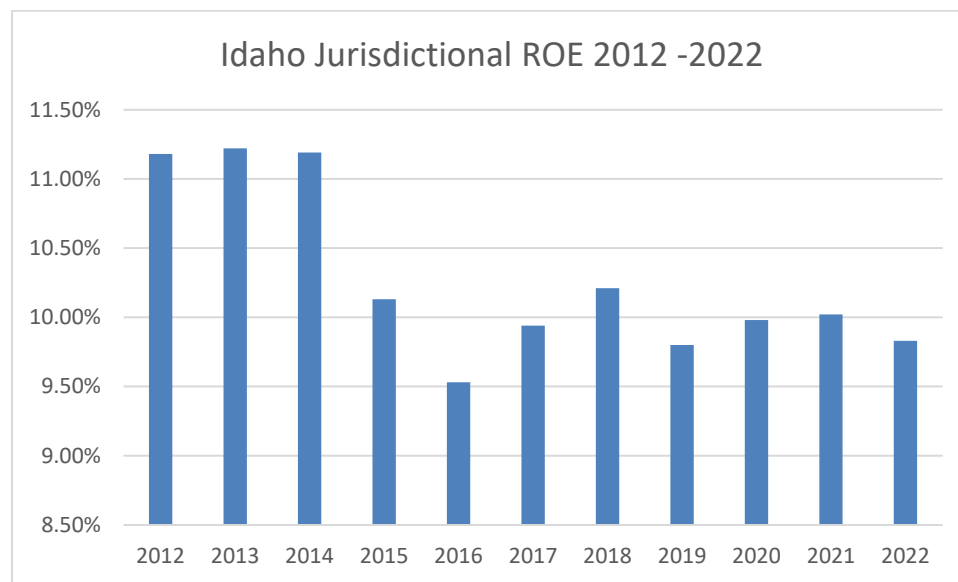
20 A. Since the Company's last general rate case the  
21 Company has shared \$126,752,809 of earnings with its  
22 customers under the ADITC/Revenue Sharing Mechanism.

23 Q. Have Idaho Power's cost management efforts,  
24 along with the other factors just described, resulted in

1 the Company earning a reasonable rate of return on equity  
2 between 2012 and 2022?

3 A. Generally, yes. As can be seen in Figure 4,  
4 the Company has earned between a 9.5 percent and 10 percent  
5 Idaho jurisdictional ROE on an actual basis over that time  
6 period.

7 **FIGURE 4**  
8 IDAHO JURISDICTIONAL ROE 2012-2022



9  
10 Q. Considering the earnings performance presented  
11 on the above chart, why do you believe it is necessary to  
12 increase rates for customers now?

13 A. As I will detail later in my testimony, since  
14 2012, the Company has invested approximately \$1.7 billion  
15 dollars on new property, plant, and equipment to serve its  
16 customers safely and reliably. In addition, in 2023, the  
17 Company expects to invest up to \$700 million in additional  
18 capital projects with nearly \$400 million in O&M expense.



1 Considering the incremental depreciation and interest  
2 expense associated with this significant capital  
3 investment, Idaho Power will no longer be able to maintain  
4 a reasonable rate of return without the requested rate  
5 relief.

6 Q. Could Idaho Power utilize accelerated  
7 amortization of ADITC to avoid the need for a GRC for at  
8 least one more year?

9 A. Unfortunately, no. As noted in the Company's  
10 first quarter 2023 earnings release, Idaho Power plans to  
11 utilize at least \$15 million of accelerated amortization of  
12 ADITC to reach a 9.4 percent Idaho ROE. In 2024, the year  
13 rates would go into effect from this case, [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 **III. CASE OVERVIEW AND DRIVERS**

17 Q. What is Idaho Power's requested revenue  
18 increase in this case?

19 A. As discussed further in the Direct Testimonies  
20 of Company Witnesses Mr. Timothy Tatum and Ms. Kelley Noe,  
21 the Company is requesting rate relief of approximately  
22 \$111.3 million, which is net of a corresponding proposed  
23 PCA decrease of \$173.4 million and a reduction to annual  
24 Energy Efficiency Rider collection of \$3.5 million. If  
25 approved, this request would result in an overall increase

1 to adjusted base revenue of 8.61 percent effective January  
2 1, 2024.

3 Q. Why do you believe this increase is necessary?

4 A. This increase is important for Idaho Power to  
5 achieve fair and timely recovery of its prudently incurred  
6 expenses and a reasonable return on the Company's  
7 investment in its electrical system, which today's rates  
8 will not fully provide. High customer growth in demand for  
9 electricity, aging infrastructure, and higher compliance  
10 and reliability requirements are driving the need to invest  
11 large amounts of capital to expand and improve electricity  
12 supply, delivery, and reliability. This increases the  
13 Company's need to access both the debt and equity markets  
14 to fund large amounts of capital investment in the system.  
15 In this environment, timely and fair recovery of the  
16 Company's prudently incurred expenses and investments is  
17 critically important to helping it attract capital  
18 investment and manage financing costs.

19 Q. What is the Company's proposed cost of  
20 capital?

21 A. The Company's request is based on a proposed  
22 rate of return of 7.702 percent, with a capital structure  
23 comprised of 51 percent equity and 49 percent debt, a 4.895  
24 percent cost of debt, and a 10.4 percent return on equity  
25 ("ROE"). Company Witnesses Mr. Adrien McKenzie and Mr.

1 Brian Buckham provide support for this recommendation in  
2 their respective testimonies.

3 Q. What are the challenges facing the Company?

4 A. Rising prices and costs and constrained system  
5 capacity are challenges facing many utilities in the West,  
6 and Idaho Power is no different. Despite considerable  
7 investment and expansion in recent years, much of the  
8 Company's system today is fully utilized by our current  
9 customers and the Company continues to experience sustained  
10 customer growth. To provide safe, reliable service to all  
11 customers, the Company must continue to make major  
12 investments in both new and existing infrastructure.  
13 Supply chain constraints and worldwide demand for the  
14 materials and services required to build needed  
15 infrastructure has driven up prices dramatically in recent  
16 years.

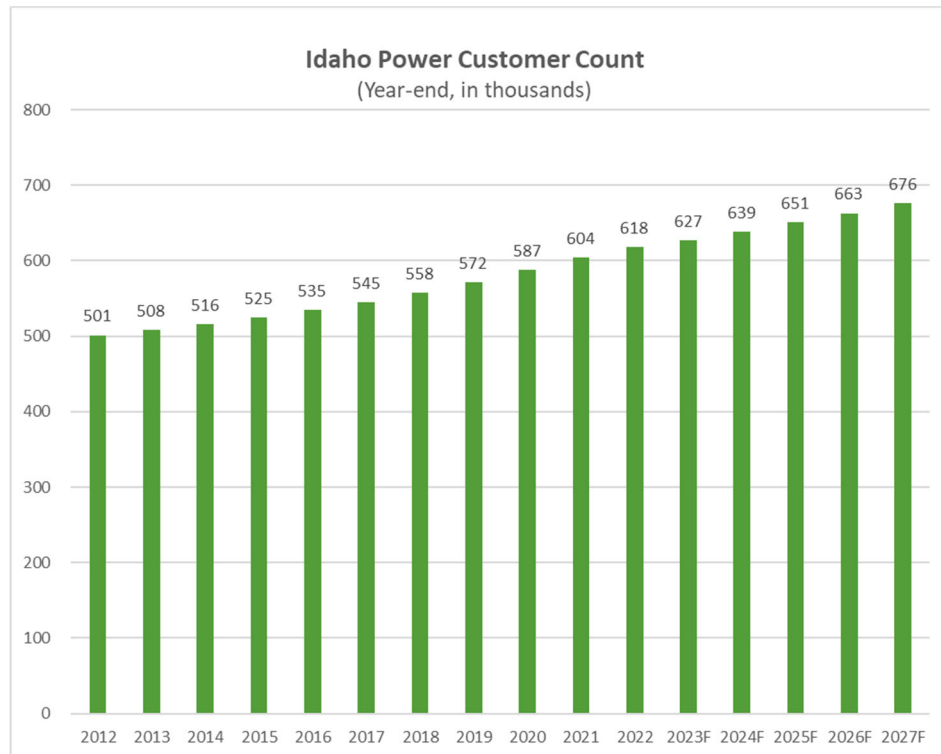
17 Idaho Power's credit quality, as measured by the  
18 national credit rating agencies, has recently been  
19 downgraded and is now at the lower end of investment grade.  
20 Rates in effect today will not provide the Company a  
21 sufficient opportunity to earn the rate of return necessary  
22 to assure access to the capital markets to finance needed  
23 investments in 2024 and beyond. Any delay in or lack of  
24 recovery of prudent operating or financing costs is seen as  
25 risk by the financial community, including the credit

1 rating agencies, during this period of plant expansion and  
2 difficult economic times. These pressures combine to  
3 present a formidable challenge to sustaining the financial  
4 health, operational excellence, and, ultimately, the  
5 independence of the Company.

6 Q. You mentioned growth in investment over the  
7 past few years. What is driving the growth in investment  
8 since rates went into effect following the Company's last  
9 general rate case?

10 A. As can be seen on Figure 5, Idaho Power has  
11 added approximately 117,000 customers between 2012 and 2022  
12 and forecasts it will experience customer growth of another  
13 58,000 customers over the next five-year period.

1 **FIGURE 5**  
2 IDAHO POWER CUSTOMER COUNT



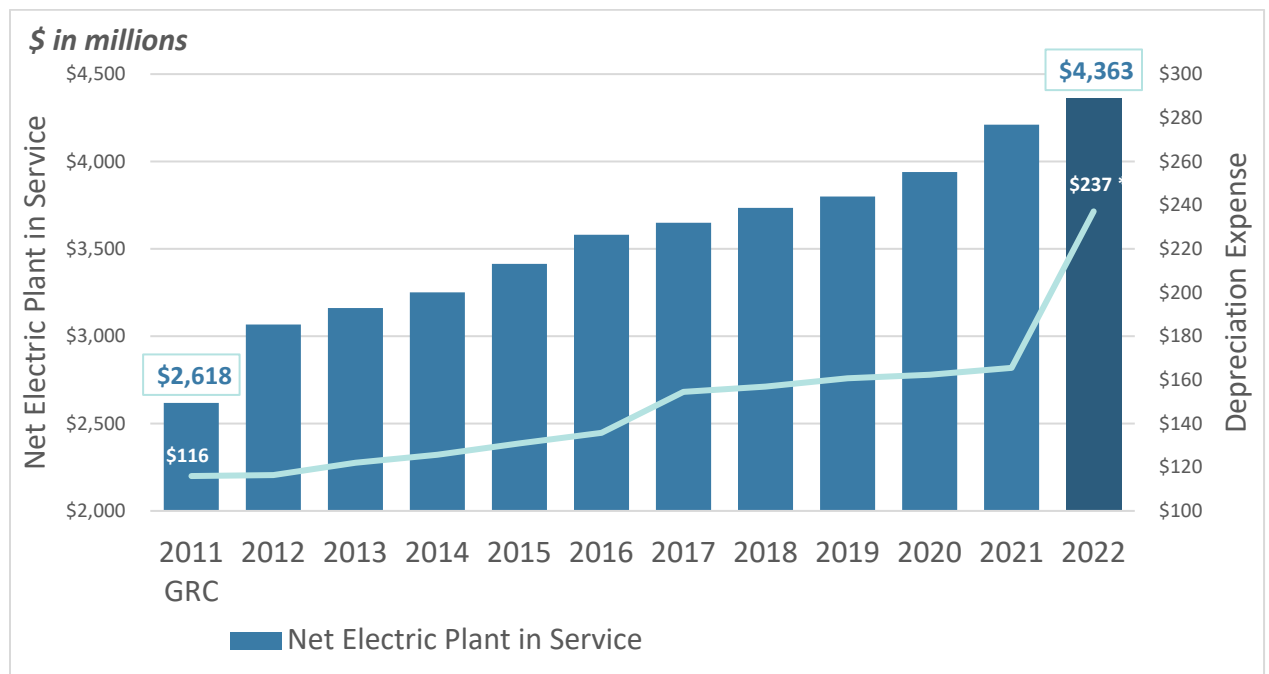
3  
4 The Company must be financially prepared to serve  
5 that growth as it occurs. To provide safe, reliable service  
6 to all customers, the Company must make investments in both  
7 new and existing infrastructure. The Company is adding  
8 capacity to its generation fleet, transmission system, and  
9 distribution facilities to ensure an adequate supply of  
10 electricity to customers, to provide service to new  
11 customers, and to maintain system reliability.

12 Idaho Power's aging T&D infrastructure requires  
13 continued investment in upgrades and replacement to  
14 maintain their operational viability. The Company's aging  
15 hydroelectric and thermal generation facilities also

1 require continuing investment in upgrades and component  
2 replacement. In addition, environmental mandates require  
3 the replacement or retrofitting of aging equipment with  
4 technology that is often more expensive. Further, the  
5 Company is operating in an environment of ever-increasing  
6 reliability and compliance standards that also require  
7 increased levels of investment.

8 As can be seen in Figure 6, since the Company's last  
9 GRC in 2011, Idaho Power's net plant in service has  
10 increased by approximately \$1.7 billion reflecting new  
11 infrastructure investment of around \$3.3 billion. During  
12 the same time period, annual depreciation expense has grown  
13 from \$116 million in 2012 to approximately \$237 million in  
14 2022.

15 **FIGURE 6**  
16 **NET ELECTRIC PLANT IN SERVICE**



17

1           The Company can no longer absorb the depreciation  
2 and financing expense associated with the incremental plant  
3 investment without the requested rate relief in this case.

4           Q.     How have rising interest rates impacted Idaho  
5 Power's financing costs?

6           A.     Over the last decade, Idaho Power has taken  
7 advantage of historically low interest rates to lower its  
8 long-term debt interest rate by almost 100 basis points  
9 over that period. However, borrowing costs have risen  
10 dramatically since December 2021, as the Federal Reserve  
11 has taken action to address inflation in the United States  
12 ("US") economy. As seen in Figure 7 from the Wall Street  
13 Journal below, as of May 12, 2023, 30-year US Treasury  
14 bond yields have risen from around 1.8 percent near the  
15 start of 2022 to as high as 4.38 percent in late 2022 and  
16 have recently been between 3.6 to 3.8 percent, a 100  
17 percent increase over that period.

1 **FIGURE 7**  
2 30-YEAR BOND



3  
4 Rapidly rising interest rates during an environment  
5 of rapid economic growth not only increases the cost of  
6 financing but also challenges Idaho Power's ability to  
7 raise efficient capital in the public and private debt  
8 markets.

9 It should also be noted that when borrowing costs  
10 rise, the ripple effects make their way into all of Idaho  
11 Power's commodities, materials, purchased services, and  
12 other costs. This happens because all of the Company's  
13 vendors and counterparties need to price their rising  
14 borrowing costs into the prices they charge to Idaho  
15 Power. And while macro-economic inflation seems to be  
16 curbing from recent highs, higher borrowing costs are more  
17 likely to persist over the longer term.



1           Q.     Can you cite examples that show how inflation  
2     has impacted the procurement of supplies?

3           A.     A combination of supply and demand factors  
4     have resulted in persistent high inflation since early  
5     2020. Idaho Power is continuing to see escalated pricing  
6     across most commodities: Since 2020, core steel is up 203  
7     percent, aluminum pricing is up 78 percent, and high-grade  
8     copper has increased 47 percent.

9           These increases translate directly into price  
10    escalations for key pieces of equipment needed to serve  
11    our customers and maintain the reliability of our system.  
12    The average cost of transformers has increased by 47  
13    percent, wood poles by 31 percent, and electrical cable by  
14    58 percent.

15          Other factors driving procurement pricing  
16    escalations are the cost of labor and the cost of freight.  
17    In addition, capacity availability among manufacturers in  
18    our industry has not been able to meet demand, causing the  
19    Company to go to new suppliers that are charging higher  
20    prices.

21          Q.     Can you cite examples of how supply chain  
22    disruptions have been a challenge?

23          A.     Supply chain disruptions continue to affect  
24    business operations, creating an environment of scarcity  
25    where manufacturers are unable to manage costs or lead

1 times. For example, lead times for transformers have  
2 increased by almost five times since 2020—from 32 weeks to  
3 156 weeks. Meter packages have increased sixfold, from 12  
4 weeks to 72 weeks, and breaker lead times have grown from  
5 32 weeks to 72 weeks. These challenges are expected to  
6 continue for the next several years. They have caused  
7 delays in project execution, increased costs, and created  
8 additional workload as the Company works to find other  
9 vendors that can support its needs on a timely basis. All  
10 of these factors have combined to cause the Company to  
11 increase its inventory to levels necessary to support its  
12 obligation to serve at an escalating cost.

13 Q. Are the supply chain disruptions unique to  
14 Idaho Power?

15 A. No. Cost increases and longer lead times are  
16 not just being seen at Idaho Power. In June 2022, an Idaho  
17 Power supplier delivered a Utility Market Commodity  
18 Impacts and Outlook presentation to the Company,  
19 highlighting several key themes including those previously  
20 discussed. In addition, the presentation noted that  
21 utilities are likely to continue to see significant  
22 disruption from changing weather patterns. Further,  
23 sweeping energy policy changes—such as the US Department  
24 of Energy's recent Notice of Proposed Rulemaking on  
25 transformer efficiency—could further add significant

1 disruption for all utilities.

2 Q. What is Idaho Power doing to actively manage  
3 supply chain disruptions?

4 A. Idaho Power monitors its inventory closely and  
5 takes action to mitigate the concerns regarding the  
6 tracking of more than 80,000 items and 30,000 unique  
7 catalog identifiers. In addition, the Company works with  
8 suppliers and others to ensure they are taking the proper  
9 actions, such as rationing inventory, providing  
10 alternative and substitute products, managing lead times,  
11 and investing in forward-looking buys.

12 Q. How have recent changes to Idaho Power's  
13 credit ratings impacted its cost of doing business?

14 A. While Idaho Power's credit ratings continue to  
15 be investment grade, a recent downgrade by Moody's from A3  
16 to Baa1 and a recent note from Standard and Poor's ("S&P")  
17 downgrading its liquidity assessment of the Company from  
18 "strong" to "adequate" provide a backdrop for Idaho  
19 Power's need to increase its cash collections from  
20 customers.

21 While credit rating changes impact both short-term  
22 and long-term borrowing costs, as lower ratings drive  
23 higher risk premiums, those changes also impact Idaho  
24 Power's wholesale commodity contracts, and the perception  
25 of suppliers, contractors, and other vendors on our

1 ability to pay for normal O&M costs, as well as  
2 construction contracts.

3 Q. Has Idaho Power taken any actions to improve  
4 its credit rating in recent years?

5 A. Yes. The Company began increasing the equity  
6 ratio immediately following the last GRC. In fact, the  
7 year-end 2012 equity ratio was 53 percent, and it grew  
8 from that level to 55 percent at year-end 2022. The  
9 increased equity ratio has had a significant positive  
10 impact to the Company's credit ratings, partially  
11 offsetting some of the lower ratios the rating agencies  
12 use for calculating applicable ratings.

13 Q. What rationale was given by the ratings  
14 agencies to support their recent actions regarding Idaho  
15 Power's credit downgrades?

16 A. Moody's stated, "without the benefit of more  
17 incremental and timelier rate relief through riders or  
18 cost tracking mechanisms, more frequent base rate  
19 increases and lower imputed debt from pension obligations,  
20 IPC's credit metrics will not improve materially, and the  
21 utility will have limited financial cushion at its current  
22 rating level to manage unforeseen events." And S&P cited  
23 our reliability and economic growth-driven capital  
24 spending needs as reflecting its liquidity downgrade, as  
25 it perceives "elevated capital spending that will result

1 in a modest weakening of the company['s] liquidity  
2 throughout the forecast period."

3 Q. Do you believe the relief requested in this  
4 case will serve to stabilize or improve the Company's  
5 credit ratings going forward?

6 A. Yes, it should stabilize the credit ratings  
7 but likely will not improve the ratings. The credit rating  
8 agencies have built their models and assumptions, in part,  
9 based on forecasts Idaho Power has discussed with them over  
10 the past few years. Those forecasts have contemplated the  
11 rate relief requested in this case. In addition, this case  
12 requests additional return of and return on rate base that  
13 has been placed into service since the last GRC that have  
14 carried regulatory lag from a cash flow perspective over  
15 several years. Finally, the request in this case seeks to  
16 address cash collections related to regulatory deferrals  
17 such as those related to wildfire mitigation and pension  
18 expenses that, if approved by the Commission, will be  
19 viewed by the credit rating agencies as positive for their  
20 assumed liquidity and other credit metrics.

21 **IV. RATE MITIGATION AND CUSTOMER ASSISTANCE**

22 Q. Did you provide any specific instructions to  
23 the Regulatory Affairs Department in preparing this GRC  
24 filing?

25 A. Yes. In recognition of the broader economic

1 conditions and concern for the impact of any rate increase  
2 on Idaho Power's customers, I instructed Mr. Tatum, Vice  
3 President of Regulatory Affairs, to identify areas where  
4 the Company could forego requesting an increase at this  
5 time. Mr. Tatum and his department identified the following  
6 areas where the Company is not asking for incremental  
7 increases:

8                   • Reduce ROE from the recommended level of  
9 10.6 percent to 10.4 percent;

10                   • Hold test year non-labor O&M to the 2022  
11 level with the exception of a limited number of known and  
12 measurable adjustments;

13                   • Maintain Valmy and Bridger cost recovery  
14 at current levels with the exception of collection related  
15 to previously deferred revenue requirement amounts;

16                   • Minimize the current revenue increase  
17 related to wildfire mitigation and pension costs by  
18 leveraging existing cost recovery mechanisms; and

19                   • Delay recovery of the revenue requirement  
20 associated the 120 megawatts of battery storage resources  
21 to be online in 2023, with interim earnings support from  
22 the associated federal investment tax credit generated from  
23 the battery storage resources.

24           Mr. Tatum describes the rationale and quantification  
25 of each of these adjustments in his testimony.

1           Q.       What options are available to customers to  
2 help them manage their energy costs?

3           A.       There are a number of options available to  
4 customers who need assistance in managing their energy  
5 costs. Project Share is a year-round bill pay assistance  
6 program started by Idaho Power in 1982 and administered by  
7 the Salvation Army. Funding is provided by Idaho Power's  
8 customers and shareholders, other utilities, and private  
9 donations, with 100 percent of Idaho Power customers'  
10 donations going to Project Share recipients.

11           The Company also offers several energy efficiency  
12 programs targeting low-income customers - Weatherization  
13 Assistance for Qualified Customers ("WAQC"), Weatherization  
14 Solutions for Eligible Customers ("Solutions"), and Easy  
15 Savings, a low-income energy efficiency educational  
16 program.

17           Idaho Power provides just over \$1,212,000 annually,  
18 funded by base rates, to the Idaho Weatherization  
19 Assistance Program to weatherize additional electrically  
20 heated customer homes under the WAQC program. Idaho Power  
21 also provides a "Near Low Income" weatherization program  
22 called Solutions. This program provides weatherization  
23 assistance to customers just under or just over the income  
24 limit for WAQC. Most of the Solutions customers are seniors  
25 who are barely over the federal cutoff, as well as Idaho

1 Power customers on the waiting list for the longest time to  
2 receive weatherization services. Finally, the Easy Savings  
3 program provides \$125,000 annually to five Community Action  
4 Partnership ("CAP") Agencies in the Idaho Power service  
5 area and develops and runs the program with a planning  
6 committee consisting of CAP Agency, Commission Staff, and  
7 Idaho Department of Health and Welfare representatives.

8 Q. How much do Idaho Power shareowners contribute  
9 to Project Share annually?

10 A. Idaho Power shareowners contribute 10 percent  
11 of monthly customer donations to support the Salvation  
12 Army's program administration costs. In addition,  
13 shareowners make an annual Project Share donation of  
14 approximately \$25,000 to directly fund customer bill  
15 assistance. In recognition of the current cost pressures on  
16 customers' bills, in 2023, Idaho Power shareowners elected  
17 to contribute an additional \$100,000 to support Project  
18 Share for a total of \$125,000 of shareowner-funded customer  
19 bill assistance.

20 **V. CONCLUSION**

21 Q. Can you summarize the Company's requested rate  
22 increase and explain why it is important not only to Idaho  
23 Power but in the best interest of customers?

24 A. This general rate request reflects a revenue  
25 requirement increase of approximately \$111.3 million, or an



1 8.61 percent increase and includes a requested ROE of 10.4  
2 percent. This increase is important for Idaho Power to  
3 achieve fair and timely recovery of its prudently incurred  
4 expenses and a reasonable return on the Company's  
5 investment in its electrical system, which today's rates  
6 will not fully provide. Continued growth in demand for  
7 electricity, aging infrastructure, and higher compliance  
8 and reliability requirements are driving the need to invest  
9 large amounts of capital to expand and improve electricity  
10 supply, delivery, and reliability.

11 Timely and fair recovery of the Company's prudently  
12 incurred expenses and investments is critically important  
13 to helping it attract capital investment and manage  
14 financing costs. A low cost of capital ultimately has a  
15 beneficial impact on customers' rates. By providing for  
16 fair and timely recovery of the Company's expenses it  
17 incurs on behalf of customers and investments in the  
18 systems and activities that serve its customers, this rate  
19 increase is in the best interests of the Company, its  
20 shareholders, and the people and communities it serves.

21 Q. Does this conclude your direct testimony in  
22 this case?

23 A. Yes, it does.

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**DECLARATION OF LISA A. GROW**

I, Lisa A. Grow, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Lisa A. Grow. I am employed by  
Idaho Power Company as the President and Chief Executive  
Officer.

2. To the best of my knowledge, my pre-filed  
direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
\_\_\_\_\_  
Lisa A. Grow

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR         ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES     )  
AND CHARGES FOR ELECTRIC SERVICE    )  
IN THE STATE OF IDAHO AND FOR       )  
ASSOCIATED REGULATORY ACCOUNTING   )  
TREATMENT.                             )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

TIMOTHY E. TATUM

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Timothy E. Tatum. My business  
5 address is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as Vice President of Regulatory  
7 Affairs.

8           Q.     Please describe your educational background.

9           A.     I earned a Bachelor of Business Administration  
10 degree in Economics and a Master of Business Administration  
11 degree from Boise State University. I have also attended  
12 electric utility ratemaking courses, including "Practical  
13 Skills for The Changing Electric Industry," a course  
14 offered through the New Mexico State University's Center  
15 for Public Utilities, "Introduction to Rate Design and Cost  
16 of Service Concepts and Techniques" presented by Edison  
17 Electric Utilities Consultants, Inc., and Edison Electric  
18 Institute's "Electric Rates Advanced Course." In 2012, I  
19 attended the Utility Executive Course ("UEC") at the  
20 University of Idaho.

21          Q.     Please describe your work experience with  
22 Idaho Power.

23          A.     I began my employment with Idaho Power in 1996  
24 in the Company's Customer Service Center where I handled  
25 customer phone calls, customer-related transactions, and

1 general customer account maintenance in the areas of  
2 billing and metering.

3 In June of 2003, I began working as an Economic  
4 Analyst on the Energy Efficiency Team. As an Economic  
5 Analyst, I was responsible for ensuring that the demand-  
6 side management ("DSM") expenses were accounted for  
7 properly, preparing and reporting DSM program costs and  
8 activities to management and various external stakeholders,  
9 conducting cost-benefit analyses of DSM programs, and  
10 providing DSM analysis support for the Company's Integrated  
11 Resource Plan.

12 In August 2004, I accepted a position as a  
13 Regulatory Analyst and in August of 2006, I was promoted to  
14 Senior Regulatory Analyst. As a Senior Regulatory Analyst,  
15 my responsibilities included the development of complex  
16 financial studies to determine revenue recovery and pricing  
17 strategies, including preparation of the Company's cost-of-  
18 service studies.

19 In September of 2008, I was promoted to Manager of  
20 Cost of Service, and in 2011, I was promoted to Senior  
21 Manager of Cost of Service and oversaw the Company's cost-  
22 of-service activities, such as power supply modeling,  
23 jurisdictional separation studies, class cost-of-service  
24 studies, and marginal cost studies.

1           In March 2016, I was promoted to Vice President of  
2   Regulatory Affairs. As Vice President of Regulatory  
3   Affairs, I am responsible for the overall coordination and  
4   direction of the Regulatory Affairs Department, including  
5   development of jurisdictional revenue requirements and  
6   class cost-of-service studies, preparation of rate design  
7   analyses, and administration of tariffs and customer  
8   contracts.

9                           **I.   CASE OVERVIEW**

10           Q.       What role did you play in the preparation of  
11   the general rate case ("GRC")?

12           A.       My role in the preparation of the GRC was to  
13   oversee, manage, and coordinate the filing and to make the  
14   policy decisions related to regulatory matters in  
15   consultation with Ms. Lisa Grow, our Company's President  
16   and Chief Executive Officer, along with other senior  
17   officers within Idaho Power.

18           Q.       What is Idaho Power's requested revenue  
19   increase this case?

20           A.       The Company is requesting rate relief of  
21   approximately \$111.3 million, which is net of a  
22   corresponding proposed Power Cost Adjustment ("PCA")  
23   decrease of \$173.4 million and a reduction to annual Energy  
24   Efficiency Rider collection of \$3.5 million. If approved,  
25   this request would result in an overall increase to

1 adjusted base revenue of 8.61 percent effective January 1,  
2 2024. The Company's request is based on a proposed rate of  
3 return of 7.702 percent, with a capital structure comprised  
4 of 51 percent equity and 49 percent debt, a 4.895 percent  
5 cost of debt, and a 10.40 percent return on equity ("ROE").

6 Q. What is the Company's test year?

7 A. The test year is the 12 months ending December  
8 31, 2023.

9 Q. Why is Idaho Power requesting a corresponding  
10 PCA decrease of \$173.4 million in this case?

11 A. Idaho Power's current Idaho base rates collect  
12 approximately \$300 million annually to fund normalized or  
13 "base level" net power supply expense ("NPSE"). This level  
14 of NPSE collection authorized by Order No. 33000 in Case  
15 No. IPC-E-13-20 became effective June 1, 2014, based on a  
16 2013 calendar year. Since that time, the Company's  
17 normalized NPSE has increased largely because of load  
18 growth and changes in fuel costs, market energy prices, and  
19 increased power purchase agreement costs. Currently,  
20 incremental NPSE over the base level NPSE established in  
21 2014 are collected annually through the PCA forecast  
22 component. Because the Company's requested Idaho-  
23 jurisdictional revenue requirement in this case reflects  
24 updated base level NPSE based on the 2023 test year, the  
25 Company is requesting a corresponding decrease in annual

1 PCA collection to ensure customers do not pay twice for the  
2 same NPSE. Simply put, this necessary PCA reduction will  
3 facilitate the transfer of base level NPSE collection from  
4 the PCA into base rates.

5 Q. How is energy efficiency currently funded at  
6 Idaho Power?

7 A. The Company's energy efficiency activities,  
8 also referred to as DSM, are primarily funded through the  
9 Energy Efficiency Rider, Schedule 91 ("Rider"), which is  
10 applied as a fixed percentage of each customer's billed  
11 base revenue. Idaho Power is currently authorized to  
12 collect 3.1 percent of base revenue annually through the  
13 Rider.

14 Q. What is the Company's proposal regarding  
15 annual Rider collection?

16 A. Idaho Power is proposing to transfer  
17 approximately \$3.5 million in ongoing Rider-funded labor  
18 costs into base rates, while otherwise maintaining the same  
19 level of annual DSM funding as measured in dollars that  
20 exists today. To achieve this goal, the Company is  
21 proposing a decrease in Rider collection from the current  
22 3.1 percent to 2.25 percent.

23 Q. Why is the Company proposing to transfer  
24 approximately \$3.5 million in ongoing DSM labor costs in  
25 this rate filing?



1           A.       There are two reasons for this proposal.  
2   First, energy efficiency has been a core business activity  
3   at Idaho Power for over 20 years, since the Rider was  
4   established in 2002. At the time the Rider was established,  
5   the Company identified all incremental costs associated  
6   with implementing and managing new DSM programs, including  
7   incremental labor-related costs, to be funded through that  
8   mechanism. Over time, DSM program management and  
9   administration staffing has reached a relatively steady  
10   state, both from a cost and head-count perspective. For  
11   these reasons, it is appropriate to treat DSM labor the  
12   same as any other Company labor costs for ratemaking  
13   purposes.

14           Secondly, DSM labor costs have been a point of  
15   concern for the Commission Staff ("Staff") in past prudence  
16   review cases. My understanding of Staff's concern is that  
17   Rider-funded labor, under the annual prudence review  
18   process, has allowed for recovery of labor-related costs  
19   annually without the rigorous, comprehensive review applied  
20   in general rate cases. By treating DSM labor the same as  
21   all other labor costs for cost recovery purposes, Idaho  
22   Power believes this will address Staff's concern.

23           Q.       What is the implication of this proposal for  
24   energy efficiency activities going forward?

25           A.       The proposed reduction in energy efficiency

1 Rider funding will have no impact on the Company's pursuit  
2 of cost-effective energy efficiency activities. This  
3 adjustment is only intended to transfer the collection of  
4 energy efficiency labor costs to base rates and to ensure  
5 that the increase to base rate revenue requested in this  
6 case does not result in an increase to the annual revenue  
7 collected under the Rider. As always, Idaho Power will  
8 monitor the need for energy efficiency funding and will  
9 propose adjustments to funding levels as warranted to allow  
10 for the Company's continued pursuit of all cost-effective  
11 energy efficiency.

12 Q. Is Company seeking any specific regulatory  
13 treatment related to wildfire mitigation and insurance  
14 costs as part of this case?

15 A. Yes. Idaho Power requests the Commission  
16 continue to authorize the Company to defer incremental  
17 wildfire mitigation and insurance costs as measured from a  
18 new base level of costs established in this case. This  
19 proposed treatment is consistent with the authority granted  
20 by the Commission in Case Nos. IPC-E-21-02 and IPC-E-22-27,  
21 with certain limited modifications.

22 In this case, the Company is only requesting  
23 authority to defer incremental costs associated with two  
24 previously authorized cost deferral categories of  
25 vegetation management and insurance.

1           Q.       Why is Idaho Power requesting ongoing deferral  
2 authority for incremental vegetation management and  
3 insurance expenses above the baseline levels set in this  
4 case?

5           A.       As discussed in the Direct Testimony of  
6 Company Witness Mr. Brian Buckham, insurance costs have  
7 increased in recent years and continue to rise. Further,  
8 insurance costs are increasingly difficult to forecast due  
9 to price volatility. While Idaho Power undertakes  
10 significant efforts to ensure it receives the greatest  
11 insurance value possible for its customers, the Company is  
12 largely a price-taker in the insurance market and must  
13 absorb price increases as insurers raise premiums due to  
14 losses. Therefore, the Company believes it is appropriate  
15 to request a new baseline level of insurance in rates and  
16 also to establish a new deferral to capture incremental  
17 insurance premium costs above the new baseline.

18           Similarly, as addressed in detail in the Direct  
19 Testimony of Company Witness Mr. Mitch Colburn, vegetation  
20 management costs continue to rise. These costs constitute  
21 the largest single expense associated with the Company's  
22 wildfire mitigation efforts. As such, the Company requests  
23 the authority to continue to defer incremental vegetation  
24 management above the new baseline established in this case  
25 until such a time that these costs stabilize.

1           Q.     Is the Company requesting new deferral  
2 authority for wildfire-mitigation related capital items?

3           A.     No. Because the Company has already made the  
4 majority of necessary incremental capital investments  
5 related to the implementation of its Wildfire Mitigation  
6 Plan, there is no longer a need to defer related  
7 depreciation expense amounts.

8           Q.     Is the Company requesting any other specific  
9 regulatory treatment as part of this case?

10          A.     Yes. The Company has several requests for  
11 specific regulatory treatment and necessary regulatory  
12 accounting as part of this case that I will cover in detail  
13 later in my testimony. At the end of my testimony, I will  
14 provide a summary listing each of those requests for  
15 clarity and transparency.

16                                   **II.   TEST YEAR**

17          Q.     How did the Company prepare its test year in  
18 this proceeding?

19          A.     Idaho Power prepared its 2023 test year in  
20 this case using the same general forecast methodology used  
21 in the Company's last two general rate cases, IPC-E-08-10  
22 and IPC-E-11-08. The Company's test year methodology starts  
23 with actual 12-month financial results adjusted to include  
24 typical and traditional ratemaking adjustments consistent  
25 with a historical test year. The adjusted 2022 actual

1 financial information was then further adjusted to reflect  
2 2023 results through the use of known and measurable  
3 adjustments appropriate for the particular revenue,  
4 expense, or asset classification.

5 Q. What attributes should be considered when  
6 selecting a test year?

7 A. In practice, in every rate case, a test year  
8 must be selected. Whether the test year selected is  
9 historical, future, or some hybrid, the most important  
10 attribute of the selected test year should be that it  
11 accurately reflects the best expectation of the cost of  
12 service.

13 Regardless of which test year is adopted, the  
14 ratemaking process is inherently prospective and requires  
15 reliance upon projections. Whether the test year is  
16 completely historical or based totally on future results,  
17 the ratemaking process requires an informed determination  
18 of what conditions will prevail in the future. As of the  
19 date of filing, Idaho Power has used its best financial and  
20 operational information to construct its forecast test  
21 year.

22 Utility commissions and policy makers throughout the  
23 country, and particularly in the West, are increasingly  
24 recognizing that in times of high inflation and heavy  
25 construction, future test years are necessary to allow

1 utilities a reasonable opportunity to earn their authorized  
2 rate of return. Utilities that operate in a period of rapid  
3 expansion and rate base growth will chronically under-earn  
4 if test years are historical in nature and fail to  
5 synchronize the matching of expenses and revenues.

6           Ultimately, Idaho Power must apply a test year  
7 approach that is both timely and reflective of the costs  
8 that the Company can reasonably expect to incur going  
9 forward. A historical test year is by definition not timely  
10 and may not be a reflection of costs going forward.  
11 Similarly, a test year based on a reasonable forecast may  
12 be more indicative of the costs the Company will be  
13 experiencing during the time rates are in place, thereby  
14 reducing the effects of "regulatory lag".

15           Q.       Why is regulatory lag such a critical issue  
16 to Idaho Power at this time?

17           A.       During periods of escalating costs where  
18 marginal costs are higher than average costs, new rates are  
19 already inadequate by the time they go into place. If this  
20 situation continues for a prolonged period of time, the  
21 Company will be denied a reasonable opportunity to earn its  
22 authorized rate of return. The effects of regulatory lag  
23 are particularly pronounced in periods where the Company is  
24 engaged in capital-intensive projects and where interest  
25 rates to finance capital projects are rising.

1 Q. Is regulatory lag always harmful to a  
2 utility?

3 A. No. The impact of regulatory lag is  
4 dependent upon the situation - if overall revenue growth is  
5 keeping pace with cost escalation, and the Company is not  
6 engaged in capital-intensive projects and procuring debt  
7 and equity financing for those projects, then the Company  
8 is not typically harmed by regulatory lag. Unfortunately,  
9 Idaho Power is not in that situation currently, and will  
10 not likely be for the foreseeable future.

11 **III. REVENUE REQUIREMENT MITIGATION ADJUSTMENTS**

12 Q. Did you receive any specific instructions from  
13 Ms. Grow in preparing this general rate case filing?

14 A. Yes. In recognition of the broader economic  
15 conditions and concern for the impact that any rate  
16 increase has on customers, Ms. Grow asked me to identify  
17 specific areas where the Company could reduce the requested  
18 increase at this time. As a result, I identified the  
19 following areas where the Company is not asking for  
20 incremental increases or has otherwise taken action to  
21 minimize the overall requested revenue increase:

22 • Reduce return on equity ("ROE") from the  
23 recommended level of 10.60 percent to 10.40 percent;

24 • Hold test year non-labor operations and  
25 maintenance ("O&M") expenses to the 2022 actual level with

1 the exception of a limited number of known and measurable  
2 adjustments;

3                   • Maintain the North Valmy Power Plant  
4 ("Valmy") and the Jim Bridger Power Plant ("Bridger") non-  
5 fuel coal-related cost recovery at current levels, with the  
6 exception of collection related to previously deferred  
7 revenue requirement amounts;

8                   • Minimize the current revenue increase  
9 related to wildfire mitigation and pension costs by  
10 leveraging the existing cost recovery mechanisms; and

11                   • Delay recovery of the revenue requirement  
12 associated with the 120 megawatts ("MW") of battery storage  
13 resources to be online in 2023 with interim earnings  
14 support from the associated investment tax credits  
15 generated from the battery storage resources.

16           Q.       How did the Company arrive at its recommended  
17 mitigated ROE of 10.4 percent?

18           A.       After discussions with Mr. Buckham, Senior  
19 Vice President and Chief Financial Officer, regarding Ms.  
20 Grow's directive to mitigate our rate relief request, the  
21 Company decided to apply an ROE that is at the lower end of  
22 the range provided by our outside ROE expert. Mr. Buckham  
23 believes this recommendation represents the minimum  
24 required ROE necessary to not weaken the Company's ability  
25 to attract capital at favorable and customer-beneficial



1 rates in the current uncertain and volatile financial  
2 markets.

3 Q. What steps did the Company take to minimize  
4 the level of non-labor O&M included in the test year and  
5 what were the results?

6 A. The Company chose to hold test year non-labor  
7 O&M expense to the 2022 actual level, with the exception of  
8 a limited number of known and measurable adjustments. As  
9 discussed by Ms. Grow in her testimony, the Company has a  
10 strong track record of managing its O&M expenses, and as a  
11 result has achieved an average annual O&M growth rate of  
12 only one percent between 2012 and 2022. After applying all  
13 known and measurable adjustments to the 2022 actual  
14 financial results, Idaho Power's proposed test year non-  
15 labor O&M is within approximately \$340 thousand of the 2022  
16 expense level.

17 Q. What is the Company's recommendation regarding  
18 the recovery of non-fuel coal-related revenue requirements  
19 associated with the Valmy and Jim Bridger power plants?

20 A. Because the Commission has previously  
21 established separate cost recovery mechanisms for these  
22 components of the Valmy and Bridger plants in Order Nos.  
23 33771 and 35423, respectively, the Company is proposing to  
24 maintain the current level of recovery as previously  
25 authorized by the Commission with one exception. In

1 addition to maintaining recovery of the amounts already  
2 included in customer rates, the Company is proposing to  
3 increase collections only related to the Bridger plant to  
4 include revenue requirement amounts that the Commission  
5 chose to defer for later recovery in Order No. 35423.

6 Q. What incremental Bridger-related cost recovery  
7 is the Company requesting in this case?

8 A. Idaho Power is requesting recovery of the full  
9 annual levelized revenue requirement approved in Case No.  
10 IPC-E-21-17 and amortization of previously deferred  
11 levelized revenue requirement amounts. The total  
12 incremental annual Bridger-related cost recovery included  
13 in this case is approximately \$10.7 million.

14 Q. What is the Company's recommendation regarding  
15 the test year level of wildfire mitigation costs?

16 A. Idaho Power is proposing to hold test year  
17 levels of wildfire mitigation costs to 2022 actual cost.  
18 Further, the Company is requesting amortization into rates  
19 of previously deferred wildfire mitigation costs, excluding  
20 deferred vegetation management costs, over a seven-year  
21 amortization period.

22 Q. Why is the Company requesting to exclude  
23 deferred vegetation management costs as part of its  
24 amortization request in this case?

25 A. As introduced earlier, vegetation management

1 costs represent the largest single cost component of the  
2 Company's overall wildfire mitigation costs. As a rate  
3 mitigation measure, the Company chose to postpone the  
4 recovery of deferred vegetation management costs and  
5 instead continue to utilize the deferral account authorized  
6 by the Commission in Order Nos. 35077 and 35717 issued in  
7 Case Nos. IPC-E-21-02 and IPC-E-22-27, respectively. By  
8 setting cost recovery at the 2022 level, the Company  
9 anticipates that the need to defer incremental amounts over  
10 time may diminish.

11 Further, the Company is hopeful that advances in new  
12 vegetation monitoring technology may eventually reduce  
13 annual vegetation management costs, allowing for deferred  
14 amounts to be offset by future cost reductions, thereby  
15 reducing the deferral balance. The Company will continue to  
16 closely monitor its vegetation management costs and will  
17 report back to the Commission in a future proceeding if an  
18 adjustment to related cost recovery is warranted.

19 Q. How did the Company arrive at its recommended  
20 test year pension cost recovery amount?

21 A. To arrive at its proposed test year pension  
22 cost recovery amount, the Company considered several  
23 factors, including its expected ongoing annual cash  
24 contributions to the pension plan and the cost recovery  
25 mechanism and balancing account approved by Commission

1 Order No. 31003 issued in Case No. IPC-E-09-29. In recent  
2 years, the Company has been contributing approximately \$40  
3 million annually to fund its pension plan. While the annual  
4 minimum required funding level fluctuates, this annual  
5 level of funding has represented a levelized or normal  
6 level of required funding. The Company's current rates  
7 include recovery of approximately \$17 million a year.  
8 Annual differences between the \$40 million in annual cash  
9 contributions to the pension plan and the \$17 million of  
10 recovery through rates have been deferred as authorized by  
11 Order No. 31003. Rather than request recovery of the full  
12 \$40 million of annual pension funding, as a rate mitigation  
13 measure, the Company is proposing to increase the current  
14 \$17 million in annual pension cost recovery to  
15 approximately \$35 million, and to continue to defer any  
16 differences between collection and plan contributions  
17 through the pension balancing account. If interest rates  
18 continue to stay at current elevated levels or higher, the  
19 associated discount rates used to determine annual pension  
20 funding requirements are more likely to drive required plan  
21 contributions down. While not known at this time, the  
22 Company is hopeful that the \$35 million in annual pension  
23 cost recovery may ultimately provide sufficient revenue to  
24 cover the ongoing required cash contributions to the plan  
25 while also serving to reduce the regulatory asset in the

1 balancing account.

2 Q. What is the Company's proposal regarding  
3 deferred recovery of the 120 MW battery storage project to  
4 be online in 2023?

5 A. As an additional rate increase mitigation  
6 measure, the Company is proposing to delay recovery of the  
7 revenue requirement associated with the 120 MW of battery  
8 storage resources to be online in 2023, with interim  
9 earnings support from the associated federal investment tax  
10 credit ("ITC") generated from the battery storage  
11 resources. More specifically, the Company is requesting  
12 authorization to 1) move to the Accumulated Deferred  
13 Investment Tax Credits ("ADITC")/Revenue Sharing Mechanism  
14 an additional amount of ITC equal to the incremental ITC  
15 generated from the Company's investment in the 2023 battery  
16 storage projects, and 2) increase to the maximum allowed  
17 annual accelerated amortization amount by a level of ADITC  
18 equal to the actual revenue requirement of the battery  
19 storage projects in any applicable year plus the current  
20 annual \$25 million cap authorized by Order No. 30978 issued  
21 in Case No. IPC-E-09-30.

22 Q. Is the Company proposing to exclude the 120-MW  
23 battery storage projects from rate base as part of this  
24 proposal?

25 A. No. The Company is requesting a full prudence

1 review of the 120-MW battery storage projects as part of  
2 this case, with the goal of receiving Commission approval  
3 to include the Idaho jurisdictional portion of the  
4 investment in its Idaho rate base. As part of this rate  
5 impact mitigation measure, the Company is proposing to  
6 include in the final Idaho jurisdictional revenue  
7 requirement a temporary credit adjustment equal to the  
8 Idaho-jurisdictional share of the 120-MW battery revenue  
9 requirement. This credit would remain in place until the  
10 Company is authorized to recover the associated revenue  
11 requirement in a future general rate case or other  
12 applicable revenue requirement proceeding.

13 Q. Please provide an overview of the  
14 ADITC/Revenue Sharing Mechanism.

15 A. Since 2009, the Company has been subject to an  
16 ADITC/Revenue Sharing Mechanism that includes provisions  
17 for the accelerated amortization of ADITC to help achieve a  
18 minimum specified percent Idaho-jurisdiction return on  
19 year-end equity ("Idaho ROE"), currently set at 9.4  
20 percent. The mechanism also provides for the potential  
21 sharing between Idaho Power and Idaho customers of Idaho-  
22 jurisdictional earnings in excess of a 10.0 percent Idaho  
23 ROE. Under the current mechanism, the ADITC and sharing  
24 thresholds are to be reset at a general rate case to align  
25 the sharing threshold with the then-authorized ROE and the

1 use of accelerated amortization of ADITC at 95 percent of  
2 the authorized ROE.

3 Q. What is the expected dollar value of the ITC  
4 generated by the 120-MW battery storage investment?

5 A. The Company expects the 120 MW of battery  
6 storage projects will generate approximately \$45 million of  
7 new federal ITC based on an assumption that the ITC will be  
8 equal to 30 percent of total project cost under Section 48  
9 of the Internal Revenue Code.

10 Q. What is the annual revenue requirement  
11 associated with the 120 MW battery storage projects?

12 A. The test year revenue requirement associated  
13 with the 120 MW battery storage projects is \$21,149,854.  
14 When considering the approximately \$45 million of new  
15 federal ITC associated with the investment, the ITC  
16 represents approximately two years of the annual revenue  
17 requirements for the batteries.

18 Q. Under the Company's proposal, what will happen  
19 to the ITC generated from the 120-MW battery projects, if  
20 they have not been amortized prior to the time the Company  
21 is allowed to recover the cost of the batteries in customer  
22 rates?

23 A. The Company proposes that the ITC remain  
24 available for accelerated amortization under the provisions  
25 of the ADITC/Revenue Sharing Mechanism until fully

1 amortized - either on an accelerated basis or according to  
2 the standard amortization schedule tied to the depreciable  
3 life of the associated asset. Both maintain the Company's  
4 long-standing compliance with federal and state ITC  
5 normalization rules.

6 Q. Does the \$21,149,854 test year revenue  
7 requirement include an offsetting annual benefit of the  
8 amortization of associated ITC?

9 A. Yes. The \$21,149,854 test year revenue  
10 requirement includes the impacts of ITC using the standard  
11 amortization schedule that ties to the depreciable life of  
12 the associated asset. An ITC amortization benefit would  
13 remain in future associated revenue requirement  
14 calculations until the ITC are fully amortized.

15 Q. Aside from deferring the rate impact of the  
16 battery projects, what other benefits will customers  
17 receive?

18 A. Aside from deferring the rate impact of the  
19 battery projects, customers will continue to receive the  
20 benefits of the ITC for ratemaking purposes until the ITC  
21 has been fully amortized as I previously described. As has  
22 been the case since the ADITC/Revenue Sharing Mechanism was  
23 first implemented, customer rates have continued to reflect  
24 the offsetting benefit of ITC amortization and, as of  
25 December 31, 2022, the Company has not utilized any of the



1 currently available ADITC for accelerated amortization. In  
2 this instance, customers are guaranteed to get the benefits  
3 of service from the 120 MW of batteries at no cost in the  
4 near-term, while preserving an opportunity to still benefit  
5 from that ITC in future ratemaking proceedings.

6 **IV. WITNESS LIST**

7 Q. What was your level of involvement with the  
8 preparation of the testimony and exhibits presented by the  
9 other Company witnesses?

10 A. I discussed the content and preparation of  
11 the witnesses' testimony and exhibits with Ms. Connie  
12 Aschenbrenner (Rate Design Senior Manager), Mr. Matthew  
13 Larkin (Revenue Requirement Senior Manager), and Mr.  
14 Donovan Walker (Lead Counsel), as well as Ms. Lisa  
15 Nordstrom (Lead Counsel) and Ms. Megan Goicoechea Allen  
16 (Corporate Counsel).

17 Q. Please provide an overview of the Company's  
18 general rate case filing.

19 A. The Company begins the presentation of its  
20 case with Ms. Grow's testimony, who provides a general  
21 overview of the Company and addresses Idaho Power's current  
22 financial and operating situation and need for general rate  
23 relief. My testimony is next and covers the regulatory  
24 policy matters related to the development of the general  
25 rate case.

1           Mr. Eric Hackett, Projects and Design Senior  
2 Manager, discusses the growth in the Company's generation-  
3 related rate base since the completion of the Company's  
4 last general rate case, up to and including major projects  
5 expected to be completed during the 2023 test year. He  
6 presents the prudent nature of these investments, detailing  
7 why they are needed to ensure Idaho Power's generation  
8 fleet is robust and well-positioned to provide continued  
9 safe, reliable service to customers. Mr. Hackett is also  
10 the witness who presents the costs associated with, and an  
11 operation overview of, the 120-MW battery projects placed  
12 into service in 2023.

13           Ms. Lindsay Barretto, 500 kV and Joint Projects  
14 Senior Manager, discusses the prudent nature of investments  
15 made at Bridger and Valmy since the Company's last prudence  
16 determinations before the Commission.

17           Mr. Mitch Colburn, Vice President of Planning,  
18 Engineering and Construction, discusses investments the  
19 Company has made in the electrical grid to ensure the  
20 provision of safe, reliable service to customers.  
21 Specifically, Mr. Colburn details Idaho Power's recent  
22 history of reliability and system performance that  
23 demonstrates a thoughtful approach to grid construction and  
24 maintenance. He also presents specific investments included  
25 in the Company's 2023 test year that demonstrate the

1 Company's prudent investment in the electrical grid at the  
2 transmission and distribution levels. Finally, Mr. Colburn  
3 reviews the Company's wildfire mitigation efforts and  
4 associated capital and O&M expenditures.

5 Mr. James "Bo" Hanchey, Vice President of Customer  
6 Operations and Chief Safety Officer, describes the  
7 Company's Safety First culture and ongoing efforts to  
8 enhance our customers' overall experience with the Company.  
9 Mr. Hanchey also describes the Company's advancements in  
10 energy efficiency as well as customer relations activities  
11 and related technology upgrades.

12 Ms. Sarah Griffin, Vice President of Human  
13 Resources, provides justification for the labor and total  
14 compensation costs included in the Company's test year. Ms.  
15 Griffin also describes the Company's overall compensation  
16 philosophy and explains why the level of compensation  
17 requested in this case is necessary to provide safe,  
18 reliable, affordable electricity to customers. As part of  
19 this discussion, she also provides the justification for  
20 the requested increase in cost recovery related to the  
21 Company's pension plan, which serves as a key component of  
22 Idaho Power's overall compensation package.

23 The next witness is Mr. Adrien McKenzie, who has  
24 been retained by the Company as its ROE expert. Mr.  
25 McKenzie discusses risk factors relevant to Idaho Power,

1 performs calculations of ROE appropriate for the Company  
2 using standard financial methodologies, and recommends a  
3 reasonable ROE range appropriate for Idaho Power. In this  
4 proceeding, Mr. McKenzie's ROE range is from 10.10 to 11.10  
5 percent.

6 Mr. Brian Buckham, Idaho Power Company's Senior Vice  
7 President and Chief Financial Officer, builds on Mr.  
8 McKenzie's recommendations by more specifically addressing  
9 the relevant risk factors impacting the Company. Mr.  
10 Buckham selects a 10.40 percent ROE point estimate as the  
11 appropriate cost of equity, supports the cost of Idaho  
12 Power's long-term debt, and includes the long-term debt and  
13 the 10.40 percent ROE in the test year capital structure to  
14 derive the Company's proposed overall rate of return.

15 Ms. Paula Jeppsen, the Company's Forecasting and  
16 Planning Director, next testifies to the actual 2022  
17 financial results with standard ratemaking adjustments. Ms.  
18 Jeppsen describes the development and application of the  
19 methodologies used to prepare the 2022 base financial  
20 information and the adjustments to those data associated  
21 with deductions to certain expenses not allowed in rates,  
22 certain adjustments to expenses and rate base, and other  
23 adjustments to revenues, expenses, and rate base related  
24 primarily to past Commission orders.

25 Mr. Matthew Larkin, Revenue Requirement Senior

1 Manager, describes how the Company utilized the 2022  
2 financial data as presented by Ms. Jeppsen as a starting  
3 point from which he made conservative adjustments to derive  
4 similar data corresponding to the 2023 test year. Mr.  
5 Larkin prepared an exhibit that details the method and  
6 rationale for each adjustment he utilized in developing the  
7 2023 test year data. Once he determined the 2023 test year  
8 system-level data, Mr. Larkin supervised the preparation of  
9 the jurisdictional separation study utilized to determine  
10 the Idaho jurisdictional revenue requirement.

11 Ms. Jessica Brady, Regulatory Analyst, provides the  
12 normalized net power supply expenses for the test year and  
13 addresses the requisite changes to the Company's PCA as a  
14 result of changing the normalized net power supply expenses  
15 in Idaho Power Company's base rates.

16 Ms. Kelley Noe, Regulatory Consultant, incorporates  
17 Ms. Jeppsen's financial data, Mr. Larkin's test year  
18 adjustments, Mr. Buckham's overall rate of return  
19 recommendation, and Ms. Brady's normalized net power supply  
20 expenses, along with other necessary inputs, and prepares  
21 the jurisdictional separation study ("JSS"). The JSS, as  
22 its name states, separates system values for rate base,  
23 revenues, and expenses for each state jurisdiction through  
24 an assignment and allocation process that is described in  
25 detail in Ms. Noe's testimony. One result of the JSS is the

1 Idaho retail jurisdictional revenue requirement, which is  
2 the Company's best representation of its expected annual  
3 cost to serve its Idaho retail customers. The 2023 Idaho  
4 jurisdictional revenue requirement is \$1,404,314,821. In  
5 order to obtain this amount, Idaho's annual retail revenues  
6 will need to increase by \$111,304,981 or 8.61 percent.

7 Ms. Connie Aschenbrenner, Rate Design Senior  
8 Manager, describes the Company's approach to rate design  
9 strategy as well as the policy basis for the rate design  
10 proposals being made in this case. Ms. Aschenbrenner also  
11 presents an overview of the Company's approach to  
12 developing pricing for its on-site generation customers,  
13 specifically considering interdependencies between this  
14 case and Case No. IPC-E-23-14, which is currently pending  
15 before the Commission.

16 Mr. Pawel Goralski, Regulatory Consultant, uses the  
17 Idaho retail jurisdictional output from the JSS as  
18 developed by Ms. Noe and further separates costs by  
19 customer class and special contract in preparing the  
20 Company's class cost-of-service study ("CCOS"). The study  
21 prepared by Mr. Goralski in this case presents an approach  
22 most similar to that used by the Company in its last  
23 general rate case, with certain modifications and  
24 additions. In the Company's 2008 general rate case, IPC-E-  
25 08-10, the Commission approved a cost-of-service

1 methodology termed "3CP/12CP" and the Company subsequently  
2 used a similar methodology in its 2011 general rate case,  
3 IPC-E-11-08, which was ultimately settled without a  
4 Commission decision regarding the filed CCOS. Mr. Goralski  
5 used that same CCOS method as the starting point for his  
6 CCOS in this case and then applied modifications to the  
7 seasonal definition for peak capacity allocation, the  
8 classification of baseload resources between demand and  
9 energy, and other changes described in his testimony. Mr.  
10 Goralski recommends that his CCOS be used as the  
11 appropriate starting point for rate spread (the process of  
12 spreading the Idaho jurisdictional revenue requirement to  
13 the customer classes and special contract customers) and  
14 rate design (the ultimate calculation of rates for  
15 customers). Mr. Goralski also presents the Company's rate  
16 recommendations for its special contract customers and  
17 Schedule 20, Speculative High-Density Load as well as the  
18 proposed Fixed Cost Adjustment rates and the corresponding  
19 modifications to Schedule 54.

20           Mr. Grant Anderson, Regulatory Consultant, presents  
21 the Company's proposed rate design and resulting prices for  
22 the residential classes, including standard service  
23 (Schedule 1), time-of-use (Schedule 5), and residential on-  
24 site generation (Schedule 6) and explains the Company's  
25 Residential Price Modernization Plan. Mr. Anderson also

1 presents the rate design proposals for Small General  
2 Service On-Site Generation (Schedule 8), Large General  
3 Service - Primary and Transmission (Schedule 9P/T) and  
4 Large Power customers (Schedule 19).

5 Mr. Zack Thompson, Regulatory Analyst, presents the  
6 rate design proposals for Small General Service (Schedule  
7 7), Large General Service - Secondary (Schedule 9S),  
8 Agricultural Irrigation Service (Schedule 24), Dusk to Dawn  
9 Customer Lighting (Schedule 15), Street Lighting Service  
10 (Schedule 41), Traffic Control Signal Lighting Service  
11 (Schedule 42), and Non-Metered General Service (Schedule  
12 40).

13 Finally, Riley Maloney describes the recommendation  
14 for the Company's Standby Service schedules (Schedules 31  
15 and 45) and Alternate Distribution Service schedule  
16 (Schedule 46). Mr. Maloney also presents several proposed  
17 modifications to the Company's tariff.

18 **V. RATE SPREAD AND RATE DESIGN**

19 Q. What has been Idaho Power's policy with regard  
20 to rate spread and rate design proposals?

21 A. Idaho Power has consistently advocated for the  
22 principle that rate spread among the customer classes, and  
23 for component pricing within the customer classes, should  
24 be primarily cost-based. Accordingly, the Company's  
25 ratemaking proposals have traditionally advocated movement



1 toward cost-of-service results that assign costs to those  
2 customers that cause the Company to incur the costs. The  
3 Company is also committed to providing customers cost-based  
4 price signals, which encourage the wise and efficient use  
5 of energy. As such, I have directed Ms. Aschenbrenner to  
6 design cost-based rate proposals that also encourage  
7 increased energy efficiency among the Company's Residential  
8 Service, Large General Service, Large Power Service and  
9 Irrigation customer groups.

10 Q. Do the Company's proposals in this case  
11 strictly adhere to that objective?

12 A. No. The Company realizes that there are often  
13 other ratemaking objectives, such as rate stability,  
14 ability to pay, and mitigating rate shock, that the  
15 Commission may consider in making its determination.  
16 However, the Company believes that the best starting point  
17 for Commission deliberations is an economic one.  
18 Nevertheless, because some ratemaking situations may cause  
19 abrupt change, Idaho Power has traditionally proposed some  
20 limits to the movement toward cost-of-service. The  
21 specifics of the Company's proposed rate spread and an  
22 exhibit delineating the target revenue requirement for each  
23 customer class are contained in Mr. Goralski's testimony.

24 Q. What guidance did you provide Mr. Goralski  
25 regarding cost-of-service constraints applied to the rate

1 spread ultimately recommended?

2           A.       First, I discussed the CCOS prepared for this  
3 case with Mr. Goralski and agreed that his recommended CCOS  
4 methodology represented the preferred starting point in  
5 this proceeding to develop the recommended rate spread.  
6 However, this method when applied without constraints, does  
7 show a larger impact to a number of customer classes  
8 (relative to the overall average increase), most notably  
9 Agricultural Irrigation, Schedule 24. Given recent rate  
10 pressures and the somewhat subjective nature of cost  
11 allocation and year-to-year cost components, I asked Mr.  
12 Goralski to run several rate mitigation scenarios to look  
13 at the impacts of constraining the rate increase at  
14 different levels.

15           After this review, the Company chose to impose a cap  
16 of one and a half times the average revenue change for any  
17 customer class or special contract customer exceeding the  
18 overall average increase. This level allowed for a  
19 reasonable level of revenue movement, while not  
20 dramatically impacting the remaining classes that had to  
21 make up the shortfall.

22           Q.       How has Idaho Power addressed the cost-based  
23 objective in its rate design proposals?

24           A.       This objective has been met by the  
25 implementation of seasonal rates for all metered service

1 schedules, and the implementation of rate structures that  
2 reflect a greater emphasis on the demand and customer  
3 components. The Company also proposes the continuation of  
4 mandatory time-of-use pricing for Large Commercial  
5 customers taking service at primary and transmission  
6 voltages and all Large Power Service customers. In  
7 addition, this objective has been met by offering optional  
8 time-of-use pricing for Residential and Large General  
9 service customers taking service at the secondary voltage  
10 level.

11 Q. Please summarize the Company's requested Price  
12 Modernization Plan.

13 A. I directed Ms. Aschenbrenner to evaluate and  
14 recommend a proposal that would move fixed cost collection  
15 from volumetric rates into fixed charges, while mitigating  
16 the bill impact to customers. In this case, the Company is  
17 proposing the Commission authorize Idaho Power to implement  
18 revenue neutral rate changes on January 1, 2025, and  
19 January 1, 2026, to achieve this goal. The proposed three-  
20 year Price Modernization Plan appropriately mitigates  
21 customer bill impacts while reducing reliance on the FCA.

22 **VI. CONCLUSION**

23 Q. Please summarize Idaho Power's requested  
24 revenue increase this case?

25 A. The Company is requesting rate relief of

1 approximately \$111.3 million, which is net of a  
2 corresponding proposed PCA decrease of \$173.4 million and a  
3 reduction to annual Rider collection of \$3.5 million. If  
4 approved, this request would result in an overall increase  
5 to adjusted base revenue of 8.61 percent effective January  
6 1, 2024. The Company's request is based on a proposed rate  
7 of return of 7.702 percent, with a capital structure  
8 comprised of 51 percent equity and 49 percent debt, a 4.895  
9 percent cost of debt, and a 10.40 percent ROE. This request  
10 was developed using a test year of 12 months ending  
11 December 31, 2023.

12 Q. Will you please summarize the Company's other  
13 requests for specific regulatory treatment and/or necessary  
14 accounting authority proposed in this case?

15 A. In addition to approval of the base revenue  
16 increase presented in this case and each of the affected  
17 tariff schedules, the Company requests the Commission issue  
18 an order that includes the following:

- 19 1. Approval of a revised Schedule 55, Power Cost  
20 Adjustment, reflecting the transfer of certain  
21 base level NPSE from the PCA to base rates.
- 22 2. Approval of a revised Schedule 91, Energy  
23 Efficiency Rider, reflecting the transfer of  
24 DSM labor-related cost collection from the  
25 Rider into base rates.

- 1                   3. Approval of a revised Schedule 54, Fixed Cost  
2                   Adjustment, reflecting the modifications  
3                   necessary to support the Company's proposed  
4                   rate designs.
- 5                   4. Authorization of the continued deferral of  
6                   incremental vegetation management and insurance  
7                   costs in 2024 and beyond as measured from a new  
8                   base level of costs established in this case.
- 9                   5. In association with the rate increase  
10                  mitigation measure proposed in this case,  
11                  authorization to 1) move to the ADITC/Revenue  
12                  Sharing Mechanism an additional amount of ITC  
13                  equal to the incremental ITC generated from the  
14                  Company's investment in the 2023 battery  
15                  storage projects and 2) increase the maximum  
16                  allowed annual accelerated amortization amount  
17                  by a level of ITC equal to the actual revenue  
18                  requirement of the battery storage projects in  
19                  any applicable year plus the current \$25  
20                  million cap.
- 21                  6. Authorization to defer and amortize annual  
22                  differences between certain periodic  
23                  maintenance costs at the Langley Gulch and  
24                  Bennett Mountain natural gas-fired power plants  
25                  (as described in Mr. Larkin's testimony).

1                   7. Approval of the Company's request for its  
2                   proposed Residential Price Modernization Plan.

3           Q.     Is it your opinion that the granting of the  
4 rate relief proposed by the Company is in the public  
5 interest?

6           A.     Yes. The proposed rates will allow Idaho Power  
7 to continue providing safe, reliable service at reasonable  
8 rates while maintaining its financial health.

9           Q.     Does this conclude your testimony?

10          A.     Yes, it does.

11          //

12          //

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**DECLARATION OF TIMOTHY E. TATUM**

I, Timothy E. Tatum, declare under penalty of perjury under the laws of the state of Idaho:


1. My name is Timothy E. Tatum. I am employed by Idaho Power Company as the Vice President of Regulatory Affairs.

2. On behalf of Idaho Power, I present this pre-filed direct testimony.

3. To the best of my knowledge, my pre-filed direct testimony is true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
Timothy E. Tatum

REDACTED

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
	)	

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

ERIC HACKETT



## REDACTED

1           Q.     Please state your name, business address, and  
2     present position with Idaho Power Company ("Idaho Power" or  
3     "Company").

4           A.     My name is Eric Hackett. My business address  
5     is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6     employed by Idaho Power as the Projects and Design Senior  
7     Manager.

8           Q.     Please describe your educational background.

9           A.     I graduated in 2003 from Boise State  
10    University in Boise, Idaho, receiving a Bachelor of Science  
11    degree in Civil Engineering. I am a registered professional  
12    engineer in the state of Idaho. In 2010, I earned a Master  
13    of Business Administration from Boise State University.

14          Q.     Please describe your work experience with  
15    Idaho Power.

16          A.     From 2005 to 2007, I was employed as an  
17    engineer in Idaho Power's Transmission Engineering  
18    group. In 2007, I became a Project Manager leading  
19    transmission and distribution line and station  
20    infrastructure projects. In 2012, I was promoted to  
21    Engineering Leader where I managed the Cost and Controls  
22    group supporting project management. In 2015, I changed  
23    leadership roles and managed the Stations Engineering and  
24    Design group as an Engineering Leader. In 2018, I was  
25    promoted to Senior Manager of Projects overseeing Project

## REDACTED

1 Management and Cost and Controls, which later became my  
2 current role of Senior Manager of Projects and Design in  
3 2021, adding Power Production Design and Project  
4 Management. In addition, I am currently leading a team of  
5 internal employees and consultants in development and  
6 evaluation of Idaho Power's Request for Proposals for Peak  
7 Capacity and Energy Resources.

8 Q. What is the purpose of your testimony in this  
9 matter?

10 A. The purpose of my testimony is to discuss the  
11 growth in the Company's generation-related rate base since  
12 the completion of the Company's last general rate case  
13 ("GRC"), up to and including major projects expected to be  
14 complete in the 2023 test year. In my testimony I will  
15 discuss the prudent nature of these investments, detailing  
16 why they are needed to ensure Idaho Power's generation  
17 fleet is robust and well-positioned to provide continued  
18 safe, reliable service to customers.

19 Q. How is your testimony organized?

20 A. My testimony begins with a background of the  
21 Company's generation fleet and the factors that have led to  
22 generation-related investment since the conclusion of the  
23 Company's last GRC in 2011, Case No. IPC-E-11-08. I will  
24 then provide a discussion of proactive investments in Idaho  
25 Power's aging hydro fleet to ensure these facilities are

1 well-equipped to continue to provide safe, clean and  
2 reliable energy to customers. My testimony will conclude  
3 with detail on Idaho Power's investment associated with the  
4 addition of utility-scale battery projects included in the  
5 2023 test year, and explain why the Company's investment in  
6 these facilities reflects the least-cost, least-risk option  
7 to ensure sufficient capacity to meet customer demand in  
8 2023 and beyond.

9 **I. BACKGROUND**

10 Q. Please describe Idaho Power's current  
11 generation fleet.

12 A. The backbone of Idaho Power's current  
13 generation fleet consists of the Company's 17 hydroelectric  
14 projects on the Snake River and its tributaries. Together,  
15 these projects comprise the Company's largest generation  
16 source at approximately 1,800 megawatts ("MW") of nameplate  
17 capacity. Additionally, the Company is the sole owner of  
18 three gas-fired generation facilities: the Danskin and  
19 Bennett Mountain simple-cycle power plants located near  
20 Mountain Home, Idaho, and the Langley Gulch combined-cycle  
21 power plant located near New Plymouth, Idaho, which provide  
22 approximately 762 MW of combined capacity. The Company also  
23 holds a 33 percent ownership share in the coal-fired Jim  
24 Bridger power plant ("Bridger"), which is expected to  
25 undergo conversion to natural gas generation at two of four

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1 units in the first half of 2024. Idaho Power's share of  
2 current coal-fired operations at Bridger provides  
3 approximately 706 MW of combined net dependable capacity.  
4 The Company also has access to 134 MW of net dependable  
5 capacity at the coal-fired North Valmy power plant,  
6 reflecting 50 percent of the nameplate capacity at Unit 2  
7 of that facility. Lastly, the Company owns and operates a 5  
8 MW diesel facility near Salmon, Idaho.

9 Q. How has Idaho Power's generation-related rate  
10 base grown since the last GRC in 2011?

11 A. As discussed in the Direct Testimony of  
12 Company Witness Ms. Lisa Grow, over the last decade Idaho  
13 Power has placed in service over \$3.3 billion in  
14 infrastructure. Of this \$3.3 billion, approximately \$1.3  
15 billion reflects investment in the Company's generation  
16 facilities. This investment was largely driven by growth on  
17 the Company's system and a proactive approach to addressing  
18 aging infrastructure. Because the Langley Gulch plant has  
19 already been approved for recovery in customer rates, the  
20 remainder of my discussion will focus on investments after  
21 Langley Gulch came online in 2012.<sup>1</sup>

22 Q. How has growth driven investment in Idaho  
23 Power's generation fleet since Langley Gulch came online in  
24 2012?

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<sup>1</sup> Order No. 32585

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1           A.       For the first time since Langley Gulch came  
2   into service in 2012, Idaho Power is adding new Company-  
3   owned resources to its generation fleet in the 2023 test  
4   year. As discussed in Ms. Grow's testimony, the Company has  
5   experienced unprecedented growth over the past decade,  
6   adding approximately 117,000 new customers between 2012 and  
7   2022. Over that same time period, normalized energy sales  
8   have grown from 14,010,319 megawatt-hours ("MWh") in 2012  
9   to over 15,358,562 MWh in 2022. From a peak load  
10  perspective, Idaho Power's system peak load (approximately  
11  95 percent of which is attributable to the state of Idaho)  
12  has grown from 3,245 MW in 2012 to 3,568 MW in 2022. As I  
13  will detail in the next section of my testimony, this  
14  growing load resulted in the Company experiencing a  
15  resource deficiency in 2023, thus necessitating the  
16  addition of new resources.

17           Q.       How has the age of the Company's existing  
18  generation fleet driven investment over the last decade?

19           A.       In addition to growth, Ms. Grow also describes  
20  how much of the Company's infrastructure is aging to the  
21  extent that replacement or refurbishment is required to  
22  maintain safe, reliable operation of the electrical grid.  
23  Much of the Company's hydro facilities are decades old,  
24  such as the Shoshone Falls power plant, which is over 100  
25  years old, and the Hells Canyon Complex ("HCC"), which was

1 constructed in the 1950s and 1960s. To ensure the Company's  
2 generation fleet can continue to provide safe, reliable  
3 service, the Company takes a proactive approach to ensuring  
4 a robust and reliable generation fleet, resulting in  
5 significant investment over the last decade.

6 **II. HYDRO FACILITIES INVESTMENTS**

7 Q. Please describe the major investments related  
8 to the Company's hydro fleet since the conclusion of the  
9 2011 GRC.

10 A. Since the Company's last GRC, Idaho Power has  
11 made several major investments in its hydro fleet, notably  
12 the refurbishment of all four turbines at the Brownlee  
13 hydrogeneration facility ("Brownlee"), upgrades and  
14 improvements at Shoshone Falls, and refurbishment of the  
15 Lower Salmon Falls hydrogeneration facility ("LSF").

16 ***Brownlee***

17 Q. Please describe the Brownlee hydrogeneration  
18 facility.

19 A. Brownlee is the most upriver dam in the HCC,  
20 which is comprised of the largest and most operationally  
21 flexible facilities in the Company's hydro fleet. The HCC  
22 consists of three dams: Brownlee, Oxbow, and Hells Canyon,  
23 which, prior to the upgrades I will discuss, provided over  
24 1,166.9 MW of nameplate generation capacity. Brownlee  
25 consists of five turbines, four with a generating capacity

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1 prior to refurbishment of 90.1 MW, for a total of 360.4 MW  
2 and one (Unit 5) with a generating capacity of 225 MW.

3 Q. What drove the need for the turbine  
4 refurbishment project at Brownlee?

5 A. At the time the refurbishment commenced, the  
6 four turbines at Brownlee had been in service for over 57  
7 years. The turbines were nearing the end of their useful  
8 lives, cavitation damage had accumulated and deterioration  
9 was observed on the turbines and wicket gates. To ensure  
10 the reliable operation of the plant and the continued  
11 availability of this source of low-cost, clean hydropower,  
12 refurbishment of the turbines was absolutely necessary.

13 Q. Did Idaho Power gain any additional benefits  
14 from the turbine refurbishment project in addition to  
15 reliability?

16 A. Yes. In addition to improving reliability at  
17 the plant, the refurbishment project increased the  
18 nameplate capacity of Brownlee, resulting in an increase of  
19 22.4 MW for each of units 1 through 4, or a cumulative  
20 increase of 89.6 MW for the entire facility, elevating the  
21 total nameplate capacity from 585.4 MW to 675 MW.  
22 Additionally, the existing turbine runners were replaced  
23 with new aerating runners, which added the ability to  
24 aerate the water to meet expected dissolved oxygen

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1 requirements associated with the Federal Energy Regulatory  
2 Commission ("FERC") license for the HCC.

3 Q. When was the Brownlee refurbishment project  
4 completed?

5 A. Refurbished Units 1, 3, 2, and 4 went into  
6 service in 2016, 2017, 2018, and 2019, respectively.

### 7 ***Shoshone Falls***

8 Q. Please describe Shoshone Falls.

9 A. Shoshone Falls is a hydroelectric facility  
10 outside Twin Falls, Idaho. Prior to the upgrade of this  
11 facility, it consisted of three units at a combined  
12 nameplate capacity of 12.5 MW.

13 Q. Please describe the scope of work Idaho Power  
14 performed at Shoshone Falls since its last GRC.

15 A. Between 2018 and 2020, Idaho Power replaced  
16 Units 1 and 2, replaced the exterior equipment conveyer,  
17 made improvements to the intake structure, and completed  
18 significant work to ensure the safe, reliable operation of  
19 the plant.

20 Q. What drove the need for the replacement of  
21 these units?

22 A. Prior to their replacement, both units were  
23 over 85 years old. Unit 2 had become inoperable due to  
24 cavitation damage and cracking of the turbine runner, while  
25 Unit 1 was shut down in 2017 due to a thrust bearing



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1 failure. Further, under the existing setup, both units  
2 could only be operated manually from the powerhouse,  
3 limiting the ability for dynamic dispatch.

4 Q. Please describe the work Idaho Power performed  
5 at Shoshone Falls related to the generating units.

6 A. Idaho Power replaced Units 1 and 2 with a  
7 single horizontal new turbine and generator with a  
8 nameplate capacity of 3.2 MW, increasing the plant's  
9 overall nameplate capacity to 14.7 MW. New unit ancillary  
10 equipment including a turbine inlet valve and turbine unit  
11 controls were also installed.

### 12 ***Lower Salmon Falls***

13 Q. Has Idaho Power performed any other major  
14 upgrades or refurbishments at any of its other hydro  
15 facilities over the last decade?

16 A. Yes. For the last eight years, Idaho Power has  
17 been upgrading and refurbishing the hydrogeneration  
18 facility at Lower Salmon Falls to ensure the safe and  
19 reliable production of energy and to enhance the generation  
20 capability of this aging plant.

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1           Q.     Please describe LSF.

2           A.     LSF was first constructed in 1910 by the  
3 Greater Shoshone and Twin Falls Power Company, then  
4 acquired by Idaho Power in 1916 and rebuilt in 1946. LSF  
5 consists of four generating units that provide a combined  
6 60 MW of clean, reliable hydropower.

7           Q.     What drove the need for investment in LSF?

8           A.     Many components at LSF were aging and in need  
9 of replacement. Annual condition-based testing of the coils  
10 showed them to be deteriorated and in need of replacement.  
11 Various components of the facility were aging and in need  
12 of replacement, such as the coils (32 years), core (70  
13 years), and turbine and mechanical components (70 years).

14          Q.     Please describe the scope of work for the LSF  
15 refurbishment project.

16          A.     Idaho Power replaced the turbine runners for  
17 Units 1, 2 and 3, and the Unit 2 Kaplan runner received new  
18 blades and refurbished inner mechanical components. The  
19 turbine unit was completely disassembled and mechanical  
20 components of the units were refurbished or replaced as  
21 necessary. The head cover was replaced on Units 1 and 3 due  
22 to cracking. Generator work included a new stator core and  
23 new coils for all units.

24          Q.     What benefits will the LSF refurbishment  
25 provide?

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1           A.       This project is expected to increase unit  
2   efficiency by 2 to 5 percent and is anticipated to increase  
3   unit operational flexibility. In addition to incremental  
4   generation and flexibility, this project should reduce  
5   long-term maintenance costs as well. As an added benefit,  
6   the increased generation from the project is expected to  
7   qualify for tax credits and renewable energy credits  
8   ("REC"), which will be sold in accordance with the  
9   Company's REC Management Plan to offset net power supply  
10  expenses for all customers.

11           Q.       When is the LSF project expected to be  
12  completed?

13           A.       Refurbished Units 1, 2, and 4 went into  
14  service in 2022, 2020, and 2015, respectively. Refurbished  
15  Unit 3 is scheduled to go into service December 2023.

16           Q.       Do the examples discussed in your testimony  
17  reflect a prudent and proactive approach to managing the  
18  Company's hydro fleet?

19           A.       Yes. Over the last decade Idaho Power has  
20  completed numerous projects at its hydro facilities to  
21  ensure they are able to provide safe, clean, and reliable  
22  service to customers.

### III. 2023 BATTERIES

Q. What drove the need for the addition of the utility-scale battery projects for which the Company is seeking a prudence determination in this case?

A. As discussed earlier in my testimony, Idaho Power has experienced and expects sustained load growth and transmission import constraints, thereby requiring the addition of new dispatchable resources to meet peak summer demand. As a result of this growth and import constraints, in May 2021, the Company identified a near-term capacity deficit in summer 2023. To meet its obligation to reliably serve customer load and fill this capacity deficiency, in June 2021, the Company issued a competitive solicitation through a request for proposals ("RFP") seeking to acquire dispatchable resources to be online by June 2023. This robust competitive bidding process resulted in the procurement of 120 MW of dispatchable four-hour duration battery energy storage as well as execution of a 20-year Power Purchase Agreement ("PPA") for 40 MW of photovoltaic ("PV") solar, all of which was necessary to adequately address 2023 capacity deficits.

Q. Did the Company file a request for a Certificate of Public Convenience and Necessity ("CPCN") for the 2023 resource procurement?

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1           A.       Yes. Idaho Power's request for a CPCN  
2   associated with a total of 120 MW of Company-owned battery  
3   storage, the Hemingway 80-MW four-hour duration battery  
4   energy storage system ("BESS") and the Black Mesa 40-MW  
5   four-hour duration BESS, was presented in Case No. IPC-E-  
6   22-13. At the conclusion of this case, the Commission  
7   granted a CPCN with Order No. 35643, stating that "...the  
8   evidence and the record ... demonstrates that the public  
9   convenience and necessity requires the Company to acquire  
10  120 MW of dispatchable energy storage." The request for  
11  approval of the 20-year PPA for 40 MW of solar was filed in  
12  Case No. IPC-E-22-06, which was approved by the Commission  
13  in Order No. 35482.

14           Q.       Did the Company request binding ratemaking  
15  treatment for the investments in the 120 MW of Company-  
16  owned battery storage facilities?

17           A.       No. Due to the urgency of the 2023 capacity  
18  deficiency and the issuance of the resulting RFP, Idaho  
19  Power was still in the process of negotiating a number of  
20  agreements necessary for the construction, installation,  
21  and maintenance of the projects and, therefore, binding  
22  ratemaking treatment was not requested. The Company's  
23  request was that the Commission find Idaho Power had met  
24  the requirements of *Idaho Code* § 61-526 and issue a CPCN,  
25  which was ultimately granted in Order No. 35643.

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1           Q.       Did Order No. 35643 impose any conditions on  
2 recovery of costs associated with the procurement of the  
3 120 MW of Company-owned battery storage?

4           A.       Yes. Order No. 35643 approved the acquisition  
5 of the 120 MW of energy storage resources but found that  
6 "implementing a soft cap of up to \$50,228,329 and  
7 \$100,456,659, for the 40 MW BESS and 80 MW BESS,  
8 respectively, is reasonable."<sup>2</sup> This equates to a total soft  
9 cap of \$150,684,988.

10          Q.       Why did the Commission impose a soft cap on  
11 the 2023 battery storage investments?

12          A.       In its Order, the Commission adopted  
13 Commission Staff's ("Staff") recommendation to implement  
14 the soft cap due to concerns regarding whether the selected  
15 resources were least-cost. In comments, Staff expressed  
16 concerns about the lead time and certain restrictions  
17 associated with the resource procurement process, resulting  
18 in its recommendation regarding the soft cap.<sup>3</sup> The soft cap  
19 did not foreclose future requests by Idaho Power for  
20 recovery of costs above the soft cap, but rather indicated  
21 the Company would have to provide justification for any  
22 costs above the soft cap when requesting rate recovery.

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<sup>2</sup> Order No. 35643 pg. 12.

<sup>3</sup> Order No. 35643 pg. 13.

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1           Q.       Was the procurement of the 120-MW Company-  
2 owned battery storage facilities least-cost?

3           A.       Yes. The Company's competitive solicitation  
4 process was initiated as soon as feasibly possible once  
5 the 2023 capacity deficiency was identified, and the  
6 project that was ultimately selected was the direct result  
7 of this process.

8           Q.       What led to the rapid change in the 2023  
9 capacity deficiency?

10          A.       The Company's rapid change in the 2023  
11 capacity deficiency was the result of several dynamic and  
12 evolving factors including: transmission availability,  
13 planning reserve margin determinations and reliability  
14 methodology modernization, an increasing population, new  
15 large customers in the service area and associated emergent  
16 load demands on the Company's system, and the ability of  
17 demand response programs and variable energy resources to  
18 meet load during the Company's highest-risk hours. The  
19 updated load and resource balance analysis prepared in May  
20 2021 first identified a 2023 capacity deficit, and the  
21 Company immediately began to prepare an RFP, which was  
22 issued on June 30, 2021, roughly one month after the load  
23 and resource balance was updated.

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1           Q.       Was the RFP solicitation as expedient and  
2 robust as possible given the urgency of the capacity need  
3 in 2023?

4           A.       Yes. Due to the urgency, the RFP solicitation  
5 focused on the importance of having a project in service by  
6 June 2023; given resource-specific permitting and  
7 construction timelines, the RFP solicited energy storage  
8 projects, solar PV projects, solar PV plus storage  
9 projects, wind projects, and wind plus storage projects.  
10 There was only one economic project bid into the RFP that  
11 was able to meet the required commercial operation date of  
12 June 2023 – the 20-year PPA associated with a 40-MW solar  
13 PV facility – which was selected through the RFP process.

14           The initial proposal also envisioned a build-  
15 transfer agreement associated with a 40-MW battery storage  
16 facility. However, during negotiations associated with the  
17 PPA, the developer indicated they were no longer interested  
18 in pursuing a build-transfer agreement and instead  
19 coordinated on the Idaho Power-owned battery storage  
20 project located at the developer's solar PV site,  
21 ultimately resulting in a self-build option that was lower  
22 cost for customers.

23           Q.       Aside from being the only economic project  
24 able to meet the required commercial operation date of June  
25 2023, does the Company have any additional support to



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1 indicate the 120 MW of Company-owned battery storage  
2 facilities were least-cost?

3 A. Yes. At the time, Idaho Power was performing a  
4 parallel investigation into different configurations of  
5 Company-owned and constructed BESS, and the indicative  
6 pricing received was comparable to the lowest-cost  
7 proposals for similar battery storage projects submitted  
8 through the RFP process. In fact, pricing on the proposed  
9 40-MW battery storage was based on a BESS from Powin Energy  
10 Corporation ("Powin"), one of the suppliers for which the  
11 indicative pricing was based. Procuring the BESS from Powin  
12 directly resulted in lower BESS costs, further supporting  
13 the acquisition of the least-cost, least-risk resource  
14 necessary to fill the 2023 capacity deficiency.

15 Q. Does the Company believe the RFP process was  
16 robust and that the resources procured were least-cost  
17 resources?

18 A. Yes. The 40-MW solar facility plus 40 MW of  
19 battery storage was identified through the RFP, resulting  
20 in a PPA for the solar facility. The decision for Idaho  
21 Power to procure the 40-MW battery storage facility  
22 directly from Powin was the result of conversations with  
23 the solar developer and Powin, ultimately resulting in a  
24 self-build option that was lower cost for customers. The  
25 remaining 80-MW project was identified through the

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1 Company's extensive analysis of other configurations to  
2 complement the RFP process, ensuring the resulting projects  
3 were least cost and least risk.

4           The lack of sufficient viable projects resulting  
5 from the RFP was not an indication that the RFP was  
6 inadequate, but rather the result of the requirement for a  
7 commercial operation date of June 1, 2023, which other  
8 bidding entities would not commit to achieving. During this  
9 time, the United States and the rest of the world were also  
10 experiencing significant supply chain disruptions and  
11 constraints, which impacted in-service dates and costs. The  
12 RFP was robust and sufficient, indicating prudent action  
13 based on information known at the time.

14           Q.       Did Idaho Power agree with Staff's  
15 quantification of the soft cap?

16           A.       No. In Case No. IPC-E-22-13, the Company  
17 expressed concern that the quantification of the soft cap,  
18 presented in Staff's Comments in that case, was flawed.  
19 Because Idaho Power did not receive multiple bids through  
20 the RFP process, Staff performed a benchmark analysis on  
21 which the quantification of the soft cap was based. The  
22 analysis, however, was based on a National Renewable Energy  
23 Laboratory ("NREL") study that is intended for long-term  
24 planning purposes and ignores current market realities and  
25 supply chain disruptions that impact the costs of lithium-

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1 ion battery systems, resulting in a flawed analysis. In  
2 fact, the NREL study states in its disclaimer: the NREL  
3 data is "prepared for reference purposes only," "based upon  
4 expectations of current and future conditions," and  
5 "subject to change without notice."<sup>4</sup>

6 While NREL data may be valuable in developing long-  
7 term integrated resource plan ("IRP") forecast cost  
8 assumptions over a 20-year time horizon, market realities  
9 can vary significantly when contracting near-term  
10 resources. This was certainly the case between 2020 and  
11 2022, as the COVID-19 pandemic, inflation, and other  
12 factors disrupted markets across the world. As evidenced by  
13 actual lithium-ion battery system costs, the downward  
14 pricing trend anticipated by NREL reversed into an upward  
15 trend starting in late 2021 and continued into 2022. This  
16 increasing price trend is well documented by industry  
17 reporting firms and will likely be incorporated into  
18 upcoming NREL forecasts.

19 Q. Are there any additional factors that would  
20 suggest the NREL study used by Staff is not appropriate for  
21 use in a benchmark analysis?

22 A. Yes. In addition to not factoring in current  
23 market realities, which include current real-world supply  
24 chain constraints, pricing, and above-normal inflation, the

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<sup>4</sup> <https://atb.nrel.gov/electricity/2022/disclaimer>

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1 NREL study referenced used 2020 as its base year or last  
2 historical year, which, at the time, anticipated a decline  
3 of 27 percent in costs from 2020 to 2023, as can be seen in  
4 the table below.

5 **Table 1**

6 NREL Forecasted Utility-Scale Battery Storage - 4Hr -  
7 Moderate

	2020	2021	2022	2023	2024	2025
\$/kW	\$1,727	\$1,475	\$1,371	\$1,256	\$1,167	\$1,104
Annual Change		(\$252)	(\$104)	(\$115)	(\$89)	(\$63)
Annual Percent Change		-15%	-7%	-8%	-7%	-5%
Change from 2020		(\$252)	(\$356)	(\$471)	(\$560)	(\$623)
Percent Ch. From 2020		-15%	-21%	-27%	-32%	-36%

8  
9 This stale NREL data did not consider recent market  
10 realities and should not have been used as a basis for  
11 Staff's soft cap recommendation. Further, in the *Annual*  
12 *Technology Baseline: The 2022 Electricity Update*,<sup>5</sup> NREL  
13 notes that it does not track near-term cost variability,  
14 and further notes that the baseline is to help in  
15 conducting scenario analysis for 5 to 30-year futures.

16 Q. Did the Company see a decline in battery  
17 storage costs as indicated in the NREL study?

18 A. No, the opposite occurred. Demand for utility-  
19 scale BESS projects in the second half of 2021 and into  
20 2022, coupled with supply chain constraints and above-  
21 normal inflation, resulted in an increase in pricing of

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<sup>5</sup> <https://www.nrel.gov/docs/fy22osti/83064.pdf>, slide 54.

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1 battery storage. Industry information suggested a 10 to 20  
2 percent increase or more from 2020 levels, driven by this  
3 high demand, input prices for lithium carbonate, and  
4 inflationary pressures on other materials and labor.<sup>6</sup>  
5 Utility Dive noted in April 2022 that battery storage costs  
6 rose more than 20 percent as compared to 2020 and 2021  
7 installs, stating "crimped supply chains, rising demand for  
8 batteries and higher costs of lithium used in ubiquitous  
9 lithium-ion batteries make for a steep climb ahead ..."<sup>7</sup>  
10 Nearly all battery material costs had increased over the  
11 prior year and some major battery module inputs increased  
12 significantly.

13           The index for nearly every commodity that  
14           is required to manufacture lithium-ion  
15           batteries, including aluminum, copper,  
16           and nickel, has risen across the board.  
17           The price of lithium-carbonate has  
18           increased 500 percent in the last 12  
19           months. Bloomberg New Energy Finance  
20           calculates that each 20 percent increase  
21           in the price of lithium-carbonate results  
22           in a three percent increase in the total  
23           cost of battery modules.<sup>8</sup>  
24

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<sup>6</sup> *IHS Markit*: "Multiple factors halt downward trajectory of Li-ion battery costs, with higher prices for energy storage systems set to continue throughout 2022 and 2023" January 6th, 2022.

<sup>7</sup> *Utility Dive*: "Battery storage costs rise more than 20% in New York as state forges ahead with 6 GW goal", April 12th, 2022.

<sup>8</sup> *Utility Dive*: "Navigating the evolving state of the storage industry," April 4th, 2022.

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1           Q.       Does Idaho Power have an alternative source of  
2 data that it believes would have been a more appropriate  
3 basis for a benchmark analysis of battery storage costs?

4           A.       Yes. The most appropriate market guide is  
5 actual RFP responses. However, if a benchmark is desired,  
6 as part of the IRP process, the Company utilizes Wood  
7 Mackenzie, a global research and consultancy business that  
8 provides quality data, analytics, and insights for energy,  
9 chemicals, metals, mining, and the power and renewables  
10 industries, as a data source for battery storage prices. In  
11 *Wood Mackenzie's U.S. Energy Storage Monitor - 2021 Year in*  
12 *Review Full Report*, dated March 2022, average utility-scale  
13 four-hour battery prices averaged [REDACTED] per kilowatt  
14 ("kW") for the same time period, as compared to the NREL  
15 data utilized by Staff that suggested battery storage costs  
16 in 2021 would have been \$1,475 per kW.

17          Q.       How did the total estimated cost of the  
18 battery storage projects compare?

19          A.       Using the Company's estimated project costs at  
20 the time Case No. IPC-E-22-13 was filed, the total cost of  
21 the 120 MW of battery storage projects, excluding  
22 interconnection and transmission upgrade costs analogous to  
23 the NREL and Wood Mackenzie cost estimates, was  
24 approximately \$1,650 per kW. Staff used the outdated NREL  
25 data to benchmark Idaho Power's battery storage costs,

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1 suggesting that, based on the forecasted 2023 NREL battery  
2 storage costs, the Company could have procured the BESS for  
3 as little as \$1,256 per kW, and therefore Idaho Power's  
4 selection of the products was not least cost. Yet, when  
5 current market conditions and industry trends are factored  
6 into battery storage costs, average costs for procurement  
7 in 2022 would range from \$1,966 per kW to as high as \$2,144  
8 per kW, evidence that the soft cap was inherently flawed  
9 and punitive and should not have been imposed on Idaho  
10 Power.

11 Q. Assuming the low range of Idaho Power's  
12 estimate of the average cost for procurement of battery  
13 storage developed in 2022, what is the Company's  
14 quantification of a reasonable benchmark estimate?

15 A. Using the low end of the range, \$1,966 per kW,  
16 for average battery storage costs developed in 2022 would  
17 suggest that a battery project costing \$235.9 million  
18 represents a more reasonable benchmark estimate, which is  
19 \$85.2 million greater than the soft cap imposed by the  
20 Commission.

21 Q. Your discussion of the average battery storage  
22 costs focuses on data available during the processing of  
23 Case No. IPC-E-22-13, the point at which Staff presented  
24 the benchmark analysis. Does Idaho Power have an updated  
25 estimate of the average cost of battery storage?

## REDACTED

1           A.       Yes. As part of the modeling for the 2023 IRP,  
2   Idaho Power is estimating average four-hour duration  
3   battery storage costs of \$1,600 per kW.

4           Q.       What is the total investment in the 120 MW of  
5   Company-owned battery storage included in the Company's  
6   2023 test year?

7           A.       The Company is requesting in this case to  
8   include \$146.8 million for 120 MW of battery capacity plus  
9   an additional \$28 million investment to account for  
10   performance degradation over time that will ensure the  
11   batteries maintain the 120 MW of capacity.

12          Q.       Does the Company's request in this case  
13   reflect a cost that is below an appropriately calculated  
14   benchmark estimate?

15          A.       Yes. The Company's total request for \$174.8  
16   million in rate base for the 120 MW of batteries reflects a  
17   cost of \$1,457 per kW. Relative to available cost data at  
18   the time Case No. IPC-E-22-13 was being processed, the 2023  
19   test year amounts are well below the range of \$1,966 per kW  
20   to \$2,144 per kW based on average costs for procurement in  
21   2022. Further, the Company's 2023 test year costs are  
22   nearly 10 percent lower than current battery storage costs  
23   based on the Company's forthcoming IRP analysis.

24          Q.       Does the information presented in your  
25   testimony support the Company's assertion that the 120 MW



## REDACTED

1 of batteries procured by Idaho Power were the least-cost  
2 option to meet the 2023 capacity deficiency?

3 A. Yes. Idaho Power identified a 2023 capacity  
4 deficiency in May 2021 and issued an RFP as soon as  
5 feasibly possible in June 2021. This robust competitive  
6 process ultimately resulted in the procurement of the 120  
7 MW of batteries included in the Company's 2023 test year.  
8 The final cost of these batteries is lower than Wood  
9 Mackenzie-based pricing available at the time the 2023 CPCN  
10 case was being processed and was even less than costs  
11 available today. For all these reasons, the 120 MW of  
12 batteries included in this case represent the least-cost,  
13 least-risk option for customers.

#### 14 IV. CONCLUSION

15 Q. Please summarize your testimony.

16 A. As mentioned in Ms. Grow's testimony, Idaho  
17 Power experienced unprecedented growth over the past  
18 decade, resulting in the need for the Company to procure  
19 its first utility-scale resources since Langley Gulch was  
20 placed in service in 2012. The Company's proactive approach  
21 to refurbishing and upgrading its existing resource fleet  
22 reflects a prudent approach to ensuring the continued  
23 provision of safe, clean, and reliable energy to meet the  
24 needs of Idaho Power's customers. Idaho Power's investment  
25 in the 2023 batteries reflects the least-cost, least-risk

## REDACTED

1 option to meet the Company's resource need, as identified  
2 in the 2023 CPCN case and affirmed in Commission Order No.  
3 35643.

4 Q. Do you believe the inclusion in rates of the  
5 generation-related rate base in the Company's 2023 test  
6 year would result in fair, just, and reasonable rates?

7 A. Yes.

8 Q. Does this conclude your direct testimony in  
9 this case?

10 A. Yes, it does.

11 //

12 //

13 //

REDACTED

# DECLARATION OF ERIC HACKETT

I, Eric Hackett, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Eric Hackett. I am employed by Idaho Power Company as the Projects and Design Senior Manager.

2. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Eric Hackett

Signed: \_\_\_\_\_

ERIC HACKETT

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES       )  
AND CHARGES FOR ELECTRIC SERVICE       )  
IN THE STATE OF IDAHO AND FOR          )  
ASSOCIATED REGULATORY ACCOUNTING      )  
TREATMENT.                               )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

LINDSAY BARRETTO

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Lindsay Barretto. My business  
5 address is 1221 West Idaho Street, Boise, Idaho 83702.

6           Q.     Please describe your educational background.

7           A.     I received a Bachelor of Science degree in  
8 Civil Engineering from Purdue University, West Lafayette,  
9 Indiana in 2005. In 2007, I earned a Master of Science  
10 degree in Civil Engineering from Purdue University. I am a  
11 registered professional engineer in the state of Idaho.

12          Q.     Please describe your work experience with  
13 Idaho Power.

14          A.     I began my employment with Idaho Power in 2010  
15 as an engineer in Power Production's Civil Engineering  
16 department. As an engineer I worked on hydroelectric and  
17 hatchery projects and regulatory compliance. In 2015, I  
18 moved to Transmission and Distribution Engineering and  
19 Construction as a project manager leading power line and  
20 substation projects. In 2018, I became an Engineering  
21 Leader, responsible for the Stations Engineering and Design  
22 department. In 2020, I was promoted to my current  
23 position, Senior Manager of 500kV and Joint Projects, where  
24 my responsibilities include supervision over Idaho Power's  
25 500kV and Joint Projects.

1 Q. What is the purpose of your testimony in this  
2 matter?

3 A. My testimony discusses the prudent nature of  
4 investments made at the North Valmy Power Plant ("Valmy")  
5 and the Jim Bridger Power Plant ("Bridger") since the  
6 Company's last prudence determinations before the Idaho  
7 Public Utilities Commission ("Commission"), including a  
8 discussion of Idaho Power's compliance with Order No.  
9 34349, issued in Case No. IPC-E-22-05, as modified with  
10 Order No. 35774.

11 Q. What exhibits are you sponsoring?

12 A. I am sponsoring Exhibit Nos. 1, 2 and 3.

13 **I. BACKGROUND**

14 Q. Please describe the Bridger and Valmy plants.

15 A. Valmy is a coal-fired power plant that  
16 consists of two units and is located near Winnemucca,  
17 Nevada. Unit 1 went into service in 1981 and Unit 2  
18 followed in 1985. Idaho Power owns 50 percent of Valmy. NV  
19 Energy is the co-owner of the plant with the remaining 50  
20 percent ownership and operates the Valmy facility. Idaho  
21 Power and NV Energy (collectively, the "Valmy Co-Owners")  
22 work jointly to make decisions regarding Valmy. The Company  
23 exited coal-fired operations of Unit 1 December 31, 2019,  
24 as accepted by the Commission in Order No. 33983 as part of  
25 Idaho Power's 2017 Integrated Resource Plan. The Preferred

1 Portfolio identified in the 2021 IRP, filed in Case No.  
2 IPC-E-21-43, concluded an exit from Valmy Unit 2 in 2025  
3 provides a more favorable economic outcome when compared to  
4 an earlier exit.

5 The Bridger plant, located near Rock Springs,  
6 Wyoming, consists of four generating units. PacifiCorp has  
7 two-thirds ownership and is the operator of the facility  
8 and Idaho Power owns one-third of Bridger. Unit 1 began  
9 commercial operation in 1974, Unit 2 in 1975, Unit 3 in  
10 1976 and Unit 4 in 1979. The Company and PacifiCorp  
11 (collectively, the "Bridger Co-Owners") work jointly to  
12 make decisions regarding the plant, including required  
13 investments and the retirement of the plant. Idaho Power's  
14 Second Amended 2019 IRP acknowledged in Case No. IPC-E-19-  
15 19 identified a preferred portfolio that included early  
16 Bridger unit exits in 2022, 2026, 2028, and 2030.  
17 Subsequently, the 2021 IRP Preferred Portfolio, filed in  
18 Case No. IPC-E-21-43, includes the conversion of Units 1  
19 and 2 from coal to natural gas by the summer of 2024, and  
20 the exit of coal-fired operations in Units 3 and 4 by year-  
21 end 2025 and 2028, respectively.

22 Q. What are the current agreements under which  
23 the Valmy Co-Owners own and operate the plant?

24 A. The ownership and operation of Valmy is  
25 governed by three agreements: the Agreement for the

1 Ownership of the North Valmy Power Plant Project and the  
2 Agreement for the Operation of the North Valmy Power Plant  
3 Project, both of which are dated December 12, 1978, and the  
4 North Valmy Station Operating Procedures Criteria, dated as  
5 of February 11, 1993, between Idaho Power Company and  
6 Sierra Pacific Power Company,<sup>1</sup> as amended by Amendment No. 1  
7 to the Operating Procedure Criteria for Valmy Coal  
8 Diversion Procedures and Usage, dated as of January 1,  
9 2012. Additionally, the Valmy Co-Owners entered into the  
10 North Valmy Project Framework Agreement between NV Energy  
11 and Idaho Power dated as of February 22, 2019,  
12 memorializing the terms and conditions under which either  
13 partner may elect exit of participation of Valmy.

14 Q. What agreements govern the ownership and  
15 operation of the Bridger plant?

16 A. Currently, the ownership and operation of  
17 Bridger is dictated by three agreements: the Agreement for  
18 the Ownership of the Jim Bridger Project between Idaho  
19 Power Company and Pacific Power & Light Company, the  
20 Agreement for the Construction of the Jim Bridger Project  
21 between Idaho Power Company and Pacific Power & Light  
22 Company, and the Agreement for the Operation of the Jim  
23 Bridger Project between Idaho Power Company and Pacific

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<sup>1</sup> Sierra Pacific Power Company has conducted business as NV Energy since 2008.



1 Power & Light Company, all of which are dated September 22,  
2 1969, as amended by Amendments 1 through 9 (collectively,  
3 "Bridger Agreements"). The Bridger Agreements set forth the  
4 respective obligations of the Bridger Co-Owners with  
5 respect to the ownership, construction and operation of  
6 Bridger.

7           **II.    RATEMAKING TREATMENT OF VALMY AND BRIDGER**

8           Q.       Has the Company requested from the Commission  
9 any ratemaking treatment associated with the coal  
10 investments in Valmy and Bridger based on the early exit of  
11 coal-fired operations?

12           A.       Yes. In Case No. IPC-E-16-24 and updated in  
13 Case No. IPC-E-19-08, Idaho Power requested approval of a  
14 balancing account mechanism designed to smooth revenue  
15 requirement impacts associated with the shutdown of Valmy  
16 and allow for full recovery of Valmy-related costs near the  
17 plant's end-of-life. In addition, this mechanism more  
18 closely aligns the cost recovery period with the remaining  
19 operating life of the plant, resulting in a better matching  
20 of cost recovery from customers who benefit from the  
21 plant's operations while mitigating the risk of future  
22 customers bearing the costs of a plant that will no longer  
23 be providing service. The Commission approved the Company's  
24 request with Order Nos. 33771 and 34349, respectively.  
25 Similarly, in Case No. IPC-E-21-17, Idaho Power requested

1 approval of a balancing account mechanism for the Bridger  
2 coal-related investments, which was approved by the  
3 Commission with Order No. 35423.

4 Q. Did approval of the balancing account  
5 mechanisms for both plants include a prudence determination  
6 of the investments at the time?

7 A. Yes. With the issuance of Order No. 34349, it  
8 was determined that all Valmy investments through December  
9 31, 2018, had been prudently incurred. Further, in Case No.  
10 IPC-E-22-05, the Company requested the Commission find that  
11 all actual Valmy investments made during the January 1,  
12 2019, through December 31, 2021, time period were prudently  
13 incurred. However, Order No. 34349, issued in Case No. IPC-  
14 E-22-05 delayed a prudence determination of Valmy  
15 investments. With respect to Bridger, Order No. 35423 found  
16 that all Bridger coal-related investments through December  
17 31, 2020, were prudently incurred.

18 Q. Why did the Commission delay a prudence  
19 determination on the Valmy investments made during the  
20 January 1, 2019, through December 31, 2021, time period?

21 A. In their review of Idaho Power's request,  
22 Commission Staff ("Staff") analyzed two types of prudence,  
23 decisional prudence, which is based on need, and  
24 operational prudence, which is based on whether or not the  
25 Company implemented the investment in the least-cost

1 manner. Commission Staff concluded that the investments  
2 were needed to continue safe and reliable operation of the  
3 facility, or decisional prudence, but indicated they could  
4 not "recommend that the investments were operationally  
5 prudent due to lack of sufficient evidence documenting that  
6 the projects were done in a least-cost way."<sup>2</sup> As such,  
7 Staff recommended Idaho Power work with them to develop the  
8 documentation necessary for Commission Staff's audit and  
9 prudence review and provide Commission Staff with the  
10 additional information via a compliance filing within six  
11 months of the Commission's order to determine prudence.<sup>3</sup>  
12 With Order No. 35494, the Commission indicated it was "fair  
13 just and reasonable for the Company to file additional  
14 documentation to support a prudence determination as part  
15 of the 2022 Annual Review" after working with Commission  
16 Staff to expand the documentation process.<sup>4</sup>

17 Q. Did Idaho Power file additional documentation  
18 to support a prudence determination as part of the Valmy  
19 2022 Annual Review?

20 A. No. On March 31, 2023, after discussing with  
21 Staff, Idaho Power filed a Motion for an Extension of Time  
22 to Comply with Order No. 35494 because Commission Staff and  
23 the Company were still working to memorialize and finalize

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<sup>2</sup> Case No. IPC-E-22-05, Staff Comments, p. 4.

<sup>3</sup> *Id.* At 8.

<sup>4</sup> Order No. 34594 at 6.

1 the information and documentation necessary for Commission  
2 Staff's prudence review. As part of this Motion, Idaho  
3 Power proposed to include the request for a prudence  
4 determination and the associated documentation, as part of  
5 this general rate case proceeding. The Motion requested the  
6 Commission acknowledge the Company will include its 2022  
7 Annual Review, as required by Order No. 34349, as part of  
8 the general rate case filing as well. The Commission issued  
9 Order No. 35774 on May 8, 2023, granting the Motion.

10 Q. Have Idaho Power and Staff come to an  
11 agreement regarding an expanded documentation process for  
12 investments made at the Company's jointly-owned generating  
13 facilities?

14 A. Yes, in principle. However, Staff and Idaho  
15 Power are still working to finalize a Memorandum of  
16 Understanding ("MOU") that will govern Idaho Power's  
17 demonstration of oversight of its jointly-owned generating  
18 facilities, and will represent a mutual agreement on the  
19 types of information the Company will file to support its  
20 request for a prudence determination of expenditures made  
21 at the Valmy and Bridger plants. Staff and Idaho Power are  
22 finalizing a Major Projects Checklist that is intended to  
23 detail the review timing and documentation to accompany  
24 capital project expenditures over a certain dollar  
25 threshold, and an Oversight Meeting Checklist that will

1 document Idaho Power's ongoing and continual participation  
2 in the capital budget reviews of each plant throughout the  
3 year, encompassing the entirety of the capital budget  
4 regardless of the dollar amount of individual projects. A  
5 summary of the key provisions envisioned to be contained in  
6 an MOU is provided as Exhibit No. 1 to my testimony.

7 Q. Based on the Company's request for a prudence  
8 determination of the Valmy and Bridger investments in this  
9 proceeding, has the Company prepared the documentation  
10 necessary to support the investments?

11 A. Yes, Idaho Power has the documentation  
12 necessary to support a prudence determination of the Valmy  
13 and Bridger investments. However, the Company cannot  
14 retroactively complete checklists for meetings that have  
15 already occurred, but Idaho Power stands ready to provide  
16 all available information for the Valmy and Bridger capital  
17 projects in support of a prudence determination.

18 **III. VALMY INVESTMENTS SINCE 2018**

19 Q. As a 50-percent owner in the plant, is Idaho  
20 Power involved in the decision-making process related to  
21 capital investments at Valmy?

22 A. Yes. As the plant operator, NV Energy manages  
23 the capital budget for Valmy. However, Idaho Power has  
24 established guidelines at Valmy to allow NV Energy to  
25 manage the capital budget as needed and directed by the

1 plant manager, without exceeding the yearly budget, or  
2 adding large projects without authorization by the Valmy  
3 Co-Owners. These guidelines provide the appropriate level  
4 of oversight while allowing the plant operator to  
5 practically manage the plant and any variances that may  
6 occur throughout the budget year.

7 Q. What guidelines are in place to monitor  
8 capital expenditures at Valmy?

9 A. First, if Idaho Power's share of the capital  
10 forecast is greater than the capital budget by more than  
11 \$100,000, the Company will review and may authorize the  
12 budget change. In addition, all new or unbudgeted Unit 2  
13 or common facility capital projects larger than \$1 million,  
14 at the plant level, require a review and authorization in  
15 writing by each Valmy Co-Owner prior to starting the  
16 project. Finally, any time an individual Unit 2 or common  
17 facility capital project with a value greater than \$1  
18 million, at the plant level, is forecast to exceed the  
19 current year original budget by 20 percent, each Valmy Co-  
20 Owner must review and authorize it in writing prior to  
21 starting or continuing the project.

22 Q. Aside from the guidelines, are there any other  
23 ways the Company participates in the capital budget  
24 process?

1           A.       Yes.   Individual capital project variances are  
2   discussed during Ownership Meetings and other meetings as  
3   directed by the Valmy Co-Owners.   In addition, NV Energy  
4   produces an Authorization for Expenditures ("AFE") request  
5   for all capital projects.   AFEs include the project title,  
6   date, project manager, description and purpose of the  
7   expenditure, cost and budget information, along with  
8   various other information to provide support for the  
9   project.   If the project is expected to exceed the AFE  
10  amount by either 10 percent, for variances greater than  
11  \$10,000, or \$100,000, a supplemental AFE is required.

12           Currently, Idaho Power provides authorization to NV  
13  Energy of all AFEs and supplemental AFEs for each project.  
14  The Company has requested that no projects begin, and the  
15  total annual budget may not be exceeded, unless the AFE is  
16  approved by both NV Energy and Idaho Power.  Lastly, in  
17  addition to the plant-specific guidelines detailed above,  
18  Idaho Power performs holistic budget reviews on a monthly  
19  and quarterly basis.  This includes capital expenditures at  
20  all of the Company's facilities, including Valmy, and  
21  therefore provides an additional review process through  
22  which the Company monitors its capital spend at Valmy.

23           Q.       What is the time period for which Idaho Power  
24  is requesting a prudence determination of Valmy  
25  investments?

1           A.       Because Order No. 34349 delayed a prudence  
2   determination on the Valmy investments made during the  
3   January 1, 2019, through December 31, 2021, time period,  
4   the Company is requesting a prudence determination of Valmy  
5   investments made during the January 1, 2019, through  
6   December 31, 2022, time period. There have been a number of  
7   investments required to operate the plant in a safe,  
8   efficient, and reliable manner, including investments  
9   required to ensure environmental compliance as well as a  
10   number of investments for routine asset replacement.

11           Exhibit No. 2 presents Idaho Power's share of the  
12   investments made at Valmy between January 1, 2019, and  
13   December 31, 2022, detailing 92 different capital projects  
14   totaling \$8.19 million. In addition, for those projects for  
15   which Idaho Power's ownership share is over \$50,000, and  
16   all investments associated with Unit 1, the Company has  
17   included a project description and investment purpose  
18   classification as to whether the investment was for  
19   environmental compliance, safety, and/or reliability. Of  
20   the 44 projects for which a detailed project description  
21   and investment purpose classification was provided, 26 were  
22   for continued reliable plant operations, three were  
23   required for environmental compliance, and 15 were for a  
24   combination of either reliability, environmental  
25   compliance, or safety.



1           Q.       Why did the Company include a project  
2 description and investment purpose classification for all  
3 investments associated with Unit 1, even if they were less  
4 than \$50,000?

5           A.       Idaho Power included a project description and  
6 investment purpose classification for all investments  
7 associated with Unit 1 to highlight that although the  
8 Company exited operations of Unit 1 on December 31, 2019,  
9 there were investments required to ensure reliable  
10 operations of Unit 1 until the Company's exited  
11 participation in coal-fired operations.

12          Q.       Were all the projects comprising the \$8.19  
13 million in investments that occurred between January 1,  
14 2019, and December 31, 2022, necessary for either  
15 environmental compliance, the safe and economic operation  
16 of the plant, or for reliability purposes?

17          A.       Yes.

18 ***Plant Reliability Investments***

19          Q.       You indicated there were 26 investments  
20 greater than \$50,000 or associated with Unit 1 that were  
21 required for the reliable operation of the plant. What was  
22 the largest investment made to maintain reliability?

23          A.       While not the largest investment made during  
24 the January 1, 2019, through December 31, 2022, time  
25 period, the largest investment made solely for reliability

1 purposes was for approximately \$630,000 for an update to  
2 the Distributed Control System ("DCS") of Unit 2.

3 Q. Why was an update to the DCS required?

4 A. The existing DCS was installed in 2015 and was  
5 operating both servers and human machine interfaces of Unit  
6 2. A typical life-cycle of the DCS is 10 years, with a  
7 five-year mid-cycle human machine interface and operating  
8 system update required. The existing DCS was operating  
9 beyond the original equipment manufacturer ("OEM") support  
10 and security patches were no longer being created for the  
11 systems. In addition, the control servers were operating on  
12 Windows Server 2008, which Microsoft ceased supporting as  
13 of January 1, 2020, and the human machine interfaces were  
14 operating on Windows 7, which Microsoft stopped supporting  
15 as of January 14, 2020. Operating without the OEM supported  
16 cybersecurity patches put these servers and human machine  
17 interfaces at an elevated security risk.

18 Q. What did the upgrade entail?

19 A. The upgrade replaced the human machine  
20 interfaced hardware and upgraded the operating system to  
21 Windows 10. In addition, the following control equipment  
22 was upgraded: (1) new virtualized Windows 2019 control  
23 servers host, (2) Emerson Ovation software, and (3) new  
24 ethernet switches and routers. All of the upgrades enabled  
25 implementation of the latest critical security controls for

1 cyber defense and detection tools.

2 Q. Were there any additional factors that  
3 influenced the decision to update the DCS when the plant  
4 did?

5 A. Yes. An additional concern existed with the  
6 scheduled retirement of Unit 1. Several common plant  
7 systems were controlled by the DCS on Unit 1 and required  
8 code changes to move these controls to the DCS on Unit 2.  
9 Therefore, the decision was made to upgrade Unit 2's DCS  
10 prior to the retirement of Unit 1 and coincident to other  
11 cybersecurity project upgrades.

12 Q. What additional investments were made at Valmy  
13 solely for reliability purposes?

14 A. The majority of the investments made to  
15 maintain reliable operations of Valmy were associated with  
16 normal wear and tear of existing investments which I will  
17 discuss first, including (1) the replacement of the  
18 pulverizer gear box, (2) the purchase of pulverizer spare  
19 parts, (3) the Unit 2 pin mixer replacement, and (4) Unit 2  
20 generator bushing gasket replacements.

21 Q. What is the purpose of a pulverizer?

22 A. Pulverizers are utilized to grind coal to fine  
23 dust via roll wheel assemblies and table grinding segments  
24 before being transported to burner fronts. Each Valmy unit  
25 requires four pulverizers to reach full load status each

1 year in order to perform annual testing and certification  
2 of the cold reheat safety valves in compliance with the  
3 Annual State of Nevada Boiler Operating Permit. The plant  
4 maintains a spare pulverizer for Unit 2 in the event of a  
5 failure of one pulverizer to maintain reliability.

6 Q. What occurred to require the replacement of a  
7 pulverizer gear box?

8 A. One of the pulverizers on Unit 2 tripped,  
9 compromising the reliability of the unit. Plant personnel  
10 opened the gearbox inspection port and discovered the  
11 gearbox had failed. Approximately \$588,000 was invested in  
12 pulverizer repairs to ensure Unit 2 maintained reliability.

13 Q. Why does the plant purchase spare parts for  
14 the pulverizers?

15 A. The grinding of coal to a fine dust wears out  
16 the roll wheel assemblies, table grinding segments, and the  
17 interior of pulverizer equipment. As a result, the normal  
18 operating life cycle of a Unit 2 pulverizer is roughly 18  
19 to 24 months until a major rebuild of the pulverizer is  
20 required. Routine inspections are typically performed at  
21 3,000 hours and maintenance performed to ensure the maximum  
22 life of the pulverizer rebuild. However, with an upcoming  
23 end-of-life of Unit 2 in 2025, upon routine inspection, it  
24 was determined the pulverizers were not in need of a major  
25 overhaul. Rather a more cost-effective approach would be to

1 purchase a full set of grinding table segments and three  
2 roll wheel assemblies, to expedite repair once excessive  
3 wear occurred, while also avoiding long lead times for  
4 replacement equipment. In addition, during routine  
5 maintenance of a pulverizer at a different time, three  
6 refurbished trunnion wheel assemblies were purchased as  
7 capital spares, totaling \$456,000 and \$166,000,  
8 respectively, as opposed to performing a major overhaul.  
9 The capital spares will allow the capital maintenance  
10 outages to be completed on an as needed basis, as opposed  
11 to during the routine inspection, when the pulverizers'  
12 hours of operation and level of wear justifies the  
13 overhauls.

14           Support of the need for spare pulverizer parts  
15 occurred when the Unit 2B pulverizer failed due to a seized  
16 roll wheel assembly, compromising reliability. A spare roll  
17 wheel assembly was installed at the time, for approximately  
18 \$231,000, ensuring Unit 2 was in compliance with the State  
19 of Nevada testing requirements. Further, in 2019, on the  
20 Unit 1D pulverizer, three of the roll wheel assemblies  
21 failed, one in April, and two in September requiring  
22 replacement, for investments totaling approximately  
23 \$160,000 and \$47,000, respectively. The Unit 1D pulverizer  
24 had exceeded 20,000 hours of operation with significant  
25 wear and parts deteriorated beyond the service life

1 expectations. Upon inspection, it was found that one of the  
2 three wheel assemblies in the pulverizer was cracked and  
3 not rotating freely due to a bearing failure.

4 Q. Why was the replacement necessary in 2019 if  
5 the Company was exiting the unit that year?

6 A. The plant was coming up on its annual testing  
7 and certification of the cold reheat safety valves, a  
8 compliance requirement of the annual State of Nevada Boiler  
9 Operating Permit as I mentioned earlier, and needed to  
10 reach full load status, requiring all four pulverizers. Due  
11 to the wear, there were sizing differences of the three  
12 roll wheels' diameters, requiring the replacement of three  
13 of the roll wheel assemblies on the Unit 1D pulverizer.

14 Q. What was the purpose of the last two projects  
15 resulting from the normal wear and tear of existing  
16 investments, the Unit 2 pin mixer replacement and the Unit  
17 2 generator bushing gasket replacements?

18 A. The Unit 2 pin mixer, which unloads the wet  
19 fly ash, required replacement and was rebuilt prior to the  
20 summer run to avoid the potential of a serious failure due  
21 to the lack of non-redundant equipment. This project  
22 totaled approximately \$225,000. In addition, approximately  
23 \$107,000 was spent to replace bushing gaskets and for the  
24 regasketing of the bushing terminal plant.

25 Q. Why must bushing gaskets be replaced?

1           A.       The terminal plate gaskets for the high  
2 voltage bushings of the generator were worn out and there  
3 was indication of bushing gaskets leaking as the viscasil  
4 lubricant was seeping through the bushing gaskets,  
5 indicating possible failure of the bushing. Bushing gasket  
6 leakage could lead to catastrophic failure of the  
7 generator.

8           Q.       When was this issue first identified?

9           A.       The issue was first identified in 2010 and  
10 temporary repairs were made. In 2017, it was noticed that  
11 the leak had become significant and one more temporary  
12 repair was made and annual inspections conducted. However,  
13 the 2018 annual inspection discovered more leakage so the  
14 replacement of the bushings and regasketing of the bushing  
15 terminal plate was performed.

16          Q.       What additional investments were made at  
17 Valmy to maintain reliability?

18          A.       The following investments greater than  
19 \$50,000 or associated with Unit 1 that were required for  
20 the reliable operation of the plant include the (1)  
21 installation of freeze protection heaters, (2) repair of  
22 the generator exciter power supply system, (3) replacement  
23 of the underground equipment wash piping, and (4) recoating  
24 of the condenser inlet tube sheet.

25          Q.       What necessitated installation of freeze

1 protection heaters?

2 A. In 2018, because the Valmy operating schedule  
3 shifted to running the units in only the summer months and  
4 to be in long-term layup during the remaining months of the  
5 year, it was determined that with both units offline there  
6 was no auxiliary steam to provide heat to the turbines,  
7 boilers and buildings to keep them dry and above the dew  
8 point, per the long-term layup plan.

9 Q. How was Valmy heated at the time?

10 A. The plant was renting portable electric space  
11 heaters to sufficiently heat the plant buildings and  
12 equipment during the layup period. However, it was  
13 determined that the purchase of the heaters for  
14 approximately \$541,000 was more cost-effective than  
15 renting. In addition, the purchase and installation  
16 included four water-to-air dry finned coolers which cool  
17 the component cooling system on each unit and exhaust warm  
18 dry air into the lower level of the turbine building,  
19 reducing the number of electric heaters required to be  
20 purchased. Heating of the turbines and buildings helps  
21 ensure the units can be operational when needed.

22 Q. What occurred that required the replacement of  
23 the generator current transformers?

24 A. The Unit 2 exciter power supply transformers  
25 had failed, preventing the unit from returning to service.



1 One of the three saturable current transformers that supply  
2 power to the generator exciter, one linear reactor  
3 transformer, and the exciter control card module were  
4 damaged. This project, which totaled approximately  
5 \$468,000, replaced two saturable current transformers that  
6 had compromised integrity due to oil and heat damage as  
7 well as one of the remaining linear reactor transformers  
8 that had degraded while running at an elevated temperature.

9 Q. What was the replacement of the underground  
10 equipment wash piping necessary to maintain reliability of  
11 Valmy?

12 A. A section of the boiler equipment wash piping,  
13 which is used to fill both circulating water systems prior  
14 to start-up, failed. The underground piping was the  
15 original piping put in during construction in 1979. Using  
16 alternative means to fill the circulating water systems is  
17 very time consuming and results in start-up delays, thus  
18 requiring the replacement of the underground equipment wash  
19 piping. The replacement of the boiler equipment wash piping  
20 in 2021 was approximately \$151,000.

21 Q. Why was recoating of the condenser inlet tube  
22 sheet necessary to maintain reliability at Valmy?

23 A. In 2019, the recoating of the condenser inlet  
24 tube sheet was required contributing to approximately  
25 \$108,000 of the Valmy investments. The condenser inlet

1 tube sheet of a unit is exposed to erosion from particles  
2 and turbulence in the circulating water. It is coated with  
3 a wear resistant coating to protect the metal tube sheet  
4 and condenser tube ends. The coating on Unit 2 had worn to  
5 the point that significant portions of bare tube and tube  
6 ends were exposed.

7 Q. What happens if the metal tube sheet and  
8 condenser tub ends are left exposed?

9 A. When exposed, the tube ends will erode and can  
10 result in tube failure and leakage of circulated water into  
11 the steam side of the condenser, contaminating the boiler  
12 water. Recoating of the tube sheet was required. However,  
13 when the recoating began, the plant was able to repair some  
14 of the existing waterbox coating resulting in project costs  
15 lower than initially estimated.

16 Q. What additional investments were made solely  
17 for reliability purposes?

18 A. The remaining 13 projects associated with  
19 investments for reliable operations of Valmy made between  
20 the January 1, 2019, through December 31, 2022, time period  
21 that I have not discussed yet were all between \$50,000 and  
22 \$100,000. They included: (1) the refurbishment of the Unit  
23 2 boiler feed pump, (2) the replacement of the coal  
24 handling conveyor following sustained run time failure, (3)  
25 the replacement of the pumps on production wells 13 and 14,

1 (4) the purchase and installation of two redundant 1000  
2 kilovolt-amp transformers that power the coal handling  
3 system following failure beyond economic repair, (5 and 6)  
4 two projects associated with the motor of the Unit 1  
5 circulating water pump that failed following a ground  
6 fault, one investment associated with the replacement of  
7 the motor and the second with the rewind of the failed  
8 motor for use as a capital spare, (7) the use of a capital  
9 spare to replace the failed Unit 2A pulverizer, (8) the  
10 replacement of three generator current transformers  
11 following failure, (9) the installation of the spare Unit  
12 1A primary air fan motor due to damage, (10) a new fly ash  
13 blower to convey ash in order to prevent the baghouse  
14 hoppers from overflowing due to internal wear and damage,  
15 (11) an upgrade of the revenue meter required when Idaho  
16 Power exited participation in operations of Unit 1, (12)  
17 refurbishment of the block valve that supplies extraction  
18 steam to the Unit 1 first point feedwater heater, and (13)  
19 the Unit 1B pulverizer rebuild. Exhibit No. 2 provides  
20 additional information for each project including the total  
21 investment amount and a detailed project description and  
22 justification.

23 Q. How have these 26 investments required for the  
24 continued reliable operations of Valmy contributed to the  
25 additions at the plant since January 1, 2019?

1           A.     At \$4.50 million, the investments for  
2     reliability purposes are the largest expenditures made at  
3     Valmy since 2018, making up 55 percent of the total  
4     projects.

5           Q.     You mentioned some of the investments over  
6     \$50,000 or associated with Unit 1 were made for a  
7     combination of either reliability, environmental  
8     compliance, or safety purposes. Were there any additional  
9     investments for which the purpose included a reliability  
10    component?

11          A.     Yes. There were eight projects required for a  
12    combination of reliability and safety purposes.

13    ***Plant Reliability and Safety Investments***

14          Q.     Please describe those projects greater than  
15    \$50,000 or associated with Unit 1 that have been identified  
16    as required for reliability and safety purposes.

17          A.     The largest investment made at Valmy during  
18    the January 1, 2019, through December 31, 2022, time period  
19    was for a combination of reliability and safety purposes.  
20    In 2021, \$1.24 million was spent to fix the Unit 2 turbine  
21    high pressure/intermediate pressure ("HP/IP") section shell  
22    steam leaks.

23          Q.     What caused the HP/IP section shell steam  
24    leaks on the Unit 2 turbine?

25          A.     Beginning in 2015, the Unit 2 steam turbine

1 HP/IP shell experienced five steam leaks from the mating  
2 surfaces of the steam turbine HP/IP upper and lower shells.  
3 Each steam leak damaged the two turbine shells by eroding  
4 the mating surfaces material and providing further paths  
5 for the superheated steam to escape from the turbine HP/IP  
6 shells. At the time, previous repairs did not fix the  
7 eroded mating surfaces or the compromised connection  
8 hardware that compresses the two shell halves together to  
9 form the mating surfaces seal.

10 Q. What happens when the mating surfaces and  
11 connection hardware is not repaired?

12 A. Connecting hardware eventually wears out, only  
13 enduring a limited number of tightening and loosening  
14 cycles before the connecting hardware loses its strength  
15 and the ability to provide the compressive forces necessary  
16 to form the mating surfaces seal of the two shell halves.  
17 This loss of connecting hardware strength is also  
18 compounded by the high temperature during operations  
19 causing the plastic deformation of the steel. This process  
20 is known as creep.

21 Q. How did the creeping compound the issues with  
22 the HP/IP shells?

23 A. The plastic deformation, in conjunction with  
24 applied stresses, can also warp and distort both the  
25 connecting hardware and the HP/IP shells themselves. A

1 'tapped stud' threads into the lower shell half and a large  
2 nut is installed on the upper portion of the tapped stud  
3 and tightened to apply the compressive force to the two  
4 shell mating surfaces.

5 Q. Were the tapped studs of the HP/IP shells  
6 affected?

7 A. Yes. A minimum of six tapped connecting studs  
8 are known to have been compromised in some fashion, mostly  
9 warpage.

10 Q. What was the extent of the investments  
11 necessary to repair and prevent future HP/IP section shell  
12 steam leaks?

13 A. This project replaced the connecting hardware,  
14 which was no longer providing sufficient consistent  
15 compressive force, with new hardware and refurbished the  
16 mating surfaces of the two HP/IP shells. The two turbine  
17 HP/IP turbine shells were separated, and the mating  
18 surfaces were refurbished with a combination of welding and  
19 machining. In addition, ten tapped connecting studs and  
20 nuts on each side of the HP/IP turbine section in the areas  
21 of the five steam leaks were replaced with new tapped  
22 connecting studs and nuts. The tapped stud threads in the  
23 lower half shell were also repaired as necessary. The  
24 tapped studs replacement, lower half thread repairs and  
25 HP/IP shell mating surfaces refurbishment were made after

1 the two HP/IP shells were separated. These repairs  
2 corrected the known root causes and corrected for the  
3 turbine HP/IP section shell steam leaks.

4 Q. What additional investments required for both  
5 safety and reliability purposes were made?

6 A. In November 2017 an evaluation of the fire  
7 protection systems was performed that determined the  
8 refurbishment or replacement of the systems was required  
9 due to degradation of the existing system, through a  
10 combination of worn out and/or outdated components and  
11 systems. As a result, the refurbishment of the Early  
12 Warning Smoke Detection system was performed, the Unit 1  
13 and Unit 2 stand-pipe booster pipes were replaced, the fire  
14 alarm control panels and associated controls and alarms  
15 were replaced, the deluge valves were replaced, and the  
16 required flow testing of the electric fire pump and the  
17 diesel fuel tank system was performed. Total project costs  
18 were approximately \$263,000.

19 In addition, Unit 2 was experiencing erratic control  
20 valve movement that resulted in unit trips due to the  
21 resulting load and drum level swings. The primary cause of  
22 the erratic valve movement was leakage in the upper and  
23 lower positioners. To operate as reliably as possible and  
24 limit the erratic valve movements, the control valves were  
25 kept wide open. Replacement of the upper and lower turbine

1 control valve hydraulic cylinder positioners, for  
2 approximately \$119,000, was necessary to restore stable  
3 operation of the turbine and improve plant reliability.

4 Q. Please describe the additional investments  
5 made between January 1, 2019, and December 31, 2022,  
6 classified as required for reliability and safety purposes.

7 A. The next set of investments over \$50,000 or  
8 associated with Unit 1 made for reliable and safe operation  
9 of the plant were required because of the age of the  
10 existing investment and the associated wear and tear,  
11 including the replacement of the Unit 2 stack elevator and  
12 transportation fleet at the plant. The stack elevator was  
13 installed with Unit 2 in 1984 and replacement parts had  
14 become obsolete. On several occasions the elevator stopped  
15 operating properly during the installation of environmental  
16 compliance equipment and prior to scheduled emission  
17 testing, causing delayed installation timelines. A total  
18 of approximately \$107,000 was invested to complete the  
19 elevator replacement including the car, brake assembly,  
20 drive motor and gearbox, electrical system replacement and  
21 call system replacement.

22 In 2020 and 2022, approximately \$88,000 and \$78,000,  
23 respectively, was spent to replace some of the van  
24 transportation fleet due to concern with safety and  
25 reliability. The Valmy fleet was aging and reaching high



1 mileage, traveling approximately 1,750 miles for  
2 maintenance and 5,200 miles for operations/fuels per month  
3 by 2022. The vans transport employees to and from the  
4 remote plant site, 24 hours a day, seven days a week, which  
5 is a standard in northern Nevada set by local mining  
6 companies. Three of the existing nine vans were replaced  
7 in both 2020 and again in 2022 as each van was over ten  
8 years old with between 190,000 to 256,000 miles.

9 Q. What were the two remaining investments made  
10 for reliability and safety purposes between January 1,  
11 2019, and December 31, 2022?

12 A. The remaining investments identified as  
13 necessary for reliable and safe operations of Valmy include  
14 the (1) refurbishment of the trisector air heater expansion  
15 joint following damage from thermal expansion, rust, acid  
16 condensation and erosion, and (2) refurbishment of the  
17 first point feedwater inlet valve on Unit 1.

18 Q. How have these projects, necessary for the  
19 continued reliable and safe operations of Valmy,  
20 contributed to the additions at the plant since January 1,  
21 2019?

22 A. The investments made at Valmy for reliability  
23 and safety purposes during the January 1, 2019, through  
24 December 31, 2022, time period total \$1.97 million, or 24  
25 percent of the total projects.

1           Q.       Were there any additional investments made at  
2 Valmy between January 1, 2019, and December 31, 2022, that  
3 included a purpose classification for continued reliable  
4 operations of the plant?

5           A.       Yes. There were five projects associated with  
6 continued reliable operations of Valmy as well as required  
7 for environmental compliance.

8       ***Plant Reliability and Environmental Compliance Investments***

9           Q.       What were the Valmy investments required for  
10 continued reliable operations and environmental compliance  
11 purposes?

12          A.       Four of the investments made at Valmy between  
13 January 1, 2019, and December 31, 2022, and identified as  
14 required for both continued reliable operations and  
15 environmental compliance were associated with the scrubber  
16 atomizer wheels on Unit 2, while the largest investment  
17 made was associated with the scrubber spray machine gearbox  
18 that drives the atomizer wheels. The dry scrubber on Unit 2  
19 utilizes nine atomizing spray machines, three atomizers per  
20 scrubber vessel, to atomize a lime/recycled fly ash mixed  
21 slurry that reacts with the sulfur dioxide in the flue gas  
22 to produce calcium sulfate. The solid calcium sulfate  
23 particles are then collected along with fly ash in the  
24 baghouse.

25          To accomplish this, the atomizer wheel rotates via

1 the gearbox at approximately 13,000 revolutions per minute  
2 and centrifugal force shears the lime/recycled ash slurry  
3 into very small droplets for intimate liquid/gas contact.  
4 The force of the shearing slurry slowly erodes the atomizer  
5 wheels which require routine replacement. An atomizer wheel  
6 can be expected to last for 10,000 to 12,000 hours in  
7 service. In 2019 the procurement of six new atomizer  
8 wheels was required. Five of the atomizer wheels that were  
9 at the end of their service life were replaced in 2020 and  
10 2021, and eight were replaced in 2022. In addition, the  
11 gearbox, which requires precision balancing and tight  
12 tolerance on gear clearances could not be repaired and  
13 required replacement. The five projects totaling  
14 approximately \$683,000 were required to ensure the  
15 continued reliable operations of Valmy.

16 ***Environmental Compliance Investments***

17 Q. What investments were made at Valmy solely for  
18 environmental compliance?

19 A. There were three investments over \$50,000 or  
20 associated with Unit 1 made at Valmy between January 1,  
21 2019, and December 31, 2022, for which the purpose was  
22 environmental compliance. The first, for approximately  
23 \$220,000, included the installation of nine new ground  
24 water monitoring wells.

25 Q. Why were the new ground water monitoring wells

1 required?

2           A.       Ground water elevation at Valmy had risen  
3 noticeably over the last six to eight years, presumably due  
4 to cessation of dewatering activities at the nearby Lone  
5 Tree Mine. As a result, the screened interval intake of  
6 several wells was nearly fully submerged.

7           Q.       Are there guidelines in place for appropriate  
8 groundwater levels?

9           A.       Yes. According to Nevada Division of  
10 Environmental Protection ("NDEP") monitoring well  
11 guidelines, the groundwater level should be within the  
12 screened interval level to obtain an accurate water level  
13 reading. Any reported ground water levels above the top  
14 screen level are considered invalid. At the time, of the  
15 Valmy plant's 14 ground water monitoring wells, five were  
16 reading above the top screen level and four were close.

17          Q.       What would happen if the groundwater levels  
18 were not addressed?

19          A.       If the wells were not redrilled, plugged,  
20 abandoned or replaced, the existing wells may have become  
21 non-compliant with the regulatory intent of monitoring the  
22 potential impacts of operating the facilities' landfill and  
23 evaporation ponds. In addition, if not in compliance, the  
24 NDEP can order similar action. As a result, the plant  
25 installed nine new ground water monitoring wells.

1           Q.     Please describe the remaining investments made  
2     at Valmy for environmental compliance.

3           A.     Approximately \$13,000 was associated with the  
4     replacement of the low nitrogen-oxide burner nozzles of  
5     Unit 1 to remain compliant with the Mercury and Air Toxics  
6     Standards, and finally \$1,000 of costs were associated with  
7     the replacement of the existing sorbent trap mercury  
8     monitoring equipment closed in 2019.

9           Q.     Were there any additional investments made at  
10    Valmy between January 1, 2019, and December 31, 2022, that  
11    included a purpose classification for environmental  
12    compliance?

13          A.     Yes.   There were two projects over \$50,000 or  
14    associated with Unit 1 that were required for both  
15    environmental compliance and the continued safe operations  
16    of Valmy.

17    ***Environmental Compliance and Safety Investments***

18          Q.     Please describe the first required investment  
19    for environmental compliance and safety.

20          A.     The three dry scrubber vessels on Unit 2 often  
21    suffer severe scaling and/or debris material buildup as  
22    scale is dislodged from the scrubber vessel walls.   The  
23    scale and buildup can be severe enough that several times  
24    per year the unit is curtailed by 70 MWs while the scale  
25    and buildup are removed from the vessel walls and the

1 outlet duct via the existing debris chute and from the  
2 outlet duct door. The debris material is then collected and  
3 transported to the ash landfill. The removal of the debris  
4 is required under the Mercury and Air Toxic Standards  
5 regulations.

6 In 2020, approximately \$127,000 in project costs  
7 were incurred to enlarge the existing Unit 2 scrubber  
8 vessel debris chute and install three 24-inch diameter  
9 hydraulically actuated knife gate valves. The purpose was  
10 to allow for the faster and safer removal and collection of  
11 the scale, sludge and debris for disposal in the ash  
12 landfill. The investment reduced the duration of forced  
13 outages by 50 percent. In addition, automation of the  
14 valves to open the scrubber vessel, which previously  
15 required personnel to perform via a ladder, rectified a  
16 safety concern.

17 Q. What additional investment was made for  
18 environmental compliance and safety of Valmy?

19 A. The primary and backup scrubber computer room  
20 air conditioning units were aging equipment and required  
21 frequent maintenance. Operating failures of the system had  
22 resulted in unit trips due to overheating of the baghouse  
23 pollution control device that is located in the scrubber  
24 computer room. Baghouse pollution control device components  
25 and the HVAC units were repaired and returned to service,

1 but overheating was a recurring problem. Replacement of  
2 both the primary and backup scrubber computer room air  
3 conditioning units totaling approximately \$65,000 was  
4 necessary to ensure reliable operation of Unit 2 while also  
5 maintaining safety of the plant personnel.

6 Q. Please summarize the investments that were  
7 made at Valmy over \$50,000 or were specific to Unit 1 that  
8 make up the \$8.19 million for which Idaho Power is  
9 requesting a prudence determination.

10 A. Of the 44 projects for which a detailed  
11 project description and investment purpose classification  
12 was provided, 26 were for the continued reliable plant  
13 operations totaling \$4.50 million, another \$234,000 was  
14 associated with the three projects required for  
15 environmental compliance, and the remaining 15, which were  
16 for the combination of either reliability, environmental  
17 compliance, or safety, contributed to \$2.85 million of the  
18 total investments made at Valmy between January 1, 2019,  
19 through December 31, 2022.

20 **IV. BRIDGER INVESTMENTS SINCE 2020**

21 Q. As a one-third owner in the plant, is Idaho  
22 Power involved in the decision-making process related to  
23 capital investments at Bridger?

24 A. Yes. As the plant operator, PacifiCorp  
25 manages the capital budget for Bridger. However, the

1 Company is and always has been actively involved in the  
2 decision-making process in all matters associated with  
3 Bridger capital investments as a co-owner. While  
4 PacifiCorp, as the operator, vets and analyzes the need for  
5 specific capital replacements as they arise to continue  
6 reliable and safe operation of the plant, Idaho Power  
7 regularly participates in discussions of the capital  
8 investment forecast prepared by PacifiCorp, influencing the  
9 investments ultimately made.

10 Q. What documentation does the Company review  
11 as the one-third owner and non-operating partner?

12 A. Idaho Power receives from PacifiCorp a  
13 monthly billing invoice, invoice support documentation, and  
14 monthly invoice reconciliation. Appropriation Requests are  
15 available for every project, which include a project  
16 description, investment reason, project number, and  
17 projected expenditures for the project, by year. During the  
18 quarterly Ownership Meetings, Idaho Power reviews the  
19 current year operations and maintenance ("O&M") expense and  
20 capital budgets and forecasts. As noted in the Exhibit No.  
21 1, Idaho Power plans to implement an Oversight Meeting  
22 Checklist to document its participation in these quarterly  
23 meetings at Bridger, including the budget overview document  
24 provided at and discussed during these meetings.



1           Q.       Does Idaho Power have any contractual rights  
2 to approve items such as capital spend?

3           A.       Yes. Under Section 5.4 of the Operation  
4 Agreement, each October PacifiCorp will submit a forecast  
5 of its estimate of operating expenses for the following  
6 calendar year, including capital projects, to Idaho Power.  
7 The budget will include items of expenditures for  
8 replacement and repair of facilities and will include a  
9 contingency for emergency repairs and replacements. The  
10 forecast is subject to approval by the Company. Under the  
11 agreement, if the forecast for projects changes by 10  
12 percent or more during the calendar year, PacifiCorp will  
13 notify Idaho Power. In addition, under compliance with the  
14 Sarbanes-Oxley Act, forecasts for projects over \$1 million  
15 that change by 10 percent or more during the calendar year  
16 must be approved by both Bridger Co-Owners.

17          Q.       Please describe the Company's participation  
18 in the Bridger capital investment discussions that meet the  
19 contractual rights described above.

20          A.       Mid-year, the Co-Owners hold a capital  
21 budget review where the forecasted capital projects  
22 expected to occur over the next three calendar years over  
23 \$50,000 are discussed in detail. In addition, large capital  
24 projects expected over the next decade are reviewed, unit

1 overhauls, and the scope and need of projects are  
2 discussed. Following the meeting, plant personnel  
3 consolidates and finalizes the list of all projects,  
4 including the scope, need and consequence for each.

5           Following the quarterly Ownership Meeting that  
6 occurs in September, the plant personnel present a formal  
7 capital and O&M expense budget for the following year as  
8 well as a high level 10-year forecast. The intent of the  
9 meeting is for the Bridger Co-Owners to ask questions of  
10 the plant personnel, most often the subject matter experts,  
11 about any details surrounding the forecasted capital  
12 investments and O&M expense.

13           Q.       How does the Company monitor the budget?

14           A.       During each quarterly Ownership Meeting, a  
15 standing agenda item is to review the current year capital  
16 and O&M expense budget, routinely providing Idaho Power the  
17 opportunity to raise any questions necessary about upcoming  
18 projects. Additionally, on a monthly basis, forecasts for  
19 capital and O&M expense are provided for review by the  
20 Company.

21           Q.       What is the time period for which Idaho Power  
22 is requesting a prudence determination of Bridger  
23 investments?

24           A.       Order No. 35423 found that investments made at

1 Bridger through December 31, 2020, had been prudently  
2 incurred therefore the Company is requesting a prudence  
3 determination on the Bridger investments made during the  
4 January 1, 2021, through December 31, 2022, time period.  
5 There have been a number of investments required to operate  
6 the plant in a safe, efficient, and reliable manner,  
7 including investments required to ensure environmental  
8 compliance as well as a number of investments for routine  
9 asset replacement.

10           Exhibit No. 3 presents Idaho Power's share of the  
11 investments made at Bridger between January 1, 2021, and  
12 December 31, 2022, detailing 216 different projects  
13 totaling \$19.33 million. In addition, for those projects  
14 for which Idaho Power's ownership share is over \$100,000,  
15 the Company has included a project description and  
16 investment purpose classification as to whether the  
17 investment was for environmental compliance, safety, and/or  
18 reliability. Of the 61 projects for which a detailed  
19 project description and investment purpose classification  
20 was provided, 31 were for continued reliable plant  
21 operations, 17 were required for environmental compliance,  
22 one was for safety, and 12 were for a combination of either  
23 reliability, environmental compliance, or safety.

24           Q.       Were all the projects comprising the \$19.33  
25 million in investments that occurred between January 1,

1 2021, and December 31, 2022, necessary for either  
2 environmental compliance, the safe and economic operation  
3 of the plant, or for reliability purposes?

4 A. Yes.

5 ***Plant Reliability Investments***

6 Q. You indicated there were 31 investments  
7 greater than \$100,000 that were required for the reliable  
8 operation of the plant. What was the largest investment  
9 made to maintain reliability?

10 A. The largest investments in both 2021 and 2022  
11 required for continued reliable operations of Bridger, as  
12 well as 12 others, were associated with the normal wear and  
13 tear of existing plant equipment. The two largest projects  
14 as well as two other projects, were the result of the  
15 accumulation of failures of either pumps, valves or  
16 gearboxes during the year, for a total of \$1.34 million.  
17 These failures and subsequent replacements were unplanned  
18 and not budgeted but resulted in capital improvements  
19 required to maintain reliability of the plant.

20 In addition, \$2.04 million in investments were made  
21 (1) for the overhaul of two pulverizers per year, (2) the  
22 repair of the primary air ducts that had developed leaks  
23 over the years of operation, (3) the replacement of the hot  
24 end and cold end seals in both air pre-heaters during an  
25 overhaul of Units 2 and 4, (4) the replacement of warped

1 sector plates on both Units 2 and 4, (5) new boiler side  
2 wall tubes required due to increased ash erosion on Units 2  
3 and 4, (6) restoration of turning vanes that had been worn  
4 through by fly ash on both Units 2 and 4, (7) replacement  
5 of high pressure turbine packing on Unit 2, and (8)  
6 installation of new mill discharge valves on the units to  
7 isolate the supply of fuel to the boiler.

8 Q. How would you categorize the next set of  
9 Bridger investments made for continued reliable operations  
10 of the plant?

11 A. There were 7 projects totaling approximately  
12 \$1.38 million associated with the replacement of obsolete  
13 equipment that was no longer supported and the repair or  
14 replacement parts were costly. This included the upgrade of  
15 the electro-hydraulic pumps on Unit 2 and Unit 4, a new  
16 continuous vibration monitoring system for the Green River  
17 pump station, a digital front end excitation system  
18 retrofit, the replacement of both Unit 2 and Unit 4's DCS,  
19 and the replacement of flame scanners on Unit 4.

20 Q. What were the remaining investments required  
21 for the reliable operation of Bridger?

22 A. Neural network combustion controls and a soot  
23 blowing optimizer were installed on Unit 4 to lower  
24 emissions and improve heat rates for a total of  
25 approximately \$218,000. To assure proper alignment with

1 both the rotating element and the pump to the turbine, the  
2 boiler feed pump was rebuilt, and the casing replaced for  
3 \$199,000. Approximately \$184,000 was associated with the  
4 re-build of a failed boiler circulating pump for future re-  
5 use. Pulverizer journals were replaced as it was more cost-  
6 effective than repairing, totaling approximately \$160,000.  
7 Radio communications were upgraded increasing bandwidth in  
8 and around the plant for \$131,000. On Unit 4, retracts and  
9 water injection penetration equipment was installed for  
10 \$122,000 to help burn the existing coal. The existing  
11 feedwater heaters were replaced to drain the system more  
12 efficiently and return the water to the condensate system  
13 for reuse as opposed to dumping, for a total investment of  
14 \$245,000. Finally, a new acoustic leak detection was  
15 installed in the boiler of Unit 4 for approximately  
16 \$177,000.

17 Q. Please summarize the investments made at  
18 Bridger during the January 1, 2021, through December 31,  
19 2022, time period that were necessary for continued  
20 reliable operations of the plant.

21 A. In summary, there were 31 projects greater  
22 than \$100,000 that were required for the reliable operation  
23 of the plant in 2021 and 2022 for a total of \$6.19 million,  
24 or 32 percent of the total investments.

25 Q. You mentioned some of the investments over

1   \$100,000 were made for a combination of either reliability,  
2   environmental compliance, or safety purposes. Were there  
3   any additional investments for which the purpose included a  
4   reliability component?

5           A.     Yes. There were eight projects for a  
6   combination of reliability and safety purposes and three  
7   projects for a combination of reliability and environmental  
8   compliance.

9   ***Plant Reliability and Safety Investments***

10           Q.     Please describe those projects greater than  
11   \$100,000 that have been identified as required for  
12   reliability and safety purposes.

13           A.     The largest investment required for  
14   reliability and safety purposes, totaling \$308,000,  
15   replaced the electromechanical trip system and eliminated  
16   the mechanical over speed bolt on the boiler feed pump  
17   turbines because the existing system was over 30 years old  
18   and maintenance issues had been increasing. Two projects  
19   involved the installation parts on Unit 4: new wear plates  
20   for the submerged drag chain conveyor and an automatic  
21   sprinkler system, for approximately \$287,000. The remaining  
22   five projects were associated with the replacement of  
23   existing investments.

24           Q.     What investments were replaced and necessary  
25   to ensure reliable and safe operations of Bridger?

1           A.       The feeder breaker relays on Unit 4 were  
2 replaced because the existing relays were obsolete. Also,  
3 Unit 4 required the replacement of the coal pipes from the  
4 pulverizers to the boiler due to high wear from the  
5 abrasiveness of the coal. A dozer with the highest  
6 operating hours and requiring the most maintenance was  
7 rebuilt. A failed epoxy liner and the stator leak monitor  
8 system were both replaced on Unit 2. The remaining five  
9 projects totaled approximately \$971,000.

10 ***Plant Reliability and Environmental Compliance Investments***

11           Q.       What three investments were required for the  
12 combination of reliability and environmental compliance?

13           A.       Both Unit 2 and Unit 4 required the  
14 replacement or repair of the burner components due to  
15 damage or warped hardware for a total of \$406,000 and  
16 \$648,000, respectively. In addition, new secondary air flow  
17 monitors were required on Unit 4 for approximately  
18 \$175,000.

19 ***Environmental Compliance Investments***

20           Q.       What investments were made at Bridger solely  
21 for environmental compliance?

22           A.       There were 17 projects necessary for  
23 environmental compliance. The largest of the investments  
24 made at Bridger since 2020 was for environmental compliance  
25 and required the replacement of two levels of Selective



1 Catalytic Reduction ("SCR") catalyst. The Bridger catalyst  
2 management plan requires the replacement of catalysts on a  
3 set cycle of every four years or coincident with major  
4 outages. The extent of catalyst replacements depends on an  
5 evaluation of the condition of the catalyst which will  
6 determine how many layers must be replaced to ensure a  
7 fully functioning SCR for compliance with environmental  
8 regulations. Two layers of the catalyst on Unit 4 were  
9 replaced totaling approximately \$1.41 million. An  
10 additional 12 more projects necessary for environmental  
11 compliance were associated with investments in Unit 4,  
12 totaling \$3.76 million. These included: (1) the extension  
13 of the pin block liner to the mid-level of the stack, (2)  
14 the replacement of discharge electrode wires in the  
15 precipitator, (3) the repair and recoat of the scrubber  
16 ductwork, (4) installation of online catalyst cleaning  
17 equipment to reduce ash pluggage, (5) installation of a new  
18 large particle ash screen to maintain optimal catalyst  
19 performance, (6) upgrade of the transformer-rectifiers and  
20 current limiting reactors in the precipitator, (7) repair  
21 and recoat of the precipitator ductwork, (8) installation  
22 of turning vanes and flow straightening devices, (9)  
23 replacement of Nuva feeder piping (10) the overhaul of the  
24 mini drag-chains that transport ash from the SCR large  
25 particle ash hopper to the drag chain hopper, (11) the

1 purchase and install of Limitorque drivers on the  
2 precipitator inlet and outlet dampers, and (12) the  
3 replacement of six discharge electrode rappers.

4 Q. What were the remaining four projects  
5 necessary for environmental compliance?

6 A. Similar to Unit 4, the repair and recoat of  
7 the scrubber and precipitator ductwork on Unit 2 was  
8 required as was the replacement of the rapper shaft,  
9 bearings, and hammers of the precipitator rapping systems.  
10 Finally, a redundant soda liquor supply line was installed.  
11 In total, there were 17 projects necessary for  
12 environmental compliance, totaling \$5.73 million, or 30  
13 percent of the total investments.

14 ***Environmental Compliance and Safety Investments***

15 Q. Please describe the investments required for  
16 environmental compliance and safety of Bridger.

17 A. There was just one project necessary for both  
18 environmental compliance and safety of the plant personnel,  
19 totaling \$139,000. The coating in the ducts from the  
20 scrubbers into the stack was worn so it was replaced. This  
21 is a high wear area and if not repaired or replaced will  
22 lead to excessive leaking and ultimately environmental  
23 violations. In addition, the leaking flue gas could be a  
24 hazard to plant employees.

1    **Safety Investments**

2           Q.     Were there any investments at Bridger made  
3 solely for safety purposes?

4           A.     Yes. One investment, for approximately  
5 \$127,000, was made for safety purposes. The existing  
6 outdated station breaker relays were a safety concern due  
7 to arc flash hazards and were upgraded. The plant has been  
8 replacing the old relays with arc flash compliant relays  
9 that will significantly reduce the hazard or arc flash  
10 incidents to plant personnel.

11          Q.     Please summarize the investments that were  
12 made at Bridger over \$100,000 that make up the \$19.33  
13 million for which Idaho Power is requesting a prudence  
14 determination.

15          A.     Of the 61 projects for which a detailed  
16 project description and investment purpose classification  
17 was provided, 31 were for the continued reliable plant  
18 operations totaling \$6.19 million, another \$5.73 million  
19 was associated with the 17 projects required for  
20 environmental compliance, one project at \$127,000 was  
21 required for safety purposes, and the remaining 12, which  
22 were for the combination of either reliability,  
23 environmental compliance, or safety, contributed to \$2.93  
24 million of the total investments made at Bridger between  
25 January 1, 2021, through December 31, 2022.



1 at \$127,000 was required for safety purposes, and the  
2 remaining 12, which were for the combination of either  
3 reliability, environmental compliance, or safety,  
4 contributed to \$2.93 million of the total investments made  
5 at Bridger between January 1, 2021, through December 31,  
6 2022. While Idaho Power is cognizant of the approaching  
7 cessation of coal-fired operations at both Valmy and  
8 Bridger, the investments made were prudent and required to  
9 ensure the plants remain operational in a safe, efficient,  
10 and reliable matter.

11 Q. Does this conclude your direct testimony in  
12 this case?

13 A. Yes, it does.

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**DECLARATION OF LINDSAY BARRETTO**

I, Lindsay Barretto, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Lindsay Barretto. I am employed by Idaho Power Company as the Senior Manager of 500kV and Joint Projects.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 1 through 3 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.



Signed: \_\_\_\_\_  
LINDSAY BARRETTO

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BARRETTO, DI**  
**TESTIMONY**

**EXHIBIT NO. 1**

# **Memorandum of Understanding Concepts for Joint Projects Documentation May 2023**

The following summarizes Company's and Staff's agreement in principle, that will ultimately be contained in a Memorandum of Understanding ("MOU"), on the types and presentment of information Idaho Power will file to support its requests for a prudence determination of expenditures made at its jointly-owned generating facilities. This document reflects Idaho Power's current understanding of the primary components that will be contained in the MOU and corresponding checklists, but is subject to change as the MOU is finalized with Staff.

## **1) Major Projects Checklist**

This checklist is envisioned to detail review timing and documentation that will be provided for all projects over a certain threshold. Idaho Power will provide the Appropriations Request (for Bridger) or Authorization for Expenditure (for Valmy), along with a list of project characteristics and areas that Joint Projects will review as prescribed in the checklist. The checklist will also prescribe specific documentation that will occur if costs exceed budget by a certain amount. Lastly, the checklist will prescribe the review that will occur, and the associated documentation that will be provided, with regard to project bidding and / or in-house completion of projects if expenditures exceed a certain level.

## **2) Valmy-Bridger Oversight Meeting Checklist**

In addition to the Major Projects Checklist, Joint Projects will complete a Valmy-Bridger Oversight Meeting Checklist for each regularly scheduled budget discussion with the Company's operating partners. These meetings currently occur monthly for Valmy and quarterly for Bridger. This checklist is envisioned to include the time, date, location, and attendees of these meetings, as well as any meeting notes taken by Joint Projects, either written directly on the checklist or attached. In addition, the Company will retain with the capital budget review worksheets that list all capital projects at the facility, including ancillary information such as budget variances and project notes.

## **3) Maintenance of Documentation for Commission Staff Review**

Idaho Power will agree to maintain documentation associated with the processes outlined in the MOU to support its prudence requests for expenditures at Bridger and Valmy.

## **4) Staff Review, Sufficiency of Documentation**

The Company will provide the checklists and associated documentation to Staff either upon filing or at Staff's request, depending on Staff's preference and the volume of information related to the period for which prudence is being requested.

## **5) Term and Termination.**

The MOU will become effective on the Effective Date and will continue until the Company does not have ownership of a jointly-owned facility, unless terminated earlier by one or more Parties with written notice to the other Party.



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BARRETTO, DI  
TESTIMONY**

**EXHIBIT NO. 2**

VALMY PLANT ADDITIONS: Jan 1, 2019 - Dec 31, 2022

Project	Descr	V1	V2	VC	Total	Purpose	Project Description/Justification
27574743	VALMY 98482392 V2 REPLACE TURBINE HP/IP SECTION		1,240,965		1,240,965	Reliability/Safety	The Unit 2 steam turbine high pressure/intermediate pressure (HP/IP) shell experienced fire steam leaks from the mating surfaces of the steam turbine HP/IP upper and lower shells, beginning in 2015. Each steam leak damaged the two turbine shells by eroding the mating surfaces material and providing further paths for the superheated steam to escape from the turbine HP/IP shells. At the time, previous repairs did not fix the eroded mating surfaces or the compromised connection hardware that compresses the two shell halves together to form the mating surfaces seal. Connecting hardware wears it out, only enduring a limited number of tightening and loosening cycles before the connecting hardware loses its strength and the ability to provide the compressive forces necessary to form the mating surfaces seal of the two shell halves. This loss of connecting hardware strength is also compounded by the high temperature during operations causing the plastic deformation of the steel in a process known as creep. This plastic deformation in conjunction with applied stresses can also warp and distort both the connecting hardware and the HP/IP shells themselves. A "tapped stud" threads into the lower shell half and a large nut is installed on the upper portion of the tapped stud and tightened to apply the compressive force to the two shell mating surfaces. A minimum of six tapped connecting studs are known to have been compromised in some fashion, mostly warpage. This project replaced the connecting hardware, which was no longer providing sufficient consistent compressive force, with new hardware and refurbished the mating surfaces of the two HP/IP shell mating surfaces. The two turbine HP/IP turbine shells were separated and the mating surfaces were refurbished with a combination of welding and machining. In addition, ten tapped connecting studs and nuts on each side of the HP/IP turbine section in the areas of the five steam leaks were replaced with new tapped connecting studs and nuts. The tapped stud threads in the lower half shell were also repaired as necessary. The tapped studs replacement, lower half thread repairs and HP/IP shell refurbishment were made after the two HP/IP shells were separated. These repairs corrected the known root causes, compromised mating surfaces and compromised connecting hardware, that were causing the turbine HP/IP section shell steam leaks.
27574748	VALMY 98483085 V2 OVATION HMI AND SERVER UPDATE		629,538		629,538	Reliability	The Valmy U2 Emerson Ovation Distributed Control System ("DCS") was operating both the servers and Human Machine Interfaces ("HMI") beyond the Original Equipment Manufacturer ("OEM") support and security patches are no longer created for these systems. The existing U2 DCS equipment was installed in 2015. The control servers were operating on Windows Server 2008 and Microsoft ceased mainstream supporting as of January 1, 2020. The HMIs were operating on Windows 7 originally released in 2009 with a service pack update in 2016, which Microsoft stopped supporting as of January 14, 2020. Operating without the OEM supported cybersecurity patches put these servers and HMIs at elevated risk. It also violated NV Energy's Information Technology ("IT") mandate to keep all critical systems patched and secured (vulnerability management). The upgrade replaced the HMI hardware and upgrade the operating system to Windows 10. In addition to the HMI and operating system upgrades, the following control equipment was upgraded: new virtualized Windows 2019 control servers host, Emerson Ovation software upgraded from 3.5.1 to 3.8 level, new ethernet switches and routers. All of the upgrades enabled implementation of latest Top 20 Critical Security Controls ("CSC") SANS guidelines for cyber defense and detection tools. Although there is no specific standard, full control system upgrade life-cycle is about 10 years, with a 5-year mid-cycle HMI and operating system updates. These timelines are general guidelines and can vary slightly to align with plant-specific risk concerns. Additionally, the operating system version update cycle and vendor application refresh cycle variabilities can sometimes cause shorter or longer cycles than the typical 5 and 10 year time span. Given the Valmy U2 existing control system was commissioned in 2015, it had reached the mid-cycle HMI and operating system upgrade requirement. The project was executed in fall 2021 to align with other cybersecurity project upgrades, the operating schedule and to maximize the project benefits given the unit retirement date. An additional concern existed with the scheduled 2021 retirement of Valmy U1. A number of common plant systems are currently controlled from U1's DCS and required code changes to move these controls to U2's DCS.
27590306	VALMY 98493081 V2 PULVERIZER C GEARBOX FAILURE		587,457		587,457	Reliability	Four pulverizers are needed on U2 to reach full load status each year to perform annual testing and certification of the cold reheater safety valves. This testing is a compliance requirement needed to maintain Valmy's Annual State of Nevada Boiler Operating Permit. Reliability is also increased by the availability of having a spare pulverizer when needed in the event of failure of another pulverizer. After pulverizer 2C tripped off, the gearbox inspection port was opened by maintenance personnel and discovered the gearbox had failed. U2's reliability was compromised at this time as well as compliance with the state testing requirements with 2C pulverizer not being ready for service.
27514784	VALMY 98438396 V2 FREEZE PROTECTION HEATERS,			541,325	541,325	Reliability	When the Valmy operating schedule shifted to running the units in only the summer months, and to be in long-term layup during the remaining months of the year, it was determined that with both units offline there was no auxiliary steam to provide heat to the turbines, boilers and buildings to keep them dry and above the dew point, per the long-term layup plan. The plant was renting portable electric space heaters to sufficiently heat the plant buildings and equipment during the layup period. It was determined that the purchase of the heaters was more cost effective than renting. In addition, the purchase and installation included four water-to-air dry finned coolers which cool the component cooling system on each unit and exhaust warm dry air into the lower level of the turbine building, reducing the number of electric heaters required to be purchased.
27585672	VALMY 98490890 V2 EXCITER POWER SUPPLY TRANSF		468,110		468,110	Reliability	Two of the U2 exciter power supply transformers had failed, preventing the return to service of the U2 generator. Following a loss of phase generator protection trip caused by the 4-phase, U2 was not able to provide service due to damage that was discovered in the generator exciter power supply system. An exciter representative was required to aide in troubleshooting the issues. One of the three saturable current transformers ("SCT") that supply power to the generator exciter, one linear reactor (transformer), and the exciter control card module were damaged during the unit trip. The emergency repairs were completed to restore the U2 generator back to service. Following recommendations to avoid future failures requires replacement of the two SCTs that had compromised integrity due to oil and heat damage, as well as one of the remaining linear reactor transformers that had degraded and was running at an elevated temperature of 350 degrees compared to the other two that were 200 degrees.
27582989	VALMY 98489340 V2 PULVERIZER CAPITAL SPARE RO		456,113		456,113	Reliability	U2 is scheduled for retirement at the end of 2025. Based on inspections, the pulverizers were not in immediate need of major overhauls. To be prepared for unexpected failures and reduce the capital investment required to operate reliably through 2025, the plant purchased a full set of grinding table segments and three roll wheel assemblies. This purchase will expedite repairs in the event of a pulverizer damage or excessive wear that could occur during the remainder of plant operation. Long lead times for replacement equipment would cause extended forced outages or derates while waiting for replacements.
27517151	VALMY 98438333 VC FIRE PROTECTION SYSTEM, REF			262,492	262,492	Reliability/Safety	In November 2017, an evaluation of the fire protection systems was performed that determined the refurbishment or replacement of the systems was required due to degradation of the existing system, through a combination of worn out and/or outdated components and systems. This project included the refurbishment of the Early Warning Smoke Detection system, the replacement of the Unit 1 and Unit 2 stand pipe booster pipes, the replacement of the fire alarm control panels and associated controls and alarms, replacement of deluge valves, the electric fire pump and the required flow testing on the diesel fuel tank system.
27596251	VALMY 98496301 V2 PULVERIZER B ROLL WHEEL REPLACEMENT VA		230,734		230,734	Reliability	Four pulverizers are needed on U2 to reach full load status each year to perform annual testing and certification of the cold reheater safety valves. This testing is a compliance requirement needed to maintain Valmy's Annual State of Nevada Boiler Operating Permit. Reliability is also increased by the availability of having a spare pulverizer when needed in the event of failure to another pulverizer. Inspection of pulverizer 2B by maintenance personnel discovered a seized roll wheel assembly. U2 reliability was compromised at this time as well as compliance with the state testing requirements with 2B pulverizer not being ready for service.
27528897	VALMY 98455128 V2 PIN MIXER/UNLOADER, REBUILD		224,787		224,787	Reliability	The existing original Unit 2 pin mixer (wet fly ash unloader) required replacement due to normal wear and tear. In addition, in 2018 an ash hauling dump truck damaged the Unit 2 wet fly ash unloader, further impacting the reliability of the pin mixer. The pin mixer/unloader was rebuilt prior to the summer run to avoid the potential of serious failure of the non-redundant equipment.
27555279	VALMY 98455852 VC GROUND WATER MONITORING WEL			219,799	219,799	Environmental	Ground water elevation at Valmy had risen noticeably over the last 6-8 years, presumably due to cessation of dewatering activities at the nearby Lone Tree Mine, resulting in the screened interval intake of several wells becoming fully submerged. According to Nevada Division of Environmental Protection (NDEP) monitoring well guidelines, the groundwater level should be within the screened interval level to obtain an accurate water level reading. Any reported ground water levels above the top screen level are considered invalid. Valmy has 14 total ground water monitoring wells, of which five were reading above the top screen level and four were close. If the wells were not redrilled, plugged, abandoned or replaced, the existing wells may have become more compliant with the regulatory intent of monitoring the potential impacts of operating the facilities landfill and evaporation ponds. In addition, if not in compliance, the NDEP can order similar action. These costs are associated with the installation of nine new ground water monitoring wells.
27596247	VALMY 98494653 V02 SCRUBBER SPRAY MACHINE GEARBOX REPLACEMEN		180,709		180,709	Environmental/Reliability	The scrubber spray machine gearbox drives stonimer wheels at 12,000 rpm for sulfur dioxide removal. The high speed components require precision balancing and tight tolerance on gear clearances. This project replaced a gearbox that was no longer repairable. The spray machine gearbox is necessary to ensure the plant's reliability and environmental compliance for the summer peak season, for both the Title V SO2 removal and Sulfur emissions as well as the MATS SO2 emissions.

VALMY PLANT ADDITIONS: Jan 1, 2019 - Dec 31, 2022

Project	Descr	V1	V2	VC	Total	Purpose	Project Description/Justification
27604610	VALMY 10086049 V2 SCRUBBER ATOMIZER WHEELS REPLACEMENT		168,148		168,148	Environmental/Reliability	The scrubber atomizer wheels are exposed to a harsh environment of fly ash laden flue gas, as well as a spray of an abrasive slurry of lime and ash at 12,000 rpm for sulfur dioxide removal. This causes erosion on both the carbide slurry nozzles and the titanium wheel body. With the plant's anticipated load forecast, eight of the existing atomizer wheels were at the end of their service life each year, and were no longer capable of being rebuilt/balanced. The procurement of eight new atomizer wheels was necessary to ensure the plant's reliability and environmental compliance for the summer peak season, for both the Title V SO2 removal and Sulfur emissions as well as the MATS SO2 emissions.
27547460	VALMY 98377358 V2 PULVERIZER "A" MAJOR REBUILD-2016		165,540		165,540	Reliability	Pulverizers are utilized to grind coal to fine dust before being transported to burner fronts. This process wears out roll wheel assemblies, table grinding segments, and the interior of the pulverizer. The normal operating life cycle of a Unit 2 pulverizer is roughly 18 to 24 months. Routine inspections are performed at 3,000 hours and required maintenance is performed to ensure the maximum life of the pulverizer rebuild. Typically, major pulverizer overhauls for continued reliable operation of Unit 2 and include replacements of roll wheels, air seals, coal shields, bearings, wear resistant ceramic liners, classifier vanes, coal feeder wear components, spring frame wear plate, and the pyrites plow. A pulverizer overhaul was scheduled for 2019 but due to reduced run times for Unit 2, a full overhaul was not needed. Instead, the project consisted of purchasing three refurbished trunnion wheel assemblies as capital spares. The capital spares will allow the capital maintenance outages to be completed on an as needed basis, as opposed to during the routine inspection, when the pulverizers' hours of operation and level of wear justifies the overhauls.
27545751	VALMY 98466935 V1 PULVERIZER D ROLL WHEEL ASS	159,459			159,459	Reliability	In April 2019, one roll wheel assembly failed and was replaced in the Unit 1D pulverizer. Black Butte coal requires all four pulverizers to achieve full load. In September 2019, plant personnel reported high amps on the Unit 1 pulverizers drive motor. Unit 1 had been experiencing much higher than expected availability requirements; the 1D coal pulverizers exceeded 20,000 hours of operation with significant wear and parts deteriorated beyond the service life expectations. The plant was coming up on its annual testing and certification of the cold reheat safety valves, a compliance requirement of the annual State of Nevada Boiler Operating Permit, and needed to reach full load status, requiring all four pulverizers. Due to the wear of the two old assemblies and the replacement of the one roll wheel assembly earlier in the year, there were sizing differences of the three roll wheels' diameters in addition to the failing other two assemblies, requiring the replacement of all three of the roll wheel assemblies.
27591516	VALMY 98494358 VC EQUIPMENT WASH PIPING REPLACEMENT			150,961	150,961	Reliability	A section of boiler equipment wash piping that is used to fill both circulating water systems prior to start up failed. This was the original underground piping from construction in 1979. Using alternative means to fill the circulating water systems is very time consuming and results in start up delays. These costs included the replacement of the underground equipment wash piping.
27549554	VALMY 98467485 V2 SCRUBBER OUTLET DUCT PLUGGA		126,759		126,759	Environmental/Safety	The three dry scrubber vessels on Unit 2 often suffer severe scaling and/or debris material buildup as scale is dislodged from the scrubber vessel walls. The scale and buildup can be severe enough that several times per year the unit is curtailed by 70 MW's while the scale and buildup are removed from the vessel walls and the outlet duct via the existing debris chute and from the outlet duct door. The debris material is then collected and transported to the ash landfill. The removal is also required under the Mercury and Air Toxics Standards regulations. This project enlarged the existing Unit 2 scrubber vessel debris chute and installed three 24-inch diameter hydraulically actuated knife gate valves to allow for the faster and safer removal and collection of the scale, sludge and debris for disposal in the ash landfill. The duration of forced outage was decreased by half and automated the valves to open the scrubber vessel, which previously required personnel to perform via a ladder, improving safety.
27603201	VALMY 10074750 V2 TURBINE CONTROL VALVE POSITIONER REPLACEME		119,399		119,399	Reliability/Safety	U2 was experiencing erratic control valve movement that resulted in unit trips due to the resulting load and drum level swings. Troubleshooting included replacement of the position feedback and tuning. The primary cause of the erratic valve movement was leakage in the upper and lower positioners. In order to operate as reliably as possible, an abnormal operating practice of keeping the control valves wide open was implemented to limit the erratic valve movements. Replacement of the upper and lower turbine control valve hydraulic cylinder positioners was necessary to restore stable operation of the turbine and improve plant reliability.
27533137	VALMY 98455854 V2 ATOMIZER WHEELS, REPL		115,962		115,962	Environmental/Reliability	A dry scrubber utilizes nine atomizing spray machines to atomize a lime/recycled fly ash mixed slurry that reacts with the sulfur dioxide in the flue gas to produce calcium sulfate. In 2018, Valmy was expected to be used as a seasonal facility and to only run during the summer peak months. The plant was utilized more than anticipated and stayed on through the winter of 2018 and into the spring of 2019, primarily due to the impacts of the Enbridge pipeline explosion that occurred in October 2018. The extended run time amounted to many more hours on the wheels than originally anticipated requiring the procurement of six new atomizer wheels. The replacement of the wheels ensured the plant's reliability for the 2019 summer peak season.
27579441	VALMY 98485333 V2 SCRUBBER ATOMIZER WHEELS, R		109,728		109,728	Environmental/Reliability	The dry scrubber on Unit 2 utilizes nine atomizing spray machines (three atomizers per scrubber vessel) to atomize a lime/recycled fly ash mixed slurry that reacts with the sulfur dioxide in the flue gas to produce calcium sulfate. The solid calcium sulfate particles are then collected along with fly ash in the baghouse. To accomplish this the atomizer wheel rotates at approximately 13,000 revolutions per minute and centrifugal force shears the lime/recycled ash slurry into very small droplets for intimate liquid/gas contact. The force of the shearing slurry slowly erodes the atomizer wheels which require routine replacement. An atomizer wheel can be expected to last for 10,000 - 12,000 hours in service. This project replaced five of the atomizer wheels that were at the end of their service life and was necessary to ensure the plant's reliability for the 2021 summer peak season.
27557530	VALMY 98473784 V2 SCRUBBER ATOMIZER WHEELS, R		108,817		108,817	Environmental/Reliability	The dry scrubber on Unit 2 utilizes nine atomizing spray machines (three atomizers per scrubber vessel) to atomize a lime/recycled fly ash mixed slurry that reacts with the sulfur dioxide in the flue gas to produce calcium sulfate. The solid calcium sulfate particles are then collected along with fly ash in the baghouse. To accomplish this the atomizer wheel rotates at approximately 13,000 revolutions per minute and centrifugal force shears the lime/recycled ash slurry into very small droplets for intimate liquid/gas contact. The force of the shearing slurry slowly erodes the atomizer wheels which require routine replacement. An atomizer wheel can be expected to last for 10,000 - 12,000 hours in service. This project replaced five of the atomizer wheels that were at the end of their service life and was necessary to ensure the plant's reliability for the 2020 summer peak season.
27528895	VALMY 98455127 V2 CONDENSER INLET WATERBOX, R		108,028		108,028	Reliability	The condenser inlet tube sheet of a unit is exposed to erosion from particles and turbulence in the circulating water so it is coated with a wear resistant coating to protect the metal tube sheet and condenser tube ends. The coating on Unit 2 had worn to the point that significant portions of bare tube and tube ends were exposed. When exposed, the tube ends will erode and can result in tube failure and leakage of circulated water into the steam side of the condenser, contaminating the boiler water. The scope of the project included the recoating of the tube sheet. When the recoating began, the plant was able to repair some of the waterbox coating resulting in project costs lower than initially estimated.
27539687	VALMY 98462057 V2 STACK ELEVATOR, REPLACE		107,341		107,341	Reliability/Safety	The Unit 2 stack elevator reliability and safety was compromised due to the age of the elevator and replacement parts had become obsolete. The elevator installed with Unit 2 was discontinued in 1984. On several occasions the elevator stopped operating properly during the installation of environmental compliance equipment and prior to scheduled emission testing, causing delayed installation timelines. The project included a complete elevator replacement including the car, brake assembly, drive motor and gearbox, electrical system replacement and call system replacement.
27527353	VALMY 98438400 V2 GENERATOR BUSHINGS, REPLACE		106,641		106,641	Reliability	The terminal plate gaskets for the high voltage bushings of the generator were worn out and there was indication of bushing gaskets leaking as the viscail was seeping through the bushing gaskets. Bushing gasket leakage could lead to catastrophic failure of the generator. The issue was first identified in 2010 and temporary repairs were made. In 2017, it was noticed that the leak had become significant and one more temporary repair was made and annual inspections conducted. The 2018 annual inspection discovered more leakage so the replacement of the bushings and regasketing of the bushing terminal plate was performed.
27609108	VALMY 10108935 V2 BOILER FEED PUMP, REFEURISH		93,381		93,381	Reliability	U2 is equipped with a single turbine driven boiler feed pump. The high pressure and high flow produced by the boiler feed pump resulting in wear as well as deposits on the rotating elements make it necessary to refurbish the rotating element periodically. The U2 Boiler Feed Pump was last overhauled in 2007. This refurbishment was required to maintain a high level of plant reliability.
27570622	VALMY 98481652 VC SB COAL UNLOAD CONVEYER BELT, REPLACE VA			88,583	88,583	Reliability	Coal handling conveyor 5B sustained a run time failure resulting in severe damage to the conveyor belting, bend pulleys and to the bend pulley support framing. Permanent repairs were made to the bend pulleys and bend pulley support framing. Temporary repairs were made to the damaged 5B building in order to make the 5B belt train available for emergency use only if needed. Because Valmy was relying on only conveyors 5A and 6A for full delivery of coal (two conveyors used in tandem are required), conveyor 5B was replaced in the event 5A or 6A became damaged or inoperable. Upon inspection of the drive gearbox, it was determined a replacement was necessary. Quotes were received for a rebuild of the gearbox but it was determined a replacement was more cost-effective.

VALMY PLANT ADDITIONS: Jan 1, 2019 - Dec 31, 2022

Project	Descr	V1	V2	VC	Total	Purpose	Project Description/Justification
27555276	VALMY 98466597 VC VANS, REPLACE (3) VA			87,965	87,965	Reliability/Safety	The plant was concerned with the safety and reliability of the van transportation fleet. The Valmy fleet was aging and reaching high mileage, traveling approximately 1,650 miles for maintenance and 4,575 miles for operations/fuels per month. The vans transport employees to and from the remote plant site, 24 hours a day, seven days a week, which is a standard in northern Nevada set by local mining companies. The cost of the vans is partially offset by a payroll deduction from each employee riding in the van. This project replaced three of the existing nine vans, each van is over ten years old with between 190,000 to 256,000 miles.
27596244	VALMY 98494647 VC PRODUCTION WELL 13 & 14 REPLACEMENT VA			81,191	81,191	Reliability	Production well 13 & 14 experienced damage to the pump. Production well 13 & 14 produce 300-400 gallons per minute each of raw water to supply the cooling tower basins on both units or the Fire and Raw Water Tanks. Replacement of Production Well 13 & 14 helped ensure adequate make up water supply to the cooling tower basins during summer peak operation.
27582985	VALMY 98485334 VC VANS, REPLACE (3) VA			78,206	78,206	Reliability/Safety	This project was driven by safety and reliability concerns regarding the van transportation fleet. The Valmy fleet is aging and vans are reaching high mileage. Valmy replaced three vans out of the fleet of nine vans. Traditionally Valmy has leased the vans through Fleet. Each Valmy van travels between 1,750 miles for maintenance/administration and 5,200 miles for operations/fuels per month. The plant purchased the three replacement vans rather than lease through fleet, and discontinued the lease of the high mileage stated vans. The vans are needed for the transportation of the employees to and from the remote plant site. Company transportation is a standard in Northern Nevada set by local mining companies. The three vehicles replaced were the highest mileage vehicles, and had between 200,000 to 250,000 miles on each vehicle. By replacing these three vans the safety risk to employees from running high mileage vans was reduced. These vans are used in the 24x7 operation of the plant in transporting employees.
27604612	VALMY 10087092 V2 SCRUBBER REPLACEMENT OF HVAC UNITS		65,043		65,043	Environmental/Safety	The primary and backup scrubber computer room air conditioning units were aging equipment and required frequent maintenance. Operating failures of the system had resulted in unit trips due to overheating of the baghouse pollution control device that is located in the scrubber computer room. Baghouse pollution control device components and the HVAC units were repaired and returned to service, but overheating issue was a recurring problem. Replacement of both the primary and backup scrubber computer room air conditioning units was necessary to ensure reliable operation of U2.
27506993	VALMY 98437220 VC UNIT SUB 5A 5B 1000 KVA DRY TRANSFORMER RPL			64,961	64,961	Reliability	The coal handling system is powered by two redundant 1000 KVA transformers. Both of the transformers have failed and were beyond economic repair so the system was being run on a temporary transformer that is close enough in design to be used for temporary purposes only. Two redundant transformers are necessary for reliable operation. If not remedied and the temporary transformer were to fail, the coal handling system would go down until a new or rewind transformer is installed. The lead time for a new transformer is 8 to 10 weeks. This would result in a 100 percent derate on the units because there would be no coal delivery to the plant. These costs were associated with the purchase and install of two new transformers.
27568576	VALMY 98478100 V2 TRISECTOR AIR HEATER EXPANSION JOINT REFUR		61,203		61,203	Reliability/Safety	The trisector air heater expansion joint suffered damage from thermal expansion, rust, acid condensation and erosion and failure was imminent. The expansion joint was torn and leaking on the outlet side of the trisector air heater. Valmy's cycling operation compounds the fatigue and wear exposure from thermal stress from cooling to ambient conditions when the unit is in reserve shutdown followed by heating back to operating temperatures in excess of 700 degrees Fahrenheit. Continued operation would likely cause deterioration, which would have resulted in an outage or derate, as well as a potential safety concern and heat rate impact due to the hot air leakage. This repair was critical for reliability and safety.
27533144	VALMY 98459394 V1 CIRCULATION WATER PUMP 1A MOTOR, REPL	58,576			58,576	Reliability	In April 2019, the Unit 1 circulating water pump failed due to a motor ground fault. Absent a circulating water pump in service, Unit 1 would be de-rated to approximately 125 net MW output, or half its normal load. The motor was sent to a contract repair shop for evaluation where it was determined that a complete motor rewind was required. At the request of the Western Electricity Coordinating Council, and because of the four to six week lead time associated with the repairs, a new replacement motor was purchased so that the plant could meet reliability and availability needs. The rewind was performed and used as a capital spare and a replacement motor was procured.
27598663	VALMY 10037777 V2 PULVERIZER 600 HP ELECTRIC		57,779		57,779	Reliability	The 2A Pulverizer motor failed due to an electrical short circuit to ground. The maintenance team installed the capital spare motor. This project replaced the U2 capital spare motor to ensure unit availability for full load in the event of another pulverizer motor failure, because all 4 pulverizers are required to achieve full load. The failed motor was sent out to be rewound to serve as the new capital spare motor for all the U2 pulverizers.
27617793	VALMY 10146694 V2 GENERATOR CURRENT TRANSFORMER REPLACEMENT		51,317		51,317	Reliability	U2 was forced offline by failure of the Generator Current Transformers. Replacement of the three Generator Current Transformers was necessary to be able to return the unit to operation.
27533145	VALMY 98459395 V1 D1 PULVERIZER ROLL WHEEL ASSEMBLY, REPL	46,984			46,984	Reliability	In April 2019, one the Unit 1D pulverizer roll wheel assembly failed (each pulverizer has three roll wheel assemblies). Black Butte coal requires all four pulverizers to achieve full load. At that time, one roll wheel assembly was replaced to bring the unit back online and available for full load. The other two roll wheel assemblies were identified as in poor condition, but due to the timing of replacement parts not available and the need to get the unit online for summer load, it was decided to replace just the one roll wheel assembly.
27534869	VALMY 98459853 V2 PULVERIZER MOTOR 2D, REBUILD		44,287		44,287		
27611233	VALMY 10115633 V2 RECYCLED ASH AGITATOR GEARBOX FOR LOOP 1		43,832		43,832		
27609106	VALMY 10111518 V2 WATER LAB INSTRUMENTATION REPLACEMENT		42,056		42,056		
27587933	VALMY 98492604 V2 CONDENSATE PUMP CAPITAL SPARE INSTALLATION		40,991		40,991		
27556791	VALMY 98473462 VAL DMZ SERVER CLUSTER VA			37,130	37,130		
27530686	VALMY 98459449 V1 1A CIRCULATING WATER PUMP 1A	35,960			35,960	Reliability	In April 2019, the Unit 1 circulating water pump failed due to a motor ground fault. Absent a circulating water pump in service, Unit 1 would be de-rated to approximately 125 net MW output, or half its normal load. The motor was sent to a contract repair shop for evaluation where it was determined that a complete motor rewind was required. At the request of the Western Electricity Coordinating Council, and because of the four to six week lead time associated with the repairs, a new replacement motor was purchased so that the plant could meet reliability and availability needs. The rewind was performed and used as a capital spare and a replacement motor was procured.
27534970	VALMY 98458824 V2 AUXILIARY STEAM DESUPERHEAT		34,947		34,947		
27603167	VALMY 10074741 VC RO MEMBRANE REPLACEMENT 6B/32			34,141	34,141		
27547697	VALMY 98468760 V1 PRIMARY AIR FAN A MOTOR, RE	33,880			33,880	Reliability	On October 31, 2019, the Unit 1 A Primary Air Fan motor inboard bearing overheated and failed while in service. The motor inboard bearing alarm sounded and upon inspection of the motor, plant personnel discovered a large amount of smoke coming from the motor inboard bearing housing. The motor was shut down and replaced with the existing spare motor. The damaged motor was refurbished to become a spare Primary Air Fan motor. Unit 1 Primary Air Fans are used to convey fluidized coal from the pulverizers to the boiler burner through attached coal conduit piping. Without both Primary Air Fans, Unit 1 could not reach stable operation and would have been curtailed until late December 2019 while the damaged motor was repaired. While the costs appear as 2020 plant additions, the work was performed on Unit 1 in 2019 but final costs did not close to the project until early 2020.

VALMY PLANT ADDITIONS: Jan 1, 2019 - Dec 31, 2022

Project	Descr	V1	V2	VC	Total	Purpose	Project Description/Justification
27551304	VALMY 98453212 V2 SKY CLIMBER ATTACHMENT PLATFORM, INSTALL		33,051		33,051		
27531065	VALMY 98454279 VALMY TECHNOLOGY SECURITY UPDA			30,781	30,781		
27587123	VALMY 98490976 VC CONVEYOR 2 GEARBOX			28,940	28,940		
27579435	VALMY 98486141 VC SYSTEM1 UPDATE			27,363	27,363		
27543734	VALMY 98464825 V1 FLY ASH BLOWER 1B, REPLACE	25,802			25,802	Reliability	A fly ash blower is needed to convey ash in order to keep the baghouse hoppers from overflowing which would lead to an eventual unit shutdown. Inspection of the fly ash blower 1B after it began making unusual noises determined that the blower was not reliable for dependable service and failure was imminent due to internal wear and damage. Plant reliability is increased as replacing the 1B fly ash blower ensures that there is a redundant blower to convey ash and fluidize when needed to do so.
275609114	VALMY 10107231 V2 PULVERIZER 600HP ELECTRIC MOTOR REPLACEME		25,779		25,779		
275603199	VALMY 10060412 V2 LIME TRANSFER BLOWER 2A REPLACEMENT		24,057		24,057		
27566786	VALMY 98474520 VC RO MEMBRANES, REPLACE 60/72			21,496	21,496		
27539690	VALMY 98463011 V2 LIME TRANSFER BLOWER 2B, RE		20,983		20,983		
27570624	VALMY 98478541 V2 BOILER DRUM MERU REPL		20,359		20,359		
27577136	VALMY 98485331 VC TD MODULES, REPLACE 2			18,853	18,853		
27533141	VALMY 98459392 V2 1ST POINT HEATER DRAIN VALVE, REPL		18,078		18,078		
27566788	VALMY 98478101 VC DIGITAL ALIGNMENT TOOL			16,892	16,892		
27596341	VALMY 98494540 VC STACKER CONTROL PLC REPLACEMENT VA			16,652	16,652		
27580308	VALMY 98493304 V2 CONDENSATE PUMP B MOTOR REPLACEMENT		15,158		15,158		
27539683	VALMY 98455219 VC DATA LOGGERS, REPLACE			14,967	14,967		
27533139	VALMY 98457380 VA HMI REPLACEMENT			14,622	14,622		
27533143	VALMY 98459393 V1 1ST POINT FEEDWATER INLET VALVE, REFLU	14,564			14,564	Reliability/Safety	In August 2018 a steam leak to atmosphere from the pressure seal surface of the valve on Unit 1 was discovered. Disassembly and refurbishment was the only way repairs could be made to the valve to avoid the burn hazard of leaking steam to plant personnel and ensure continued reliability of the unit's operation.
27537126	VALMY 98459140 V2 REVENUE METER, UPGRADE		14,443		14,443		
27502697	VALMY 98434354 V1 LOW NOX BURNER NOZZLES, REP	13,148			13,148	Environmental	Mercury and Air Toxics Standards ("MATS") Rule 40 CFR 63.10021 require a burner and combustion control inspection, and combustion tuning every thirty-six months. During the inspection, completed in December 2017, significant degradations were noted on 21 thermocouples, 15 coal burner assemblies, and refractory around all burners. This scope of work was identified as required to be completed to meet regulations and allow continued boiler operation.
27557532	VALMY 98473888 VC ONSITE BACKUP HOST SERVER			12,989	12,989		
27537223	VALMY 98459139 V1 REVENUE METER, UPGRADE	12,709			12,709	Reliability	Given Idaho Power's impending exit from Unit 1 operations, it is important to have in place a sufficient measurement infrastructure to properly account for both owners' utilization of each unit. Based upon NV Energy's review of the net megawatt ("MW") billing infrastructure, it was determined that Valmy lacked sufficiently accurate meters, totalizers, and communication infrastructure to reliably account for MW generation including transformer losses. At the time the Company joined the Energy Imbalance Market, the Valmy metering infrastructure had not been upgraded and instead relied on a mix of local readings from different meters and systems that did not always match. This project consolidates and standardizes Valmy net MW reporting by sending the data to the plant's distributed controls system, which then consolidates the information and reports it in a single, consistent value to each owner.
27568480	VALMY 98490803 V2 PULVERIZER 600HP ELECTRIC MOTOR, CAP SPARE		11,641		11,641		
27599865	VALMY 98493276 V2 TURBINE REHEAT DRAIN VALVE		10,300		10,300		
27603169	VALMY 10074744 VC AUTOMATED COMPRESSION DEVICE			10,102	10,102		
27579439	VALMY 98486138 V2 DCS NETWORK GPS TIME SERVER		10,088		10,088		
27587933	VALMY 98492604 V2 CONDENSATE PUMP CAPITAL SPARE INSTALLATION		9,643		9,643		
27533147	VALMY 98459448 V1 1ST POINT HEATER EXTRACTION STEAM BLOCK VA	9,119			9,119	Reliability	The block valve that supplies extraction steam to the Unit 1 1st point feedwater heater failed in the closed position in July 2018. This valve serves to isolate the 1st point feedwater heater from turbine feed extraction steam and also protects the turbine from backflow/water induction by going to closed position when called on. The failure required the bypass of the 1st point feedwater heater affecting the plant reliability and diminishing the heat rate. This project refurbished the block valve.
27591520	VALMY 98494614 VC WEST 3ST PASS RO MEMBRANE R			8,916	8,916		
27596255	VALMY 98496604 V2 FORCED DRAFT FAN B MOTOR REPLACEMENT VA		6,926		6,926		
27509175							Pulverizers are utilized to grind coal to fine dust before being transported to burner fronts. This process wears out roll wheel assemblies, table grinding segments, and interior of pulverizer equipment. The normal operating life cycle of a Unit 1 pulverizer is roughly 18 to 24 months. Routine inspections are performed at 3,000 hours and required maintenance is performed to ensure the maximum life of the pulverizer rebuild. Major overhaul includes replacements of roll wheels, air seals, coal shields, bearings, wear resistant ceramic liners, classifier vanes, coal feeder wear components, spring frame wear plate, and the gyrles plow. In addition, the gearbox and lubrication system was refurbished and other associated welding and re-building was performed due to erosions to the pulverizer housing and associated equipment. The purpose of this project is for the continued reliable operation of Unit 1.
27501116	VALMY 98427786 V1 PULVERIZER "B" MAJOR REBUILD	6,732			6,732	Reliability	
27545750	VALMY 98466098 VC UTILITY CARTS, REPLACE			6,268	6,268		
27591516	VALMY 98494358 VC EQUIPMENT WASH PIPING REPLACEMENT			5,915	5,915		
27570624	VALMY 98478541 V2 BOILER DRUM MERU REPL		2,582		2,582		
27517150	VALMY 98442216 ACOUSTIC MONITORING SECU			2,051	2,051		
27545747	VALMY 98454282 OT PLANT TECHNICIAN TOOLS MORT			988	988		
27502692	VALMY 98434198 V1 SORBENT TRAP MERCURY MONITO	929			929	Environmental	A mercury monitoring system is required for environmental compliance. The monitoring provisions apply to the measurement of total vapor phase mercury in emissions from sorbent trap monitoring systems that must be capable of measuring mercury in units of the applicable emissions standards. The existing monitoring system suffered failures requiring parts to be replaced and exhausted warehouse stock. While attempting to replenish the stock, it was determined that replacement parts were no longer available. This project replaced the existing sorbent trap mercury monitoring equipment with units which meet compliance requirements and have parts readily available to maintain compliance. The majority of the project costs closed in 2018, with some remaining dollars closing in 2019.
27502694	VALMY 98434199 V2 SORBENT TRAP MERCURY MONITO		627		627		
27587123	VALMY 98490976 VC CONVEYOR 2 GEARBOX			521	521		
27568635	VALMY 98474339 VC FPS DIESEL FIRE PUMP A ENGINE REBUILD			413	413		
27619674	VALMY 10132570 VC ANNEX OFFICE BUILDING FLOOR REPL			295	295		
27603164	VALMY 10074746 VC UTILITY CARTS REPLACEMENT			263	263		
27603165	VALMY 10060545 VC CRUSHER FEEDER MOTOR AND GEARBOX REPLACEME			229	229		
27509175	VALMY 98437116 VC RO MEMBRANES, REPLACE			92	92		
27556791	VALMLY 98473462 VAL DM2 SERVER CLUSTER VA			(28)	(28)		
27514789	VALMY 98443689 V1 ID FAN MOTOR 1B, REBUILD	(1,003)			(1,003)		
27570622	VALMY 98481652 VC SB COAL UNLOAD CONVEYER BELT, REPLACE VA			(15,589)	(15,589)		
27440893	VALMY 98376800 VC PRODUCTION WELL #30 REPLACE			(109,095)	(109,095)		
Grand Total		416,860	6,013,329	1,761,645	8,191,837		

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BARRETTO, DI**  
**TESTIMONY**

**EXHIBIT NO. 3**

## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2021	27541813	BRIDGER 2019C091 U4 SCR CATALYST REPLACEMENT 20				1,413,556		1,413,556	Environmental	Replaced two levels of Selective Catalytic Reduction ("SCR") catalyst as defined in the catalyst management plan. Current SCR design requires replacement of catalyst on a set cycle corresponding to major outages.
2021	27549354	BRIDGER 2020C010 U4 STACK LINER (PHASE 2) 20				897,531		897,531	Environmental	This project extended the pin block liner to the mid level of the stack and was a continuation of the project to complete the line replacement. The project will prevent deterioration of acid brick lining and compression bands.
2021	27547308	BRIDGER 2020C009 U4 BURNERS - MAJOR 20				648,381		648,381	Reliability / Environmental	Replaced burner (nozzle tip) components and repair other damaged/warped hardware. Most burner front components have a 4-year life. Warpage causes less-than-optimal combustion.
2021	27503065	BRIDGER 2018C011 U4 PRECIPITATOR WIRE REPLACEMENT 20				575,461		575,461	Environmental	This project replaced discharge electrode wires in the precipitator. Without replacement, electrode wires will begin breaking at an increasing rate adversely impacting precipitator performance.
2021	27553266	BRIDGER 2020C016 BLANKET - PUMPS, VALVES, GEARBOXES 20					456,375	456,375	Reliability	These costs are associated with miscellaneous pumps, valves and gearboxes associated with several capital mechanical projects performed throughout the year.
2021	27553276	BRIDGER 2020C011 U4 SCRUBBER DUCTWORK 20				407,605		407,605	Environmental	Recoated scrubber ductwork and completed repairs as required. The project was required to maintain the integrity of the ductwork.
2021	27551439	BRIDGER 2020C035 U4 SCR AIR CANNONS 20				315,713		315,713	Environmental	Installed online catalyst cleaning equipment to reduce ash pluggage. During several catalyst inspections on U4, ash buildup was observed on the front wall of the bottom two layers of the catalyst. This project installed air cannons/ash sweepers on the front wall and turning valves to eliminate this ash buildup.
2021	27545744	BRIDGER 2020C004 U4 BFPT TRIP SYSTEM 20				308,162		308,162	Reliability/Safety	This project replace the electro mechanical trip system as well as eliminate the mechanical over speed bolt on the boiler feed pump turbines. This is a triple redundant system. The existing system was over 30 years old and maintenance issues increased over the years. This was the first set of boiler feed pump turbines slated for the upgrade.
2021	27533268	BRIDGER 2020C001 U4 LPA SCREEN REPLACEMENT 20				291,847		291,847	Environmental	Installed a new large particulate ash ("LPA") screen to maintain the optimal catalyst performance and service life. The LPA screens prevent the SCR catalyst from plugging. The catalyst is costly hardware that is used to produce the operating permit NOx value. The LPA screen typically has a 5 year life expectancy. U4 LPA screens have experienced higher than expected failure in parts of the screen and this project is part of a warranty agreement.
2021	27549348	BRIDGER 2020C006 U4 PRECIPITATOR TR & CLR REPLACEMENT 20				274,230		274,230	Environmental	Upgraded 18 transformer-rectifiers ("TR") and 18 Current Limiting Reactors ("CLR") in the precipitator. Existing TRs and CLRs were reaching the end of their service life and had become unreliable. TR and CLR malfunctions can significantly impact precipitator performance.
2021	27551426	BRIDGER 2020C022 U4 WATERWALL COUTANT SLOPE INTERFACE PHA				252,486		252,486	Reliability	This project replaced boiler side wall tubes at the interface with the coutant slope. Tube in this area experiences increased ash erosion as compared to other areas of the boiler. Tubes had previously been pad welded numerous times and required replacement.
2021	27553282	BRIDGER 2020C052 U4 PRECIPITATOR DUCT WORK 20				229,106		229,106	Environmental	The project was required to maintain the integrity of the ductwork. If the ductwork is not repaired and recoated, the steel will be impacted by fly ash erosion. This impacts the structural integrity of the duct work.
2021	27575653	BRIDGER 2021C012 BLANKET - MILLS, PULVERIZER VERTICAL SHA					226,258	226,258	Reliability	This work order allocates funds for major pulverizer overhauls. Approximately two pulverizers require major overhauls each year therefore these costs are associated with the replacement parts that were ordered in advance to provide a quick turn-around time of the mills.
2021	27545655	BRIDGER 2019C094 U4 EHC PUMPS SKID UPGRADE 20				218,633		218,633	Reliability	This project improved Electro-Hydraulic pump performance by upgrading the pumps from the existing obsolete equipment. It was difficult and costly to find service shops that could rebuild the pumps. Having contemporary pumps will also increase reliability and serviceability.
2021	27493693	BRIDGER 2017C110 U4 BOILER OPTIMIZATION SYSTEM 17				217,915		217,915	Reliability	This project implemented neural network combustion controls and soot blowing optimizer on the unit. The optimizer seeks to lower emissions (NOx and CO) while minimizing heat rate. Other targets such as steam temperatures, oxygen controls, and Regional Haze requirement emission restriction profiles can also be set. Results achieved on U2 are a 65 BTU/KWh reduction in the net unit heat rate with the combustion optimizer alone; other power plants have experienced an additional 0.5% improvement in heat rates as a result of the soot blowing optimizer.
2021	27547299	BRIDGER 2019C095 U4 ABS INLET TURNING VANES 20				202,986		202,986	Environmental	The project involved the installation of turning vanes and flow straightening devices to ensure uniform flow profile across the absorber inlet and equal distribution of flow in all absorbers. These devices will also reduce flow recirculation at the absorber inlet hence reducing slurry to flow back into absorber inlet plenum.
2021	27549359	BRIDGER 2020C015 U4 #42 BOILER FEED PUMP REBUILD 20				199,417		199,417	Reliability	This project rebuilt the boiler feed pump and replaced the pump casing. It was required to assure proper alignment with both the rotating element and the pump to the turbine.
2021	27549360	BRIDGER 2020C021 U4 NUVA FEEDER PIPING REPLACEMENT 20				197,957		197,957	Environmental	Replacement of the Nuva feeder piping. The existing piping was reaching the end of its life and was starting to deteriorate. The piping replacement maintains the integrity of the system.
2021	27575652	BRIDGER 2021C003 BLANKET - PUMPS, VALVES, GEARBOXES 21					195,757	195,757	Reliability	These costs are associated with miscellaneous pumps, valves and gearboxes associated with several capital mechanical projects performed throughout the year.
2021	27573809	BRIDGER 2020C074 U4 ECONOMIZER OUTLET TURNING VANE 20				189,477		189,477	Reliability	This area is subject to fly ash erosion to structural supports and duct work. This project restored turning vanes that had been worn through by fly ash. The support structure and turn vanes are directly over the air pre-heater. This material can fall onto the air pre-heater and stop the rotor which will cause a unit trip.
2021	27583201	BRIDGER 2021C021 U0 BCP MOTOR REWINDS & COOLERS 21					184,447	184,447	Reliability	This work order includes costs associated with the rebuild of a failed boiler circulating pump for future re-use. Absent the spare boiler circulating pump, a typical rebuild time is at least 2 months which would impact unit generation for the time period that one of the boiler circulating pump is out of service.
2021	27547293	BRIDGER 2019C082 U4 REPLACE 7200 VAC BUS RELAYS 20				182,230		182,230	Reliability/Safety	This project replaced existing motor and Load Control Center transformer feeder breaker relays with new solid state relays on U4 because the existing relays are obsolete. The new relays provide enhanced diagnostic and monitoring capability.
2021	27551428	BRIDGER 2020C025 U4 PA DUCT INSPECT AND REPAIR 20				182,137		182,137	Reliability	Inspected and repaired the primary air duct, including the required scaffolding and insulation work. The primary air ducts had developed leaks over years of operation. The cracks and holes that were visible were repaired during unit outages; however, the insulation on the hot air duct and the height of the vertical duct continue to limit the inspection view. This project enabled a more complete inspection and repair to restore the ductworks ability to supply adequate primary air pressure for full load.
2021	27507255	BRIDGER 2018C088 GREEN RIVER 3500 VIBRATION MONITORING SY					180,430	180,430	Reliability	The existing Emerson 4500 was obsolete and no longer supported by Emerson. A new Bentley Nevada 3500 was installed on the green river pump station. The Continuous Vibration Monitoring System provides real time vibration shutdown protection for the six Green River pumps. This upgrade was necessary in order to have OEM support, and to standardize this system with the rest of Bridger's on-line monitoring systems. This system will also be tied into the plant network, using the latest critical security control upgrades and will provide real time vibration data for trending, alarming, and advanced analysis at the plant.

## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2021	27551444	BRIDGER 2020C046 U4 INSTALL NEW AIR FLOW PROBES 20				174,584		174,584	Reliability / Environmental	Installed new secondary air flow monitors. Unit operation at low load requires increased accuracy of boiler air load.
2021	27549363	BRIDGER 2020C024 U4 SDCC WEAR PLATE LOAD SIDE 20				165,783		165,783	Reliability/Safety	Purchased and installed AR500 wear plates for the U4 submerged drag chain conveyor, which removes ash from the bottom of the boiler. The original wear plates were installed in 2012 and had reached the end of their 8 year design life.
2021	27559516	BRIDGER 2020C075 REPLACE PULVERIZER JOURNALS					160,334	160,334	Reliability	The project replaced pulverizer journals which were beyond economical repair. The purchase of journals help to maintain pulverizer availability. Underground coal has proven to be more abrasive which leads to increased journal wear.
2021	27549352	BRIDGER 2020C008 U4 LPA SCR COLLECTION/TRANSFER CNVYR 20				139,597		139,597	Environmental	This project overhauled the mini drag-chains that transport ash from the SCR large particle ash hopper to the drag chain hopper. Replacement of components are required to operate the equipment reliably for the next four years.
2021	27475574	BRIDGER CITC2017C207 BACKUP BANDWIDTH UPGRADES 2017					130,809	130,809	Reliability	This project upgraded the radio communications at the plant. Contact with personnel including technicians and maintenance needed improvement by adding some off the circuits and increasing the bandwidth in and around the plant.
2021	27549367	BRIDGER 2020C045 U4 APH SEAL REPLACEMENT 20				130,390		130,390	Reliability	Replaced all hot end and cold end seals in both air pre-heaters during major overhaul. Air pre-heater seals have to be set with an interference fit to reduce air leakage at operating temperatures. The interference fit will cause additional wear during shutdowns and startups, leading to excessive air leakage.
2021	27551441	BRIDGER 2020C041 U4 EX-2100E CONTROL UPGRADE & PARTS 20				129,263		129,263	Reliability	Upgraded the EX2100 control system with an EX2100e digital front end excitation system retrofit. The U4 system was installed 12 years ago and the hardware, circuit board, and control interface had become obsolete. In addition, the manufacturer had stopped supporting the old hardware and recommended an upgrade to the new EX2100e control system.
2021	27553281	BRIDGER 2020C050 U4 DCS MINOR 20				123,134		123,134	Reliability	Replaced failed Distributed Control Systems ("DCS") component. The plant has moved from a 4 year major DCS component Evergreen cycle to an 8 year cycle. Work stations and monitors have a 4 year life.
2021	27551452	BRIDGER 2020C057 U4 RETRACTS & WATER INJECTION PENETRATIO				122,268		122,268	Reliability	Installed equipment to help burn a better coal quality. Bridger Coal Company is delivering fuel that contains higher sodium, calcium and iron. Coal with these constituents result in accumulations of fouling and plugging of the boiler. This results in load reductions and forced outages. The plant installed hardware that will burn the supplied coal without negatively impacting the boiler.
2021	27545743	BRIDGER 2019C101 U4 TURBINE BEARING FIRE DETECTION/SUP 20				121,474		121,474	Reliability/Safety	Install of an automatic pre-action closed-head sprinkler system to protect the turbine generator bearings on the unit and mitigate the risk of fire damage to the turbine generator and the plant. This project will help reduce the risk of turbine bearing fire damage and was identified through a risk audit.
2021	27549361	BRIDGER 2020C023 U4 PRECIP DAMPER LIMITORQUE REPLACE 20				112,405		112,405	Environmental	This project included the purchase and install new Limitorque drives on the precipitator inlet and outlet dampers and was needed to maintain reliable operation of the precipitator and allow maintenance repairs to be completed with the unit on-line. High availability of network systems used to communicate with customers is critical to maintaining efficient and effective business operations as well as meeting customer expectations.
2021	27580827	BRIDGER 2021C023 U4 PRECIP CE/DE RAPPER REPLACEMENT 21				111,888		111,888	Environmental	This project replaced 6 discharge electrode rappers in A fields, 5 collector electrode rappers in A fields and 4 CE rappers in B fields. Electrostatic precipitator removes fly ash from the gas. Opacity is used to quantify the effectiveness of precipitator. Precipitator consists of highly charged electrodes and collecting electrodes to collect fly ash.
2021	27551448	BRIDGER 2020C055 U4 APH SECTOR PLATES 20				110,624		110,624	Reliability	Replaced the two worst sector plates on each unit. Sector plates have reached their effective life after 35 years of use. Warped sector plates result in excessive air pre-heater leakage.
2021	27549357	BRIDGER 2020C012 U4 FLAME SCANNER 20				102,853		102,853	Reliability	Replaced the 12 flame scanners on U4. The supplier was no longer manufacturing spare parts for the existing scanners. The scanners are integral in the boiler operation.
2021	27575902	BRIDGER 2020C040 U4 COAL PIPE REPLACEMENT 20				100,188		100,188	Reliability/Safety	This project replaced the coal pipes from the pulverizers to the boiler that had high wear due to the abrasiveness of the coal. Over time the coal flowing through the pipes will develop high wear areas and thinning of the steel coal pipes, mostly at the elbow. If the pipes are not replaced, the high wear areas will wear through and pulverized coal and air from the primary air fans will be blowing into the power plant causing a hazard to employees and lost efficiency in the boiler.
<b>2021 Total</b>			-	-	-	<b>8,849,280</b>	<b>1,534,411</b>	<b>10,383,691</b>		



## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2022	27602389	BRIDGER 2022C016 U0 BLANKET- PUMPS, VALVES, GEARBOXES 22					555,832	555,832	Reliability	These costs are associated with miscellaneous pumps, valves and gearboxes associated with several capital mechanical projects performed throughout the year.
2022	27595046	BRIDGER 2021C042 U2 BURNERS MAJOR 22		405,663				405,663	Reliability / Environmental	Replaced burner (nozzle tip) components and repaired other damaged/warped hardware. Most burner front components have a 4-year life. Warpage causes less-than-optimal combustion.
2022	27597944	BRIDGER 2022C001 U2 DCS MAJOR 22		400,965				400,965	Reliability	This project upgraded the DCS software and select power supplies and controllers. DCS software is upgraded on an eight year cycle and hardware is replaced as necessary to be compatible with the software.
2022	27613523	BRIDGER 2022C045 U0 REBUILD FRAME UP D-10T DOZER 22					313,469	313,469	Reliability/Safety	This project rebuilt the D-10T Dozer with the highest operating hours/in the worst condition to maintain fleet reliability. D-10Ts are required for coal delivery to the plant. Equipment operating hours reached OEM recommended limits for major rebuilds. Maintenance costs and downtime had been increasing.
2022	27575650	BRIDGER 2020C076 U2 REPLACE 25 FEEDWATER HEATER 21		245,336				245,336	Reliability	This project replaced the existing 25 feedwater heater. The system was taking 8 hours to drain to the floor resulting in a delay before repairs to the feedwater system could begin. The new drains will drain the system in half the time and return the water to the condensate system for reuse rather than dumping the hot water to the floor.
2022	27483895	BRIDGER 2017C035 U2 REPLACE EPOXY LINER IN CW TUNNELS 17		244,537				244,537	Reliability/Safety	The epoxy liner installed in the circulating water pipelines beneath the power building floor had partially failed, requiring replacement. This project replaced the failed epoxy liner.
2022	27597953	BRIDGER 2022C015 U2 EHC PUMPS REPLACEMENT 22		223,574				223,574	Reliability	Replaced obsolete electro-hydraulic controlled pumps with a supported pump. Pumps were obsolete and were difficult to maintain.
2022	27597951	BRIDGER 2022C012 U2 WATERWALL COUTANT SLOPE INTERFACE PHASE		222,866				222,866	Reliability	This project replaced boiler side wall tubes at the interface with the coutant slope. Tying in this area experienced increased ash erosion as compared to other areas of the boiler. Tubes had been pad welded numerous times and need to be replaced.
2022	27602391	BRIDGER 2022C030 U2 REPLACE ECON OUTLET TURNING VANES 22		204,776				204,776	Reliability	This area is subject to fly ash erosion to structural supports and duct work. This project restored turning vanes that have been worn through by fly ash. The support structure and turn vanes are directly over the air pre-heater. This material can fall onto the air pre-heater and stop the rotor which will cause a unit trip.
2022	27551450	BRIDGER 2020C056 U4 ACOUSTIC LEAK DETECTION SYSTEM 20				176,915		176,915	Reliability	Installed acoustic leak detection in boiler for detection and monitoring of tube leaks. Provides early detection and scheduling of tube leak repairs.
2022	27602387	BRIDGER 2022C008 U2 SCRUBBER DUCTWORK 22		166,210				166,210	Environmental	Recoat scrubber ductwork and completed repairs as required. If the ductwork is not repaired and recoated, the steel will continue to corrode. This impacts the structural integrity of the duct work.
2022	27602388	BRIDGER 2022C009 U2 PRECIPITATOR DUCTWORK 22		154,319				154,319	Environmental	The project was required to maintain the integrity of the ductwork. If the ductwork is not repaired and recoated, the steel will be impacted by fly ash erosion. This impacts the structural integrity of the duct work.
2022	27597961	BRIDGER 2022C017 U2 HP TURBINE PACKING 22		151,812				151,812	Reliability	This project replaced the U2 high pressure turbine packing with new packing to restore efficiency. With the new packing, it is expected that the heat rate will improve by 27 BTU/kWh.
2022	27602384	BRIDGER 2022C003 U2 STACK BREECH COATING 22		138,797				138,797	Environmental / Safety	This project replaced the worn coating in the ducts from the scrubbers into the stack (stack breach). This is a high wear area and if not repaired and/or replaced will lead to excessive leaking and could lead to environmental violations. This could also be a hazard to employees if there is leaking flue gas where employees might be working.
2022	27559555	BRIDGER 2020C086 U0 REDUNDANT SODA LIQUOR SUPPLY LINE					134,591	134,591	Environmental	Installed redundant soda liquor supply line, in case repairs are required on the existing soda liquor supply line to prevent unit derates or outages.
2022	27575652	BRIDGER 2021C003 BLANKET - PUMPS, VALVES, GEARBOXES 21					130,908	130,908	Reliability	These costs are associated with miscellaneous pumps, valves and gearboxes associated with several capital mechanical projects performed throughout the year.
2022	27597946	BRIDGER 2022C004 U2 SLMS HP UPGRADE 22		130,829				130,829	Reliability/Safety	This project replaced the Stator Leak Monitor System ("SLMS") on U2. The components on the U2 SLMS were approaching end of life. The monitoring of hydrogen leakage into the stator water cooling system is a good indicator on the overall health of the machine's insulation system.
2022	27607052	BRIDGER 2022C031 U4 APH SECTOR PLATES 22		130,526				130,526	Reliability	Replaced the two worst sector plates on each unit. Sector plates have reached their effective life after 35 years of use. Warped sector plates result in excessive air pre-heater leakage.
2022	27600043	BRIDGER 2022C019 U2 7200 LCC RELAY ARC FLASH UPGRADE 22		126,971				126,971	Safety	This project upgraded the existing outdated station breaker relays that were a safety concern due to arc flash hazards. The plant has been replacing the old relays with arc flash compliant relays that will significantly reduce the hazard or arc flash incidents to plant personnel.
2022	27566689	BRIDGER 2020C088 U0 MILL DISCHARGE VALVE REPLACE 21					126,415	126,415	Reliability	This project replaced mill discharge valves on the units to isolate the supply of fuel to the boiler and will maintain National Fire Protection Association compliance for coal pipe isolation valves. The existing valves wear out as they remain in the abrasive coal flow, but the replacement valves are designed with longer life.
2022	27604648	BRIDGER 2022C033 U4 APH SEAL REPLACEMENT 22		110,702				110,702	Reliability	Replaced all hot end and cold end seals in both air pre-heaters during major overhaul. Air pre-heater seals have to be set with an interference fit to reduce air leakage at operating temperatures. The interference fit will cause additional wear during shutdowns and startups, leading to excessive air leakage.
2022	27595047	BRIDGER 2022C011 U2 PRECIPITATOR RAPPERS 22		100,969				100,969	Environmental	Complete replacement of rapper shaft, bearings and hammers as the precipitator rapping systems were reaching their end of life.
<b>2022 Total</b>			-	<b>3,158,849</b>	-	<b>176,915</b>	<b>1,261,215</b>	<b>4,596,979</b>		
<b>Grand Total - Projects Over \$100k</b>			-	<b>3,158,849</b>	-	<b>9,026,195</b>	<b>2,795,626</b>	<b>14,980,670</b>		

## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2021	27569520	BRIDGER 2020C093 REPLACE PLANT VEHICLES 20					99,571	99,571		
2021	27559520	BRIDGER 2020C082 U4 LOADOUT CONVEYOR PLATFORM				98,763		98,763		
2021	27551442	BRIDGER 2020C044 U4 ECONOMIZER HARMONIC BAFFLES 20				93,701		93,701		
2021	27569745	BRIDGER 2020C103 U4 SCR ADD AIR NOZZLES @ TURN VANES 21				91,162		91,162		
2021	27549345	BRIDGER 2019C103 U4 AMMONIA MONITOR				91,000		91,000		
2021	27583200	BRIDGER 2021C002 BLANKET - MOTORS 21					87,265	87,265		
2021	27569735	BRIDGER 2020C102 REPAVE PLANT ROADS 20					79,203	79,203		
2021	27545653	BRIDGER 2019C068 03A & 03B BUS RELAY UPGRADES 19					75,607	75,607		
2021	27566691	BRIDGER 2020C053 U0 PLANT LIGHTING IMPROVEMENTS 20					75,351	75,351		
2021	27578625	BRIDGER 2021C006 U4 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKER				73,680		73,680		
2021	27549344	BRIDGER 2016C031 U4 MERCURY DEVICE REPLACEMENT 20				71,261		71,261		
2021	27555273	BRIDGER 2020C072 REBUILD 777 ASH HAULER FRAME UP (A) 20					69,663	69,663		
2021	27575648	BRIDGER 2020C065 U4 SDCC LINER/SHELL REPLACEMENT 2020				67,491		67,491		
2021	27545746	BRIDGER 2020C014 U4 BFP1 AC/DC OIL PUMPS 20				67,173		67,173		
2021	27553278	BRIDGER 2020C027 U4 SDCC TU/SUB IDLER REPLACEMENT 20				63,910		63,910		
2021	27553272	BRIDGER 2020C002 U4 UPGRADE COOLING TOWER VFDS 20				63,874		63,874		
2021	27549347	BRIDGER 2020C005 REPLACE EX-2100 HMI COMPUTERS 20					63,627	63,627		
2021	27561649	BRIDGER 2020C092 U0 CONTRACTOR PARKING GATE 2 CONCRETE WORK					61,391	61,391		
2021	27551431	BRIDGER 2020C031 BLANKET - ELECTRICAL/INSTRUMENTATION 20					59,620	59,620		
2021	27551430	BRIDGER 2020C026 U4 COVER ECONOMIZER HOPPERS 20				56,811		56,811		
2021	27555268	BRIDGER 2020C030 HEAT TRACE SYSTEM UPGRADES 20					56,699	56,699		
2021	27549365	BRIDGER 2020C029 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKER					55,825	55,825		
2021	27560921	PAC-SPONS JOQA: JIM BRIDGER REPLACE EPU					53,296	53,296		
2021	27553280	BRIDGER 2020C034 U2 COOLING TOWER FAN BRAKE SYSTEMS 20		52,711				52,711		
2021	27591387	BRIDGER 2019C034 U0 REPLACE ROOFING SYSTEM 21					51,456	51,456		
2021	27547309	BRIDGER 2020C013 U4 FEEDWATER SYSTEM DRAINS TO COND 20				47,882		47,882		
2021	27569857	BRIDGER 2020C073SEWER SEWER PIPES LINERS- JIM BRIDGER PLANT					46,346	46,346		
2021	27553351	BRIDGER 2020C036 U4 COOLING TOWER FAN BRAKE SYSTEMS 20				45,882		45,882		
2021	27580817	BRIDGER 2020C058 U4 SDCC REPLACE DEWATERING SLOPE 20				44,550		44,550		
2021	27547327	BRIDGER 2019C083 U3 STACK OPACITY MONITOR HEATING 19			43,546			43,546		
2021	27580822	BRIDGER 2021C007 BLANKET - ELECTRICAL/INSTRUMENTATION 21					42,360	42,360		
2021	27580826	BRIDGER 2021C022 BLANKET LCC SWITCHGEAR & XFMR UPGRADES 21					39,990	39,990		
2021	27575904	BRIDGER 2020C104 U2 PRECIP INTERLOCK PANEL REPLACEMENT 20		36,934				36,934		
2021	27551347	BRIDGER 2020C017 BLANKET - SMALL TOOLS 20					36,830	36,830		
2021	27553353	BRIDGER 2020C043 U4 SO3 NOZZLE REPLACEMENT 20				36,038		36,038		
2021	27580825	BRIDGER 2021C020 U4 SDCC REFRACTORY REPLACEMENT 21				34,442		34,442		
2021	27573808	BRIDGER 2021C004 U0 BLANKET - SMALL TOOLS 21					33,829	33,829		
2021	27571833	BRIDGER 2020C070 BLANKET MCC UPGRADES 20					30,155	30,155		
2021	27578675	BRIDGER CITC2021C202 2021 CONSOLIDATED PC TOM					30,038	30,038		
2021	27568634	BRIDGER 2020C071 U4 LCC OV/UV RELAY UPGRADE				28,479		28,479		
2021	27560845	PAC-SPONS JOQA: NERC PRC-002 AND MOD-033					28,016	28,016		
2021	27587057	BRIDGER 2021/C/032 CONVEYOR BELTS 21					26,556	26,556		
2021	27524343	BRIDGER 2018C132 U4 MAIN TURBINE OVERSPEED UPGRADE				25,761		25,761		
2021	27553279	BRIDGER 2020C032 U4 ERV MODIFICATION 20				25,012		25,012		
2021	27505201	BRIDGER CITC2018C250 BOUNDARY DEFENCE IMPROVEMENT					24,301	24,301		
2021	27578626	BRIDGER 2021C013 U0 CH LINER PLATES 21					22,987	22,987		
2021	27585690	BRIDGER CITC2021C018 DRAGOS-JIM BRIDGER					22,110	22,110		
2021	27549350	BRIDGER 2020C007 U4 REPLACE DOGBONE EXPANSION JOINT 20				18,733		18,733		
2021	27524338	BRIDGER 2018C130 U2 MAIN TURBINE OVERSPEED UPGRADE		17,191				17,191		
2021	27501256	BRIDGER 2018C064 U1 FLAME SCANNER 18	15,358					15,358		
2021	27564797	BRIDGER U0 2020/C/081 DUST COLLECTOR DUCTWORK REPLACEMENTS					15,008	15,008		
2021	27571832	BRIDGER 2020C083 U0 REPLACE RO MEMBRANES 20					15,003	15,003		
2021	27551437	BRIDGER 2020C033 U4 REPLACE 42 MOISTURE SEPARATOR 20				14,660		14,660		
2021	27559496	BRIDGER 2020C038 REPLACE FORKLIFT					12,199	12,199		
2021	27525030	BRIDGER 2019C032 BLANKET - PUMPS, VALVES, GEARBOXES 19					12,151	12,151		
2021	27578627	BRIDGER 2021C015 U0 BLANKET - UNDERGROUND IPS / HYDRANTS 21					11,421	11,421		

## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2021	27580823	BRIDGER 2021C014 U4 COOLING TOWER COMPONENT COATING 21				7,049		7,049		
2021	27578672	BRIDGER 2020C068 U1 SHOWER FOOM FLOOR COATING	6,207					6,207		
2021	27585109	BRIDGER 2021C011 U0 DAHS SERVER CHANGE OUT 21					6,054	6,054		
2021	27569728	BRIDGER 2020C100 REPLACE FIRE EXTINGUISHERS 20					6,038	6,038		
2021	27580818	BRIDGER 2020C060 U4 SDCC & TRANSFERCHUTES 20				5,795		5,795		
2021	27527161	BRIDGER 2019C039 BLANKET - ELECTRICAL / INSTRUMENTATION 1					4,949	4,949		
2021	27591375	BRIDGER 2021C005 U0 BLANKET - OFFICE EQUIPMENT 21					3,803	3,803		
2021	27527167	BRIDGER 2019C066 U0 MERCURY DEVICE REPLACEMENT 19					3,584	3,584		
2021	27551348	BRIDGER 2020C019 BLANKET - OFFICE EQUIPMENT 20					3,398	3,398		
2021	27551447	BRIDGER 2020C051 DCS SECURITY SERVER UPGRADES 20					3,260	3,260		
2021	27517680	BRIDGER 2018C117 INSTALL EFFLUENT TO MINE WATER PIPING					3,155	3,155		
2021	27557169	BRIDGER 2020C078 U1 REPLACE PYRITE HOPPERS 20	3,107					3,107		
2021	27589304	BRIDGER 2021C008 U0 BLANKET - SHOP MACHINERY REPLACEMENT 21					2,844	2,844		
2021	27541805	BRIDGER 2019C040 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKE					2,228	2,228		
2021	27578781	BRIDGER CITC2020C308 CONTROL NETWORK ROUTER/SWITCH TOM 2020					1,976	1,976		
2021	27564795	BRIDGER U0 2020C080 REPLACE CATHODIC PROTECTION ANODE BED					1,348	1,348		
2021	27569752	BRIDGER 2020C095 REPLACE 35 TON CRANE 20					775	775		
2021	27553270	BRIDGER 2020C067 U4 ULTRASONIC FEEDWATER FLOW METER				46		46		
2021	27524351	BRIDGER 2018C135 U2 ELEVATOR UPGRADES		1				1		
2021	Various	CORRECTIONS ASSOCIATED WITH INVESTMENTS PRIOR TO 2021	(8,969)	(4,287)	(29,024)	(3,066)	(72,606)	(117,951)		
<b>2021 Total</b>			<b>15,704</b>	<b>102,550</b>	<b>14,522</b>	<b>1,170,089</b>	<b>1,308,676</b>	<b>2,611,541</b>		
2022	27587065	BRIDGER 2021C016 GAS CEMS CHANGEOUT 21					94,645	94,645		
2022	27600046	BRIDGER 2022C024 U0 BLANKET - MOTORS 22					91,390	91,390		
2022	27607057	BRIDGER 2022C041 U2 WATERWALL SOOTBLOWER PANELS AND TUBES		89,972				89,972		
2022	27568632	BRIDGER 2018C125 U0 RADIO COMMUNICATIONS TOWER					88,802	88,802		
2022	27595041	BRIDGER 2021C017 U0 GAS UMBILICAL 21					83,831	83,831		
2022	27560916	PAC-SPONS JOQA: TPL 2017 BACKUP BUS DIFF RLY- JIM BRIDGER 34					80,873	80,873		
2022	27597954	BRIDGER 2022C018 U2 SDCC REPLACE CHAIN 22		80,035				80,035		
2022	27593467	BRIDGER 2021C039 U3 REPLACE PULVERIZER JOURNALS 21			78,942			78,942		
2022	27608979	BRIDGER 2022C044 U2 STACK LINING REPAIRS 22		73,341				73,341		
2022	27604649	BRIDGER 2021C046 U0 REPLACE TRUCK SCALE 21/22					71,420	71,420		
2022	27580822	BRIDGER 2021C007 BLANKET - ELECTRICAL/INSTRUMENTATION 21					70,351	70,351		
2022	27587061	BRIDGER 2021C028 U2 SDCC TU/SUB IDLER REPLACEMENT 21		70,268				70,268		
2022	27549365	BRIDGER 2020C029 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKE					66,506	66,506		
2022	27600040	BRIDGER 2022C006 U2 REPLACE PRECIP/SCRUB EXPANSION JOINT		65,394				65,394		
2022	27607055	BRIDGER 2022C038 U2 SDCC LINER / SHELL REPLACEMENT 22		63,141				63,141		
2022	27589306	BRIDGER 2021C010 U0 BLANKET - PLANT LIGHTING IMPROVEMENTS 21					59,719	59,719		
2022	27607054	BRIDGER 2022C038 U2 SDCC INSTALL LINER AT CHAIN GUARD 22		59,698				59,698		
2022	27615665	BRIDGER 2022C054 U0 RPLC LARGE SECONDARY CRUSHER ROTOR 22					49,677	49,677		
2022	27597950	BRIDGER 2022C007 U2 REPLACE DOGBONE EXPANSION JOINTS 22		48,066				48,066		
2022	27600042	BRIDGER 2022C010 U2 SDCC REPLACE DEWATERING SLOPE 22		47,534				47,534		
2022	27615669	BRIDGER 2022C060 U1 REPLACE SDCC DRIVE SHAFT 22	47,001					47,001		
2022	27566763	BRIDGER 2020C096 U2 STACK OPACITY MONITOR HEATING		46,005				46,005		
2022	27578627	BRIDGER 2021C015 U0 BLANKET - UNDERGROUND IPS / HYDRANTS 21					42,973	42,973		
2022	27578625	BRIDGER 2021C006 U4 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKE				42,838		42,838		
2022	27583200	BRIDGER 2021C002 BLANKET - MOTORS 21					41,186	41,186		
2022	27587062	BRIDGER 2021C027 U3 SDCC TU/SUB IDLER REPLACEMENT 21			39,601			39,601		
2022	27587057	BRIDGER 2021/C/032 CONVEYOR BELTS 21					39,461	39,461		
2022	27597941	BRIDGER 2021C048 U0 01 CLARIFIER COATING REPAIRS 21					35,038	35,038		
2022	27602396	BRIDGER 2022C039 U2 COAL PIPE REPLACEMENT 22		32,401				32,401		
2022	27607056	BRIDGER 2022C040 U2 PA DUCT INSPECT AND REPAIR 22		31,947				31,947		
2022	27600048	BRIDGER 2022C025 U0 BLANKET - ELECTRICAL / INSTRUMENTATION 2					31,694	31,694		
2022	27595024	BRIDGER 2021C043 U4 LAB PANEL INSTRUMENTATION 21				31,485		31,485		
2022	27617945	BRIDGER 2022/C/050 U0 BIRD LASER HAZING SYSTEM INSTALLATION					30,542	30,542		
2022	27597943	BRIDGER 2021C049 U4 #43 SCRUBBER OUTLET DUCT RECOAT 21				29,713		29,713		
2022	27600049	BRIDGER 2022/C/032 U0 CONVEYOR BELTS 22					29,076	29,076		
2022	27589308	BRIDGER 2021C033 U4 TURBINE BUILDING WINDOWS				28,712		28,712		
2022	27597939	BRIDGER 2021C047 U0 BLANKET SCR LPA SCREENS 21					28,314	28,314		
2022	27597932	BRIDGER 2021C041 U0 DCS SIMULATOR UPDATES 21					23,560	23,560		
2022	27507255	BRIDGER 2018C088 GREEN RIVER 3500 VIBRATION MONITORING SY					17,142	17,142		
2022	27503087	BRIDGER 2018C060 BLANKET UPGRADE 7.2 KV MAGNEBLAST BREAKE					16,893	16,893		
2022	27589304	BRIDGER 2021C008 U0 BLANKET - SHOP MACHINERY REPLACEMENT 21					15,065	15,065		

## BRIDGER PLANT ADDITIONS: Jan 1, 2021 - Dec 31, 2022

Accounting Year	Project	Description	U1	U2	U3	U4	Common	Total	Purpose	Project Description/Justification
2022	27600045	BRIDGER 2022C020 U0 BLANKET - SMALL TOOLS 22					15,026	15,026		
2022	27602394	BRIDGER 2022C036 U2 REPLACE 22 MOISTURE SEPERATOR 22		14,799				14,799		
2022	27597938	BRIDGER 2021C045 U0 REPLACE MILL BOWL HEATER 21					13,466	13,466		
2022	27553266	BRIDGER 2020C016 BLANKET - PUMPS, VALVES, GEARBOXES 20					10,664	10,664		
2022	27615664	BRIDGER 2022/C/049 U0 REPLACE POST 1 TURNSTILES 22					10,277	10,277		
2022	27615841	BRIDGER CITC2019C603 WIRELESS BRIDGE REPLACEMENT					9,789	9,789		
2022	27597962	BRIDGER 2022C021 U0 ADD LOOP 3440-C CHANNEL BANK 22					9,498	9,498		
2022	27591387	BRIDGER 2019C034 U0 REPLACE ROOFING SYSTEM 21					9,124	9,124		
2022	27573808	BRIDGER 2021C004 U0 BLANKET - SMALL TOOLS 21					8,750	8,750		
2022	27589307	BRIDGER 2021C029 U0 BLANKET MCC UPGRADES 21					8,061	8,061		
2022	27617947	BRIDGER 2022/C/052 U0 REPLACE CATHODIC PROTECTION ANODE BED					8,023	8,023		
2022	27583202	BRIDGER 2021C018 U0 GAS PROBE CHANGEOUT 21					7,881	7,881		
2022	27602390	BRIDGER 2022C029 U0 BLANKET - OFFICE EQUIPMENT 22					7,378	7,378		
2022	27597935	BRIDGER 2021C044 U0 REPLACE BOTH CONTROL ROOM CARPET 21					7,143	7,143		
2022	27553272	BRIDGER 2020C002 U4 UPGRADE COOLING TOWER VFDS 20				5,974		5,974		
2022	27575653	BRIDGER 2021C012 BLANKET - MILLS, PULVERIZER VERTICAL SHA					5,744	5,744		
2022	27566691	BRIDGER 2020C053 U0 PLANT LIGHTING IMPROVEMENTS 20					5,540	5,540		
2022	27501256	BRIDGER 2018C064 U1 FLAME SCANNER 18	5,456					5,456		
2022	27615666	BRIDGER 2022C055 U4 REPLACE SHOP DOOR 22				5,281		5,281		
2022	27580826	BRIDGER 2021C022 BLANKET LCC SWITCHGEAR & XFMR UPGRADES 21					3,749	3,749		
2022	27524338	BRIDGER 2018C130 U2 MAIN TURBINE OVERSPEED UPGRADE		2,868				2,868		
2022	27527164	BRIDGER 2019C057 BLANKET - REPLACE SUPPORT EQUIPMENT 19					2,320	2,320		
2022	27549348	BRIDGER 2020C006 U4 PRECIPITATOR TR & CLR REPLACEMENT 20				2,277		2,277		
2022	27541813	BRIDGER 2019C091 U4 SCR CATALYST REPLACEMENT 20				2,085		2,085		
2022	27551447	BRIDGER 2022C051 DCS SECURITY SERVER UPGRADES 20					1,744	1,744		
2022	27479282	BRIDGER 2017C029 U2 BFPT TRIP SYSTEM 17		1,618				1,618		
2022	27559520	BRIDGER 2020C082 U4 LOADOUT CONVEYOR PLATFORM				1,054		1,054		
2022	27597929	BRIDGER 2021C025 U2 SDCC REPLACE FLIGHTS 21		997				997		
2022	27578675	BRIDGER CITC2021C202 2021 CONSOLIDATED PC TOM					790	790		
2022	27483924	BRIDGER 2017C068 SCRAPER REBUILD 17					724	724		
2022	27549359	BRIDGER 2020C015 U4 #42 BOILER FEED PUMP REBUILD 20				611		611		
2022	27604694	BRIDGER CITC2020C305 U0 UPS TOM 2020					527	527		
2022	27559765	BRIDGER TSYS/2017/C/864 NERC PRC-002/MOD-033 SYS UPGRADE					498	498		
2022	27475628	BRIDGER 2017C017 U2 REPLACE SCRUBBER DUCT DRAIN/SEAL POTS		409				409		
2022	27487476	BRIDGER 2017C031 COMMON ANNUNCIATORS TO DCS 17					258	258		
2022	27483897	BRIDGER 2017C047 U2 CIRC WTR PMPS CONTINUOUS VIBRATION 1		225				225		
2022	27483894	BRIDGER 2017C034 U2 NETWORK HARDWARE UPGRADE 17		44				44		
2022	27587059	BRIDGER 2021C031 U4 SCR OUTLET NEMS PLATFORMS				15		15		
2022	27517677	BRIDGER 2018C055 REPLACE FIRE EXTINGUISHERS 18					11	11		
2022	Various	CORRECTIONS ASSOCIATED WITH INVESTMENTS PRIOR TO 2021	(13,114)	(51,420)	(30,577)	(244,470)	(229,270)	(568,851)		
<b>2022 Total</b>			<b>39,342</b>	<b>677,342</b>	<b>87,965</b>	<b>(94,425)</b>	<b>1,025,873</b>	<b>1,736,097</b>		
<b>Grand Total - Projects Under \$100k</b>			<b>55,046</b>	<b>779,892</b>	<b>102,487</b>	<b>1,075,664</b>	<b>2,334,549</b>	<b>4,347,638</b>		
<b>Total Projects (2021 - 2022)</b>			<b>55,046</b>	<b>3,938,741</b>	<b>102,487</b>	<b>10,101,859</b>	<b>5,130,175</b>	<b>19,328,308</b>		

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
<hr/>		)

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

MITCH COLBURN

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Mitch Colburn. My business address  
5 is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as the Vice President of Planning,  
7 Engineering, and Construction.

8           Q.     Please describe your educational and  
9 professional experience.

10          A.     I graduated from the University of Idaho in  
11 2006 with a Bachelor of Science degree in Electrical  
12 Engineering, Summa Cum Laude. Thereafter, I obtained a  
13 Master of Engineering degree in Electrical Engineering from  
14 the University of Idaho in 2010 and a Master of Business  
15 Administration from Boise State University in 2015. I am a  
16 licensed Professional Engineer in the State of Idaho.

17               I have worked at Idaho Power since 2007. Prior to my  
18 current role, I served as Director of Engineering and  
19 Construction, Director of Resource Planning and Operations,  
20 Senior Manager of Transmission & Distribution Strategic  
21 Projects, Engineering Leader over 500 kilovolt ("kV") and  
22 Joint Projects. I held several engineering roles prior to  
23 these leadership roles.

24          Q.     What are your duties as Vice President of  
25 Planning, Engineering, and Construction?

1           A.       I am responsible for an organization of more  
2 than 380 employees focused on multiple areas:

3                   1) Identifying future electric grid  
4 infrastructure requirements,

5                   2) Operating and maintaining the electric grid,  
6 including the wildfire mitigation program and  
7 vegetation management, and

8                   3) Designing, engineering, and constructing grid  
9 infrastructure projects.

10          Q.       What is the purpose of your testimony in this  
11 matter?

12          A.       The purpose of my testimony is to discuss the  
13 investments the Company has made in the electrical grid to  
14 ensure the provision of safe, reliable service to  
15 customers. My testimony will begin with a discussion of  
16 Idaho Power's recent history of reliability and performance  
17 that demonstrates a thoughtful approach to grid  
18 construction and maintenance. Next, I will detail specific  
19 investments included in the Company's 2023 test year that  
20 demonstrate the Company's prudent investment in the  
21 electrical grid at the transmission and distribution  
22 ("T&D") levels. Finally, my testimony will review the  
23 Company's wildfire mitigation efforts and associated  
24 capital and operation and maintenance ("O&M") expenditures  
25 proposed for recovery in this case.

1 Q. What exhibits are you sponsoring?

2 A. I am sponsoring Exhibit Nos. 4 and 5.

3 I. **Reliability and Performance**

4 Q. How is reliability typically measured on the  
5 Company's system?

6 A. As discussed in the Direct Testimony of  
7 Company Witness Ms. Lisa Grow, Idaho Power primarily uses  
8 four indices to measure reliability of the system. To  
9 summarize the information provided by Ms. Grow, these four  
10 measurements are:

11 SAIFI: System Average Interruption Frequency Index

12 SAIDI: System Average Interruption Duration Index

13 CEMI: Customers Experiencing Multiple Interruptions

14 MAIFI: Momentary Average Interruption Frequency  
15 Index

16 Q. Please provide a brief description of each of  
17 these measures.

18 A. SAIFI, SAIDI, and CEMI are indices that  
19 measure sustained outages. A sustained outage is defined as  
20 customers out of power for five minutes or longer. CEMI is  
21 typically referred to as "CEMI-1" through "CEMI-6," where  
22 CEMI-1 indicates the percentage of customers who had one or  
23 more outage, CEMI-2 indicates the percentage of customers  
24 who had two or more outages, and so on. MAIFI is an index  
25 that measures momentary interruptions. Momentary



1 interruptions are when customers are out of power for fewer  
2 than five minutes.

3 Q. Based on these metrics, has Idaho Power  
4 demonstrated prudent and reliable operation of the  
5 electrical grid?

6 A. Yes. As detailed in Ms. Grow's testimony,  
7 Idaho Power's SAIFI metric has improved substantially since  
8 2007. On a relative basis, a comparison of Idaho Power's  
9 rolling five-year average SAIFI compared to a peer utility  
10 group demonstrates that the Company outperformed its peers  
11 in each year since 2017.

12 Q. Has Idaho Power shown similar improvement in  
13 MAIFI, SAIDI, and CEMI?

14 A. Yes. Each of these metrics has improved across  
15 Idaho Power's system for the prior 10-year period, as  
16 demonstrated in Figures 1 through 3.

17 //

18 //

19

20

21

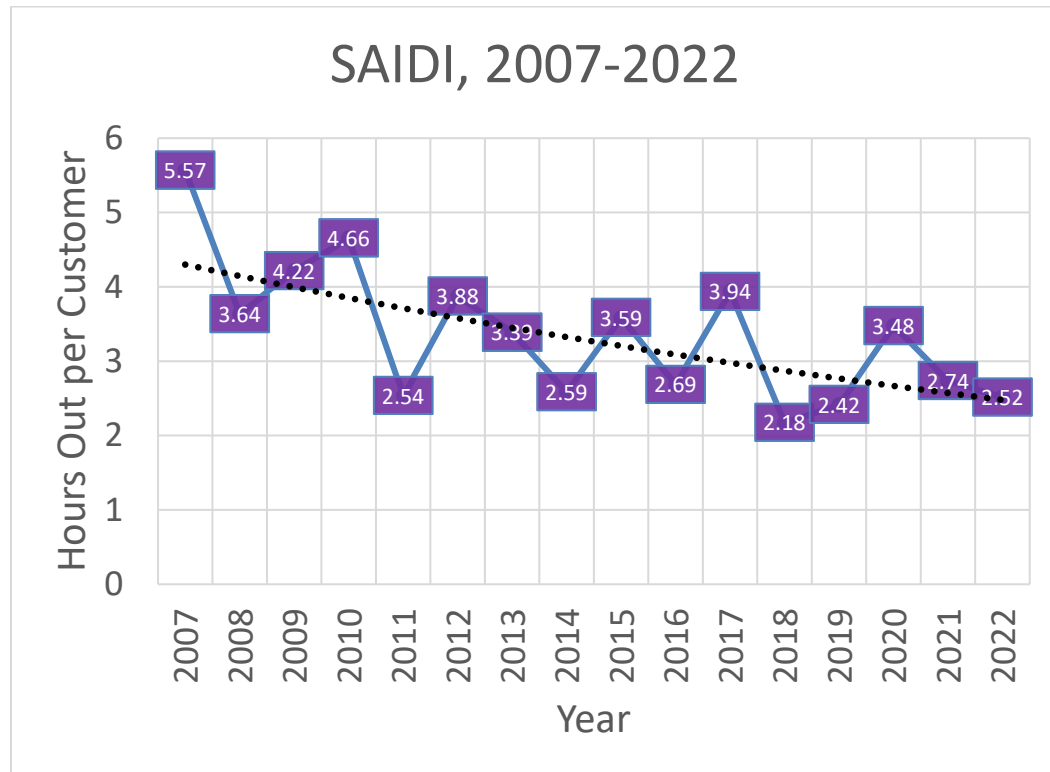
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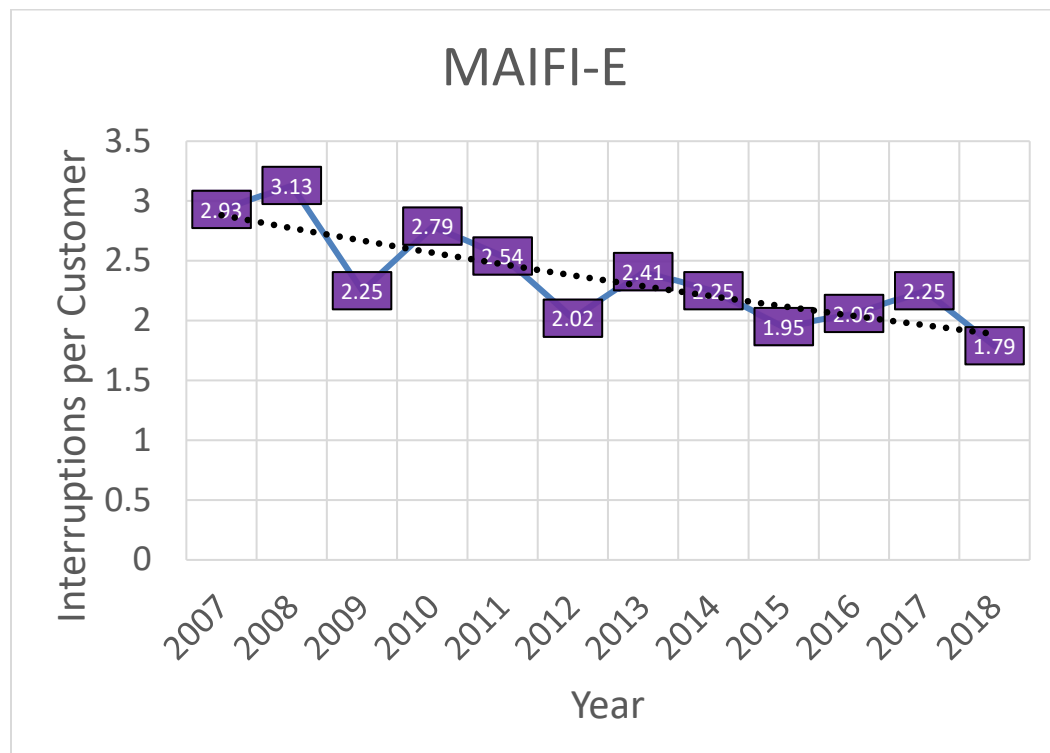
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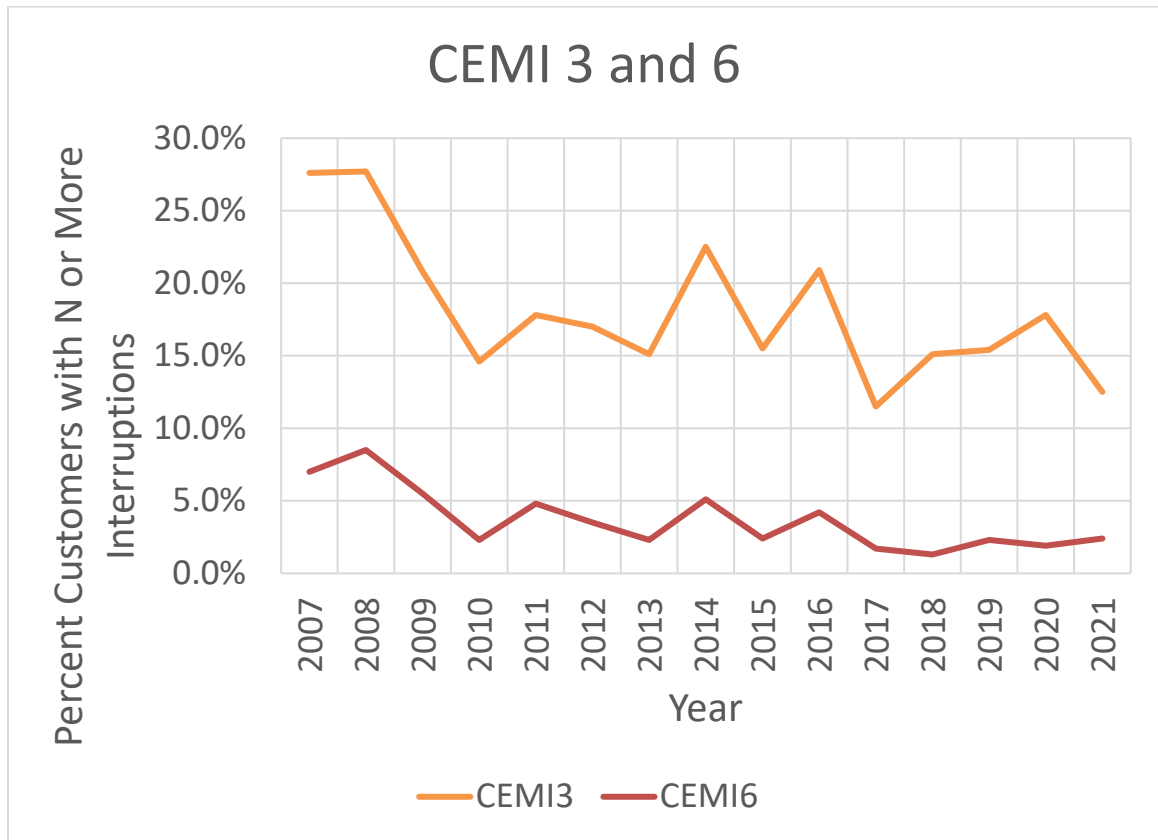
1 **FIGURE 1**  
2 SAIDI, 2007 THROUGH 2022



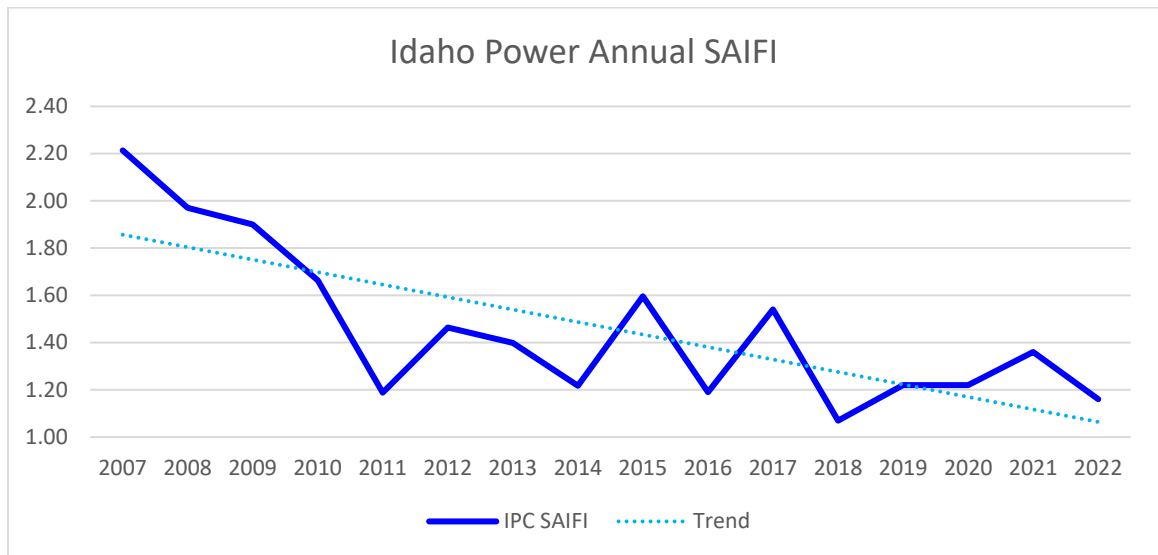
3  
4 **FIGURE 2**  
5 MAIFI, 2007 THROUGH 2022



1 **FIGURE 3**  
2 CEMI 3 AND CEMI 6, 2007 THROUGH 2022



3  
4 **FIGURE 4**  
5 SAIFI, 2007 THROUGH 2022



6  
7

1           Q.       Do these metrics indicate prudent construction  
2 and maintenance of the Company's distribution and  
3 transmission systems?

4           A.       Yes. Idaho Power's reliability metrics  
5 reflect a thoughtful approach to construction and  
6 maintenance of its T&D systems. Since the completion of the  
7 Company's last general rate case ("GRC") in 2011 in Case  
8 No. IPC-E-11-08, the Company has placed in service over  
9 \$3.3 billion in infrastructure. As I will discuss in my  
10 testimony, approximately \$1.6 billion of this total  
11 reflects prudent investment in the T&D systems. The  
12 corresponding improvement in the Company's reliability  
13 metrics over this same period indicates that this  
14 investment was prudent to ensure the safe, reliable  
15 provision of electric service.

16                   **II.   Transmission Investments**

17           Q.       Please describe how the Company defines the  
18 transmission-related portion of the electrical grid.

19           A.       Transmission generally describes the bulk or  
20 high voltage components of the electrical grid, including  
21 stations and high voltage lines typically utilized to  
22 transmit large volumes of electricity closer to load  
23 centers. On Idaho Power's system, transmission equipment is  
24 considered to be facilities at or above 138 kV, with an

1 additional sub-transmission component comprised of  
2 facilities at 46 kV and 69 kV.

3 Q. How has transmission-related investment grown  
4 since the completion of the 2011 GRC?

5 A. Of the \$3.3 billion in infrastructure placed  
6 in service over this period, approximately \$553 million  
7 reflects investment in the Company's transmission system.

8 Q. What drives investment in the transmission  
9 system?

10 A. Growth and reliability are the primary drivers  
11 of the transmission investments reflected in the Company's  
12 2023 test year. Growth-related projects typically include  
13 either the construction of new transmission facilities or  
14 the expanded capacity of existing facilities. Reliability  
15 projects typically include the proactive reconstruction or  
16 replacement of aging facilities.

17 Q. Please provide examples of growth and  
18 reliability needs driving investment in the Company's  
19 transmission system between 2012 and 2022.

20 Q. Based on the growth experienced by Idaho Power  
21 over this period, investment has been required to ensure  
22 reliability on the Company's transmission system. Two  
23 projects that demonstrate how growth drives transmission  
24 investment are the rebuild of the 59-mile transmission line  
25 between the King Substation and the Wood River Substation

1 in the Wood River Valley ("King-Wood River Rebuild") and  
2 the upgrade of the 6.8-mile transmission line between the  
3 Cloverdale Substation and the Hubbard Substation in the  
4 Treasure Valley ("Cloverdale Line Rebuild").

5 Q. What factors led to the King-Wood River  
6 Rebuild?

7 A. Growth in the Wood River Valley was causing  
8 strain on the regional grid. Specifically, transmission  
9 planning studies required<sup>1</sup> by the North American Electric  
10 Reliability Corporation ("NERC") and dating back to 2009  
11 demonstrated the need for transmission system upgrades to  
12 maintain adequate system voltage in the future and avoid  
13 needing to shed load for certain system conditions. To  
14 comply with NERC standards and to ensure the Company's  
15 reliability metrics provided earlier in my testimony did  
16 not degrade, investment in the local area transmission  
17 system was necessary.

18 Q. What actions did Idaho Power take to ensure  
19 the reliability of its transmission system?

20 A. In response to the identified need, Idaho  
21 Power rebuilt the line between the King and Wood River  
22 substations, upgrading the capacity of the line.  
23 Additionally, for enhanced reliability the Company replaced

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<sup>1</sup> NERC TPL-001 Reliability Standard (Table 1 - Steady State & Stability Performance).

1 the existing wood structures with steel components. This  
2 investment was required to ensure that system reliability  
3 was maintained while accommodating growth in the area.

4 Q. Did similar factors lead to the Cloverdale  
5 Line Rebuild in the Treasure Valley?

6 A. Yes. Similar factors led to the Cloverdale  
7 Line Rebuild, further exemplifying how growth drives the  
8 need for investment to maintain a robust, reliable  
9 transmission system. In 2015, NERC-required transmission  
10 planning studies demonstrated the need for a 230-kV  
11 connection between the Hubbard and Cloverdale substations,  
12 whereas the existing line was 138 kV. The study showed that  
13 growth in the area had resulted in expected loads under  
14 certain conditions exceeding emergency equipment rating  
15 limits.

16 Q. What actions did Idaho Power take to address  
17 the reliability needs identified by this study?

18 A. In response to the growth-driven reliability  
19 requirements in the area, Idaho Power upgraded the local-  
20 area capacity by replacing the existing 138-kV line with a  
21 230-kV circuit, as well as constructing distribution  
22 circuits located on the same structures as the 230-kV  
23 transmission line. This upgrade reflected a cost-effective  
24 solution to meet the requirements of growing load in the

1 Treasure Valley, enhancing and maintaining reliability of  
2 the local transmission system.

3 Q. Can you provide an example of transmission  
4 investment driven by the Company's proactive approach to  
5 aging infrastructure?

6 A. Yes. The Company's work on the Midpoint-to-  
7 Borah 345-kV transmission line demonstrates the need to  
8 invest in maturing longer-lived assets to ensure ongoing  
9 safe and reliable operation of the grid.

10 Q. Please describe the Midpoint-to-Borah  
11 transmission line.

12 A. The Midpoint-to-Borah 345-kV transmission line  
13 serves as a major component of the Company's bulk  
14 transmission system. This line was originally constructed  
15 in 1948 and operated at 138 kV, and over the next several  
16 decades was modified and improved to its current operating  
17 capacity of 345kV. Enhancements to the line over this  
18 period included an increase in capacity due to the addition  
19 of the Jim Bridger Power Plant, which included the addition  
20 of a second conductor, conductor re-configuration on the  
21 structures, and adding additional insulation to operate at  
22 a higher voltage. However, as the transmission line aged,  
23 issues began to arise related to ground clearance and  
24 leaning structures.



1           Q.       What action was required to address this aging  
2 and important component of the Company's bulk transmission  
3 system?

4           A.       The age and importance of this line warranted  
5 complete replacement of the structures from the Midpoint  
6 Substation to the Borah Substation. The existing wood-pole  
7 structures were replaced with steel-pole structures,  
8 remedying the potential structural issues by installing  
9 resilient, long-life steel poles.

10          Q.       Do the projects you have discussed demonstrate  
11 a prudent approach to investment in the Company's  
12 transmission system over the last decade, and support the  
13 Company's transmission-related rate base included in this  
14 case?

15          A.       Yes. Over the last decade Idaho Power has  
16 invested over \$553 million in its transmission system. As  
17 evidenced by the King-Wood River Rebuild and Cloverdale  
18 Line Rebuild projects, Idaho Power is constantly evaluating  
19 the capacity needs and reliability of its transmission  
20 systems, ensuring that the electrical grid is stable and in  
21 compliance with NERC standards. As further evidenced by the  
22 Midpoint-to-Borah Rebuild, Idaho Power's investments in the  
23 transmission system over the last decade reflect a  
24 thoughtful, proactive approach to ensuring bulk system  
25 reliability. As evidenced by the improving reliability

1 metrics experienced over this same period, these  
2 investments were prudently made and in the public interest.

3 **III. Distribution Investments**

4 Q. Please describe how the Company defines the  
5 distribution-related portion of the electrical grid.

6 A. Distribution refers to equipment at 34.5 kV  
7 and below, including lower voltage lines, substations, and  
8 transformers that are typically utilized to provide  
9 electricity at the lower voltages required by the majority  
10 of end-use customers.

11 Q. How much has distribution-related investment  
12 grown since the completion of the 2011 GRC?

13 A. Of the \$3.3 billion in plant placed in service  
14 referenced previously in my testimony, approximately \$1.0  
15 billion is comprised of investments in the distribution  
16 system.

17 Q. What factors contributed to investment in  
18 Idaho Power's distribution system over this period?

19 A. Growth in the distribution system can be  
20 directly tied to the addition of new customers, as every  
21 new customer, regardless of service level, requires some  
22 form of additional equipment. In addition, similar to  
23 certain components of the Company's generation and  
24 transmission systems, Idaho Power has also undertaken a  
25 number of key projects to proactively harden its

1 distribution system to maintain and improve reliability in  
2 light of aging infrastructure. These investments not only  
3 include the proactive replacement of aging infrastructure,  
4 but also the improvement of the distribution system through  
5 the installation of modern technology.

6 Q. How does growth impact the need for investment  
7 on the distribution system?

8 A. Growth impacts the distribution system in  
9 several ways. First, the addition of new customers requires  
10 new investment - from new service transformers and service  
11 drops for every new customer to, once demand reaches  
12 certain levels, new substations and lines. Additionally,  
13 construction and growth within the Company's service area  
14 also result in the need for investment related to facility  
15 relocations for road construction and other civil projects.

16 Q. What were the primary growth-related  
17 components of distribution investment made over the last  
18 decade?

19 A. Growth-related investment in the Company's  
20 distribution system consisted primarily of meters,  
21 transformers, and other distribution infrastructure in each  
22 of the Company's operating regions. In addition to new  
23 facilities, Idaho Power spent approximately \$25 million  
24 related to the relocation of facilities as the result of  
25 road projects in the Company's service area.

1           Q.     In addition to serving growth, has Idaho Power  
2 undertaken any major initiatives to maintain or improve the  
3 reliability of its distribution system?

4           A.     Yes. There are two notable initiatives Idaho  
5 Power has undertaken to improve the reliability of its  
6 distribution system: 1) the replacement of direct-buried  
7 underground cable and 2) a grid modernization initiative  
8 that encompasses multiple projects.

9           Q.     Please describe what is meant by "direct-  
10 buried cable."

11          A.     Direct-buried cable describes underground  
12 distribution cable that was directly buried in the soil  
13 with no conduit. The use of direct-buried cable was  
14 standard practice in the industry and for Idaho Power up  
15 until the mid-1990s.

16          Q.     What are the benefits of replacing direct-  
17 buried cable with new cable in conduit?

18          A.     Replacing the existing direct-buried cable  
19 with new cable in conduit improves reliability and lowers  
20 future expenses when the cable needs to be replaced.

21          Q.     How does the installation of cable with  
22 conduit improve reliability?

23          A.     Cable in conduit is better protected from  
24 impacts related to direct contact with soil and moisture.

1     Consequently, faults are less frequent and cable in conduit  
2     is expected to last longer than direct-buried cable.

3             Q.     How does the installation of cable in conduit  
4     help to lower future expenses when the cable needs to be  
5     replaced?

6             A.     The installation of conduit allows the Company  
7     to replace the cable within the conduit more effectively  
8     and cheaply. With conduit in place, the cable can be  
9     removed from the conduit and new cable can be installed  
10    more efficiently. This will help to eliminate fees and  
11    expenses associated with permitting, flagging, landscaping  
12    and repaving roads and sidewalks.

13            Q.     How far has Idaho Power's underground cable  
14    replacement project progressed?

15            A.     The underground cable replacement program  
16    began in 2012 with completion forecasted for 2035,  
17    targeting the replacement of approximately 350,000 feet of  
18    direct-buried cable each year until all 7 million feet of  
19    direct-buried cable have been replaced. To date, the  
20    Company has completed approximately 4 million feet of cable  
21    replacement.

22            Q.     Please describe the grid modernization  
23    initiative.

24            A.     The grid modernization initiative is a set of  
25    multi-year projects designed to maintain and improve

1 reliability on the Company's electrical grid. This suite of  
2 projects replaces and modernizes equipment nearing its end  
3 of life and updates the Company's distribution system with  
4 modern technology to enhance reliability while keeping  
5 costs low.

6 Q. What notable projects comprise grid  
7 modernization efforts included in the 2023 test year?

8 A. Two notable projects under the Company's grid  
9 modernization initiative are the implementation of a new  
10 700-megahertz ("MHz") Field Area Network ("FAN") and  
11 replacement of an Automated Capacitor Control ("ACC")  
12 system with the development of a new integrated volt-var  
13 control ("IVVC") system. The IVVC system and FAN became  
14 operational in 2019 and were built out across Idaho Power's  
15 service area by 2022.

16 Q. What are the FAN and the IVVC system, and how  
17 do they interrelate?

18 A. The 700-MHz FAN serves as the communication  
19 backbone for the IVVC system. The 700-MHz FAN is utilized  
20 to send and receive secure, reliable wireless  
21 communications to and from line devices on Idaho Power's  
22 distribution system. This communication supports the  
23 gathering of data and control of distribution system  
24 devices within the IVVC.

25 Q. How does the IVVC system benefit customers?

1           A.       The IVVC system replaced a 22-year-old DOS-  
2   based system that was nearing its end of life and was  
3   unable to provide for direct and coordinated voltage  
4   control offered by more modern systems such as the IVVC  
5   system. Replacing the ACC with the IVVC provides the  
6   Company with the ability to better control devices and  
7   gather data in real-time, allowing the Company to improve  
8   power quality and voltage levels, optimize efficiency, and  
9   provide visibility and control to engineers and operators  
10  to better manage the distribution system.

11           At a high level, the IVVC system provides direct  
12  feedback on the status of devices through two-way  
13  communication, which reduces the need for seasonal  
14  inspections, instead allowing for inspections to focus on  
15  alarmed devices. This system is also the foundation for a  
16  future fault location, isolation, and service restoration  
17  ("FLISR") system. Idaho Power is in the process of  
18  installing fault location devices on the distribution  
19  system, which is prevalent in the industry.

20           Q.       Do these projects demonstrate a prudent  
21  approach to investment in the Company's distribution  
22  system over the last decade and support the Company's  
23  distribution-related rate base included in this case?

24           A.       Yes. Idaho Power's thoughtful and proactive  
25  approach to investing in its distribution system has

1 resulted in improved reliability metrics over the past  
2 decade as detailed earlier in my testimony. In addition to  
3 investing to accommodate growth within the Company's  
4 service area, Idaho Power invested in initiatives such as  
5 underground cable replacement and grid modernization that  
6 ensure the distribution system is equipped to provide safe,  
7 reliable service to customers now and in the future.

8 **IV. Idaho Power's Wildfire Mitigation Efforts**

9 Q. What total system costs did the Company  
10 incur related to wildfire mitigation in 2022?

11 A. As outlined below in Table 1 of my  
12 testimony, Idaho Power incurred a systemwide total of  
13 \$26,408,743 in wildfire mitigation-related O&M costs in  
14 2022. This amount excludes insurance, which is discussed in  
15 the Direct Testimony of Company Witness Mr. Brian Buckham.

16 Regarding capital expenditure, Idaho Power placed  
17 in service \$12,059,451 in capital projects to support  
18 wildfire mitigation in 2021 and 2022. This amount does not  
19 include capital depreciation, which is addressed in the  
20 Direct Testimony of Company Witness Mr. Matthew Larkin.

21 Capital placed in service for 2021 and 2022 and  
22 O&M expenditure for 2022 is detailed in Exhibit No. 4 to my  
23 testimony.



1           Q.       Are the Company's actual 2022 costs related  
2 to wildfire mitigation reflected in the Company's revenue  
3 requirement in this case?

4           A.       Yes. The costs identified in my testimony  
5 are factored into the Company's 2023 test year revenue  
6 requirement, as addressed in Mr. Larkin's testimony.  
7 Additionally, the treatment and accounting of the  
8 Commission's authorized wildfire deferrals are addressed in  
9 the Direct Testimony of Company Witness Ms. Paula Jeppsen.

10           The remainder of my testimony in this section will  
11 present the Company's implementation of its Wildfire  
12 Mitigation Plan ("WMP") and will demonstrate the prudence  
13 of the associated costs proposed for recovery in this case.  
14 I will focus on costs incurred during 2022, as those costs  
15 represent previously deferred amounts proposed for  
16 amortization into rates in this case and form the basis for  
17 the test year values addressed by Mr. Larkin.

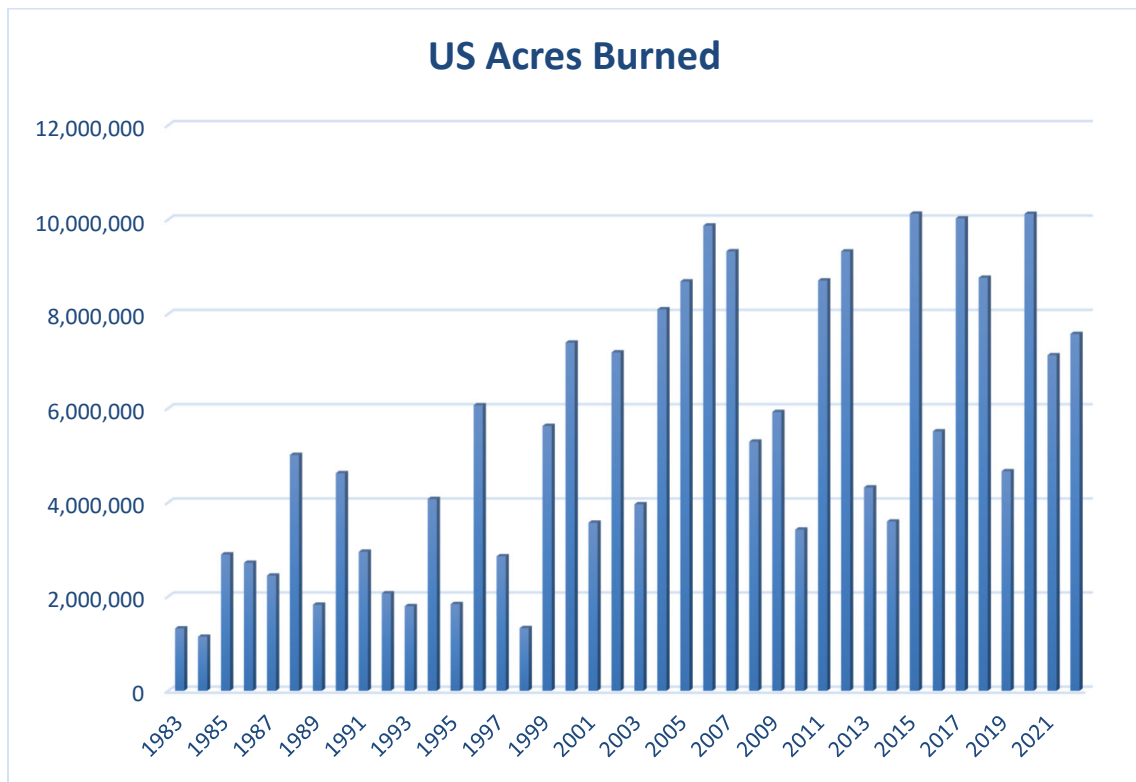
18           Q.       Why did Idaho Power develop a WMP?

19           A.       Idaho Power is dedicated to safely delivering  
20 reliable, affordable energy to its customers. In pursuit of  
21 that mission, the Company developed a WMP in response to  
22 the increase in frequency and intensity of wildfires seen  
23 across the western United States ("US") in recent years.

24           Q.       To what extent has wildfire activity increased  
25 in the West?

1           A.       Since the 1980s, wildfire activity in the US,  
2 as measured by acres burned, has more than tripled and,  
3 according to the National Interagency Fire Center, western  
4 states account for upwards of 95 percent of the acres  
5 burned in recent years.<sup>2</sup> Since 1983, the 10 years with the  
6 largest acreage burned have all occurred in the period of  
7 2004 through 2022.<sup>3</sup>

8 **FIGURE 5**  
9 TOTAL US ACRES BURNED (1983-2002)



10  
11           Q.       What has contributed to the growth of western  
12 wildfires in recent years?

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<sup>2</sup> Based on the National Interagency Fire Center historical year-end fire statistics by state. <https://www.nifc.gov/fire-information/statistics>

<sup>3</sup> Based on the National Interagency Fire Center total wildland fires and acres (1983-2022). <https://www.nifc.gov/fire-information/statistics>  
<https://www.nifc.gov/fire-information/statistics/wildfires>

1           A.     A variety of factors have contributed to a  
2 greater number of destructive wildfires, including climate  
3 change, increased human encroachment in wildland areas,  
4 historical land management practices, and changes in  
5 wildland and forest health, among other factors.

6           Q.     How has Idaho Power been affected by the  
7 increase of wildfires in the West?

8           A.     While Idaho Power has not experienced  
9 catastrophic wildfires within its service area at the same  
10 level experienced in other western states, such as  
11 California and Oregon, millions of acres of rangeland and  
12 southern Idaho forests have burned in the last 30 years.<sup>4</sup>

13           In 2022, Idaho had fewer wildfires and acres burned  
14 during wildfire season than the previous 20-year average.<sup>5</sup>  
15 However, 436,733 acres burned in Idaho during the 2022 fire  
16 season, a larger amount than the combined acres burned in  
17 Arizona, Colorado, Montana, Nevada, Utah, and Wyoming in  
18 2022.<sup>6</sup>

19           Q.     What impacts could Idaho Power face because of  
20 wildfire?

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<sup>4</sup> Rocky Barker, *70% of S. Idaho's Forests Burned in the Last 30 Years. Think That Will Change? Think Again.*, Idaho Statesman, Oct 4, 2020.

<sup>5</sup> Based on the National Interagency Fire Center historical year-end fire statistics by state. <https://www.nifc.gov/fire-information/statistics>

<sup>6</sup> National Interagency Coordination Center Wildland Fire Summary and Statistics Annual Report, 2022. [https://www.predictiveservices.nifc.gov/intelligence/2022\\_statsumm/annual\\_report\\_2022.pdf](https://www.predictiveservices.nifc.gov/intelligence/2022_statsumm/annual_report_2022.pdf)

1           A.       Wildfire can create myriad and costly  
2 environmental, social, and economic impacts. The magnitude  
3 and duration of these impacts depends on a fire's size,  
4 severity, and location. Generally, though, wildfire impacts  
5 are considered in terms of lives threatened, structures or  
6 homes lost or damaged, and damage to natural resources.

7           Specific to Idaho Power, wildfires have the  
8 potential to damage or destroy the Company's facilities,  
9 impact personnel, and cause significant harm to Idaho  
10 Power's customers and the communities in which the Company  
11 serves.

12          Q.       How has Idaho Power responded to growing  
13 wildfire risk?

14          A.       As a result of growing and more frequent  
15 wildfires in the West, Idaho Power began a proactive effort  
16 in 2019 to develop a guiding wildfire mitigation document –  
17 the WMP – that would use robust risk analysis to identify  
18 areas within the Company's service area exposed to higher  
19 levels of wildfire risk. As an action plan for Company  
20 operations, the WMP includes best practices for mitigating  
21 wildfire risk that guide operational, personnel, and  
22 communication practices before, during, and after wildfire  
23 season.

24          Q.       What are the objectives of the WMP?

1           A.       Idaho Power developed the WMP to accomplish  
2 two critical objectives: (1) reduce wildfire risk  
3 associated with Idaho Power's T&D facilities and associated  
4 field operations and (2) improve the resiliency of the  
5 Company's T&D system impacted by wildfire events.

6           Q.       How many WMPs has the Company developed?

7           A.       In December 2022, the Company published its  
8 2023 WMP (Exhibit No. 5), the Company's fifth version of  
9 the WMP since 2021.

10          Q.       Please describe the prior versions of the WMP.

11          A.       Version 1 of the WMP was filed with the  
12 Commission in January 2021 in Idaho Power's initial  
13 wildfire-related cost deferral Application in Case No. IPC-  
14 E-21-02. Version 2, dated December 21, 2021, included an  
15 expanded cost-benefit analysis discussion, WMP progress and  
16 updates, and an introduction to the Company's newly  
17 developed Public Safety Power Shutoff ("PSPS") program.  
18 Version 3, dated June 28, 2022, included information added  
19 to comply with the Public Utility Commission of Oregon's  
20 conditions of approval of the Company's 2022 WMP. Version  
21 4, filed with the Company's cost deferral Application in  
22 Case No. IPC-E-22-27, added Idaho and Oregon specific  
23 information and state-specific forecasts of incremental  
24 mitigation expenditure. Version 5, the current WMP for the  
25 2023 fire season, includes a new executive summary, a

1 review of the 2022 fire season with lessons learned, a  
2 forecast of condition for the upcoming fire season, and  
3 provides a detailed discussion of 2023 fire season  
4 mitigation measures.

5 Q. How will the WMP change from year to year?

6 A. Each year, the Company strives to improve upon  
7 previous versions by incorporating new learnings, methods,  
8 and feedback from stakeholders, customers, communities,  
9 fire experts, and the Company's regulators. Going forward,  
10 the Company will file its annual WMP with the Commission,  
11 as specified in Order No. 35717.<sup>7</sup> Moving forward and to  
12 reduce confusion, the Company will endeavor to avoid  
13 multiple versions of the WMP and, instead, release one plan  
14 in advance of each fire season.

15 Q. Please summarize the key elements of the WMP  
16 that help meet the Company's wildfire mitigation  
17 objectives.

18 A. Idaho Power's WMP includes comprehensive and  
19 multi-faceted strategies that are effective at reducing  
20 wildfire risk. Key elements of the plan include:

21 • Risk analysis and mapping: Utilizing a risk-based  
22 approach for decision making and quantifying wildfire risk  
23 throughout the Company's service area.

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<sup>7</sup> Case No. IPC-E-22-27, Order No. 35717, pp. 8-9 (Mar 23, 2023).

1           • Situational awareness: Informing Company  
2 operations and practices by incorporating new methods of  
3 visual, geographical, and contextual awareness of the  
4 environments in which Idaho Power operates, specifically  
5 during wildfire season.

6           • Mitigation activities: Expanding and/or enhancing  
7 many of the same programs that the Company has carried out  
8 over the course of its operating history to mitigate  
9 wildfire risk, decrease the likelihood of ignition events,  
10 and protect infrastructure from wildfire regardless of  
11 where it starts.

12          • Communication: Communicating with and educating  
13 customers and the public about wildfire and outage  
14 preparedness.

15          • Monitoring and tracking performance: Routine  
16 analysis of wildfire mitigation activities to gauge their  
17 effectiveness and build continuous improvement and risk  
18 reduction over time.

19          Q.       How does Idaho Power ensure its WMP is  
20 informed by industry best practices?

21          A.       Idaho Power recognizes the importance of  
22 engaging with federal, state, and local governments as an  
23 integral part of deciding on and implementing wildfire  
24 mitigation measures. The WMP documents specific activities  
25 and forums to engage with key stakeholders to share

1 information, gain feedback, and incorporate lessons  
2 learned.

3 Much of Idaho Power's service area extends over land  
4 managed by the US Bureau of Land Management ("BLM") and the  
5 US Forest Service. As such, the Company engaged with these  
6 agencies in the development of the WMP and continues to  
7 hold meetings and workshops with them to share information  
8 and identify geographic areas and specific mitigation  
9 activities that are mutually beneficial.

10 Idaho Power is also a member of the Idaho Fire  
11 Board, which was initiated by the US Forest Service.  
12 Membership is voluntary and currently includes the Forest  
13 Service, BLM, the Federal Emergency Management Agency,  
14 Idaho State Lands Department, Idaho Department of  
15 Insurance, Idaho Military Division, City of Lewiston, the  
16 Nature Conservancy of Idaho, and Idaho Power. This group,  
17 like the efforts listed above, is also focused on sharing  
18 Idaho wildfire knowledge and best practices for wildfire  
19 mitigation.

20 Q. Did Idaho Power consult with other utilities  
21 to develop and inform its WMP?

22 A. Yes. Peer utility engagement was crucial in  
23 developing the WMP to ensure the Company's efforts are  
24 consistent with best practices and aligned with its peers  
25 in the region. To inform the initial development of the



1 WMP, Idaho Power participated in multiple workshops with  
2 San Diego Gas and Electric, Southern California Edison,  
3 Pacific Gas and Electric, Sacramento Municipal Utility  
4 District, and PacifiCorp. The Company continues to engage  
5 with these utilities to learn about California's evolving  
6 practices.

7 In the Pacific Northwest, many utilities work  
8 collaboratively to understand and ensure commonality of  
9 their respective wildfire plans, while also accounting for  
10 the variation in each utility's unique service area. These  
11 utilities include Idaho Power, Avista Utilities, Portland  
12 General Electric, Rocky Mountain Power, Pacific Power,  
13 Chelan County Public Utility District, Puget Sound Energy,  
14 NV Energy, Bonneville Power Administration, and  
15 NorthWestern Energy.

16 Q. Does Idaho Power participate in any other  
17 collaborative efforts to inform and evolve its WMP?

18 A. Yes. Idaho Power is a member of both the  
19 Edison Electric Institute ("EEI") and the Western Electric  
20 Institute, both of which host workshops and conferences to  
21 help members discuss and compare their wildfire plans and  
22 mitigation efforts.

23 Additionally, Idaho Power's President and Chief  
24 Executive Officer Lisa Grow is an active member of EEI's  
25 Electricity Subsector Coordinating Council Wildfire Working

1 Group. This working group partners with the US Department  
2 of Energy and other government agencies to collectively  
3 minimize wildfire threats and potential impacts nationwide.

4 These industry collaboratives continue to prove  
5 valuable for sharing wildfire mitigation best practices and  
6 discussing new and existing technology related to wildfire  
7 mitigation.

8 ***Wildfire Risk Analysis & Selection of Mitigation Practices***

9 Q. Was a risk-based approach used to determine  
10 the type and level of wildfire mitigation needed for Idaho  
11 Power's service area?

12 A. Yes. The Company followed a risk-based  
13 approach in identifying, analyzing, and selecting wildfire  
14 mitigation measures. The Company has integrated the  
15 practices and principles detailed in the International  
16 Standard ISO 31000, Risk Management Guidelines, to manage  
17 wildfire risk and meet the goals and objectives of the WMP.

18 Wildfire risk mitigation is an enterprise-wide  
19 effort, and risk reduction practices are integrated into  
20 normal business activities and decision making across the  
21 Company - from field personnel to executive officers.

22 Q. Please describe the Company's wildfire-based  
23 risk framework.

1           A.           The Company takes a structured and effective  
2 approach to managing wildfire-related risk that includes  
3 the following:

- 4           • Identify risk - Recognize new and evolving  
5 threats and associated risk;
- 6           • Analyze - Understand new and evolving risk,  
7 including likelihood and consequence and any existing  
8 controls;
- 9           • Evaluate - Determine whether risk levels can be  
10 accepted or should have additional controls in place;
- 11          • Mitigate - Select appropriate risk treatment;
- 12          • Monitor - Continually check and review to  
13 determine effectiveness of mitigation practices and  
14 protocols; and
- 15          • Communicate and consult- Communicate, educate,  
16 and engage with stakeholders, customers, communities, and  
17 regulators about the Company's risk-based wildfire  
18 mitigation work.

19           Q.           What methodology was used to quantify  
20 wildfire risk?

21           A.           Idaho Power leveraged an external consultant  
22 – Reax Engineering – that specializes in assessing and  
23 quantifying wildfire risk to determine where wildfire risk  
24 is elevated within the Company's service area. The  
25 consultant used a risk-based methodology that incorporates

1 weather modeling, wildfire spread modeling, and Monte Carlo  
2 simulations, among other modeling techniques.

3           This approach to modeling wildfire risk is not  
4 unique to Idaho Power. The California Public Utilities  
5 Commission("CPUC") used the same modeling approach – and  
6 the same consultant – as part of its development of the  
7 CPUC Fire Threat Map. Other utilities in Oregon, Idaho,  
8 Nevada, and Utah have utilized similar modeling approaches  
9 to identify and quantify wildfire risk.

10           Q.       What calculation does the Company use to  
11 determine elevated risk areas?

12           A.       The Company's wildfire consultant modeled  
13 wildfire risk considering a wildfire event's probability  
14 multiplied by its potential negative consequences or  
15 impacts, should that event occur. Expressed as a formula:

16                   *Wildfire Risk = Fire Probability x Consequence*

17           The first term, Fire Probability, is based on fire  
18 volume (i.e., spatial integral of fire area and flame  
19 length) because rapidly spreading fires are more likely to  
20 escape initial containment efforts and become extended  
21 fires rather than slowly developing fires. The second term,  
22 Consequence, reflects the number of structures (i.e.,  
23 homes, businesses, and other man-made structures) that  
24 could be impacted by a wildfire.

1           Q.       How does this equation translate to elevated  
2 risk areas?

3           A.       Using the formula noted above, areas of  
4 highest wildfire risk will be those in which both Fire  
5 Probability and Consequence are elevated. Conversely,  
6 combinations of low Fire Probability and elevated  
7 Consequence (or elevated Fire Probability but low  
8 Consequence) will not typically be areas with highest risk.

9           Detailed discussion of the risk formula, including  
10 modeling and model inputs, is provided in Exhibit No. 5.

11          Q.       What are the results of the wildfire risk  
12 modeling?

13          A.       Using the above methodology and risk formula,  
14 Idaho Power and its consultant identified specific  
15 geographic areas across its service area and transmission  
16 corridors. The Company then sorted these areas into tiers –  
17 Yellow Risk Zones, reflecting increased risk, and Red Risk  
18 Zones, reflecting highest risk. Red Risk Zones – such as  
19 those in the Boise foothills and around Payette Lake in  
20 McCall – were determined to have the greatest wildfire risk  
21 based on the combination of Fire Probability and  
22 Consequence, while Yellow Risk Zones have elevated risk but  
23 may have reduced Fire Probability and/or Consequence  
24 relative to Red Risk Zones.

1           These risk zones are the foundation of Idaho Power's  
2 wildfire risk mitigation strategies and are used to  
3 prioritize targeted investments, vegetation management  
4 work, inspection activities, and situational awareness.

5           Q.     How much of the Company's service area is in  
6 elevated wildfire risk zones?

7           A.     Approximately 7 percent of the Company's  
8 overhead distribution and 11 percent of transmission lines  
9 are located within wildfire risk zones. These geographical  
10 areas include approximately 47,000 customers.

11          Q.     Does the Company visualize its elevated risk  
12 areas?

13          A.     Yes. Based on the wildfire risk analysis,  
14 Idaho Power developed a risk map, shown below, that  
15 reflects the two tiers of increased wildfire risk within  
16 the Company's service area. The map – provided on Idaho  
17 Power's website – is available publicly and accessible to  
18 Public Safety Partners to educate and inform them about the  
19 Company's elevated risk areas.

20

21

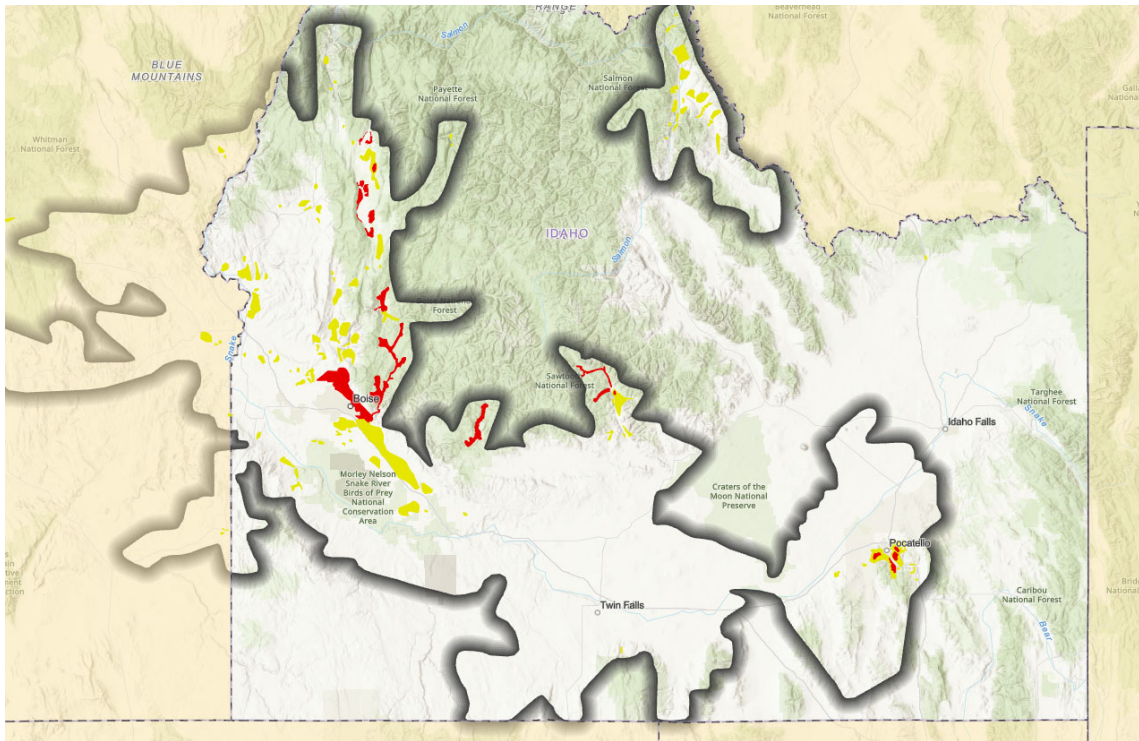
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23

24

25

**FIGURE 6**  
**IDAHO POWER WILDFIRE RISK MAP**



Q. How have these wildfire risk zones informed the Company's wildfire mitigation projects?

A. The Company's wildfire mitigation activities are specifically targeted at reducing wildfire risk in elevated risk areas, with Red Risk Zones given priority due to the increased level of risk associated with higher fire probability and potential impact to structures.

Q. What types of mitigation activities is the Company pursuing?

A. Based on the risk identified in the Company's risk assessment, Idaho Power developed and

grouped its wildfire mitigation work into the following categories: A) quantifying wildland fire risk; B) situational awareness; C) mitigation associated with field personnel practices; D) mitigation activities within Idaho Power's T&D programs; E) enhanced vegetation management; F) communication; and G) information technology. Idaho Power's specific activities in these categories, as well as actual 2022 O&M and capital expenditures, are described in the sections below.

**Wildfire Mitigation O&M Expense**

Q. Please describe Idaho Power's system O&M expenses for wildfire mitigation in 2022.

A. The table below summarizes Idaho Power's total systemwide O&M expenses by wildfire mitigation category for 2022:

**TABLE 1**  
**WILDFIRE MITIGATION O&M IN 2022**

<b>Wildfire Mitigation Category</b>	<b>Program Activity</b>	<b>2022 Actuals</b>
<b>Quantifying Wildland Fire Risk</b>	Risk Analysis and Map Updates	\$4,125
<b>Situational Awareness</b>	Weather Forecasting - System Development, Support, and Personnel	\$156,201
<b>Mitigation - Field Personnel Practices</b>	Tools/Equipment	\$10,720



<b>Mitigation - Transmission &amp; Distribution Programs</b>	O&M Component of Capital Work	\$898,966
	Annual O&M T&D Patrol	
	Maintenance Repairs	
	Environmental Management Practices	
	T&D Thermography Inspection Mitigation & Personnel	
	Transmission Wood Pole Fire Resistant Wraps - Red Risk Zone	
	Transmission Wood Pole Fire Resistant Wraps - Yellow Risk Zone	
	Wildfire Mitigation Program Manager	
	Covered Wire Evaluation - Pilot Program in PSPS Zones	
<b>Enhanced Vegetation Management</b>	Transition to/Maintain 3-Year Vegetation Management Cycle	\$25,151,422
	Enhanced Practices for Distribution Red & Yellow Risk Zones (Pre-Season Patrols/Mitigation, Pole Clearing, Removals, Work, QA)	
	Line Clearing Personnel	
	Vegetation Management Satellite and Aerial Patrols	
<b>Communications</b>	Wildfire/Wildfire Mitigation Communications - Advertisements/Meetings/Other	\$106,779
	PSPS Customer Education/Communication - Advertisements, Bill Inserts/Other	
<b>Information Technology</b>	Communication/Alert Tool development (System set up, outage maps, critical facilities identification)	\$80,531

1

2 ***O&M: Quantifying Wildfire Risk***

3 Q. Why did the Company choose to use a consultant

4 to quantify wildfire risk in its service area?

1           A.       The Company selected Reax Engineering for its  
2 recognized expertise in wildfire risk modeling and fire  
3 science. Hiring an outside consultant helped ensure Idaho  
4 Power's risk analysis would be developed in a manner  
5 consistent with and comparable to peer utilities.

6           Q.       Was it prudent for the Company to hire an  
7 external consultant to develop the wildfire risk analysis?

8           A.       Yes. Hiring an external consultant was a  
9 prudent Company decision for two reasons. First, it was  
10 more cost effective than hiring additional internal  
11 resources with specialized experience in wildland fire  
12 behavioral modeling. Second, hiring a nationally recognized  
13 consultant provides confidence that the Company's risk  
14 areas – the basis for all its wildfire mitigation work—were  
15 determined using the best and latest wildfire modeling  
16 techniques.

17          Q.       How much did the Company spend to quantify  
18 wildfire risk in 2022?

19          A.       The Company's wildfire risk analysis was first  
20 conducted in 2020. Every two years the Company intends to  
21 work with Reax Engineering to refine the risk analysis,  
22 adjust as warranted, and update its risk maps. In 2022, the  
23 Company spent \$4,125 on external consultant activities to  
24 update and refine its wildfire risk map.

25    //

1    **O&M: Situational Awareness**

2           Q.     What efforts and activities did the Company  
3   conduct in 2022 to enhance situational awareness during  
4   wildfire season?

5           A.     The Company's situational awareness activities  
6   in 2022 included refining its weather forecasting tools,  
7   installing weather stations, training new personnel to  
8   assist in the development and analysis of fire-season  
9   weather forecasts, and initial efforts to install wildfire  
10  detection cameras. Each of these activities is described in  
11  more detail below.

12          Q.     How much did Idaho Power's situational  
13  awareness efforts cost in 2022?

14          A.     The Company spent \$156,201 on situational  
15  awareness in 2022.

16          Q.     What is the Fire Potential Index ("FPI") and  
17  how does it reduce wildfire risk?

18          A.     An essential component of Idaho Power's fire  
19  season work involves enhancing situational awareness by  
20  forecasting the FPI. This tool, which forecasts a wildfire  
21  risk level on a daily basis during fire season, supports  
22  operational decision-making to reduce wildfire threats and  
23  risks. For example, on days with a high FPI, automatic  
24  reclosing device settings are adjusted and field personnel  
25  modify work activities in Red Risk Zones.

1           The FPI tool accounts for weather, prevalence of  
2   fuel (i.e., trees, shrubs, grasses), and topography, and  
3   converts that data into an easily understood forecast of  
4   the short-term fire threat for different geographic regions  
5   in Idaho Power's service area. Additionally, the tool is  
6   used to help determine when a PSPS may be necessary in  
7   Idaho Power's service area.

8           The benefits of developing the FPI and enhancing the  
9   Company's meteorological forecasting capabilities is  
10   greater situational awareness of Idaho Power's system  
11   during critical peak summer months.

12           Q.     How has Idaho Power enhanced its ability to  
13   forecast weather and fire conditions during wildfire  
14   season?

15           A.     The Company has expanded and enhanced  
16   situational awareness by incorporating a new weather  
17   forecasting system that leverages an ensemble of weather  
18   models to improve accuracy and reduce forecast-to-forecast  
19   variability. The ensemble approach also provides a measure  
20   of certainty to better inform up-to-the-minute decision-  
21   making for the FPI and PSPS events. As such, the new system  
22   provides greater confidence in severe weather conditions  
23   and will allow Idaho Power to provide early PSPS  
24   notification to Public Safety Partners, operators of  
25   critical facilities, and affected customers. Additional

1 personnel were leveraged to assist in the development and  
2 launch of this ensemble tool.

3 ***O&M: Field Personnel Practices***

4 Q. Please describe the Company's wildfire  
5 mitigation efforts related to field personnel and  
6 associated spending in 2022.

7 A. In 2022, the Company trained its personnel in  
8 fire season conditions, practices, and operational  
9 modifications. The Company equipped its field crews with  
10 fire prevention tools and leveraged field observers to  
11 assess on-the-ground conditions.

12 In total, the Company spent \$10,720 on mitigation  
13 efforts related to field personnel in 2022.

14 Q. Why are field personnel practices vital to  
15 wildfire risk reduction?

16 A. Idaho Power's field personnel and contractors  
17 work across the Company's service area, including in  
18 elevated risk areas. During wildfire season, the basic  
19 work, routines, preparatory activities, and preparedness of  
20 employees and contractors is paramount to minimizing the  
21 risk of ignition events.

22 Q. What field practices did Idaho Power establish  
23 for its employees and contractors during wildfire season?

24 A. Idaho Power developed a Wildland Fire  
25 Preparedness and Prevention Plan to provide guidance to

1 Idaho Power employees and contractors specifically for  
2 operating during wildfire season. The plan includes  
3 information regarding fire season tools and equipment  
4 available on the job site; daily situational awareness  
5 relative to areas with heightened fire conditions; expected  
6 actions and mechanisms for reducing on-the-job wildfire  
7 risk as well as reporting requirements in the event of an  
8 ignition; and training and compliance requirements.

9 All Idaho Power crews, and certain field personnel  
10 and contractors, performing work on or near Company  
11 facilities are required to operate in accordance with the  
12 provisions of the Wildland Fire Preparedness and Prevention  
13 Plan and expected to conduct themselves in a fire-safe  
14 manner. They are also equipped for potential wildfire  
15 events by carrying specific tools, including, but not  
16 limited to, shovels, Pulaskis, and water for initial  
17 suppression.

18 Q. What is the role of field observers during  
19 wildfire season?

20 A. In its benchmarking with other utilities,  
21 Idaho Power found that most utilities use field observers  
22 in some capacity as part of the de-energization decision-  
23 making process. The Company currently has 24 trained field  
24 observers made up of Line Operations Technicians,  
25 Distribution Designers, Patrolmen, and other technician

1 roles. In 2022, a PSPS event in Pocatello, Idaho was not  
2 executed due to reports from field observers that rain had  
3 preceded high winds. This information was not immediately  
4 evident through weather stations nor available radar at the  
5 time. This situation highlighted the importance of having  
6 field observers equipped with mobile weather kits to inform  
7 de-energization decision making.

8 ***O&M: Mitigation Efforts in the Company's T&D Programs***

9 Q. Please summarize Idaho Power's mitigation  
10 activities within its T&D programs and associated O&M  
11 spending in 2022.

12 A. Executing the Company's WMP relies on  
13 leveraging its asset management programs to maintain safe  
14 and reliable operation of T&D facilities. Specific to  
15 wildfire mitigation, these efforts include: performing  
16 visual and infrared thermography inspections, performing  
17 maintenance based on the findings of those inspections, and  
18 utilizing innovative and cost-effective approaches to  
19 reduce wildfire risk, such as wrapping wood poles with a  
20 fire-resistant mesh and evaluating the cost effectiveness  
21 of covered conductor for potential future implementation.

22 In 2022, the Company spent \$898,966 on T&D program-  
23 related wildfire mitigation efforts.

24 Q. What are the notable wildfire mitigation  
25 expenses associated with Idaho Power's T&D programs?

1           A.       The largest wildfire mitigation expense in the  
2   Company's T&D mitigation programs is the installation of  
3   fire-resistant mesh wraps. In 2022, Idaho Power spent  
4   \$364,075 – or 40 percent of the total system actuals in the  
5   T&D mitigation category – on fire-resistant mesh wraps. The  
6   mesh, which is applied to wood transmission poles in Red  
7   and Yellow Risk Zones, is an effective and widely used tool  
8   to increase the resilience of the pole and improve  
9   reliability for customers.

10           Q.       What other T&D program activities did the  
11   Company pursue in 2022 to reduce wildfire risk?

12           A.       In addition to the installation of fire-  
13   resistant mesh wraps, the Company conducted work associated  
14   with a new Program Manager function, conducted more annual  
15   inspections of its facilities in elevated risk zones,  
16   expanded the use of infrared thermography inspections in  
17   Red Risk Zones, launched a covered conductor pilot program,  
18   and performed a variety of capital projects for which there  
19   was an O&M component. Specific capital projects are  
20   described in detail in the section below.

21           Q.       Please describe the value and purpose of  
22   thermography inspections with respect to wildfire  
23   mitigation.

24           A.       Infrared thermography inspections are  
25   conducted using hand-held and drone-mounted cameras with



1 thermal-sensing technology and can help identify defects  
2 associated with the overheating of equipment, connections,  
3 splices, or conductors.

4 Thermography inspections are uniquely valuable in  
5 that they can uncover problems undetectable to the naked  
6 eye. From the Company's perspective, there is not a viable  
7 alternative to this practice. The technology enables more  
8 proactive identification of potential issues than would  
9 otherwise be possible.

10 In 2022, the Company used additional personnel to  
11 evaluate the annual use of thermography inspections in Red  
12 Risk Zones, as opposed to the Company's historical approach  
13 of periodic use of the technology across its system.

14 Q. Please explain the purpose of the covered  
15 conductor pilot program.

16 A. In 2022, Idaho Power began a pilot of covered  
17 conductor that will run through 2024 to explore the  
18 benefits, tooling requirements for field personnel, and  
19 design parameters associated with this potential mitigation  
20 practice. While covered conductor may reduce the risk of  
21 wildfire, the Company will analyze any other potential  
22 concerns or co-benefits, including improved reliability  
23 outside of wildfire season, other safety considerations,  
24 and reduced outage restoration costs. Upon completion of  
25 the pilot, the Company will determine whether installation

1 of covered conductor is a cost-effective risk mitigation  
2 practice.

3 ***O&M: Enhanced Vegetation Management***

4 Q. What is vegetation management?

5 A. Vegetation management is the practice of  
6 trimming or pruning vegetation away from the Company's  
7 facilities to reduce the likelihood of vegetation coming  
8 into contact with T&D lines and causing damage or an  
9 outage.

10 Idaho Power has more than 400,000 trees within its  
11 system that are inspected and pruned on an ongoing basis.  
12 The lines are inspected periodically, and trees and  
13 vegetation are cleared from the line while other trees are  
14 removed entirely.

15 Q. Why is vegetation management a key part of  
16 the Company's wildfire mitigation efforts?

17 A. In terms of time, expense, and overall risk  
18 reduction, enhanced vegetation management is the most  
19 critical aspect of executing Idaho Power's WMP. If  
20 vegetation comes in contact with energized powerlines there  
21 is potential that it could result in an outage or ignition.  
22 Historical outage data from across Idaho Power's service  
23 area shows that vegetation contact is one of the most  
24 likely sources of faults and possible ignition on the power  
25 system.

1           Q.       What strategies has the Company employed to  
2 reduce wildfire risk associated with vegetation?

3           A.       Idaho Power employs an enhanced vegetation  
4 management strategy in wildfire risk zones that includes  
5 transitioning to a sustainable three-year pruning cycle for  
6 all distribution circuits and transmission lines in valley  
7 locations. In addition to achieving a three-year pruning  
8 cycle, the Company conducts mid-cycle patrols and pruning  
9 in the second year of the cycle to address "cycle buster"  
10 trees and annual "hotspot" patrols to address any new  
11 hazard trees or unexpected vegetative growth that poses an  
12 immediate threat of contact with energized facilities.

13           Additionally, the Company strives to complete audits  
14 for all pruning work performed in wildfire risk zones,  
15 regardless of reason for the pruning. The audits confirm  
16 that pruning cuts meet the specification and that the  
17 proper clearance (i.e., the distance between vegetation and  
18 the Company's T&D lines) was obtained.

19           Q.       When developing the WMP, did the Company  
20 consider different pruning cycle lengths?

21           A.       Yes. The Company considered other vegetation  
22 management cycle alternatives, including shorter trimming  
23 cycles, longer trimming cycles, and strategies that  
24 evaluate each tree individually and only trim it once it  
25 has nearly grown back to the power line (known as "just-in-

1 time trimming"). Each alternative presented challenges or  
2 resulted in negative impacts that undermined any potential  
3 benefits. While shorter trimming cycles result in less  
4 vegetation being removed during each trimming cycle, this  
5 practice costs more due to the need for more resources and  
6 more frequent trimming of trees near the power lines.

7           In contrast, longer cycles result in less frequent  
8 trimming of each tree but larger amounts of vegetation that  
9 must be removed to maintain larger clearance envelopes  
10 around the power lines to accommodate additional years of  
11 vegetative growth. Further, longer trimming cycles create  
12 logistical challenges that are exacerbated by tree biology.  
13 Some trees simply grow faster than a given trimming cycle  
14 and the longer the trimming cycle, the more pervasive this  
15 issue becomes. Longer cycles that call for heavy pruning  
16 also lead to hormonal imbalances between a tree's canopy  
17 and its root system. To correct this imbalance, the tree  
18 aggressively re-grows new sprouts to quickly replace its  
19 lost canopy. In this regard, heavier pruning results in a  
20 faster rate of tree regrowth than normal, making it even  
21 more difficult to consistently maintain longer trimming  
22 cycles.

23           Finally, "just-in-time trimming" is primarily a  
24 reactive strategy that ultimately leads to challenges  
25 associated with securing qualified tree-trimming crews, as

1 this ad hoc approach involves hiring crews on an as-needed  
2 basis rather than on a consistent schedule.

3 After evaluating these alternative approaches, Idaho  
4 Power concluded that maintaining a three-year trimming  
5 cycle is the most cost-effective and sustainable strategy  
6 to keep vegetation away from power lines in a proactive  
7 manner.

8 Q. How has shifting to a three-year cycle and  
9 implementing other enhanced vegetation management  
10 activities affected costs?

11 A. Moving to a three-year vegetation management  
12 cycle and performing enhanced vegetation activities –  
13 including pre-season patrols, additional inspections, pole  
14 clearing, tree and shrub removal, and quality assurance in  
15 Red and Yellow Risk Zones – has resulted in a sizeable  
16 increase in O&M expenditure. In 2022, Idaho Power spent  
17 \$25,151,422 on vegetation management – more than double the  
18 \$10.7 million of vegetation management expense in 2019 –  
19 and representing the single largest source of the Company's  
20 wildfire-related expenditure. The Company's second largest  
21 source of wildfire-related expenditure is insurance, which  
22 is addressed in Mr. Buckham's testimony.

23 Q. Why has the Company experienced such  
24 substantial growth in the cost of vegetation management?

1           A.       A variety of factors help explain the cost  
2   increases Idaho Power has experienced to perform vegetation  
3   management. Most notably, the availability of qualified  
4   labor has diminished while demand for vegetation management  
5   services has grown across the western US among other  
6   utilities, other industries, and government agencies that  
7   also recognize vegetation management is a critical  
8   component of wildfire risk mitigation.

9           Importantly, the vegetation management companies  
10   hired by Idaho Power and other utilities are not simple  
11   arborists or landscapers. Rather, vegetation management  
12   companies qualified to work near electrical lines and  
13   equipment require special certifications and training. The  
14   limited number of companies offering such qualified  
15   services are in high demand in many western states and  
16   especially in California, where labor rates are higher for  
17   the work itself and the labor that provides it. Idaho Power  
18   has felt the effect of out-of-state competition in the form  
19   of double-digit cost increases and qualified labor  
20   shortages.

21           Another exacerbating factor of vegetation management  
22   cost is Idaho's growth. Greater population density and  
23   expansion of homes into more vegetation-dense areas has  
24   made it harder to maintain a consistent vegetation  
25   management cycle. New development is routinely built with

1 frontage trees and other vegetation. The growth in newly  
2 planted trees certainly leads to more work, but an  
3 associated problem is that these trees are often  
4 inappropriate for their location and environment. Trees  
5 that grow wide and tall and/or mature quickly are poor  
6 candidates for planting near or beneath electrical lines,  
7 and yet tree selection is more often made based on  
8 aesthetics rather than safety. This problem persists  
9 despite Idaho Power making significant efforts to  
10 communicate and educate on appropriate tree selection in  
11 several ways, including the "Right Tree, Right Place" tree  
12 planting guide, which offers detailed information on  
13 selecting appropriate trees and planting them at safe  
14 distances from power lines.

15           Finally, climate change is a factor contributing to  
16 escalating vegetation management costs. In recent years,  
17 Idaho has experienced wetter springs followed by more  
18 temperate summers and falls, leading to longer vegetation  
19 growing seasons.

20           Another climate-related issue is the spread of pests  
21 such as the bark beetle that leave dead trees in their  
22 wake. Failure to remove dead or dying vegetation - a  
23 problem felt most acutely on government land - complicates  
24 vegetation management work and makes adhering to a routine

1 clearing cycle more challenging, time consuming, and,  
2 thereby, more costly.

3 Q. Has the Company explored any alternatives to  
4 vegetation management?

5 A. Yes. The primary alternative to vegetation  
6 management is converting overhead distribution circuits to  
7 underground. However, undergrounding is consistently more  
8 expensive than enhanced vegetation management. The Company  
9 continues to evaluate and implement underground solutions,  
10 as appropriate and cost-effective based on risk, as part of  
11 its WMP hardening efforts, as described in the section  
12 below.

13 Q. Has the Company identified benefits other than  
14 risk reduction from enhanced vegetation management  
15 practices?

16 A. Yes. Although vegetation management is a  
17 sizeable increased wildfire mitigation expense, performing  
18 this work is expected to have notable co-benefits,  
19 including reduced vegetation-caused outages, thereby  
20 enhanced reliability, in Red and Yellow Risk Zones. Idaho  
21 Power plans to monitor performance and outage metrics to  
22 confirm the success of the enhanced program. Decreasing  
23 vegetation outages was considered one of the most  
24 important, cost-effective measures Idaho Power could take



1 to reduce the likelihood of an ignition event and protect  
2 utility infrastructure.

3 Q. Is Idaho Power's enhanced vegetation  
4 management program prudent and in customers' best interest?

5 A. Yes. Shifting to enhanced vegetation  
6 management practices, including the move to a three-year  
7 pruning cycle, was deemed a prudent course of action based  
8 on the reduction of risk in wildfire risk zones and the  
9 number of potential outages or ignition sources that may be  
10 eliminated. A vegetation management-focused wildfire  
11 mitigation program is also the approach adopted by many of  
12 Idaho Power's peer utilities.

13 Q. Has the Company evaluated new technology to  
14 help in vegetation management efforts and reduce  
15 vegetation-related risks?

16 A. Yes. Vegetation monitoring tools have come to  
17 market in recent years that have the potential to help  
18 Idaho Power apply a more targeted approach to vegetation  
19 management. The Company conducted a pilot effort in 2022  
20 that involved combining artificial intelligence ("AI") with  
21 satellite and aerial imagery surveys of overhead powerlines  
22 to detect vegetation encroachment and hazard trees.

23 The surveys have the potential to identify problem  
24 areas more quickly than conventional methods and provide  
25 less reliance on "eyes on the ground" to identify areas at

1 risk of vegetation contact or trees in poor health that may  
2 fall into powerlines. In addition, the technology has the  
3 potential to allow Idaho Power to invest resources where  
4 they will be the most effective in mitigating the impact of  
5 wildfires.

6 Q. What were the results of the pilot?

7 A. Initial results of the pilot did not  
8 demonstrate sufficient accuracy needed to make risk-  
9 informed decisions for vegetation encroachment.

10 Q. Will the pilot shift Idaho Power's approach to  
11 vegetation management?

12 A. Perhaps. The Company plans to reassess the  
13 technology in 3 to 5 years as improvements in machine  
14 learning and AI are made.

15 Q. What is Idaho Power's assessment of the need  
16 for ongoing enhanced vegetation management?

17 A. Based on comparison to underground conversions  
18 and the insufficiency of current technology to allow a more  
19 targeted approach to vegetation management, Idaho Power  
20 considers its strategy of achieving and maintaining a  
21 three-year pruning cycling, along with enhanced practices  
22 in Red and Yellow Risk Zones, the most prudent approach for  
23 reducing wildfire risk associated with vegetation.

24 Considering the challenges noted above, the Company  
25 expects vegetation management expense may continue to rise.

1 A discussion of this concern, and the associated  
2 justification for ongoing vegetation management cost  
3 deferral at a new baseline level, is provided in the Direct  
4 Testimony of Company Witness Mr. Timothy Tatum.

5 ***O&M: Communications & Information Technology***

6 Q. Please explain the Company's communication and  
7 information technology-related strategies in the WMP.

8 A. The Company conducts several education  
9 campaigns around wildfire each year, including promoting  
10 the Company's wildfire mitigation activities and work  
11 within communities, providing awareness and education on  
12 how to prepare for wildfire season. The following core  
13 messages are the foundation for all wildfire-related  
14 communications each year:

15 • How customers can prepare for wildfire-related  
16 outages, including where to find outage and PSPS  
17 information and how to sign up for alerts and update  
18 contact information;

19 • Ways customers can reduce wildfire risk; and  
20 • Idaho Power's work to protect the grid from  
21 wildfire and reduce wildfire risk.

22 Idaho Power communicates with customers and the  
23 public before and throughout wildfire season to inform them  
24 of steps the Company is taking to reduce wildfire risk and  
25 ways they can help prevent wildfires and prepare for

1 outages. Various communication mediums used to accomplish  
2 this include: newsletters, news media, website content and  
3 videos, social media, postcards, and paid advertising.

4           The Company also promotes ways that the public can  
5 reduce the potential to ignite fires. Customers in PSPS  
6 zones are targeted for expanded communication to promote an  
7 awareness of PSPS and outage preparation. PSPS-focused  
8 communication comes in the form of advertisements, bill  
9 inserts, postcards, and other awareness raising and  
10 educational campaigns.

11           Q.           What efforts has the Company made to  
12 directly contact customers about emergency events and  
13 outages?

14           A.           To help provide timely communication of  
15 emergency events – specifically, PSPS – to customers, the  
16 Company has implemented a communication tool called the  
17 Enterprise Omnichannel Notification System (“EONS”). Having  
18 advanced alerts prior to and during a PSPS is an important  
19 aspect of Idaho Power’s PSPS program. A large component of  
20 the EONS tool is identifying critical customers and  
21 facilities that will automatically be contacted leading up  
22 to, during, and after a PSPS event.

23           Q.           What did the Company spend in 2022 on  
24 customer communication and related information technology?

1           A.       In 2022, Idaho Power spent \$106,779 on  
2   communications to customers and communities before, during,  
3   and after wildfire season. This amount includes postcards  
4   sent to all customers in PSPS zones to educate them about  
5   the purpose of PSPS and how they can stay connected to the  
6   Company to learn about PSPS events.

7           Implementing the EONS system, a critical tool for  
8   more timely communication with customers, cost \$80,531 in  
9   2022.

10   ***Wildfire Mitigation Capital Investments***

11           Q.       In what capital projects has the Company  
12   invested related to wildfire mitigation?

13           A.       The table below summarizes wildfire  
14   mitigation investments by mitigation program:

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**TABLE 2**

CAPITAL INVESTMENT BASED ON PLANT CLOSINGS IN 2021 AND 2022

Mitigation Program	Description of the Program	Risk Reduction Benefit	Plant Closings in 2021 and 2022
Overhead Primary Hardening Program	Systematic replacement of hardware, equipment, and materials, 113-line miles in Red Risk Zones	Reduced potential of equipment failure, utilizing material and equipment with less energy release and potential of ignition, increased resiliency	\$9,869,070
Strategic Undergrounding	Select conversion of overhead to underground conversion in Red Risk Zones, 1.85 miles completed in 2022	Reduce exposure and potential of ignition by locating power lines underground	\$1,822,482
Red Risk Zone Overcurrent Protection Segmentation	Installation, relocation, and expanded communication for Automatic Reclosing overcurrent protection devices	Isolate circuit segments and improve reliability for enhanced Fire Potential Index settings and PSPS	\$367,899

Q. What is included in the Overhead Primary Hardening Program?

A. The Overhead Distribution Hardening program involves systematic replacement of hardware, equipment, and

1 materials to improve safety and reliability and reduce  
2 ignition risk. The program is targeted for Red Risk Zones.  
3 Enhanced measures to mitigate wildfire are:

4       **Wood Pole Replacement**—The Company will replace wood  
5 poles if field evaluations determine that significant  
6 deterioration or damage has occurred since the last  
7 inspection or treatment. Furthermore, poles having wood  
8 stubs/structural reinforcements are changed out pursuant to  
9 current practices.

10       **Spark Prevention Units**—Porcelain arresters used for  
11 overvoltage protection will be changed out with arresters  
12 utilizing Spark Prevention Units ("SPU"). The SPU acts to  
13 eliminate the potential of catastrophic failure during  
14 arrester operation.

15       **Fiberglass Crossarms**—Replacing wood tangent and  
16 dead-end crossarms with fiberglass. Fiberglass crossarms  
17 provide decrease the likelihood of heating through a  
18 crossarms and cross-functional benefits of lower cost, ease  
19 of installation, strength, and supply availability.

20       **Small Conductor**—Replace copper conductor and  
21 conductor smaller than #4 Aluminum Conductor Steel  
22 Reinforced.

23       **Porcelain Switches**—All porcelain switches installed  
24 in Red Risk Zones will be changed out with cutouts  
25 featuring Ethylene Propylene Diene Monomer Rubber.

1           **Avian Protection Coverings**—Idaho Power employs  
2     several different protection measures to protect wildlife  
3     on existing structures, including but not limited to  
4     covers, insulated conductor, diverters, perches, nesting  
5     platforms, and structural modifications.

6           In addition to the enhanced hardening measures  
7     mentioned above, each location is inspected to ensure  
8     structures and equipment are brought up to current  
9     construction standards. All existing hardware that will  
10    remain in place is re-tightened, loose conductors are re-  
11    tensioned, and third-party pole attachments are checked for  
12    proper clearances.

13           Q.     Does hardening work occur on the transmission  
14    system?

15           A.     Yes. On the transmission side, the Company  
16    evaluates upcoming transmission line construction projects-  
17    such as new line construction and line rebuilds with the  
18    plan to use steel construction for all lines of 138 kV and  
19    above. For existing wood poles, a fire-resistant mesh wrap  
20    is applied to existing wood poles in designated wildfire  
21    risk zones, as discussed earlier in my testimony. The mesh  
22    wrap improves the resiliency of the pole and keeps it from  
23    catching fire if exposed to a surface fire.



1           Q.       What steps did the Company take to determine  
2   what mitigation measures should be included in the  
3   hardening program?

4           A.       Idaho Power researched historical faults on  
5   the T&D system to determine outage causes that may result  
6   in potential ignition. That analysis determined that  
7   tree/vegetation contact, equipment failure, loose hardware,  
8   corrosion, and animal contact are among the top causes of  
9   faults throughout the service area. Specific risk drivers  
10   were established and identified as part of the risk  
11   evaluation process.

12           In addition, the Company used the Cal Fire Powerline  
13   Fire Prevention Guide to help identify equipment and  
14   materials that may contribute or cause an ignition on the  
15   power system. This guide, combined with the Company's past  
16   root cause analysis and feedback from employees with line  
17   construction and maintenance experience, helped identify  
18   expulsion fuses, porcelain switches, deteriorated wood  
19   crossarms, expulsion arresters, and small conductor as  
20   being potential ignition sources.

21           Q.       Does the hardening program offer any co-  
22   benefits for customers?

23           A.       Yes. The Overhead Distribution Hardening  
24   program includes infrastructure upgrades and the  
25   replacement of several materials or equipment to reduce the

1 likelihood of ignition on the distribution system. Each  
2 material or equipment selected was analyzed to determine  
3 its effectiveness at reducing risk, estimated near-term  
4 cost, potential co-benefits of the activity to Idaho Power  
5 and its customers, and costs between alternatives. At a  
6 foundational level, the program offers the co-benefit of  
7 improved reliability for customers and a decrease of  
8 ignition potential.

9 Q. Can reliability indices be used to measure the  
10 effectiveness of the hardening program?

11 A. Yes. Prior to developing the WMP, Idaho Power  
12 successfully implemented distribution hardening measures  
13 and, through outage data and analytics over that period  
14 (2010 through 2019), learned that customer outages were  
15 reduced by approximately 38 percent in areas where  
16 reliability hardening projects were carried out. This  
17 initial success of reducing outages for reliability  
18 purposes resulted in the Company selecting similar  
19 activities in the WMP to further increase reliability and  
20 help reduce ignition potential in Red Risk Zones. Idaho  
21 Power is tracking reliability performance in wildfire risk  
22 zones over time to assess effectiveness.

23 Q. What is the Strategic Undergrounding Program?

24 A. As part of Idaho Power's effort to reduce  
25 wildfire risk and impacts associated with outages and PSPS,

1 Idaho Power evaluates the cost-effectiveness of overhead-  
2 to-underground conversion of distribution lines on a case-  
3 by-case basis.

4 Areas selected for conversion will have increased  
5 reliability and resiliency to wildfire, and customers in  
6 the area will no longer be exposed to the potential of long  
7 outages associated with operational protection settings on  
8 high fire potential days or PSPS. Strategic Undergrounding,  
9 one effort of many the Company is taking to reduce wildfire  
10 risk, is selected in highest-risk areas when the cost-  
11 benefit analysis shows that underground construction is  
12 prudent.

13 Q. Has the Company completed any underground  
14 conversion projects for wildfire mitigation?

15 A. Yes. In 2022, overhead-to-underground  
16 conversion was performed on 1.85 miles of distribution  
17 lines in Idaho. The projects included four line segments on  
18 the Boise Bench and Cartwright feeders in Boise, Idaho.  
19 These were the first underground conversion projects that  
20 the Company has undertaken to reduce wildfire risk.

21 Q. Why were the locations selected for  
22 underground conversion?

23 A. The areas were chosen for underground  
24 conversion due to the results of risk quantification and  
25 work, summarized later in my testimony. That work

1 identified the areas having a combination of high wildfire  
2 probability and impacts to structures.

3 Field assessments and feedback from local fire  
4 officials confirmed that the topography and surface fuels  
5 in the areas were conducive to rapid fire spread, which  
6 could lead to structure and human safety impacts.

7 Fire history was another factor considered for the  
8 project near Idaho Power's Boise Bench Substation, located  
9 off Amity Road in East Boise. Another consideration was  
10 that the undergrounding of these line segments would  
11 decrease the overall risk profile of each feeder due to  
12 most of the feeders already having underground  
13 distribution.

14 Q. What criteria did the Company use to select  
15 the underground conversion projects?

16 A. The Overhead Distribution Hardening program is  
17 the primary program used to decrease the likelihood of  
18 ignition on the distribution system. Underground conversion  
19 projects are undertaken for locations where outage data and  
20 risk assessments show the need for increased risk reduction  
21 beyond what the hardening program provides.

22 Idaho Power's approach to selecting underground  
23 conversion projects involves the ISO 31000 risk management  
24 framework. Established criteria used in the assessment for  
25 optimal underground conversion locations is as follows:

- 1           • Wildfire risk modeling scores, having high  
2 wildfire probability and impacts to structures;
- 3           • Fire history where distribution overhead circuits  
4 may be susceptible to repeat wildfire events over their  
5 lifetime;
- 6           • Areas having a high likelihood of ignition due to  
7 risk drivers such as vegetation contact, contact from  
8 objects, lightning, and equipment failure;
- 9           • PSPS zones having high likelihood of proactive  
10 de-energization due to historic weather patterns,  
11 vegetation, or ignition risk;
- 12          • Areas of high wildfire risk that present  
13 challenges to patrol due to access issues, terrain, or  
14 inability to perform aerial inspections after a PSPS or  
15 outages on days with high FPI; and
- 16          • Areas where PSPS and enhanced protection settings  
17 may impact critical infrastructure.

18           The underground conversion projects in 2022 were  
19 analyzed by their expected risk-reduction benefit to  
20 overall project cost. And, for the projects in question,  
21 underground conversion was deemed cost-effective based on  
22 the level of risk reduction and type of risk driver that  
23 was mitigated.

24           Q.       How do the costs of overhead distribution  
25 hardening compare to underground conversions?

1           A.       The cost of converting overhead distribution  
2 lines to underground can vary significantly based on the  
3 voltage level, equipment, and terrain to be worked. The  
4 2022 underground conversion projects cost \$1,822,482 – or an  
5 average cost of \$985,125 per line mile. The benefit of the  
6 projects are increased wildfire resiliency and decreased  
7 potential of ignition. Based on wildfire modeling and  
8 property values<sup>8</sup> in the area, Idaho Power estimates that the  
9 project is protecting structures that could cost upwards of  
10 \$45 million to replace in the event of a destructive  
11 wildfire.

12           Q.       What is the Overcurrent Protection  
13 Segmentation program?

14           A.       The Overcurrent Protection Segmentation  
15 program involves the installation of automatic reclosing  
16 equipment (“reclosers”) at the edge of Red Risk and PSPS  
17 zones. By strategically locating reclosers at the edge of a  
18 zone, the Company can limit the impact on customers outside  
19 of those zones from increased outages due to enhanced  
20 protection settings on days with high fire potential and  
21 PSPS. The program also includes adding communication  
22 capabilities to recloser so they can be remotely operated  
23 through the Company’s dispatch group. The remote operation

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<sup>8</sup> 2022 median home prices as reported by the Ada County Assessor’s Office.

1 provides the benefit of being able to change protection  
2 settings remotely on days when the FPI is high. It also  
3 gives Reliability Engineers the ability to assess waveforms  
4 and fault characteristics immediately after a fault occurs,  
5 eliminating the need for a technician to travel and  
6 download the event record.

7 **2022 WMP Performance**

8 Q. What metrics is the Company tracking to gauge  
9 the effectiveness of the WMP?

10 A. Idaho Power tracks several metrics to measure  
11 the performance of the WMP and its effectiveness over time.  
12 Each year, work plans are established at the beginning of  
13 the year and items are tracked throughout the year to  
14 identify areas needing corrective action or attention. This  
15 includes monitoring vegetation management activities,  
16 inspections, and circuit hardening. Idaho Power's goal is  
17 to complete 100 percent of the work plan each year;  
18 however, emergencies or other unplanned events can occur  
19 and disrupt the annual work plan.

20 Q. How did Idaho Power perform on its WMP  
21 wildfire mitigation objectives in 2022?

22 A. As is demonstrated in the table below, the  
23 Company met or exceeded its wildfire mitigation objectives  
24 in 2022, in all but two instances.

25 //

**TABLE 3**  
2022 WMP PERFORMANCE METRICS

Plan Area	Wildfire Mitigation Plan Activities	2022 Goal	Completed	% Complete	2023 Goal
System Hardening	<b>Distribution System Hardening</b>				
	System Hardening Line Miles	48	48.91*	102%	69
	Overhead Line Miles Converted to Underground	1.85	1.85	100%	1
	Expulsion Fuse Replacement	930	942	101%	1319
	Surge Arrester Replacement	830	839	101%	1175
Feeder Segmentation	<b>Segmentation Devices</b>				
	Installation or Relocation of Automatic Reclosing Devices	17	17	100%	8
Fire Mesh Installation	<b>Transmission Fire Mesh Installation</b>				
	Red Risk Zone Poles	492	492	100%	-
	Yellow Risk Zone Poles	406	585	144%	870
Asset Inspections	<b>Transmission Inspections</b>				
	Wildfire Pre-Season Patrol - Red Risk Zones (Structures)	923	923	100%	923
	Infrared Thermography Patrol (Structures)	923	923	100%	923
	<b>Distribution Inspections</b>				
	Wildfire Pre-Season Patrol - Red Risk Zones (Structures)	20,192	20,192	100%	20,192
	Infrared Thermography Patrol - Red Risk Zones (Structures)	3,000	3,800	127%	4,000
Vegetation Management	<b>Pruning Cycle</b>				
	Transition to a 3-Year Pruning Cycle (circuits)	282	173	70%**	320
	<b>Enhanced Vegetation Management</b>				
	Annual Patrol - Red & Yellow Risk Zones (circuits)	65	65	100%	65
	Annual Mitigation - Red & Yellow Risk Zones (circuits)	65	65	100%	65
	Mid-Cycle Patrols - Red & Yellow Risk Zones (circuits)	47	47	100%	1
	Mid-Cycle Pruning - Red & Yellow Risk Zones (circuits)	47	47	100%	1
	Hazard Trees Identified and Pruned	-	77	100%	100% of All Identified
	Hazard Trees Identified and Removed	-	49	100%	100% of All Identified
	Audits of Pruning Activities - Red & Yellow Risk Zones (worksites)	6,324	977	15%**	100% of All Identified
Meteorology	<b>Idaho Power Weather Stations</b>				
	Weather Station Installations	5	5	100%	5

\*Excludes hardening work outside of wildfire risk zones

\*\*Estimated year end completion

The Company did not fully achieve its 2022 vegetation management production goal in the transition to a three-year vegetation management cycle and, similarly, fell below the goal with respect to pruning audits in high-risk zones. Both of these outcomes are the direct result of the vegetation management challenges discussed earlier in my testimony – namely, labor shortages that have made it difficult to hire enough qualified crews to perform the Company's needed vegetation management work.

Q. Please summarize your testimony in this case.



1           A.       As evidenced by the Company's ongoing  
2 improvement in reliability metrics, Idaho Power has taken a  
3 thoughtful and prudent approach to construction and  
4 maintenance of its T&D systems.

5           Regarding wildfire mitigation, the Company made  
6 substantial and prudent 2022 investments in programs,  
7 personnel, infrastructure, system hardening, and vegetation  
8 management to ensure that Idaho Power can continue to  
9 safely and reliably serve customers and continue to make  
10 great strides to mitigate wildfire risk.

11          Q.       Does this conclude your direct testimony in  
12 this case?

13          A.       Yes, it does.

14        //

15        //

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**DECLARATION OF MITCH COLBURN**

I, Mitch Colburn, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Mitch Colburn. I am employed by  
Idaho Power Company as the Vice President of Planning,  
Engineering, and Construction.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony and Exhibit Nos. 4 through 5 in  
this matter.

3. To the best of my knowledge, my pre-filed  
direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed   
MITCH COLBURN

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**COLBURN, DI**  
**TESTIMONY**

**EXHIBIT NO. 4**

Wildfire Mitigation Category	Program Activity	2022 Actuals
Quantifying Wildland Fire Risk	Risk Analysis and Map Updates	\$4,125
Situational Awareness	Weather Forecasting - System Development, Support, and Personnel	\$156,201
Mitigation - Field Personnel Practices	Tools/Equipment	\$10,720
Mitigation - Transmission & Distribution Programs	O&M Component of Capital Work	\$160,123
	Annual O&M T&D Patrol Maintenance Repairs	\$100,461
	Environmental Management Practices	\$9,225
	T&D Thermography Inspection Mitigation & Personnel	\$97,888
	Transmission Wood Pole Fire Resistant Wraps - Red Risk Zone	\$127,258
	Transmission Wood Pole Fire Resistant Wraps - Yellow Risk Zone	\$236,817
	Wildfire Mitigation Program Manager Function	\$135,006
	Covered Wire Evaluation - Pilot Program in PSPS Zones	\$32,189
Enhanced Vegetation Management	Transition to/Maintain 3-Year Vegetation Management Cycle	\$24,848,875
	Enhanced Practices for Distribution Red & Yellow Risk Zones (Pre-Season Patrols/Mitigation, Pole Clearing, Removals, Work, QA)	
	Line Clearing Personnel	\$150,927
	Vegetation Mgmt Satellite and Aerial Patrols	\$151,620
Communications	Wildfire/Wildfire Mitigation Communications - Advertisements/Meetings/Other	\$106,779
	PSPS Customer Education/Communication - Advertisements, Bill Inserts/Other	
Information Technology	Communication/Alert Tool development (System set up, outage maps, critical facilities identification)	\$80,531
<b>TOTAL O&amp;M</b>		<b>\$26,408,745</b>

Mitigation Program	Description of the Program	Risk Reduction Benefit	Plant Closings in 2021 and 2022
Overhead Primary Hardening Program	Systematic replacement of hardware, equipment, and materials, 113-line miles in Red Risk Zones	Reduced potential of equipment failure, utilizing material and equipment with less energy release and potential of ignition, increased resiliency	\$9,869,070
Strategic Undergrounding	Select conversion of overhead to underground conversion in Red Risk Zones, 1.85 miles completed in 2022	Reduce exposure and potential of ignition by locating power lines underground	\$1,822,482
Red Risk Zone Overcurrent Protection Segmentation	Installation, relocation, and expanded communication for Automatic Reclosing overcurrent protection devices	Isolate circuit segments and improve reliability for enhanced Fire Potential Index settings and PSPS	\$367,899
<b>TOTAL CAPITAL</b>			<b>\$ 12,059,451</b>

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**COLBURN, DI**  
**TESTIMONY**

**EXHIBIT NO. 5**

# WILDFIRE MITIGATION PLAN







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### Appendix A

The Wildland Fire Preparedness and Prevention Plan.

### Appendix B

The Public Safety Power Shutoff (PSPS) Plan.

### Appendix C

Oregon Wildfire Requirements and Recommendations.

## Review/Revision History

This document has been approved and revised according to the revision history recorded below.

Review Date	Revisions
Jan. 22, 2021	WMP Version 1 was filed with the Idaho Public Utilities Commission and posted to the Idaho Power website.
Dec. 29, 2021	Modifications including expanded cost-benefit discussion, plan progress and updates, and inclusion of Idaho Power's Public Safety Power Shutoff plan.
March 18, 2022	Added Appendix C.
June 28, 2022	Added information to comply with the Public Utility Commission of Oregon's conditions of approval of Idaho Power's 2022 Wildfire Mitigation Plan.
Oct. 19, 2022	Updated cost table within the WMP and filed with the Idaho Public Utilities Commission.
Dec. 29, 2022	WMP Version 5.0, including 2022 season in review, changes for 2023 season, and addition of Appendix C—Oregon Wildfire Requirements and Recommendations.



## EXECUTIVE SUMMARY

Idaho Power is dedicated to the safety of our customers and communities, and to delivering reliable, affordable energy. In pursuit of that mission, we built off our existing Wildfire Mitigation Plan (WMP) and took major steps in 2022 to enhance our situational awareness in the field, enhance vegetation management, further harden the electrical system, and expand and better the ways in which we communicate and alert customers and communities about wildfire and wildfire risk. As the company enters its third year with a WMP, this new edition (Version 5.0) has been improved to reflect key learnings, feedback from stakeholders, and a focus on new technology. The WMP also provides supporting information on wildfire requirements and actions specific to our Idaho and Oregon regulators, but the document remains—first and foremost—an evolving guide that provides holistic and prudent strategies for reducing wildfire risk.

This Executive Summary—a new introduction in the 2023 WMP—provides a comprehensive summary of the 2022 wildfire season and the company’s lessons learned and progress toward our wildfire mitigation objectives. Additionally, the Executive Summary previews changes to the company’s risk management framework and lessons learned that will inform 2023 wildfire mitigation efforts and beyond.

### *2022 Weather and Fire Potential*

The spring of 2022 brought above normal precipitation and below normal temperatures. As an example, parts of southern Idaho—including the Boise area—experienced heavy snowfall in the second week of May 2022.<sup>1</sup> This led to an abundance of fuels across the region. The summer months saw record high temperatures and below normal relative humidity that increased wildfire potential. Idaho Power atmospheric scientists conducted regular forecasts during wildfire season to determine a daily Fire Potential Index (FPI) value across the company’s service area. The FPI is used to inform Idaho Power’s on-the-ground, operational strategies when the fire potential is high.

A combination of record heat and low humidity led to a dramatic increase in FPI levels throughout the summer of 2022. There were nearly three times as many high-fire-potential days as in 2021. Despite the seasonal challenges, the company fulfilled and executed the WMP as planned for 2022.

---

<sup>1</sup> Carolyn Komatsoulis. 2022. Idaho Press. It’s Pretty Unusual: Half-Inch of Snow, Power Outages Make for Manic Monday in Boise. May 2, 2022.





**Figure 1**  
A field team installs a mesh wrap on a wood pole in 2022

Idaho Power continues to monitor climate variability and changing conditions to determine how wildfire risk is shifting season to season and in the longer term. Historical data shows temperature has increased over the past 80 years in southern Idaho and eastern Oregon. Studies show a connection between higher temperatures and increased wildfire activity, both in intensity and size of wildfires.<sup>2</sup> Further, extreme fire weather days are increasing, and fire season is getting longer.<sup>3</sup>

As climate conditions change, the company is committed to monitoring increased wildfire risk and enhancing the WMP to keep customers and communities safe.

### *Impacts of Wildfires in 2022*

This year, both Idaho and Oregon had fewer wildfires and acres burned during wildfire season than the previous 20-year average.<sup>4</sup> However, wildfires did affect Idaho Power equipment both

---

<sup>2</sup> Idaho reviewed academic, scientific, and governmental climate change studies, including those from the Center for Climate and Energy Solutions, the US Environmental Protection Agency, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, North Carolina State University, and National Geographic.

<sup>3</sup> In late 2022, Idaho Power analyzed temperatures over the last 80 years in the Idaho Power service area to assess changing climate conditions. The analysis showed that daily high temperatures and extreme weather events are increasing.

<sup>4</sup> Interagency Fire Center. Current National Statistics. [www.nifc.gov/fire-information/statistics](https://www.nifc.gov/fire-information/statistics).

inside and outside of our service area. Three major wildfires threatened or burned wood structures. In some cases, we de-energized lines to keep firefighters safe.

**Table 1**

Wildfires impacting Idaho Power operations and facilities in 2022

Incident Name	Location	Fire Discovery Date	Containment Date	Acres	Cause	Facilities Impacted
Moose	17 Miles North of Salmon, ID	7/17/2022	11/9/2022	130,144	Unattended Campfire	Transmission
Four Corners	6 Miles west of the City of Cascade, ID	8/13/2022	10/20/2022	13,702	Lightning	Distribution
Double Creek	10 miles SE of Imnaha, OR	8/30/2022	10/25/2022	175,937	Lightning	Transmission

Idaho Power's mapping applications include geographic information system (GIS) data for active wildfires to inform operational planning and provide insight into areas that could be threatened throughout the fire season. The company monitored fire activity throughout the season to compare fire behavior to modeling. We expect to learn more about how real-time fire analytics can inform risk-based decision-making in coming fire seasons.

#### *Key Objectives of 2022 WMP*

Idaho Power met the 2022 WMP's key objectives, including the completion of major projects to ensure the WMP could be effectively carried out. A new Public Safety Power Shutoff (PSPS) program was implemented and all processes and procedures guiding customer communication, weather forecasting, switching plans and de-energization criteria were completed before fire season. This includes the installation and commissioning of a new communication system used to expedite notifications of PSPS events via voice, text messaging, and e-mail. We also installed 17 protective devices to isolate line segments and provide a means of remote de-energization.





**Figure 2**

A line worker installs a spark prevention unit near Eagle, Idaho

#### *Overview of 2022 WMP Progress*

By almost all measures, Idaho Power met or exceeded its WMP goals in 2022. Work plans are established at the beginning of the year and these items are tracked throughout the year to identify areas needing corrective action or attention. As some wildfire mitigation work is on a rotating cycle based on wildfire season (and not the calendar year), some of the items listed are still in progress at the time of writing this 2023 WMP.

## Idaho Power's Progress Toward 2022 Wildfire Mitigation Goals

**Table 2**  
2022 WMP activity summary and results

Plan Area	Wildfire Mitigation Plan Activities	2022 Goal	Completed	% Complete	2023 Goal
System Hardening	<b>Distribution System Hardening</b>				
	System Hardening Line Miles	48	48.91*	102%	69
	Overhead Line Miles Converted to Underground	1.85	1.85	100%	1
	Expulsion Fuse Replacement	930	942	101%	1319
Feeder Segmentation	Surge Arrester Replacement	830	839	101%	1175
	<b>Segmentation Devices</b>				
	Installation or Relocation of Automatic Reclosing Devices	17	17	100%	8
	<b>Transmission Fire Mesh Installation</b>				
Fire Mesh Installation	Red Risk Zone Poles	492	492	100%	-
	Yellow Risk Zone Poles	406	585	144%	870
	<b>Transmission Inspections</b>				
Asset Inspections	Wildfire Pre-Season Patrol - Red Risk Zones (Structures)	923	923	100%	923
	Infrared Thermography Patrol (Structures)	923	923	100%	923
	<b>Distribution Inspections</b>				
	Wildfire Pre-Season Patrol - Red Risk Zones (Structures)	20,192	20,192	100%	20,192
	Infrared Thermography Patrol - Red Risk Zones (Structures)	3,000	3,800	127%	4,000
	<b>Pruning Cycle</b>				
Vegetation Management	Transition to a 3-Year Pruning Cycle (circuits)	282	173	70%**	320
	<b>Enhanced Vegetation Management</b>				
	Annual Patrol - Red & Yellow Risk Zones (circuits)	65	65	100%	65
	Annual Mitigation - Red & Yellow Risk Zones (circuits)	65	65	100%	65
	Mid-Cycle Patrols - Red & Yellow Risk Zones (circuits)	47	47	100%	1
	Mid-Cycle Pruning - Red & Yellow Risk Zones (circuits)	47	47	100%	1
	Hazard Trees Identified and Pruned	-	77	100%	100% of All Identified
	Hazard Trees Identified and Removed	-	49	100%	100% of All Identified
	Audits of Pruning Activities - Red & Yellow Risk Zones (worksites)	6,324	977	15%**	100% of All Identified
Meteorology	<b>Idaho Power Weather Stations</b>				
	Weather Station Installations	5	5	100%	5

\*Excludes hardening work outside of wildfire risk zones

\*\*Estimated year end completion

As can be observed from the numbers above, vegetation management is a challenging area. Much of the delay in reaching 2022 goals is attributable to broader challenges in the workforce. Idaho Power uses contractors to perform vegetation management and audit work. The company witnessed labor shortages, more inexperienced contract workers than in the past, and increased turnover that led to lower vegetation management production levels throughout the year. Vegetation management production was also lower than anticipated because more climbing work was required than originally expected. Climbing to prune or remove vegetation requires contractors with more skill and takes more time. Despite these challenges, Idaho Power continues to work with contractors to push toward its goals and estimates that, by the end of the calendar year, the production level will be near 70% of target.

Audits were also impacted by resource availability, as contractors did not reach full staff levels until December 2022. Because of this, random sampling was used in lieu of auditing all vegetation management work in wildfire risk zones. Idaho Power will work with contractors at the end of 2022 to develop corrective action plans and make necessary adjustments to meet targeted performance levels in 2023.



Regarding customer communication in 2022, Idaho Power used several methods to inform customers throughout the year of our WMP and PSPS plan. These included social media, radio, customer newsletters, postcards, and voice and text messaging. Before the 2022 wildfire season, the company focused on asking customers—especially those in PSPS potential zones—to update their contact information and prepare for potential PSPS events. Additionally, the company conducted over 20 in-person and virtual meetings to engage with customers, counties, and fire and other public agencies to discuss and seek feedback on the WMP and PSPS efforts.



**Figure 3**  
[Idaho Power developed an educational video to explain PSPS](#)

Fortunately, the company did not need to fully implement a PSPS in 2022. However, the company's planning and communication apparatuses were tested in one instance in Pocatello, Idaho, where the company anticipated a PSPS event due to high winds and extremely high fire potential. The company took the steps to inform public safety partners, critical facilities, and customers in the area that a PSPS was imminent. Rain showers preceded high winds in the area and the PSPS event was canceled before de-energization took place.

### *Looking Ahead—Expanded Mitigation Activities*

As detailed in the WMP, Idaho Power deploys a comprehensive and multi-faceted strategy to reduce wildfire risk. The company plans to implement new activities and expand existing ones in 2023. The list below summarizes new or expanded activities.

#### **Infrastructure Hardening**

In 2022, we hardened approximately 49 line miles to decrease the risk of wildfire in Red Risk Zones—areas with the highest wildfire risk based on wildfire probability and potential impacts. The hardening program is 26% complete, with Red Risk Zones given the highest priority at this time. This work will increase in 2023 by 40% and include hardening to 69 line miles.

#### **Strategic Undergrounding**

In 2022, Idaho Power buried approximately 1.85 miles of overhead distribution line in areas of highest wildfire risk. This work primarily targeted the main trunk of distribution feeders. In 2023, we will target a smaller line segment in an area that includes residences.

The company's goal is to work through the complexities and costs associated with burying primary overhead powerlines, overhead services, and converting customer-owned service-entrance equipment. This work will take place in a PSPS zone in Idaho with high fire probability and potential impact. The projects in 2022 and upcoming work in 2023 will inform future underground conversion strategies by helping us weigh costs and risk-reduction benefits against those of traditional feeder hardening and covered conductor conversions.

### **Vegetation Management**

Idaho Power's effort to achieve a three-year pruning cycle will continue in 2023. It is a critical aspect of meeting our objective to reduce wildfire risk. We will expand brush clearing and applying ground sterilant around wood poles to reduce fuels. We are also exploring an opportunity to partner with the National Forest Foundation, Boise National Forest, Bureau of Land Management, and local fire districts on a shared stewardship program in the Boise Front. This work is expected to provide a means for Idaho Power to participate in fuel reduction activities outside of the right of way, which will reduce wildfire risk by decreasing surface fuels and the potential of tree contact.



**Figure 4**

A contractor trims trees in a bucket truck

### **Risk Modeling**

Risk modeling of Idaho Power's service area is used to prioritize mitigation activities. In 2023, we will re-evaluate our risk modeling by incorporating new structure information based on 2020 Census data and explore new areas of consequence based on the feedback received in the past year from fire agencies and customers.



**Situational Awareness**

The FPI is forecasted daily during fire season and provides critical information that informs operational changes during days with high fire potential. In 2023, we will work to improve the communication and calculation of the FPI by creating more clear and concise messaging to stakeholders.

**PSPS**

While the company did not proactively de-energize any customers as part of its PSPS program in 2022, engagement with communities and customers this year highlighted their concerns—specifically the inability to communicate or suppress fire via electric wells and water pumps without power. This feedback highlights the need for the company to find ways to limit the impact and frequency of future PSPS events. Many of the activities being pursued here, such as strategic undergrounding and utilizing covered conductor, will decrease the likelihood of PSPS. However, PSPS will remain a tool available to the company to mitigate wildfire risk during extreme fire weather conditions.



**Figure 5**

Idaho Power uses visual graphics to illustrate the conditions that could require a PSPS event

**Segmentation**

We completed the installation of 17 automatic reclosing devices (reclosers) in Red Risk Zones as part of an effort to isolate circuit segments and improve reliability for customers outside of those zones. In 2023, we will continue this work and install an additional eight reclosers in Red Risk Zones.

**New Technology and Innovations**

New technology and innovative programs were explored in 2022 to find new ways to reduce the risk and impacts of wildfire. In 2023, we will conduct pilots based on our findings with the goal of learning more about their implementation complexities and to analyze costs and risk reduction benefits prior to fully integrating into the WMP. These pilots or trials include the following:

- **Satellite Imagery**—Using satellite imagery to detect vegetation encroachment and hazard trees.



- **Covered Conductor**—Covered conductor is a solution used throughout the industry to decrease the potential of ignition if an object contacts powerlines. A trial of covered conductor will be carried out in our training yard to determine overall costs, tooling requirements, work methods, and construction standards and specifications.
- **Structural Resilience of Wood Poles**—We will increase situational awareness in Red Risk Zones by performing a survey of distribution poles using Light Detection and Ranging (LiDAR) technology to identify structural loading capacity of existing wood poles.
- **Shared Stewardship**—We will partner with federal agencies on a shared stewardship fuel reduction program in forested areas and evaluate the benefits in terms of reduced surface fuels and fire spread potential. The collaboration will also provide the company with the opportunity to work with land managers and owners to expand vegetation management and reduce the potential of ignition from vegetation contact.
- **Fire Detection Cameras**—In 2022, we explored the benefits that cameras can have in early fire detection and became part of the Wildfire Detection Camera Strategy Work Group in Oregon. We are working to identify optimal locations and developing partnerships with state and federal agencies and will expand our knowledge of cameras that utilize artificial intelligence for fire detection. We plan on piloting cameras in 2023 to further understand the complexities of installations, permitting, systems used for notification, and overall accuracy. The pilot will be critical in determining a long-term strategy for the use of cameras to reduce wildfire risk.

### *Lessons Learned*

Idaho Power has conducted its own assessment of lessons from the 2022 wildfire season and the company's wildfire mitigation practices. The following lessons learned were developed by supplementing this analysis with feedback heard from stakeholders, customers, public safety partners, peer utilities, and through wildfire-related forums, research, and education.

#### **Pre-Wildfire Season Patrols**

Idaho Power strives to complete wildfire patrols prior to the start of each wildfire season to identify issues that may pose a risk of ignition if left unchecked. Above-normal precipitation and below-normal temperatures in the spring months of 2022 created access issues in mountain areas where snow levels were several feet deep. Late, heavy snow delayed completion of these patrols until mid-June, which, while later than target, was still prior to the onset of conditions conducive for wildfire.

#### **Situational Awareness**

The FPI is an essential tool to support operational decision making. It includes detailed forecasts of 148 different geographical areas or zones throughout the service area and is used to determine when a PSPS is necessary. The preparation for a PSPS event in August 2022 highlighted an opportunity to improve the communication and precision of the forecasts. In that case, a line segment subject to the potential PSPS was included in two different FPI zones that had different fire potential across their geographical areas. Initially, this created



confusion as to which forecast to use for decision-making purposes. In 2023, we will review areas that have overlapped FPI zones and refine mapping and forecasted boundaries to eliminate the potential of this situation occurring again.

### **Vegetation Management**

Pruning levels in 2022 did not meet the target established for the year largely due to labor issues. We added outsourced crews from throughout the country to assist in conducting vegetation management activities and expect to reach approximately 70% of targeted vegetation management pruning by the end of 2022. In 2023, we will conduct a thorough review of all activities and assess means of working with contractors to drive towards 2023 production goals.

### **Expansion of the Wildland Urban Interface**

As the population in Idaho Power's service area continues to grow, we've seen an expansion of new construction in the wildland urban interface (WUI). This expansion creates challenges for wildfire mitigation as new wildfire risks emerge. In 2023, we will analyze the growth of the WUI and create new strategies to address new risks.

### **Functional Exercises**

Two functional exercises were conducted in the spring of 2022 to test processes and procedures needed to fully execute the PSPS program. The exercises were beneficial and ensured that the company was prepared to effectively carry out a PSPS prior to the onset of severe fire weather. Forty action items were identified throughout the exercises and consisted of refining and improving communication methods, timing, documentation, and website functionality. We found that PSPS events can be complex and occur within different parts of the company's service area simultaneously. To help ensure expedited and accurate communication for all potential scenarios, templates were developed for communication activities involving customers, Public Safety Partners, Emergency Support Function (ESF-12), and departments within the company. The templates will be reviewed and improved as needed in 2023.

### **List of Stakeholders**

The PSPS functional exercises highlighted the need for accurate and readily available lists of Public Safety Partners and critical facilities. We developed a central repository for all information related to PSPS which includes contacts for Public Safety Partners, operators of critical facilities, and Emergency Support Function ESF-12 personnel.

### **Estimated Time of Restoration**

As with all outages, having accurate estimates for the time or restoration (ETR) is a priority. The PSPS functional exercises highlighted that setting an initial ETR for PSPS events is more challenging than ordinary unplanned or planned outages. The company determined that the ETR for a PSPS should take into consideration the duration of the weather event and the time needed for safety patrols to occur. Internal atmospheric scientists became a crucial part of determining the duration of weather events. Operational plans were developed for each region to guide restoration and switching procedures to expeditiously restore power during a PSPS. These plans include estimated patrol times which are also used for establishing an initial ETR. We plan on reviewing any assumptions in the operational plans each year and



include lessons learned from the previous year into the patrol estimates to ensure we are providing the best information possible.

**Field Observer Program**

PSPS events are carefully evaluated by an assessment team to balance wildfire risk with potential PSPS impacts on the customers and the communities we serve. In 2022, we expanded the PSPS decision-making process to include real-time on-site conditions from Field Observers (FOBs). FOBs are Idaho Power personnel positioned within pre-defined PSPS zones to monitor system conditions and periodically report observations to help inform the PSPS assessment team. The location of FOBs in PSPS zones was examined to ensure their safety during severe weather conditions and communication templates were developed to ensure accurate and consistent fire weather reporting. We found that, in some areas, cellular and radio communication does not exist and we had to rely on satellite messaging services. The FOB program became more complex than anticipated, and we will work in 2023 to improve the documentation and procedures as well as increase the number of qualified resources to perform FOB duties in situations where multiple areas are at risk of PSPS.

**Customer Communication**

Notifying customers in PSPS zones was a priority this year and consisted of telephone, text, and e-mail outreach. We found that some of the targeted customers did not have up-to-date contact information associated with their account. Several efforts were made to encourage customers to update their contact information, and additional information was mailed to those customers without current contact information. This will be a continued focus in 2023.

**Community Feedback**

The company conducted over 20 WMP and PSPS plan presentations throughout the service area, to advise customers of our plans and to solicit feedback to help inform future versions of the WMP. Seven public meetings were held in Oregon at the end of fire season, and we received good feedback from local fire chiefs, emergency managers, and the general public. Feedback and themes from these meetings and others throughout the year will be incorporated into the 2023 WMP and include:

- Adjusting the timing of public meetings in Oregon to coincide with fire season
- Partnering with agencies and other programs, such as Firewise, when conducting public meetings
- Reviewing risk modeling to include additional areas of consequence
- Having more collaboration with fire agencies including the Idaho Bureau of Land Management (BLM), Forest Service, Baker County, and La Grande Rural Fire Protection District

**Vulnerable Populations**

Idaho Power participated in two mock events, one conducted by Malheur County in Oregon and another as part of the Idaho Office of Emergency Management's Cascade Rising event. These two events highlighted two opportunities to improve our support for vulnerable populations during an outage or PSPS event. First, the Red Cross was added as a Public Safety Partner in Malheur County based on their role in coordinating Community Resource Centers (CRC). Second, the emPower program was identified as a tool to help notify customers on durable medical devices (DME) if a PSPS event is predicted. Targeted outreach to vulnerable populations was also conducted to include outage preparedness flyers sent to Meals on Wheels participants. In 2023, Idaho Power will further the efforts made in identifying and communicating with vulnerable populations.

**Risk Management Process**

A review of Idaho Power's risk management process used in developing previous versions of the WMP was completed in 2022. The review found opportunities to improve by strategically incorporating a more formalized risk management process into the WMP. The International Standardization Organization (ISO 31000-2018) is a recognized standard for risk management and will be integrated into the 2023 plan. The standard will help position the company to achieve the objectives of the WMP by fostering continuous improvement and ensuring a consistent approach to risk-based decision making.



## REGULATORY CONTEXT

As part of Idaho Power Company's (Idaho Power or company) commitment to deliver safe, reliable, and affordable energy, the company developed a comprehensive Wildfire Mitigation Plan (WMP) to reduce wildfire risk associated with its facilities. The WMP has three core objectives:

1. Reducing wildfire risk for the safety of Idaho Power's customers and the communities in which it operates.
2. Ensuring the continued and reliable delivery of electricity to more than 600,000 retail customers in Southern Idaho and Eastern Oregon.
3. Furthering the company's good stewardship of the beautiful and natural lands within Idaho Power's service area and beyond.

Idaho Power released its inaugural WMP in January 2021. The company's WMP is a living document that will evolve over time. Idaho Power will seek to review, modify, and expand the WMP in the coming years to reflect shifts in industry best practices and to ensure the company is following procedures and requirements established by its regulators. Given that Idaho Power operates in both Oregon and Idaho, below is a description of recent wildfire-related regulatory activities by state.

### Idaho

On January 22, 2021, Idaho Power proactively filed its first WMP with the Idaho Public Utilities Commission (IPUC). The company's [application](#) provided a narrative of Idaho Power's effort to develop the WMP, including discussion of risk analysis across its service area and evaluation of specific wildfire mitigation activities (e.g., enhanced vegetation management and system hardening) the company would undertake in the coming fire season. Idaho Power asked the IPUC for authority to defer the Idaho jurisdictional share of incremental operations and maintenance expenses and capital depreciation expenses related to implementing the measures in the WMP, as well as incremental insurance costs.

On June 17, 2021, the IPUC issued [Order No. 35077](#), granting the company's application and allowing cost deferral of all incremental wildfire mitigation and insurance expenses identified in Idaho Power's application.

On October 20, 2022, the company filed an updated WMP and a new application for deferral of newly identified wildfire mitigation-related costs.

### Oregon

In August 2020, the Public Utility Commission of Oregon (OPUC) opened an informal rulemaking related to mitigating wildfire risks to utilities, utility customers, and the public. The scope of this docket ([AR 638](#)) shifted following the 2020 wildfire season, splitting into two

tracks—a temporary wildfire rulemaking to govern the 2021 wildfire season and a secondary track to establish replacement permanent rules for the 2022 fire season.

On July 19, 2021, Oregon Governor Kate Brown signed into law [Senate Bill 762](#) (SB 762), a wildfire bill that, among other actions, established minimum requirements for utility wildfire protection (or mitigation) plans. The bill required that utilities file inaugural plans no later than December 31, 2021.

In response to the passage of SB 762, the OPUC halted the permanent wildfire rulemaking in AR 638 and opened docket AR 648 to develop interim permanent rules adhering to the requirements and timing of the new law. On September 8, 2022, the OPUC issued Order No. 22-335 in AR 638 finalizing requirements specific to requirements for utility WMPs.

Idaho Power added Appendix C to the WMP to provide Oregon-specific information related to wildfire requirements and recommendations.



# 1. INTRODUCTION

## 1.1. Background

In recent years, the Western United States has experienced an increase in the frequency and intensity of wildland fires (wildfires). A variety of factors have contributed in varying degrees to this trend including climate change, increased human encroachment in wildland areas, historical land management practices, and changes in wildland and forest health, among other factors.

While Idaho Power has not experienced catastrophic wildfires within its service area at the same level experienced in other western states, such as California and more recently certain areas in Oregon, millions of acres of rangeland and southern Idaho forests have burned in the last 30 years.<sup>5</sup> In that same time period, the wildfire season in Idaho has expanded by 70 days.<sup>6</sup> Idaho's wildfire season is defined by Idaho Code § 38-115 as extending from May 10 through October 20 each year, or as otherwise extended by the Director of the Idaho Bureau of Land Management (BLM). Oregon's wildfire season is designated by the State Forester each year pursuant to Oregon Revised Statute § 477.505 and typically begins in June. Idaho Power's operational practices account for the differences between Idaho and Oregon's wildfire seasons and requirements.

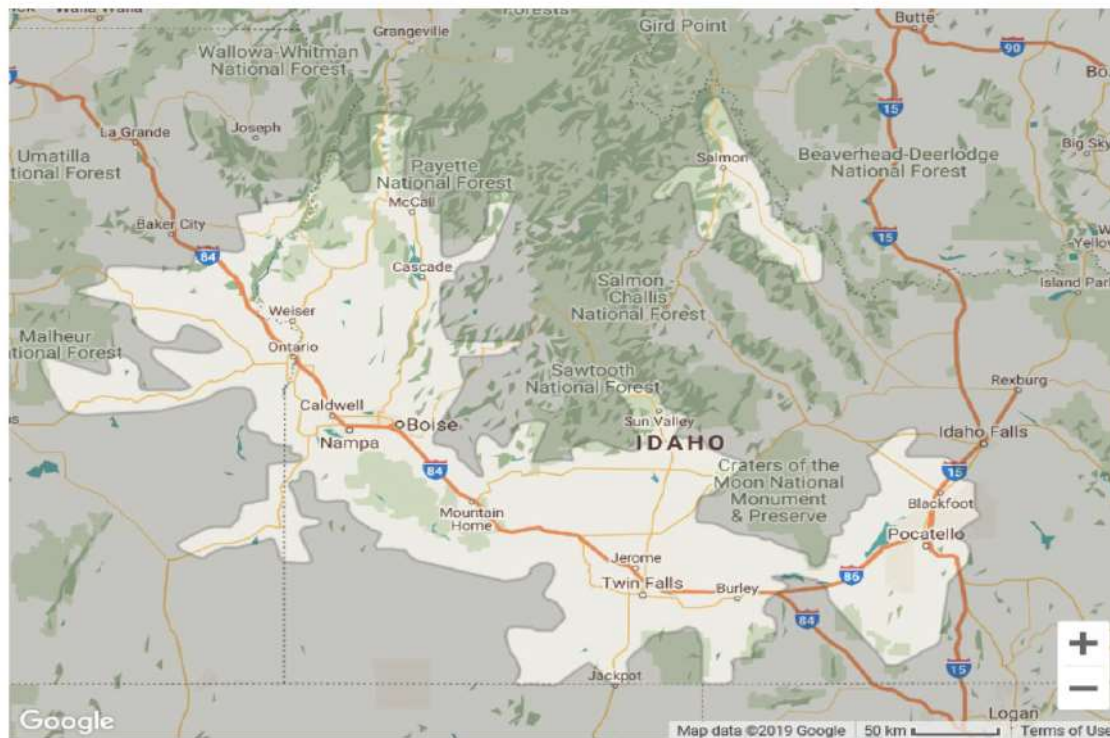
## 1.2. Idaho Power Profile and Service Area

Idaho Power is an investor-owned utility headquartered in Boise, Idaho, engaged in the generation, transmission, and distribution of electricity. Idaho Power is regulated by the Federal Energy Regulatory Commission (FERC) and the state regulatory commissions of Idaho and Oregon. Idaho Power serves approximately 600,000 retail customers throughout a 24,000 square mile area in southern Idaho and eastern Oregon (see Figure 6).

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<sup>5</sup> Rocky Barker, *70% of S. Idaho's Forests Burned in the Last 30 Years. Think That Will Change? Think Again.*, Idaho Statesman, October 4, 2020.

<sup>6</sup> Ibid.



**Figure 6**  
Idaho Power service area

Of Idaho Power's 24,000 square mile service area, approximately 4,745 square miles are located in Oregon and 19,255 in Idaho. Approximately 20,000 customers are served in Oregon and 580,000 in Idaho.

### 1.3. Asset Overview

Idaho Power delivers electricity to its customers via more than 310 substations, 4,800 miles of overhead transmission lines, and 19,300 miles of overhead distribution lines. Table 3 summarizes the overhead powerline asset information by state. Approximately 2,871 pole miles (12%) are in Oregon and 21,042 (87%) are in Idaho.



**Table 3**

Overhead transmission voltage level and approximate line mileage by state (Dec. 31, 2021)

ASSET	TOTAL	IDAHO		OREGON		MONTANA		NEVADA		WYOMING	
	Pole Miles	Pole Miles	%	Pole Miles	%	Pole Miles	%	Pole Miles	%	Pole Miles	%
46 kV Transmission Lines	383	383	100								
69 kV Transmission Lines	1,136	743	65	344	30	50	4				
115 kV Transmission Lines	3			3	100						
138 kV Transmission Lines	1,448	1,242	86	141	10			65	4		
161 kV Transmission Lines	84	84	100								
230 kV Transmission Lines	1,148	927	81	219	19						
345 kV Transmission Lines	473	364	77							110	23
500 kV Transmission Lines	103	53	51	50	49						
Total OH Transmission Lines	4,778	3,796	80	757	16	50	1	65	1	110	2
Total OH Distribution	19,297	17,183	89	2,114	11						
<b>Total OH Pole Miles</b>	<b>24,075</b>	<b>20,979</b>	<b>87</b>	<b>2,871</b>	<b>12</b>	<b>50</b>	<b>0.21</b>	<b>65</b>	<b>0.27</b>	<b>110</b>	<b>0.46</b>

## 1.4. Objectives of this Wildfire Mitigation Plan

The primary objectives of this WMP are to identify and implement strategies to accomplish the following:

1. Reduce wildfire risk associated with Idaho Power's transmission and distribution (T&D) facilities and associated field operations.
2. Improve the resiliency of Idaho Power's T&D system in a wildfire event, independent of the ignition source.
3. Comply with all wildfire mitigation requirements established by its regulators.<sup>7</sup>

Idaho Power's approach to achieving these objectives includes the following actions:

- Engage with government and industry entities and electric utility peers to ensure understanding and commonality of wildfire mitigation plans.
- Utilize a risk-based approach to quantify wildland fire risk that considers *wildfire probability* and *consequence* to identify areas of elevated wildfire risk within Idaho Power's service area. These identified areas are then incorporated in Idaho Power's geographic information system (GIS) mapping.
- Create specific and targeted operations and maintenance practices, system hardening programs, vegetation management, and field personnel practices to mitigate wildfire risk.

<sup>7</sup> The OPUC established docket AR 648, the interim permanent wildfire rulemaking, after the Oregon legislature passed Senate Bill 762. The bill created a requirement for public utilities in Oregon to submit "wildfire protection plans" to the OPUC by December 31, 2021.

- Incorporate information regarding current and forecasted weather and field conditions into operational practices to increase situational awareness.
- Employ public safety power shutoff (PSPS) protocols for Idaho Power's service area and transmission corridors.
- Evaluate the performance and effectiveness of strategies identified in this WMP through metrics and monitoring. The WMP and all its components will be reviewed prior to wildfire season each year.



## 2. GOVERNMENT, INDUSTRY, AND PEER UTILITY ENGAGEMENT

### 2.1. Objective

Idaho Power recognizes the importance of engaging with federal, Idaho and Oregon State governments, and local governments as an integral part of mitigating wildfire risk. Idaho Power also recognizes the importance of engagement and outreach with respect to potential future PSPS events to minimize customer impact.

Idaho Power's wildfire mitigation plan and outage preparedness strategy includes specific activities to engage with key stakeholders to share information, gain feedback, and incorporate lessons learned. Peer utility engagement is crucial to ensure the company's efforts are informed by the best practices of its peers in Idaho and Oregon.

### 2.2. Government Engagement

Much of Idaho Power's service area extends over land managed by the BLM and U.S. Forest Service. Idaho Power engages with both agencies to share information and identify areas and activities that are mutually beneficial. For example, Idaho Power allowed for an extended firebreak along Highway 93 in Jerome County, Idaho, on its property to help with BLM wildfire mitigation initiatives.

Idaho Power is also a member of the Idaho Fire Board, which was initiated by the U.S. Forest Service. Membership is voluntary and currently includes the Forest Service, BLM, Federal Emergency Management Agency (FEMA), Idaho State Lands Department, Idaho Department of Insurance, Idaho Military Division, City of Lewiston, Idaho Power, and The Nature Conservancy in Idaho.

Idaho Power is actively engaged with both the IPUC and the OPUC with respect to wildfire mitigation activities. Idaho Power filed its WMP with the IPUC in 2021 and again in 2022. In Oregon, the company is required to submit an updated WMP by the end of each calendar year. Idaho Power continues to participate in the OPUC's Oregon Wildfire and Electric Collaborative (OWEC) and ongoing rulemaking efforts.

### 2.3. Industry and Peer Utility Engagement

Although Idaho Power relied on plans developed by several California utilities in drafting its own WMP, modifications were made to account for Idaho Power's considerably different risk profile. Additionally, Idaho Power participated in multiple workshops with San Diego Gas and Electric, Southern California Edison, Pacific Gas and Electric, Sacramento Municipal Utility District, and PacifiCorp. The company continues to engage with these utilities to learn about California's evolving practices.

In the Pacific Northwest, many utilities work collaboratively to understand and ensure commonality of their various wildfire mitigation plans, while accounting for the variation in each

utility's unique service area. These utilities include Idaho Power, Avista Utilities, Portland General Electric, Rocky Mountain Power, Pacific Power, Chelan County Public Utility District, Puget Sound Energy, NV Energy, Bonneville Power Administration (BPA), and Northwestern Energy.

Idaho Power is also a member of both the Edison Electric Institute (EEI) and the Western Electric Institute (WEI). The company participated in multiple workshops and conferences with both entities and member utilities to evaluate the strength and effectiveness of Idaho Power's WMP in comparison to other members' plans. Additionally, Idaho Power's CEO and President is an active member of the EEI Electricity Subsector Coordinating Council Wildfire Working Group. This working group has been partnering with the U.S. Department of Energy and other government agencies to collectively minimize wildfire threats and potential impacts.

These workshops continue to prove valuable for sharing wildfire mitigation best practices and discussing new and existing technology related to wildfire mitigation. For example, EEI and WEI workshops, as well as independent investigations, led Idaho Power to expand its use of Unmanned Aircraft Systems ([UAS] also known as drones) during line patrols, replace expulsion fuses with energy limiting fuses, and add mesh wraps to wood poles in wildfire risk zones. Idaho Power has also enlisted a team of employees to focus on wildfire mitigation technologies by identifying opportunities to incorporate new and innovative technologies into Idaho Power's wildfire mitigation efforts.



### 2022 Industry and Peer Utility Engagement

Idaho Power continues to engage with industry groups and peer utilities to gain knowledge of new mitigation activities, industry best practices, and employing technology to reduce wildfire risk. The following summarizes 2022 activities:

- Technology—Held meetings with over 30 vendors and manufacturers to identify new technology and innovations used to mitigate wildfire risk. The findings were used to develop a roadmap and led to the creation of pilot projects in 2022 and 2023.
- Electric Power Research Institute (EPRI)—Engaged with EPRI to learn more about new technology and the attributes of covered conductor, particularly the UV performance and reliability performance.
- Utility Wildfire Symposium—Attended a symposium hosted by EPRI and Portland General Electric focused on new technology, trends, and ways to mature risk modeling.
- NW Wildfire Group—Attended biennial meetings and shared details of Idaho Power's WMP and PSPS plan with attendees including how new technology and innovative materials are being incorporated.
- WEI—Provided a presentation and details of Idaho Power's documented processes and procedures used in PSPS execution and customer notifications.
- WEI Wildfire Planning and Mitigation Virtual Meeting—Attended a two-day conference to gain insight into mitigation activities and strategies other utilities are pursuing.
- International Wildfire Risk Mitigation Consortium—Held meetings throughout the year with program managers and participated in a risk reduction seminar focused on vegetation management.
- Oregon Wildfire Detection Camera Strategy Group—Became a member of a workgroup focused on the interoperability of different camera platforms to improve fire detection, suppression efficiency, and response time. This group has provided valuable information into the benefits that cameras hold for early fire detection and how partnerships can be utilized to expedite the installation.
- Wildfire Technology Webinar—Attended webinar focused on using artificial intelligence (AI) drones for grid inspections, aerial sensors, and cameras to gain situational awareness.
- National Forest Foundation (NFF)—Attended multiple meetings with the NFF and other agencies to learn more about the benefits of fuel treatments and shared stewardship programs and how utilities have participated in other locations. Lessons learned include details of the success achieved in the Upper Arkansas Forest Fund in the State of Colorado.
- British Standards Institute (BSI) —Attended a two-day course taught by BSI to gain knowledge of the International Organization for Standardization (ISO) 31000 risk management framework and how it can be applied to the company's WMP.



### 3. QUANTIFYING WILDLAND FIRE RISK

#### 3.1. Objective

Idaho Power's approach to quantifying wildland fire risk is to identify geographic areas of elevated wildfire risk if a wildfire ignites near a power line. Mitigation actions and programs are prioritized in those areas identified as elevated wildfire risk areas.

#### 3.2. Identifying Areas of Elevated Wildfire Risk

Idaho Power hired an external consultant that specializes in assessing and quantifying the threat of wildfire through a risk-based methodology that leverages weather modeling, wildfire spread modeling, and Monte Carlo simulation. This methodology is not unique to Idaho Power's WMP. The California Public Utilities Commission (CPUC) used the same modeling approach (and in fact, the same consultant) in developing its CPUC Fire Threat Map. In addition, other utilities in Oregon, Idaho, Nevada, and Utah have utilized similar modeling to identify and quantify wildfire risk.

This methodology is consistent with conventional definitions of *risk*, which is usually taken as an event's *probability* multiplied by its potential negative *consequences* or impacts should that event occur. For Idaho Power's wildfire risk assessment, this formula is:

$$\text{Wildfire Risk} = \text{Fire Probability} \times \text{Consequence}$$

The definition of each component is as follows:

Fire Probability. Fire volume (i.e., spatial integral of fire area and flame length) is used as Fire Probability because rapidly spreading fires are more likely to escape initial containment efforts and become extended fires than slowly developing fires. Data inputs used in the fire spread model to determine the fire volume (Fire Probability) include:

- Historical weather (temperature, wind speed/direction, relative humidity)
- Topography
- Fuel types present
- Fuel moisture content (both dead and live fuels)

Consequence. Number of structures (i.e., homes, businesses, other man-made structures) that may be impacted by a wildfire.

Wildfire Risk. Fire Probability multiplied by the Consequence. The highest Wildfire Risk areas are those where both the Fire Probability and Consequence are elevated. Conversely, combinations of low Fire Probability and elevated Consequence, or elevated Fire Probability and low Consequence typically indicate lower Wildfire Risk.



### 3.2.1. Wildfire Risk Modeling Process

The wildfire risk modeling process incorporated the following major steps:

1. A 20-year (2000–2019) fire weather climatology was developed utilizing the Weather Research and Forecasting (WRF) model to recreate historical days of fire weather significance across Idaho Power’s service area. This analysis generated high-resolution hourly gridded fields of relative humidity, temperature, dead fuel moisture, and wind speed/direction that was used as input to a Monte Carlo-based fire modeling analysis.
2. Estimates of seasonal variation in live fuel moisture across Idaho Power’s service area were developed. This was accomplished by analyzing historical fuel measurements and/or weather station observations. This step was necessary because live fuel moisture data is needed for fire spread modeling, but the WRF weather model does not provide live fuel moistures.
3. The federal LANDFIRE program was utilized to provide high-resolution (approximately 100 feet) fuel rasters for use in fire spread modeling.<sup>8</sup>
4. The data developed above (WRF climatology, live fuel moisture, and LANDFIRE data) was used to drive a Monte Carlo<sup>9</sup> fire spread modeling analysis. This Monte Carlo simulation was accomplished by randomly selecting an ignition location and a randomly selected day from the fire weather climatology developed in step 1 above. Ignition locations were limited in the model to be within a two-kilometer buffer surrounding Idaho Power’s overhead T&D lines (i.e., 1 kilometer on either side). The model used equal ignition probability for all overhead distribution and transmission asset types. Urbanized areas having underground circuitry were not included in the model due to a low probability of wildfire associated with underground electrical equipment. Note that transmission lines jointly owned by Idaho Power and PacifiCorp were included in the analysis. Furthermore, the proposed Boardman to Hemingway (B2H) 500 kilovolt (kV) line route was also included in this analysis. For each combination of ignition location and time of ignition, fire progression was then modeled for 6 hours. For each modeled fire, potential fire impacts to structures were quantified using structure data. This was repeated across Idaho Power’s service area for millions of combinations of ignition location and time of ignition.
5. The Monte Carlo results were processed, and GIS based data depicting fine grained wildfire risk was developed. This risk was then visually depicted on GIS based wildfire risk maps.

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<sup>8</sup> Chris Lautenberger, Mapping areas at elevated risk of large-scale structure loss using Monte Carlo simulation and wildland fire modeling. IAFSS 12<sup>th</sup> Symposium 2017.

<sup>9</sup> Ibid.



### 2023 Risk Modeling Update

With the help of our consultant in 2023, Idaho Power will strive to improve risk modeling to better understand wildfire risk and estimations of wildfire consequences along electric lines and equipment. Areas of focus include:

- Incorporate structure density information using 2020 Census data
- Incorporate proposed building developments in or near wildfire risk zones
- Explore new available data to potentially incorporate into wildfire probability and consequence. Examples include:
  - Fire history
  - Land use changes

Additionally, Idaho Power's risk modeling update will include assessing feedback from customers and agencies received throughout the year. Enhancements made will provide more understanding and improved methods to better inform operational decision-making and risk treatments.

Idaho Power's broader risk framework is discussed in Section 4.

### 3.2.2. Wildfire Risk Areas

Based on the previously described modeling, draft risk tiers were generated algorithmically<sup>10</sup> by an automated process. Tiers were established which, if exceeded, would classify an area as Tier 2 (elevated risk) or Tier 3 (high risk). To aid in customer and public understanding, Idaho Power also color-coded the tiers to reflect relative risk—Yellow Risk Zones (YRZ) for Tier 2 and Red Risk Zones (RRZ) for Tier 3. This was accomplished by manually setting threshold values at naturally occurring breaks. Idaho Power held several public workshops wherein tiers were reviewed and adjusted based upon consideration of local and institutional knowledge and potential impacts to communities. This was a similar approach taken by the California Public Utilities Commission in developing a state wildfire risk map. Consequently, the resulting risk tiers reflect risk relative to Idaho Power's service area only and not absolute risk. As set forth later in this plan, Idaho Power's risk profile is significantly lower than utilities serving California.

An integral part of the consultant's mapping process involved reviewing the tiers and making necessary adjustments to account for unique aspects of certain areas, including factors that may increase or decrease risk, which would not be accounted for in the computer modeling. Several factors were considered, including the following:

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<sup>10</sup> Ibid.



- Topography and resistance to fire control
- Means of ingress and egress
- Presence/absence of defensible space
- Vulnerable populations
- Cell phone coverage
- Non-burnable land cover such as built-up urban areas

This review helped define overall tier boundaries and, in some cases, expanded Tier 3 areas or moved certain Tier 2 areas into Tier 3. For example, the Charlotte fire was a human-caused fire that occurred in Pocatello in 2012 and burned more than 1,000 acres and destroyed 66 homes and 29 outbuildings. It was a difficult fire to control and highlighted the dangers of juniper trees intermixed within the wildland urban interface (WUI). Local knowledge of this event was used to expand outlying Tier 2 areas in the vicinity of the Charlotte fire into Tier 3. As part of integrating the ISO 31000 risk management processes into the WMP, Idaho Power plans to review tier levels and boundaries as part of continuous improvement and maturing our risk modeling methods.

Table 4 provides a breakdown of pole miles in risk zones on a system-wide basis and by state. Across Idaho Power's service area, 8% of pole miles exist in elevated risk zones (either RRZs or YRZs). In Idaho, 5% of pole miles exist in YRZs and 3% exist in RRZs. In Oregon, less than 1% of pole miles exist in YRZs. The company has no RRZs in Oregon.

**Table 4**

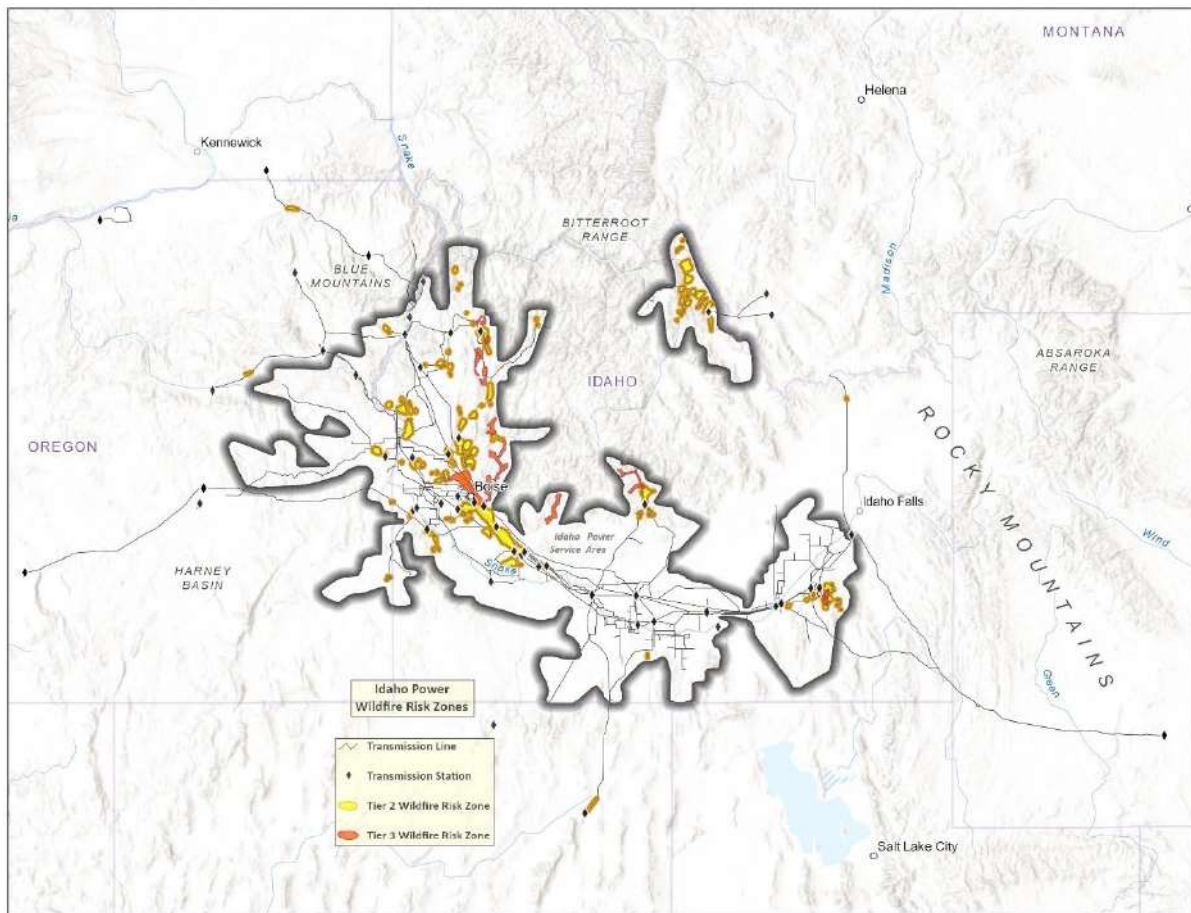
Idaho Power's transmission and distribution lines by risk zone in Idaho and Oregon\*

Asset	Total Pole Miles	Total Pole Miles within Wildfire		Wildfire Risk Zone by State											
		Pole Miles	%	Tier 2 - Idaho		Tier 3 - Idaho		Tier 2 - Oregon		Tier 3 - Oregon		Tier 2 - Nevada		Tier 3 - Nevada	
				Pole Miles	%	Pole Miles	%	Pole Miles	%	Pole Miles	%	Pole Miles	%	Pole Miles	%
Transmission Lines	4,778	517	11%	376	8%	110	2%	20	0.42%	0	0%	11	0.23%	0	0%
Distribution Lines	19,297	1,447	7%	837	4%	581	3%	29	0.15%	0	0%	0	0%	0	0%
Total Pole Miles	24,075	1,964	8%	1,213	5%	691	3%	49	0.20%	0	0%	11	0.05%	0	0%

\*Geospatial analysis was performed in 2022 to reconfirm the pole miles in wildfire risk zones.

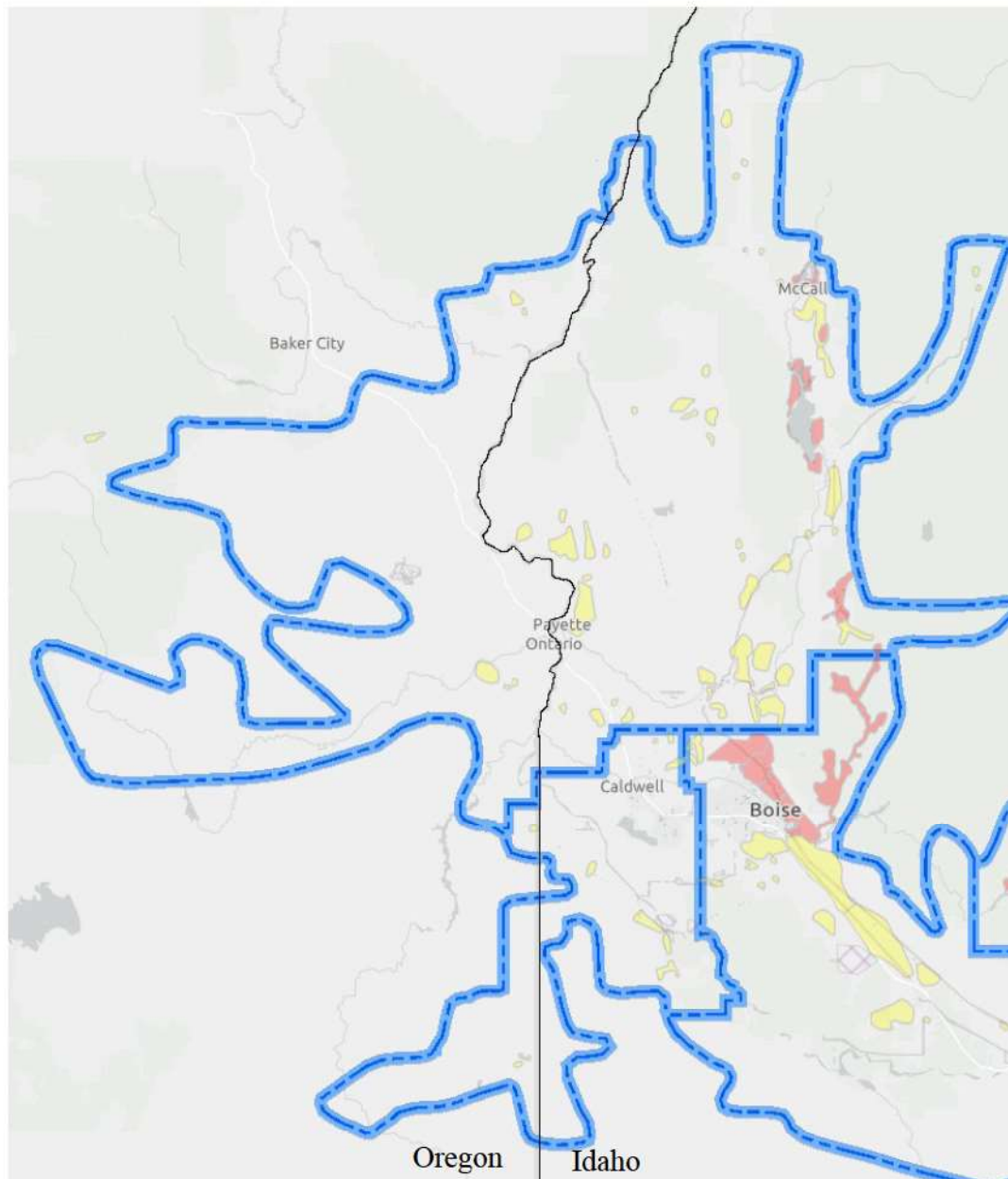
The final two-tier risk map reflecting relative increased risk in YRZs and RRZ is shown in Figure 7. The map is the foundation of Idaho Power's wildfire mitigation and risk reduction strategies. It is used to determine and prioritize targeted investments, inspection activities, and increase situational awareness for field personnel.

The [risk zone map](#) can be viewed in detail on Idaho Power's website. Individual addresses can be entered on the map to determine proximity to identified risk zones.



**Figure 7**  
Wildfire Mitigation Plan—Risk Map

Additionally, Figures 8 through 11 delineate risk zones in Idaho and Oregon.



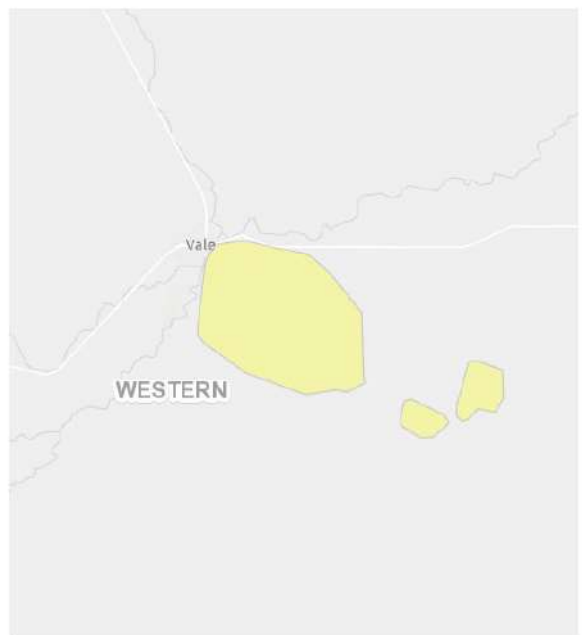
**Figure 8**  
Wildfire Risk Map—western Idaho and eastern Oregon



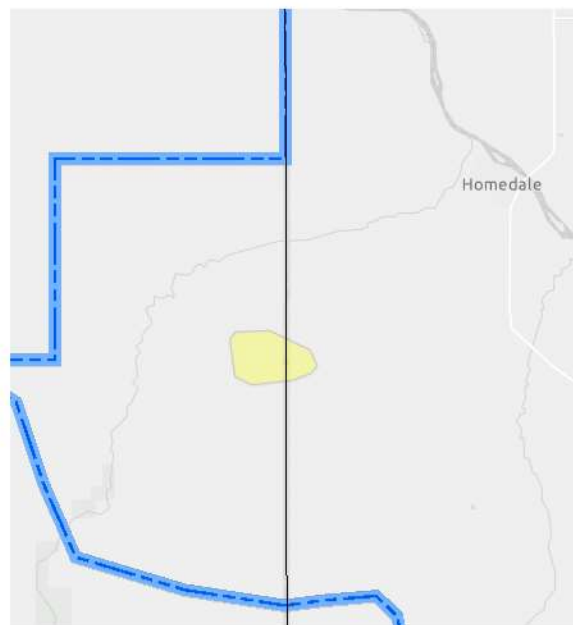
Halfway



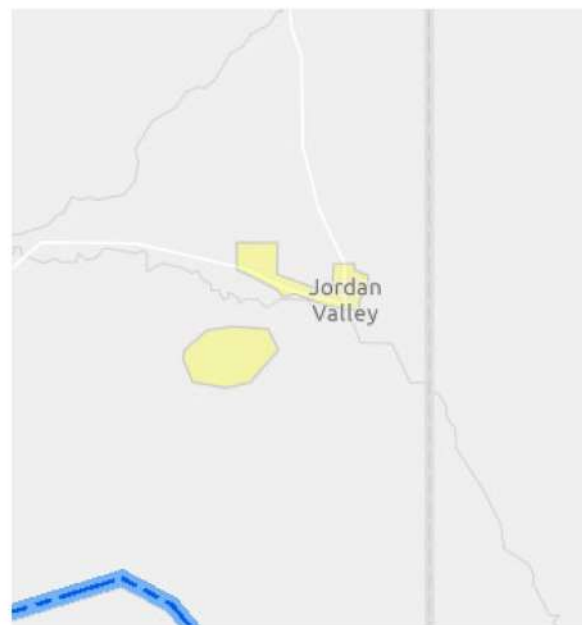
Vale



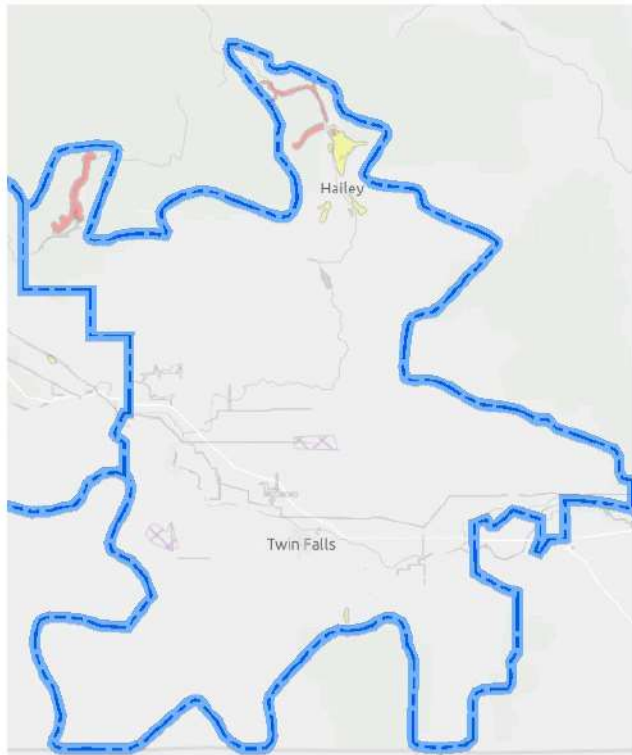
Idaho-Oregon Boarder



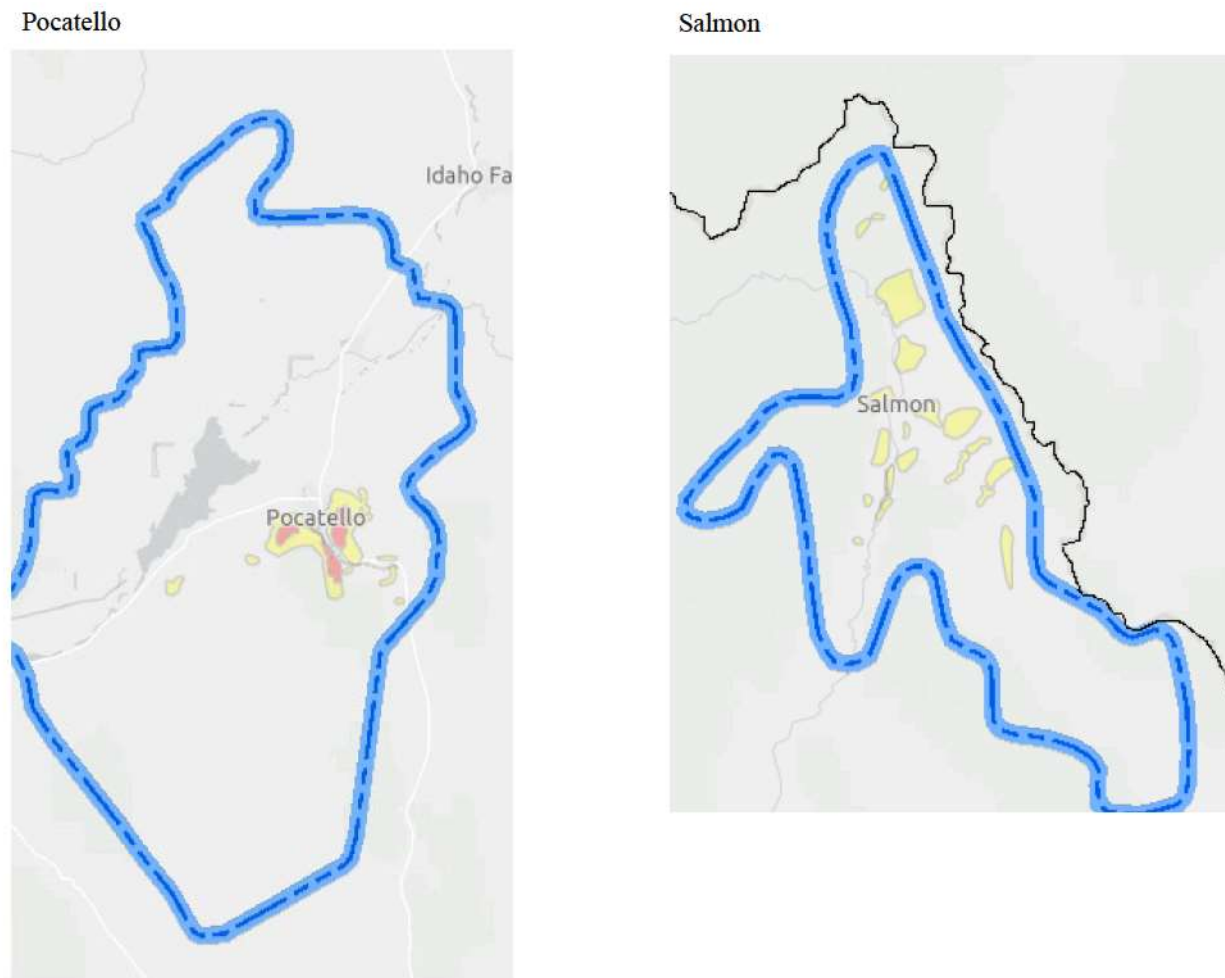
Jordan Valley



**Figure 9**  
Oregon-specific zones



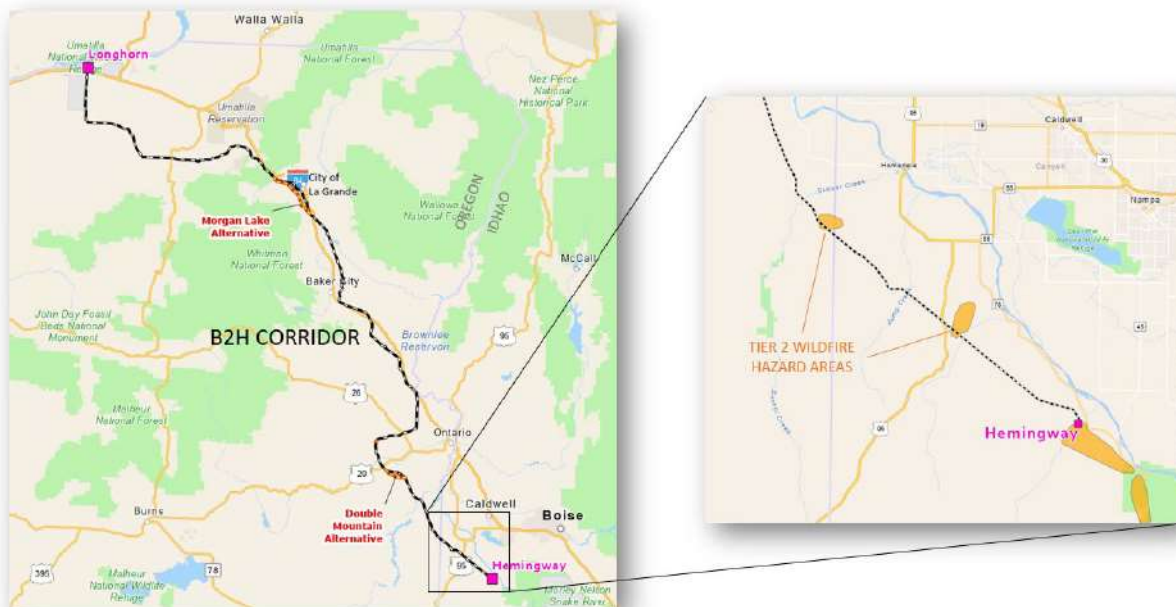
**Figure 10**  
Wildfire Risk Map—southern Idaho



**Figure 11**  
Wildfire Risk Map—eastern Idaho

### 3.2.2.1. Boardman to Hemingway Proposed Transmission Line

Idaho Power specifically considered the proposed route of the B2H 500 kV transmission line as part of the WMP. The proposed B2H route was included in the wildfire risk assessment and associated map analysis (see Figure 3). Two locations are identified along the route as having increased wildfire risk (YRZs), and there were no areas of higher risk (RRZs). Although the B2H transmission line has not been constructed as of the publication of this 2023 WMP, Idaho Power intends this WMP (as it will be reviewed annually) will apply to B2H. Additionally, Idaho Power will continue to update its fire risk mapping periodically and address the locations with elevated risk consistent with the mitigation strategy for transmission lines as described in sections 5–9 of this WMP.



**Figure 12**  
B2H proposed route risk zones



## 4. COSTS AND BENEFITS OF WILDFIRE MITIGATION

### 4.1. Objective

This section details Idaho Power's assessment of high-level risk with respect to undertaking wildfire mitigation activities. This assessment provides a framework for understanding the potential consequences of wildfire damage and the possibility of diminishing those consequences through targeted mitigation activities.

To that end, Section 4.3 identifies selected mitigation activities and the estimated costs of those activities on a system level. In Section 4.4, each mitigation activity is discussed in detail, with an assessment of why it was selected, what alternatives (if any) may be available, and any additional benefits (referred to as "co-benefits") the company believes may result from pursuing it.

### 4.2. Risk-Based Cost and Benefit Analysis of Wildfire Mitigation

In assessing the probability and consequence of wildfire risk, and to identify benefits of various wildfire mitigation efforts, Idaho Power engaged with its external consultant and considered several sources of empirical data on the costs of major wildfires—both in terms of fires that burn into Idaho Power's facilities or that originate from electric infrastructure. These costs can include replacement costs of the company's property; the cost of fire suppression and environmental damage; third-party claims for property damage; employee and public injuries and fatalities; and other economic losses.

Through its research, Idaho Power found that obtaining a precise calculation of the potential costs of future wildfires is not realistic. The damage that any fire may cause depends on factors such as wind and weather, vegetation, fire risk levels, location, and population and structure density.

Idaho Power's assessment of the potential costs of wildfires—used in developing the WMP and the scope of proposed updates to practices—involved a review of prior major fires in other states, as well as calculations by other western utilities. While this assessment did not yield a precise quantification of potential benefits specific to Idaho Power, it provides a helpful illustration of the potential costs of not taking actions aimed at reducing wildfire risk.

Idaho Power reviewed and considered calculations analyzing the potential reduction in probability of igniting wildfires based on risk-mitigating activities. For instance, in a June 2020 filing before the IPUC, Avista Corporation (Avista) stated that its "analysis indicates a 10-year inherent potential risk exposure of at least \$8 billion dollars," though noted the figure should not



be interpreted as a precise financial estimate.<sup>11</sup> Avista further noted that the actions it proposes in its own wildfire resiliency plan result in an average percentage of risk mitigation of 89% for the overall plan.<sup>12</sup>

In California, costs and damages associated with wildfires in recent years have exceeded \$10 billion per year, with those associated with the 2020 fires alone potentially set to exceed \$20 billion.<sup>13</sup> This increase<sup>14</sup> is consistent with the fact that, with few exceptions, the prevalence, intensity, and impact of wildfires continues to escalate year after year as evidenced by information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) and detailed in Table 5.

**Table 5**  
CAL FIRE wildfire data by year

Year	Estimated Acres Burned	No. of Wildfires	No. of Confirmed Fatalities	No. of Structures Damaged or Destroyed
2020	4,197,628	9,279	31	10,488
2019	259,823	7,860	3	732
2018	1,975,086	7,948	100	24,226
2017	1,548,429	9,270	47	10,280
2016	669,534	6,954	6	1,274

The data compiled by peer utilities, historic fire costs, and known damage from prior fires are instructive. Considering peer metrics and analyses on probability and magnitude, as well as Idaho Power's own empirical review of wildfire events such as those in California and Oregon—and the resulting loss of lives—it is reasonable to conclude that the potential human and capital costs and damage from wildfire events vastly exceed any incremental costs of wildfire mitigation efforts identified in this WMP.

<sup>11</sup> *In the Matter of Avista Corporation's Application for an Order Authorizing Accounting and Ratemaking Treatment of Costs Associated with the Company's Wildfire Resiliency Plan*, Case No. AVU-E-20-05, Application at 17.

<sup>12</sup> *Ibid.*

<sup>13</sup> Jill Cowan, *How Much Will the Wildfires Cost?*, The New York Times, Sept. 16, 2020, at <https://www.nytimes.com/2020/09/16/us/california-fires-cost.html>.

<sup>14</sup> Idaho Power believes that its system is in notably better condition than some utilities in California. Nevertheless, these figures illustrate the destruction that can occur from vegetation contact if vegetation is not actively managed.



### 2023 Wildfire Mitigation Analysis Framework

In 2022, Idaho Power reviewed the risk management process used in developing previous versions of the WMP. The review consisted of reexamining existing risk management practices, specifically how risk is analyzed, evaluated, treated, and continuous improvement is applied. We also benchmarked against other western utilities' risk management approaches and consulted with risk management professionals, both internal and external to Idaho Power.

A formalized risk management process will provide greater structure and consistency in decision making, continuous improvement, and maturing our analytical approach to balancing costs and mitigation benefits. As part of this work, the company determined that the international standard ISO 31000 is widely used by other utilities as a guide or foundation for their WMPs and was recommended to be incorporated by risk management professionals. The ISO 31000 is one of several guides to effective risk management and much of the processes used to create previous versions of the WMP align with the recommended practices found in the standard.

However, the ISO 31000 provides a more comprehensive approach to risk management than what was being employed prior and will be integrated into the plan in 2023. This effort will start by performing the following:

- Engage Idaho Power stakeholders to participate in risk review processes and activities with the goal that all employees become managers of risk
- Develop a comprehensive picture of all risk management activities associated with the WMP and how they compare to the ISO 31000
- Determine how the ISO 31000 principles can be applied, achieved, measured, and tracked
- Develop a framework based on the ISO 31000 that provides a structured and effective approach to managing wildfire-related risk and includes a process of reviewing and maturing the methods used for risk identification, analysis, evaluation, and treatment

## 4.3. Wildfire Mitigation Cost Summary

From 2022–2025, Idaho Power estimates investing \$46.8 million in incremental operations and maintenance (O&M) expenses to further wildfire mitigation measures. The following table summarizes the company's planned expenditures associated with executing its WMP through 2025. Estimated amounts reflect the company's best estimates and plans as of the 2022 WMP. These estimates will likely change in the future as the company reviews and refines its WMP and associated mitigation activities. For the 2022 WMP, each wildfire mitigation category—and associated estimated expenditures in Oregon and Idaho—is discussed in Section 4.4.

**Table 6**Estimated system-wide incremental O&M expenses for wildfire mitigation, \$000s (2023–2025)<sup>15</sup>

	2023	2024	2025	Idaho Power System Total 2023 - 2025
<b>A. Quantifying Wildland Fire Risk</b>				
Risk Map Updates	\$ 67	\$ -	\$ 69	\$ 136
<b>B. Situational Awareness</b>				
Weather Forecasting - System development and support	\$ 47	\$ 74	\$ 74	\$ 195
Weather Forecasting Personnel - Fire Potential Index (FPI) and Public Safety Power Shutoff (PSPS)	\$ 178	\$ 99	\$ 102	\$ 379
Weather Forecasting - Weather Station Maintenance	\$ 19	\$ 24	\$ 30	\$ 73
Pole Loading Modeling & Assessment (Contract service)	\$ 75	\$ 75	\$ 75	\$ 225
Cameras	\$ 165	\$ 220	\$ 220	\$ 605
<b>C. Mitigation - Field Personnel Practices</b>				
Tools/Equipment	\$ 5	\$ 5	\$ 5	\$ 15
Mobile Weather Kits for Field Observers	\$ 10	\$ -	\$ -	\$ 10
International Wildfire Risk Mitigation Consortium	\$ 40	\$ 40	\$ 40	\$ 120
<b>D. Mitigation - Transmission &amp; Distribution Programs</b>				
O&M Component of Capital Work	\$ 61	\$ 60	\$ 54	\$ 175
Annual O&M T&D Patrol Maintenance Repairs	\$ 50	\$ 50	\$ 50	\$ 150
Environmental Management Practices	\$ 25	\$ 25	\$ 25	\$ 75
Transmission Thermography Inspection Mitigation - Red Risk Zone	\$ 20	\$ 20	\$ 20	\$ 60
Distribution Thermography Inspection Mitigation - Red Risk Zone	\$ 30	\$ 30	\$ 30	\$ 90
Thermography Technician Personnel	\$ 160	\$ 165	\$ 170	\$ 495
Transmission Wood Pole Fire Resistant Wraps - Red Risk Zone	\$ 88	\$ -	\$ -	\$ 88
Transmission Wood Pole Fire Resistant Wraps - Yellow Risk Zone	\$ 163	\$ 163	\$ 163	\$ 489
Wildfire Mitigation Program Manager	\$ 191	\$ 196	\$ 202	\$ 589
Covered Wire Evaluation - Pilot Program in PSPS Zones	\$ 50	\$ 50	\$ -	\$ 100
<b>E. Vegetation Management</b>				
Transition to/Maintain 3-year Vegetation Management Cycle	\$ 11,196	\$ 13,347	\$ 12,172	\$ 36,715
Enhanced Practices for Distribution Red & Yellow Risk Zones (Pre-Fire Season Patrols/Mitigation, Pole Clearing, Removals, Work QA)	\$ 1,284	\$ 1,349	\$ 1,416	\$ 4,049
Line Clearing Personnel	\$ 159	\$ 164	\$ 169	\$ 492
Fuel Reduction Program	\$ 75	\$ 75	\$ 75	\$ 225
Vegetation Mgmt Satellite and Aerial patrols	\$ 150	\$ 300	\$ 300	\$ 750
<b>F. Communications</b>				
Wildfire/Wildfire Mitigation Education/Communication - Advertisements, Bill Inserts, Meetings, Other	\$ 100	\$ 100	\$ 100	\$ 300
PSPS Customer Education/Communication - Advertisements, Bill Inserts, Other	\$ 71	\$ 71	\$ 71	\$ 213
<b>G. Information Technology</b>				
Communication/Alert Tool for PSPS Customer Alerts/Extended Use	\$ 129	\$ 129	\$ 129	\$ 387
<b>Forecast Incremental O&amp;M Expenditures Total</b>	<b>\$ 14,608</b>	<b>\$ 16,831</b>	<b>\$ 15,761</b>	<b>\$ 47,200</b>

<sup>15</sup> As of December 29, 2022.



## 4.4. Mitigation Activities

Idaho Power selected individual wildfire risk mitigation activities based on a variety of factors, including assessment of industry best practices in wildfire mitigation; discussions with peer utilities; consultation with government entities and agencies; and with consideration of alternatives that could be pursued.

Below is a narrative of each mitigation activity, its purpose, estimated near-term cost, potential co-benefits of the activity to Idaho Power and its customers, and potential alternatives.

With respect to Idaho and Oregon cost estimates, the estimated costs identified below are grounded in cost assignment between the company's Idaho and Oregon service areas and further informed by anticipated work in the two service areas.

### 4.4.1. Quantifying Wildland Fire Risk

*Idaho Power's assessment of wildland fire risk is discussed in Section 3 of this WMP.*

The first step in developing Idaho Power's WMP was to conduct a comprehensive assessment of the company's service area and transmission corridors. The company worked with Reax Engineering, a consulting firm that specializes in wildfire risk modeling and fire science, to conduct Idaho Power's wildfire risk analysis. The company determined that hiring an external consultant was beneficial for two reasons: (1) an external consultant was more cost effective than hiring additional resources within Idaho Power to perform the modeling, and (2) an outside consultant helped ensure Idaho Power's risk analysis approach was similar to its peer utilities.

An additional co-benefit of hiring an external consultant is aligning risk analysis with other utilities' practices to create a basis for comparison of risk and also a standard terminology and methodology in discussing risk. Idaho Power deemed Reax Engineering a qualified consultant to perform wildfire risk analysis based on the work it performed for the CPUC in developing the CPUC Fire Threat Map. Other utilities in Oregon, Idaho, Nevada, and Utah have utilized similar modeling approaches to identify and quantify wildfire risk.

*Cost Estimate for Quantifying Wildland Fire Risk (2023–2025)*

Idaho Power intends to re-evaluate its risk analysis using an external consultant on two more occasions between 2023 and 2025. Idaho Power estimates system-wide expenditure for these services to be approximately is \$136,000.

### 4.4.2. Situational Awareness—Weather Forecasting Activities and Personnel

*Idaho Power discusses specific situational awareness practices in Section 5 of this WMP.*

In developing the WMP, Idaho Power created a new Fire Potential Index (FPI) tool to support operational decision-making to reduce wildfire threats and risks. The tool takes data on weather,



prevalence of fuel (i.e., trees, shrubs, grasses), and topography, and converts that data into an easily understood forecast of the short-term fire threat for different geographic regions in Idaho Power's service area. Additionally, Idaho Power plans to continue to enhance meteorological and weather forecasting capabilities to further improve FPI forecasting and help determine when a Public Safety Power Shutoff may be necessary in Idaho Power's service area.

The benefits of developing the FPI and enhancing the company's meteorological forecasting capabilities is greater situational awareness of Idaho Power's system during critical peak summer months. To continue to generate useful information and system benefits, Idaho Power's situational awareness activities will be evaluated and updated annually as necessary to support the company's wildfire preparedness.

The company considers the FPI and related efforts an essential part of reducing the risk of ignition from work activities. This provides Idaho Power field personnel would not have a tool to assess the fire potential on a consistent basis. Given the distinct benefits that result from the FPI and enhanced forecasting capabilities, Idaho Power did not consider alternatives to the development of these critical tools.

*Cost Estimate for Situational Awareness—Weather Forecasting Activities and Personnel (2023–2025)*

The estimated expenditure for weather forecasting activities (weather forecasting tools, system development, weather station maintenance, and personnel) is \$647,000 between 2023 and 2025.

#### **4.4.3. Situational Awareness—Advanced Technologies**

Beginning in 2022, Idaho Power created a Technology Strategy Initiative team aimed at determining how new technologies and innovative practices can be incorporated into the company's wildfire mitigation practices to further decrease wildfire risk. Technology-based practices being considered include—amongst others—strategic use of cameras, satellite, and aerial imagery to detect vegetation hazards, pole loading modeling (to assess the structural integrity of poles), as well as covered conductors. With regard to cameras, the company is evaluating a pilot to test placement of cameras in strategic, high-risk locations to enhance situational awareness. Additionally, the company is learning more about artificial intelligence and how it can be leveraged to detect wildfire ignitions. Multiple camera and analytics companies are being considered to determine potential cost-effective solution(s). The company is also working with local agencies to explore the possibility of partnering on the installation and ongoing use of cameras which may lead to reduced cost.

*Cost Estimate for Situational Awareness—Pole Loading Modeling and Assessment (2023–2025)*

The estimated system-wide expenditure to conduct pole loading modeling and assessment, which includes LIDAR assessment, is \$225,000 for 2023 through 2025. Idaho Power plans to conduct the assessment in its highest risk zones, which are located exclusively in Idaho, as detailed in Table 4.



*Cost Estimate for Situational Awareness—Cameras (2023–2025)*

The estimated system-wide expenditure for the pilot evaluation installation of cameras in high-risk areas is \$605,000 from 2023 through 2025. Idaho Power plans to prioritize the use of cameras in its highest risk zones, which are located exclusively in Idaho as detailed in Table 4.

**4.4.4. Field Personnel Practices**

*Idaho Power discusses its field personnel practices in Section 6 of this WMP.*

Idaho Power’s wildfire mitigation strategy includes procedural measures to reduce potential ignition and spread of wildfires. Idaho Power developed a *Wildland Fire Preparedness and Prevention Plan* (included as Appendix A to this WMP) to provide guidance to Idaho Power employees and contractors. The plan includes information regarding fire season tools and equipment available on the job site; daily situational awareness relative to areas with heightened fire conditions; expected actions and mechanisms for reducing on-the-job wildfire risk as well as reporting requirements in the event of an ignition; and training and compliance requirements.

All Idaho Power crews, and certain field personnel and contractors performing work on or near Idaho Power’s facilities are required to operate in accordance with the provisions of the *Wildland Fire Preparedness and Prevention Plan* and expected to conduct themselves in a fire-safe manner. They should be prepared for wildfire by carrying specific tools, including but not limited to, shovels, Pulaskis,<sup>16</sup> and water for initial suppression. Additionally, Idaho Power’s PSPS program (included as Appendix B to this WMP) includes employees acting as Field Observers to report on site conditions as part of the de-energization process. Field Observers are equipped with mobile weather kits that include wind meters, compasses, and satellite communication devices to report real-time conditions.

The preparedness of Idaho Power crews and contractors is critical to comprehensive wildfire risk reduction practices. The incremental investment in field personnel equipment is focused on additional tools carried by employees working in elevated risk zones. Additionally, Idaho Power will join the International Wildfire Risk Mitigation Consortium (IWRMC), a group whose mission is to share lessons learned, best practices, and innovation in the area of wildfire mitigation. Many of Idaho Power’s utility peers are part of the consortium. The company is not aware of any other effort or group that provides a similar level of access or insight into global thinking and advancements in wildfire mitigation as the IWRMC.

*Cost Estimate for Field Personnel Equipment (2022–2025)*

The estimated system-wide expenditure for field personnel equipment (tools, mobile weather kits, and participation in the IWRMC) is \$145,000 between 2023 and 2025.

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<sup>16</sup> A Pulaski is a hand tool specifically used for fighting fires that combines an axe and an adze atop a single handle. The tool is the invention of Edward Crockett Pulaski, a ranger with the U.S. Forest Service who was based in Wallace, Idaho, in the early 1900s.



#### **4.4.5. Transmission and Distribution (T&D) Programs for Wildfire Mitigation**

*Idaho Power's T&D-related wildfire mitigation activities primarily involve expanded asset management programs and system hardening efforts, discussed in detail in Section 8.2 of this WMP. The narratives below provide insight into Idaho Power's consideration and selection of certain mitigation and hardening practices.*

##### **4.4.5.1. Annual T&D Patrol, Maintenance, and Repairs**

Visual inspections are a critical component of T&D line-related wildfire mitigation efforts. On an annual basis, Idaho Power uses helicopters for visual aerial inspection of transmission lines that are Western Electricity Coordinating Council (WECC) path lines. Under the WMP, Idaho Power will continue to use this method of line inspection for all transmission lines located in Red Risk Zones. Idaho Power strives to complete these inspections prior to the start of the wildfire season; however, spring weather and snow levels may create access issues and delay the completion until June 15 in some areas.

Distribution lines that are located within RRZs are inspected on an annual basis to identify 'Priority 1' defects, or conditions that may result in an outage or potential ignition. The patrols will be completed by personnel that have been trained in distribution line inspection procedures and have experience in distribution line construction. Targeted defects may include cracked/broken crossarms, avian nesting hazards, damaged equipment and hardware, floating conductors, NESC violations, and other obvious defects that pose an immediate threat to the continued operation of the line. Similar to visual inspections for transmission lines, Idaho Power will strive to complete distribution inspections prior to the start of each wildfire season; however, access issues may delay the completion until June 15 in some areas.

Helicopters are not practical for carrying out all distribution patrols due to greater population, structural, and vegetation density, so unmanned aerial vehicles (UAV) with high-definition cameras are used to aid in these inspections in certain situations. These inspections allow personnel to look for potential line defects that may not be obvious from the ground. Priority 1 defects are immediately reported and repaired as soon as possible.

The company will continue to explore the expanded use of UAVs, as the detailed images and data collected through high-resolution aerial inspections can provide several co-benefits, including more granular data on vegetation growth and line and facility conditions.

##### *Cost Estimate for Annual T&D Patrol, Maintenance, and Repairs (2023–2025)*

The estimated system-wide incremental expenditure for annual T&D patrols, maintenance, and repairs is \$150,000 from 2023 to 2025.

##### **4.4.5.2. Thermography Inspections**

While Idaho Power periodically conducts infrared thermography inspections as part of reliability and maintenance programs, the company is expanding these inspections in Red Risk Zones on an



annual basis. These inspections are conducted using hand-held and drone-mounted cameras with thermal-sensing technology and can help identify defects associated with the overheating of equipment, connections, splices, or conductors.

As part of the thermography inspections, temperature gradients are analyzed to detect potential problems and issues found are prioritized based on their severity and repaired. Idaho Power recently created a new Thermography Technician position to carry out the inspections and coordinate repair activities, and additional resources may be added to perform this function across more of Idaho Power's service area if a single technician proves insufficient. To prioritize the use and information gained from this technology, it will initially be employed only in RRZs. 2022 is the test year to determine how many inspections can be performed, and the overall cost-benefit of the technology to help evaluate the possibility of expanding use and adding more resources.

Thermography inspections are uniquely valuable in that they are able to uncover problems undetectable to the naked eye. From the company's perspective, there is not a viable alternative to this practice. The technology enables more proactive identification of potential issues than would otherwise be possible.

#### *Cost Estimate for Thermography Inspections (2023–2025)*

The estimated expenditure for thermography inspections is \$645,000 from 2023 to 2025. Idaho Power will prioritize the use of this mitigation practice in its highest risk zones, which are exclusively in Idaho, as detailed in Table 4.

#### **4.4.5.3. Wood Pole Fire-Resistant Wraps**

To help improve the resiliency of the company's wood transmission poles, Idaho Power now wraps them with a fire-resistant mesh in Red and Yellow Risk Zones. The mesh wrap helps protect the integrity of the pole if it is exposed to fire and improves the resiliency of Idaho Power's transmission system. An alternative to installing fire-proof mesh wrap is to replace wood poles with structures made of non-combustible material, such as steel. With 3,863 existing wood transmission poles in Idaho Power's Red and Yellow Risk Zones, the cost of replacing all wood poles is much higher than the cost of covering with a fire-resistant mesh.

Prior to developing the WMP, Idaho Power evaluated different products to determine the most cost-effective approach for protecting existing wood poles from fire. Several products were considered and trialed, including short-term spray-on and paint-on fire retardants, long-term retardants, and steel wraps. In 2020, the company evaluated a protective mesh wrap and compared the cost and performance to the alternatives. The evaluation found that the mesh wrap was approximately 53% less costly than the alternatives and offered the same level of risk reduction. The decision to use a mesh wrap product was not based solely on cost; other criteria were considered, including availability of the product, ease of installation, expected protective life span, and performance when exposed to fire. By all these measures, fire-resistant mesh was the best solution.



*Cost Estimate for Wood Pole Fire-Resistant Wraps (2023–2025)*

The estimated system-wide expenditure for applying fire-resistant mesh wraps to transmission poles in Red and Yellow Risk Zones is \$577,000 between 2023 and 2025.

**4.4.5.4. Covered Conductor Pilot**

Idaho Power's Technology Strategy Initiative identified covered conductor as a potential mitigation measure to pilot. Benchmarking and feedback from other utilities highlighted the potential benefit of covered conductor as a mitigation measure. The company will conduct a pilot of covered conductor through 2024 to explore the benefits, tooling requirements for field personnel, and design parameters. While covered conductor may reduce the risk of wildfire, the company will analyze potential co-benefits, including improved reliability outside of wildfire season and reduced outage restoration costs.

*Cost Estimate for the Covered Conductor Pilot (2023–2024)*

The estimated cost of the pilot is \$100,000 from 2023–2024. While this pilot will take place in Idaho, the lessons from it will extend across the company's service area.

**4.4.6. Enhanced Vegetation Management**

*Idaho Power's enhanced vegetation management practices are discussed in detail in Section 8.3 of this WMP.*

In the initial stage of developing its WMP, Idaho Power conducted an analysis to determine the most likely sources of ignition across the company's service area. Reliability data revealed vegetation contact as one of the most common causes of outages on Idaho Power's system. With the goal of eliminating potential ignition sources and to reduce risk, enhanced vegetation management was recognized as a critical aspect of Idaho Power's WMP.

To prioritize risk reduction from vegetation contact, Idaho Power determined it would move to a three-year pruning cycle and apply enhanced vegetation management practices in Red and Yellow Risk Zones. These enhanced practices include pre-fire season vegetation patrols, more targeted pole clearing and vegetation removal, and additional quality assurance for vegetation management practices.

The company considered other vegetation management alternatives, including shorter trimming cycles, longer trimming cycles, and strategies that evaluate each tree individually and only trim it once it has nearly grown back to the power line (known as "just-in-time trimming"). Each alternative presented challenges or resulted in negative impacts that undermined any potential benefits.

While shorter trimming cycles result in less vegetation being removed during each trimming cycle, this practice costs more due to the need for more resources and more frequent trimming of trees near the power lines. In contrast, longer cycles result in less frequent trimming of each tree but larger amounts of vegetation that must be removed to maintain larger clearance



envelopes around the power lines to accommodate additional years of vegetative growth. Further, longer trimming cycles create logistical challenges that are exacerbated by tree biology. Some trees simply grow faster than a given trimming cycle and the longer the trimming cycle, the more pervasive this issue becomes. Longer cycles that call for heavy pruning also lead to hormonal imbalances between a tree's canopy and its root system. To correct this imbalance, the tree aggressively re-grows new sprouts to quickly replace its lost canopy. In this regard, heavier pruning results in a faster rate of tree regrowth than normal, making it even more difficult to consistently maintain longer trimming cycles. Finally, "just-in-time trimming" is primarily a reactive strategy that ultimately leads to challenges associated with securing qualified tree-trimming crews, as this ad hoc approach involves hiring crews on an as-needed basis rather than on a consistent schedule. After evaluating these alternative approaches, Idaho Power concluded that the goal of maintaining a consistent three-year trimming cycle is the most cost-effective and sustainable strategy to keep vegetation away from the power lines in a proactive manner.

Moving forward with a three-year cycle and performing the additional activities detailed above will involve a sizeable increase in incremental O&M expenditure. An alternative to enhancing Idaho Power's vegetation management program is to convert overhead distribution circuits to underground. While undergrounding is used in certain circumstances, undergrounding has generally not been determined to be a cost-effective expense relative to enhanced vegetation management. That said, the company continues to evaluate and implement underground solutions, as appropriate, as part of its WMP hardening efforts detailed below.

Although vegetation management is a sizeable increased wildfire mitigation expense, performing this work is expected to have notable co-benefits, including reduced vegetation-caused outages in Red and Yellow Risk Zones. Idaho Power plans to monitor performance and outage metrics to confirm the success of the enhanced program.

Decreasing vegetation outages was considered one of the most important, cost-effective measures Idaho Power could take to reduce the likelihood of an ignition event and protect utility infrastructure. Shifting vegetation management practices was deemed a prudent course of action based on the number of potential outages or ignition sources that may be eliminated. It is also the approach that has been adopted by many of Idaho Power's peer utilities.

Additionally, the company will participate in a regional fuel reduction program, in which Idaho Power will work in partnership with the Idaho Department of Lands, the National Forest Foundation, the U.S. Forest Service, and the U.S. Bureau of Land Management to remove hazard trees and other vegetation from utility rights-of-way. The partnership is designed to enhance forest resilience to wildfire, decrease hazardous fuel accumulations, increase powerline resiliency while minimizing the risk of ignitions, and improve forest conditions in the vicinity of Idaho Power infrastructure. This program is similar to what other western utilities have taken part in and is modeled after projects performed in Washington, California, Colorado, and Arizona. Participation in the effort is estimated to cost \$225,000 through 2025.

The company also plans to deploy satellite and aerial patrols of vegetation in the company's wildfire risk zones. The technology used in these satellite and aerial patrols will help identify encroachment and clearance issues in areas that are growing faster than expected and hazard



trees that have the potential of falling into powerlines. Data collected through this technology may reshape the company's vegetation management strategy and shift from a systemwide cycle to a more targeted approach that identifies and focuses on high-growth vegetation areas. The company will conduct limited vegetation-focused satellite and aerial patrols in 2023 before expanding to a larger area in 2024 and 2025, pending outcomes from the pilot program years. The company estimates spending \$750,000 on this technology through 2025.

*Cost Estimate for Enhanced Vegetation Management (2023–2025)*

The estimated system-wide expenditure for enhanced vegetation management is \$41.3 million from 2023 to 2025.

#### **4.4.7. Communications and Information Technology Customer Notification Enhancements**

*Idaho Power's efforts to communicate with customers and the public about wildfire and mitigation are discussed in detail in Section 10 of this WMP.*

Idaho Power considers communication a vital part of its wildfire mitigation efforts. Customer and public awareness and education are a vital part of ensuring that the communities that Idaho Power serves are protected and safe from the threat of wildfire. New communication expenses related to customer and community educational outreach include advertisements, printed media, social media, and public meetings. The purpose of these communications is to keep customers aware of mitigation and fire-related activities before, during, and after fire season. Additionally, the company is building out communication systems to be able to alert customers more quickly and easily about wildfire events and outages, including potential PSPS events.

*Cost Estimate for Communication and Customer Notification Enhancements (2023–2025)*

The estimated system-wide expenditure for communication expenses is \$513,000 and \$387,000 for customer notification system enhancements, totaling \$900,000 from 2023 to 2025.

#### **4.4.8. Incremental Capital Investments**

Idaho Power's wildfire mitigation efforts include capital investments in system hardening practices including approaches deployed after internal testing and analysis, many of which also provide co-benefits to the company.

*Idaho Power's capital investments for wildfire mitigation are discussed in detail in Section 8.2 (T&D Asset Management Programs) of this WMP.*

##### **4.4.8.1. Circuit Hardening and Infrastructure Upgrades**

*Idaho Power estimates spending \$5.1 million annually through 2025 on circuit hardening and infrastructure upgrades across its system.*



Idaho Power's WMP includes an overhead distribution hardening program for Red Risk Zones. The program includes systematic replacement of hardware, equipment, and materials to improve safety and reliability and reduce ignition risk. The first five years of the program are focused on circuits in Red Risk Zones, but it may be expanded to Yellow Risk Zones in the future. The company will review hardening outcome metrics annually to determine the benefit of the program and to determine whether to expand the program after 2025.

Prior to developing its WMP, Idaho Power successfully implemented many of the same hardening measures detailed below as part of the company's reliability program. Outage data and analytics showed that customer outages were reduced by approximately 38% in areas where hardening projects were carried out. With the success of reducing outages, some of these same activities to increase reliability were chosen to be part of the WMP to help reduce ignition potential in Red Risk Zones. Enhanced system hardening efforts include installation of fire safe fuses, Spark Prevention Units, and fiberglass crossarms.

All the hardening activities and equipment identified in this program were evaluated by patrolmen, troublemen, reliability engineers, and the company's Methods and Materials department to determine cost-effective solutions that balance overall costs with expected risk reduction.

As an alternative to conducting circuit hardening upgrades, the company considered converting overhead distribution circuits to underground. While underground conversions are used in certain circumstances, the cost is estimated to be 2–10 times higher than the cost of carrying out hardening work. In general, overhead hardening efforts provide the benefit of being able to impact a greater number of circuit miles and customers in a shorter time horizon with less investment than undergrounding. Idaho Power will continue to evaluate underground opportunities as part of overall system hardening efforts.

The following summarizes the incremental capital investments the company is making to harden its system and further reduce wildfire risk:

**Wood Pole Replacement**—The company will replace wood poles if field evaluations determine that significant deterioration or damage has occurred since the last inspection or treatment. Poles are inspected above the groundline to determine strength and climbability. Poles identified as “rejects” will be replaced. Furthermore, poles having wood stubs/structural reinforcements are changed out pursuant to current practices.

**Fuse Replacements**—Expulsion fuses located in Red Risk Zones will be changed out with energy-limiting and power fuses. Fuse applications include overhead transformers, line taps, risers, and capacitor banks. In 2018, Idaho Power began exploring different fusing technology to replace expulsion fuses with non-expulsion fuses. Three different fuse types were considered and subsequently piloted. The pilot was used to determine the performance of each fuse type, installation requirements, and coordination characteristics. Financial analysis included the cost of each fuse along with associated cutout and hardware and helped determine the most cost-effective option. This information was used to evaluate non-expulsion fuses. *Replacement of all expulsion fuses in Red Risk Zones is expected to take*



*approximately three years at a cost of approximately \$1.9 million. Because this work will be conducted in Red Risk Zones, the company does not anticipate replacing fuses in Oregon at this time.*

**Spark Prevention Units**—Porcelain arresters used for overvoltage protection will be changed out with arresters utilizing Spark Prevention Units (SPU). The SPU acts to eliminate the potential of catastrophic failure during arrester operation. This work includes all distribution arresters located on primary distribution lines in Red Risk Zones. In 2019, Idaho Power piloted new arrester technology to determine performance characteristics, installation requirements, and potential benefits in reducing ignition risk. As part of the pilot, Idaho Power compared different manufacturers with similar technology and conducted performance analysis to determine the most cost-effective solution. *Replacement of the arresters is expected to take approximately three years to complete and will cost approximately \$1.7 million. Because this work will be conducted in Red Risk Zones, the company does not anticipate replacing arresters in Oregon at this time.*

**Fiberglass Crossarms**—Idaho Power began piloting fiberglass crossarms in 2018 to determine potential cross-functional benefits associated with fiberglass. The pilot focused on cost, ease of installation, strength, supply availability, and reduced potential for tracking of electrical current. Tracking is known as the flow of current over an insulator, which can generate heat. The company compared different crossarm types and manufacturers and determined that fiberglass was most cost effective when considering up-front capital and installation costs. The pilot program, along with benchmarking of peer utilities, helped determine that fiberglass crossarms provided a number benefits relative to improved safety and reliability. Therefore, Idaho Power's hardening program includes the installation of both tangent and dead-end fiberglass crossarms in Red Risk Zones. However, Idaho Power does not intend to replace all wood crossarms with fiberglass immediately. As part of the fielding phase, company distribution designers will assess wood crossarms and initially change those showing signs of defects or damage. Identified crossarms utilizing wood pins will also be replaced with fiberglass. This approach will spread the cost out over time and help reduce the upfront cost of the program.

**Small Conductor**—In the early stages of developing the WMP, Idaho Power considered the possible risk associated with small conductor and the potential for breakage. As a result of this exercise, the company's WMP hardening program includes the replacement of overhead distribution conductor that meets certain criteria which includes approximately 60 miles in Red Risk Zones. Conductor losses were analyzed and showed that replacing the conductor will result in an approximately 50% reduction of line losses, resulting in co-benefits for the company and customers in terms of greater reliability and line loss improvements.

**Porcelain Switches**—Idaho Power's Outage Management System and feedback from field personnel revealed potential benefits of switches made of material other than porcelain. Therefore, porcelain switches installed in Red Risk Zones will be changed out with cutouts featuring Ethylene Propylene Diene Monomer Rubber (EPDM). Idaho Power's Methods and Materials Department trialed different cutout switches made up of different material, including silicone and polymer, to determine the most cost-effective solution. The results of



the trial highlighted the potential for avian issues with silicone (i.e., ravens tended to eat the silicone), and the cost of EPDM versus polymer was nearly equivalent. The financial analysis determined that EPDM would preserve the integrity of the insulator body, prevent outages, and provide an estimated savings of \$10,798 per year over silicone.

**Avian Protection**—Idaho Power employs several different protection measures to protect wildlife on existing structures including but not limited to covers, insulated conductor, diverters, perches, nesting platforms, and structural modifications. The company has an extensive history working with manufacturers of animal guards/covers and regularly seeks new solutions for avian issues to prevent mortalities, increase reliability, and eliminate other risks. The company's Avian Protection Plan (APP) was developed in the mid-2000s and many of the practices identified in the APP are used for wildfire mitigation in Red and Yellow Risk Zones. For example, new wildlife guards were recently developed and installed in conjunction with the installation of new power fuses and SPUs. Idaho Power consulted with different manufacturers to develop new products that would accomplish the dual goals of avian protection and wildfire mitigation. The best solution is determined on a case-by-case basis depending on the specific location, the type and extent of avian presence, and other relevant factors.

#### 4.4.8.2. Overhead to Underground Conversions

Another aspect of Idaho Power's system hardening program is the select conversion of overhead to underground distribution lines in Red Risk Zones. In 2022, the company will convert 1.5 miles of overhead distribution lines to underground lines. In 2023 and beyond, the company will work to build a strategic undergrounding program to weigh the cost-benefit of undergrounding versus other circuit hardening measures. While underground distribution lines offer benefits associated with being less exposed to the elements and external forces, conversion may not be possible, advisable, or economical in certain situations. The company will continue to evaluate the feasibility of underground conversions as well as the relative value and cost effectiveness as part of the WMP.

#### 4.4.8.3. Transmission Steel Poles

In 2021 and as part of its WMP, Idaho Power revised its transmission construction standards to utilize steel poles and structures for new line construction built to 138 kV and above in elevated wildfire risk zones. This change is intended to minimize the potential for wildfire damage, improve transmission line resiliency, and increase reliability for customers. Wood poles continue to be accepted and used in the industry, and the company will still utilize wood poles in many transmission system applications in consideration of the availability of steel poles, the specific engineering, right-of-way, permitting, and scheduling requirements for each project.

In addition, wood poles will continue to be the standard construction practice for transmission line voltages below 138 kV unless a different material is needed to meet specific engineering or planning requirements. As discussed above, Idaho Power will wrap wood poles located in Red and Yellow Risk Zones with fire-proof mesh.



## 5. SITUATIONAL AWARENESS

### 5.1. Overview

Visibility and readily available access to current and forecasted meteorological conditions and fuel conditions is a key aspect of Idaho Power's wildfire mitigation strategy. Meteorological and fuel conditions can vary significantly across Idaho Power's service area. Idaho Power leverages its internal atmospheric science department's modeling/forecasting capabilities, its existing field weather stations, and publicly available weather/fuel data to develop projections of current and future wildfire potential across Idaho Power's service area. This wildfire potential information is then available to operations personnel to factor into their operational decision-making.

### 5.2. Fire Potential Index

Idaho Power has developed an FPI tool based upon original work completed by San Diego Gas and Electric, the National Forest Service, and the National Interagency Fire Center and modified for Idaho Power's Idaho and Oregon service area. This tool is designed to support operational decision-making to reduce fire threats and risks. This tool converts environmental, statistical, and scientific data into an easily understood forecast of the short-term fire threat which could exist for different geographical areas in the Idaho Power service area. The FPI is issued for a seven-day period to provide for planning of upcoming events by Idaho Power personnel.

The FPI reflects key variables, such as the state of native vegetation across the service area ("green-up"), fuels (ratio of dead fuel moisture component to live fuel moisture component), and weather (sustained wind speed and dew point depression). Each of these variables is assigned a numeric value and those individual numeric values are summed to generate a Fire Potential value from zero to sixteen, each of which expresses the degree of fire threat expected for each of the 7 days included in the forecast. The FPI scores are grouped into the following index levels:

- **Green:** FPI score of 1 through 11 indicates low potential for a large fire to develop and spread as there is normal vegetation and fuel moisture content as well as weak winds and high relative humidity.
- **Yellow:** FPI score of 12 through 14 indicates an elevated potential for a large fire to develop and spread as there are lower than normal vegetation and fuel moisture content as well as moderate winds and lower than normal relative humidity.
- **Red:** FPI score of 15 through 16 indicates a higher potential for a large fire to develop and spread as there are well below normal vegetation and fuel moisture content as well as strong winds and low relative humidity.

Fire Potential Index (FPI) Category			
	Normal	Elevated	High
FPI Range	1 to 11	12 to 14	15 - 16

The state of native grasses and shrubs, or **Green-Up Component**, of the FPI is determined using satellite data for locations throughout the Idaho Power areas of interest. This component is rated on a 0-to-5 scale ranging from very wet (or “lush”) to very dry (or “cured”). The scale is tied to the Normalized Difference Vegetations Index (NDVI), which ranges from 0 to 1, as follows:

Green-Up Component						
NDVI	Very Wet/Lush: 1.00 to 0.65	0.64 to 0.60	0.59 to 0.55	0.54 to 0.50	0.49 to 0.40	Very Dry/Cured 0.39 to 0.00
Score	0	1	2	3	4	5

The **Fuels Component (FC)** of the FPI measures the overall state of potential fuels which could support a wildfire. Values are assigned based on the overall state of available fuels (dead or live) for a fire using the following equation:

$$FC = FD / LFM$$

Where FC represents Fuels Component in the scale below, FD represents 10-hour Dead Fuel Moisture (using a 1-to-3 scale), and LFM represents Live Fuel Moisture (percentage). This data will be collected from satellite sources and regional databases supported by state and federal agencies.

The product of this equation represents the fuels component that is reflected in the FPI as follows:

Very Wet					Very Dry
0	1	2	3	4	5

The **weather component** of the FPI represents a combination of sustained wind speeds and dew-point depression as determined using the following scale. Regional adjustment to criteria limits for the upper wind speeds may occur after further discussion with subject matter experts from each of the regional operations. This data will be sourced from the weather, research and forecasting (WRF) products produced by Idaho Power using its High-Performance Computing (HPC) system. In addition to the HPC system produced WRF data, several national level



meteorological products will be used. These products will include regional weather observations used to validate model information.

Dewpoint Depression/Wind	≤5 mph	6 to 11 mph	12 to 18 mph	19 to 25 mph	26 to 32 mph	≥33 mph
≥50°F	4	4	4	5	5	6
40°F to 49°F	3	3	4	4	5	5
30°F to 39°F	3	3	3	4	4	5
20°F to 29°F	3	3	3	3	3	4
10°F to 19°F	2	2	2	2	2	3
<10°F	0	1	1	1	1	2

### 5.3. FPI Annual Process Review

The FPI process will be reviewed annually after completion of the fire season and, with consultation of interested parties (e.g., Load Serving Operator, Line Crews, and others), will be updated to enhance Idaho Power's wildfire preparedness.

## 6. MITIGATION—FIELD PERSONNEL PRACTICES

### 6.1. Overview

A component of Idaho Power's wildfire mitigation strategy is to prevent the accidental ignition and spread of wildfires due to employee work activities. Idaho Power developed the *Wildland Fire Preparedness and Prevention Plan* (Appendix A) to provide guidance to Idaho Power employees and contractors to help prevent the accidental ignition and spread of wildfires due to company work activities in locations and under conditions where wildfire risk is heightened. All Idaho Power crews and certain field personnel performing work on or near Idaho Power's facilities are expected to operate in accordance with the Plan and continue to conduct themselves in a fire-safe manner.

### 6.2. Wildland Fire Preparedness and Prevention Plan

The *Wildland Fire Preparedness and Prevention Plan* informs Idaho Power personnel and its line construction contractors about the following factors:

- Annual fire season tools and equipment to be available when on the job site
- Daily situational awareness regarding locations of heightened potential for fire risk and weather conditions in those areas
- Expected wildfire ignition prevention actions while working and reporting instructions in the event of fire ignition
- Training and compliance requirements

## 7. MITIGATION—OPERATIONS

### 7.1. Overview

A component of Idaho Power's wildfire mitigation strategy is to continue safe and reliable operation of its T&D lines while also reducing wildfire risk. These operational practices primarily center around the following:

- Temporary operating procedures for transmission lines during the fire season<sup>17</sup>
- An operational strategy for T&D lines during time periods of elevated wildfire risk during the fire season
- A PSPS strategy for Idaho Power's service area and transmission corridors

### 7.2. Operational Protection Strategy

Operational protection strategies were developed to reduce the probability of ignition during fault events on Idaho Power's transmission and distribution system. Analysis was performed by Reliability Engineers to assess the available fault energy under different protection schemes and configurations and the effect each would have on customers in terms of increased and extended outages. Idaho Power analyzed the following configurations for automatic reclosing devices:

- Reclose off
- Limited energy reclose
- Limited energy lockout

The analysis performed included assessing Time Current Curves and fault energy of different circuits to gauge the overall reduction in energy between different protection configurations and coordination challenges. Figure 13 below summarizes the different protection configurations evaluated along with estimated benefits in terms of reduced fault energy and impacts to customers. At this time, reclose off appears to provide the best balance between reducing fire ignition risk and customer reliability impacts.

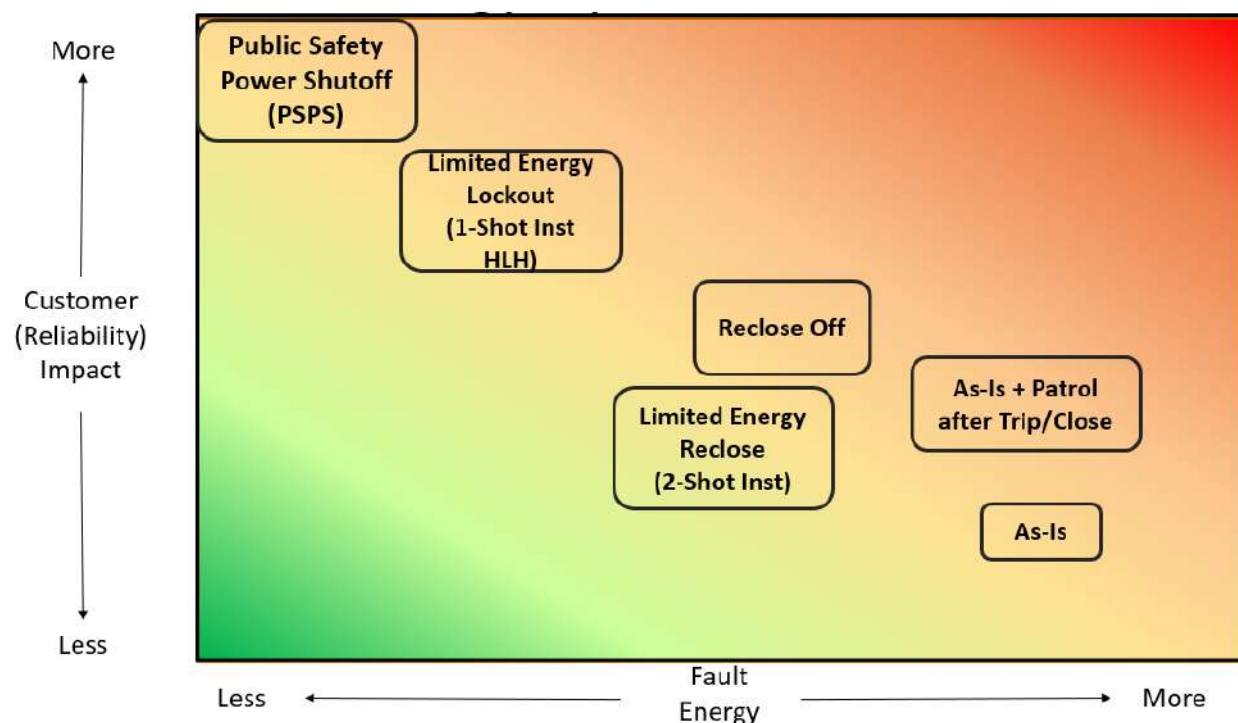
This analysis, along with consideration of historic outage events associated with reclose off, led to the determination that enhanced protection strategies were warranted only in RRZs due to their higher level of wildfire risk. Idaho Power plans to evaluate the effectiveness of protection strategies and will work to mature in this area. New advancements in relay protection used to decrease wildfire risk were evaluated in 2022. The company plans to further our understanding

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<sup>17</sup> The duration of the fire season will be reviewed and defined annually.



of their capabilities and integration into existing relay apparatus by testing new algorithms and schemes as part of the company's wildfire technology roadmap from 2024 through 2028.



**Figure 13**

Comparison of reclosing strategies with respect to customer reliability and wildfire risk

## 7.3. Transmission Line Operational Strategy

### 7.3.1. Fire Season Temporary Operating Procedure for Transmission Lines

Each year, typically in May, leadership within Idaho Power's Load Serving Operations (LSO) department updates and issues its Fire Season Temporary Operating Procedure. The purpose of this temporary operating procedure is to provide LSO employees with guidelines for operating transmission lines during the summer fire season. The procedure aims to reduce wildfire risk through practices relating to information collection, notification, and procedures for testing/closing in on locked-out transmission lines.

### 7.3.2. Red Risk Zone Transmission Operational Strategy

During wildfire season, Idaho Power determines a daily FPI as described in Section 5 of this WMP. The FPI informs the transmission line operational strategy for those lines owned, operated, and located in RRZs. These lines will be operated in normal settings mode but with no

“testing”<sup>18</sup> of a line that may have “locked out” during the time of a red FPI. Essentially, in the event of a fault on the specified transmission line(s) during a red FPI, the line will operate as normal and may “lock out,” at which time the line(s) will either need to be patrolled before “testing” or wait until the FPI level drops out of the red category prior to being reenergized.

## 7.4. Distribution Line Operational Strategy

### 7.4.1. Red Risk Zone Distribution Operational Strategy

During wildfire season, Idaho Power determines a daily FPI as described in Section 5 of this WMP. The FPI informs the distribution line operational strategy for those lines located in the wildfire RRZs. These lines will be operated in a non-reclosing<sup>19</sup> state during the time of red FPI. Essentially, in the event of a fault on the specified distribution line(s) during the red FPI, the line(s) will be automatically de-energized with no reclosing attempts until either the line(s) has been patrolled or the FPI level drops out of the red category.

## 7.5. Public Safety Power Shutoff

### 7.5.1. PSPS Definition

PSPS, as used in this WMP, is defined as the proactive de-energization of electric transmission and/or distribution facilities during extreme weather events to reduce the potential of those electrical facilities becoming a wildfire ignition source or contributing to the spread of wildfires. The concept is as follows: if significant weather events can be predicted far enough in advance, the resulting proactive line de-energization before the forecasted weather conditions materialize could mitigate the risk of a wildfire. A PSPS event has significant customer impact and requires significant planning.

PSPS is not the practice of de-energizing lines in the following types of situations:

- Unplanned de-energization of lines required for emergencies and during outage restoration situations.
- Planned line or station work activities that require a planned outage (Idaho Power currently has a planned outage customer notification process in place for this).
- Reactive de-energization of electric transmission and/or distribution facilities, which may be either at Idaho Power’s determination or at the request of fire managers (e.g., BLM,

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<sup>18</sup> Transmission line “testing” refers to the human act of re-energizing a line without completing a physical field patrol or observation of a line.

<sup>19</sup> Distribution line “non-reclosing” refers to the deactivation of automatic re-energization of a distribution line or use of a non-reclosing device such as a fuse.



U.S. Forest Service, or other fire-fighting managers) in response to existing/encroaching wildfire threatening to burn into such facilities.

- Automated de-energization of electric transmission and/or distribution facilities due to smoke/fire from an existing fire causing a fault on the line.

Idaho Power will continue its current de-energization practices in the above referenced, and comparable situations. Such outage situations are not defined as PSPS events in the context used here and, as a result, would not trigger PSPS protocols.

### **7.5.2. PSPS Plan**

Idaho Power developed a PSPS Plan (see Appendix B) that operates in parallel with its wildfire mitigation strategy. Although the wind patterns in Idaho Power's service area are generally of a much lower sustained velocity and often less predictable (i.e., micro-bursts) than other utilities' service areas where PSPS has most frequently been utilized (i.e., California), the company's PSPS Plan generally follows industry best practices by considering other utilities' PSPS plans and incorporating input from Idaho Power's external consultant, discussed in 3.2 above, which developed the company's WMP risk maps.

## 8. MITIGATION—T&D PROGRAMS

### 8.1. Overview

Idaho Power's wildfire mitigation strategy relies in part on its various asset management programs and vegetation management program to maintain safe and reliable operation of its T&D facilities in reducing wildfire risk.

### 8.2. T&D Asset Management Programs

In addition to maintaining a number of existing and newly implemented robust asset management programs intended to reduce wildfire risk, Idaho Power continues to research, monitor, and pilot emerging technologies and strategies to manage its T&D infrastructure.

Idaho Power's key asset management programs supporting wildfire prevention and mitigation are summarized in the table below.

**Table 7**

Summarized T&D asset management programs (associated with the WMP)

#### Transmission

##### Transmission Asset Management Programs

Aerial Visual Inspection Program  
Ground Visual Inspection Program  
Detailed Visual (High Resolution Photography) Inspection Program  
Wood Pole Inspection and Treatment Program  
Cathodic Protection and Inspection Program  
Thermal Imaging (Infra-Red) Inspections  
Wood Pole Wildfire Protection Program (enhanced)  
Steel Pole (Structures) (enhanced)

#### Distribution

##### Distribution Asset Management Programs

Ground Detail Inspection Program (enhanced)  
Wood Pole Inspection and Treatment  
Wood Pole Fire Protection Program (enhanced)  
Line Equipment Inspection Program  
Thermal Imaging (Infra-Red) Inspections  
Overhead Primary Harden Program  
    Replace "small conductor" with new 4acsr or larger conductor (new)  
    Replace or repair damaged conductor  
    Re-tension loose conductors including "flying taps" and slack spans as required

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- Replace wood-stubbed poles with new wood poles (enhanced)
- Replace white and yellow square tagged poles with new wood poles
- Replace wood pins/wood crossarm with new steel pins/fiberglass crossarms
- Replace steel insulator brackets with new steel pins/fiberglass crossarms (new)
- Replace wedge deadends on primary taps with new polymer deadend strain insulators
- Replace aluminum deadend strain insulators with new polymer deadend strain insulators (new)
- Replace porcelain switches with new polymer switches
- Replace hot line clamps
  - Replace aluminum stirrups
  - Install avian cover
  - Relocate arresters
- Install bird/animal guarding
- Update capacitor banks
  - Replace swelling capacitors
  - Replace oil-filled switches with vacuum style
  - Replace porcelain switches with polymer switches
- Install disconnect switches on CSP transformers
  - Install avian cover
- Update down guys
  - Replace/Install down-guy insulators with fiberglass insulators
  - Tighten down guys
- Tighten hardware
- Correct 3rd party pole attachment clearances (report to Joint Use Department)

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Idaho Power has a robust and proven inspection and correction strategy and schedule. Current practices will continue in YRZs. Risk quantification and modeling performed shows that RRZs have a higher level of risk from wildfires so, in addition to its current practices, Idaho Power believes it is prudent to add an annual inspection to minimize the likelihood of a wildfire ignition as well as targeted infrared inspections in select RRZs to identify any potential issues that may not be apparent on visual inspection. As part of the ISO 31000 risk management process, Idaho Power plans to evaluate the effectiveness of inspection and correction activities and schedules and further grow in this area as wildfire risk evolves. The following table summarizes inspection work performed and inspection frequency with respect to wildfire risk zones.



**Table 8**  
Summary of asset inspections and schedules by state and zone

Asset Inspection Type	Inspection Interval				
	Idaho Non-Risk Zone	Oregon Non-Risk Zone	Idaho YRZ	Oregon YRZ	Idaho RRZ
<b>Transmission Defect Inspections</b>					
Visual	Annually	Annually	Annually	Annually	Annually
Detailed	10 Years	10 Years	10 Years	10 Years	10 Years
Groundline (Wood Pole Test and Treat)	10 Years	10 Years	10 Years	10 Years	10 Years
Wildfire Mitigation Patrol	None	None	None	None	Annually
Infrared Patrol	None	None	None	None	Annually
<b>Distribution OH Defect Inspections</b>					
Visual/Detailed	3 Years	2 Years	3 Years	2 Years	3 Years
Groundline (Wood Pole Test and Treat)	10 Years	10 Years	10 Years	10 Years	10 Years
Wildfire Mitigation Patrol	None	None	None	None	Annually
Infrared Inspections	None	None	None	None	Targeted

### 8.2.1. Transmission Asset Management Programs

Several of Idaho Power's transmission management programs have been in place for decades and include condition-based aerial visual inspections, ground visual inspections, detailed visual (generally using high-resolution photography) inspections, transmission wood pole inspection and treatment, and cathodic protection. Additionally, Idaho Power has used various methods and materials to prevent wildfire from damaging wood structures and now intends to use a fire-resistant mesh wraps installed on structures located in the RRZ and YRZs.

#### 8.2.1.1. Aerial Visual Inspection Program

Annually, Idaho Power uses helicopters to assist Idaho Power qualified personnel in the visual aerial inspection of transmission lines identified as WECC Path Lines. This method of line inspection is now used for transmission lines located in the RRZs. In addition, unmanned aerial vehicles with high-definition cameras are now used in certain situations to inspect facilities on these lines. These inspections allow personnel to look for potential line defects, which, if found, are noted and scheduled for repair.

All noted defects are prioritized as Priority 1, Priority 2, or Priority 3, based on the criteria listed below:

- **Priority 1:** Defects that, depending on the circumstances, require reporting and repair as soon as reasonably possible.
- **Priority 2:** Defects that, depending on the circumstances, generally require reporting and correction within 24 months of identification. The correction of these defects should be scheduled during crews' normal work schedules. Priority 2 defects not assigned a

corrective plan within 24 months will be reviewed by the T&D vegetation and maintenance engineering leader.

- **Priority 3:** Potential issues that may need correction but do not pose a threat to the system and should be monitored. A Priority 3 designation may also be used by Idaho Power personnel for tracking of certain line construction practices.

Corrective action plans for Priority 1 and 2 defects are determined by engineering personnel for each prioritized defect and are scheduled and repaired.

#### 8.2.1.2. Ground Visual Inspection Program

Annually, Idaho Power qualified personnel (i.e., trained in transmission line inspection procedures and experienced in transmission line construction) complete ground visual inspections of all transmission lines. Ground patrols are completed using four-wheel-drive vehicles, all-terrain vehicles, utility terrain vehicles, and/or on foot. These inspections identify potential line defects that are noted and scheduled for repair following the same process as described in 8.2.1.1.

#### 8.2.1.3. Detailed Visual (High-resolution Photography) Inspection Program

In addition to the annual inspections and associated maintenance, Idaho Power also completes detailed visual inspections generally utilizing high resolution photography. This detailed inspection is typically completed using helicopters, unmanned aerial vehicles, and contracted professionals operating high-definition cameras and, if potential line defects are noted, they are scheduled for repair following the same process as described in 8.2.1.1. The detailed inspections are completed on a 10-year cycle in conjunction with the 10-year cycle of wood pole ground line inspection and treatment (see 8.2.1.4).

#### 8.2.1.4. Wood Pole Inspection and Treatment Program

All wood poles are visually inspected, sounded, and bored for defects and decay on a 10-year cycle. The poles are categorized according to the following:

- **Reported:** Any wood pole inspected and found to be installed within 10 years of the manufactured date or last inspection date.
- **Treated:** Any wood pole inspected and found to be installed 11 years or more prior to the inspection date and is determined to be in sound enough condition to warrant treatment.
- **Rejected:** Any wood pole determined to fit the following criteria:
  - Have less than 4 inches of shell at 48 inches above the ground line; and/or
  - Less than 2 inches of shell at 15 inches above the ground line; and/or
  - Less than 2 inches of shell at the ground line; or



- Is deteriorated and does not meet minimum strength criteria; or
- Fails a visual inspection.

Rejected poles are categorized as: reinforceable with steel, non-reinforceable and are to be replaced.

- **Visually Rejected:** Any wood pole that has been damaged (i.e., burned, split, broken, hit by a vehicle, damaged by animals, etc.) above the ground line to such an extent as to warrant rejection and that cannot be further tested to determine priority status.
- **Sounded, Bored, and Treated:** Any wood pole set in concrete, asphalt, or solid rock 11 years or more prior to the inspection date is internally treated. Internal treatment involves fumigating the good wood and flooding the voids with fumigant.

#### 8.2.1.5. Cathodic Protection and Inspection Program

Cathodic protection systems are employed on select steel transmission towers. These systems use either an impressed current corrosion protection system (ICCP) or direct-buried sacrificial magnesium anodes. Included in Idaho Power's tower maintenance plan, every 10 years, structure-to-soil potential testing is performed on select towers with direct-buried anodes. For ICCP systems, rectifiers and ground-beds are tested to ensure they are functioning properly. Based on test results repairs and adjustments are completed. Each year all rectifiers are inspected, and direct current (DC) voltage and DC current readings noted.

#### 8.2.1.6. Thermal Imaging (Infra-red) Inspections

Idaho Power will complete annual inspections of lines and equipment using thermal imaging (infra-red) cameras. This inspection methodology, although not new to Idaho Power, is being expanded to specifically include the RRZs. Compromised electrical connections and overloaded equipment may be identified using thermal imagery. Identified risks will be prioritized and mitigated using the prioritization methodology noted in 8.2.2.1 of this WMP.

#### 8.2.1.7. Wood Pole Wildfire Protection Program

Idaho Power has utilized numerous technologies to minimize the damage to wood poles that have been exposed to wildfires. The current technology of "mesh wraps" is utilized on transmission wood poles located in the RRZs and YRZs.

#### 8.2.1.8. Transmission Steel Poles

Idaho Power will utilize steel poles or structures for new transmission line construction projects built to 138 kV standards and above in an attempt to minimize wildfire damage and improve transmission line resilience. Wood poles may be used on 138 kV structures for emergency and maintenance replacements based on the specific engineering, right-of-way, permitting, and scheduling requirements for each project. Wood construction is used for voltages below 138 kV unless a different material is needed to meet specific engineering or planning requirements.



### **8.2.2. Distribution Asset Management Programs**

Idaho Power has several distribution asset management programs that are mature, have been implemented for decades, and will continue to be utilized in the RRZs. These programs include condition-based, detailed, and ground visual inspection; distribution wood pole inspection and treatment; and line equipment inspection.

Idaho Power also has an enhanced overhead distribution “hardening” program to implement in the RRZs. Examples of specific work include replacement of small conductors and associated hardware and replacement of wooden pins and associated wooden crossarms.

#### **8.2.2.1. Ground Visual Inspection Program**

Annually, qualified line patrol personnel (trained in distribution line inspection procedures and experienced in distribution line construction) complete visual wildfire mitigation inspections of the distribution lines located in the RRZs to identify Priority 1 defects and those that may cause an outage or possible ignition. The ground patrols are completed using four-wheel-drive vehicles, all-terrain vehicles, utility terrain vehicles, or on foot. These inspections identify potential line defects that are noted and scheduled for repair. Detailed distribution inspections are completed on a predetermined schedule and may be performed in conjunction with annual visual inspections.

All noted defects are prioritized as Priority 1, Priority 2, or Priority 3, based on the criteria listed below:

- **Priority 1:** Defects that, depending on the circumstances, require reporting and repair as soon as reasonably possible.
- **Priority 2:** Defects that, depending on the circumstances, generally require reporting and correction within 24 months of identification. The correction of these defects should be scheduled during crews’ normal work schedules. Priority 2 defects not assigned a corrective plan within 24 months will be reviewed by the T&D Vegetation and maintenance engineering leader.
- **Priority 3:** Potential issues that may need correction but do not pose a threat to the system and should be monitored; or tracking of certain line construction practices.

Corrective action plans for Priority 1 and 2 defects are determined by engineering personnel for each prioritized defect and are scheduled and repaired.

#### **8.2.2.2. Wood Pole Inspection and Treatment Program**

All wood poles are visually inspected, sounded, and bored for defects and decay. The procedure is noted in 8.2.1.4.



### **8.2.2.3. Line Equipment Inspection Program**

Line equipment in wildfire risk zones, including capacitor banks, automatic reclosing devices, and regulators, are inspected annually prior to wildfire season by line operations technicians. The inspection includes a visual inspection and, when electronic controls are present, data is retrieved and analyzed for proper operation.

### **8.2.2.4. Thermal Imaging (Infra-red) Inspections**

Idaho Power will complete annual inspections of lines and equipment using thermal imaging (infra-red) cameras. This inspection methodology, although not new to Idaho Power, is being expanded to specifically include the RRZs. Compromised electrical connections and overloaded equipment may be identified using thermal imagery. Identified risks will be prioritized and mitigated using the prioritization methodology noted in 8.2.2.1 of this WMP.

### **8.2.2.5. Overhead Primary Hardening Program**

Overhead distribution infrastructure located in the RRZs will be analyzed and may be inspected and hardened depending upon proximity to fuels conducive to wildfires in the unlikely event of failure of the line infrastructure. It is expected to take multiple years to inspect and harden all applicable overhead distribution lines.

The Overhead Primary Hardening program is intended to upgrade or repair certain overhead distribution infrastructure. Criteria as outlined in Table 7 drives the program work. Notable criteria are further explained in the following sections of this WMP.

#### ***8.2.2.5.1. Conductor “Small” Replacement***

Idaho Power is implementing replacement of small conductors in the RRZs. Small conductors are those in sizes less than that of 4ACSR conductor. Examples of small wires include 6Cu, 6-3SS, 8A, 8A CW, 9IR, etc. These small conductors will be replaced with standard larger conductors, primarily with 4ACSR conductor.

#### ***8.2.2.5.2. Wood Pin and Crossarm Replacement***

Wooden crossarms installed with wooden pins will continue to be replaced with fiberglass crossarms and steel pins. This work will be coordinated and included in the overhead primary hardening program. And, whenever work is being completed on a structure that requires replacement of wooden crossarms, Idaho Power will, generally, install fiberglass crossarms.

#### ***8.2.2.5.3. Porcelain Switch Replacement***

Porcelain switches located in the RRZs will continue to be replaced with polymer switches. Additionally, associated hot clamps and stirrups will be replaced. This work will be coordinated and included in the overhead primary hardening program.

#### ***8.2.2.5.4. Fuse Options***

Idaho Power investigated reasonable alternatives to replace certain expulsion fuses and expulsion arrestors. A pilot program was initiated in 2020 to replace several expulsion fuses with



non-expulsion fuses in the vicinity of the Boise foothills. This pilot program was successful and Idaho Power implemented a subsequent program to replace expulsion fuses with non-expulsion fuses in RRZs as a part of its distribution overhead primary wildfire hardening program.

#### 8.2.2.5.5. *Wood Pole Wildfire Protection Program*

Idaho Power has utilized numerous technologies to minimize the damage to wood poles that have been exposed to wildfires. The current technology of “mesh wraps” is utilized on certain distribution wood poles located in the RRZs.

### 8.3. T&D Vegetation Management

Idaho Power’s T&D vegetation management program (VMP) addresses public safety and electric reliability and helps to safeguard T&D lines from trees and other vegetation that may cause an outage or damage to facilities. Specifically, the lines are inspected periodically, and trees and vegetation are cleared away from the line while certain trees are removed entirely. In addition, the VMP addresses the clearing of vegetation near the base of certain poles and line structures. The responsibilities of the VMP include the planning, scheduling, and quality control of VMP associated work. The VMP is active year-round and complies with applicable NESC, federal, and state requirements. Additional vegetation monitoring tools are in various stages of development, and Idaho Power will evaluate such tools for potential future implementation.

Idaho Power’s key components of its VMP, relative to the WMP, are summarized in the table below.

**Table 9**  
VMP summary

Vegetation Management
<b>Transmission</b> <ul style="list-style-type: none"> <li>Pre-Fire Season Inspection and Mitigation</li> <li>Line Clearing Cycle Goal: 3-year cycle for valley areas &amp; 6-year cycle for mountain areas</li> <li>Tree Removals - Hazard Trees</li> <li>Targeted Pole Clearing</li> <li>100% Quality Assurance/Quality Control Auditing in RRZs and YRZs</li> </ul>
<b>Distribution</b> <ul style="list-style-type: none"> <li>Pre-Fire Season Inspection and Mitigation</li> <li>Line Clearing Cycle Goal: 3-year cycle in all areas with mid-cycle pruning occurring in 2<sup>nd</sup> year in RRZs and YRZs*</li> <li>Tree Removals - Cycle Busters/Hazard Trees</li> <li>Targeted Pole Clearing</li> <li>100% Quality Assurance/Quality Control Auditing in RRZs and YRZs</li> </ul>

\*Distribution line clearing cycles vary by utility. Idaho Power has set a goal of achieving a 3-year cycle of distribution line clearing.

Vegetation contact with energized powerlines is a cause of outages and potential source of ignition for wildfires. Idaho Power's transition to a sustainable three-year pruning cycle will help reduce wildfire risk across the company's service area. In non-wildfire risk zones, distribution feeders and valley-located transmission lines will be patrolled and pruned on a three-year cycle. A six-year cycle will continue to be employed for transmission lines in mountain locations. Specific to each tree pruned, directional pruning methods will be employed where cuts will meet ANSI A300 standard and adequate clearance will be obtained that should accommodate regrowth without violating the prescribed minimum clearance throughout the cycle.

Reliability data has shown that vegetation contact is one of the most likely sources of faults and possible ignition on the system. As a result, Idaho Power employs the same enhanced vegetation management practices in both YRZs and RRZs despite the different levels of wildfire risk. These practices include mid-cycle patrols and pruning in the second year of the cycle to address "cycle buster" trees and annual "hotspot" patrols to address any new hazard trees or unexpected vegetative growth that poses an immediate threat of contact with energized facilities. In addition, the company strives to complete audits for all pruning work performed in YRZs and RRZs, regardless of reason for the pruning. The audits confirm that pruning cuts meet the specification and proper clearance was obtained. The following table summarizes vegetation management activities with respect to wildfire risk zones.

**Table 10**  
Summary of vegetation management activities and schedules

Vegetation Management Inspections and Activity Schedule	Inspection Interval				
	Idaho Non- Risk Zone	Oregon Non- Risk Zone	Idaho YRZ	Oregon YRZ	Idaho RRZ
<b>Transmission</b>					
Hazard Tree Patrol	Annually	Annually	Annually	Annually	Annually
Cycle Patrol/Pruning—Valley Locations	3 Years	3 Years	3 Years	3 Years	3 Years
Cycle Patrol/Pruning—Mountain Locations	6 Years	6 Years	6 Years	6 Years	6 Years
Wildfire Mitigation Patrol/Pruning	None	None	None	None	Annually
Cycle Buster Patrol/Pruning	18 Months	18 Months	18 Months	18 Months	18 Months
<b>Distribution</b>					
Wildfire Mitigation Patrol/Pruning	None	None	Annually	Annually	Annually
Cycle Patrol/Pruning	3 Years	3 Years	3 Years	3 Years	3 Years
Mid-Cycle Patrol/Pruning	None	None	2 Years after Cycle Prune	2 Years after Cycle Prune	2 Years after Cycle Prune
Cycle Buster Patrol/Pruning	None	18 Months	None	18 Months	None
<b>Quality Assurance (Transmission and Distribution)</b>					
Post-Pruning Audit Inspections	Sampling	Sampling	100%	100%	100%



### 8.3.1. Definitions

**Applicable Transmission Lines**—Each overhead transmission line operated within the WMP RRZ at 46 kilovolts (kV) or higher.

**Cycle Buster**—Trees that grow at a rapid rate, requiring a more frequent trimming schedule than the normal trim cycle.

**Hazard Tree**—Any vegetation issue that poses a threat of causing a line outage but has either a low or medium risk of failure in the next month. Hazard trees will be further defined as posing either a medium hazard or low hazard.

**High-Priority Tree**—Any vegetation condition likely to cause a line outage with a high risk of failure in the next few days or weeks. High-priority trees could also be vegetation that is in good condition but has grown so close to the lines that it could be brought into contact with the line through a combination of conductor sag and/or wind-induced movement in the conductor or the vegetation.

**Line Clearing Cycles**—T&D clearing of lines defined on a periodic basis.

### 8.3.2. Transmission Vegetation Management

Maintaining a zone near transmission lines that is free of vegetation has long been a priority for Idaho Power. The clearance zone is voltage-level dependent and defined by federal and state regulations.

#### 8.3.2.1. Transmission Vegetation Inspections

Utility arborists annually conduct aerial and/or ground patrols on each applicable transmission line to identify and mitigate vegetation hazards. In addition, transmission patrol personnel inspect all applicable transmission lines once a year to identify any transmission defects and vegetation hazards. During these inspections, the patrol personnel will identify hazardous vegetation, within or adjacent to the Right of Way (ROW), that could fall in or onto the transmission lines or associated facilities. The patrol personnel will evaluate the hazardous vegetation as to the level of threat posed by categorizing the vegetation as a *high priority*, *medium hazard*, or *low hazard*. Any hazardous vegetation found is reported to the utility arborist and documented. Any hazardous vegetation categorized as a *high priority* and that presents a risk to cause an outage at any moment shall also be reported without any intentional time delay to the grid operator. The utility arborist will conduct a follow-up inspection if potential hazard trees or grow-ins are identified. The utility arborist prioritizes and schedules any remedial action for all reported vegetation issues.

#### 8.3.2.2. Transmission Line Clearing Cycles

Transmission lines will be cleared on long-term cycles based on 3 years for urban and rural valley areas and 6 years for mountain areas. However, shorter clearing cycles may occur if conditions dictate out-of-cycle trimming. In most cases, vegetation is cleared primarily through



manual cutting of targeted trees and tall shrubs. However, when appropriate and in compliance and permission with federal and state requirements, tree-growth regulators and spot herbicide treatments are applied as effective techniques for reducing re-growth of sprouting deciduous shrubs and trees and extending maintenance cycles.

### **8.3.2.3. Transmission Line Clearing Quality Control and Assurance**

In non-wildfire risk zones, audits are performed on a random sample of pruning worksites. These audits are performed through a combination of the contracted arborists that planned the work and Idaho Power's utility arborists. Due to the elevated risk of wildfire in YRZs and RRZs, audits will be performed on pruning work performed in YRZs and RRZs regardless of the reason for the patrols and pruning. The audits will be performed by a combination of contracted arborists and Idaho Power's utility arborists to check whether pruning cuts meet specification and proper clearance was achieved.

### **8.3.3. Distribution Vegetation Management**

Idaho Power is actively working to clear distribution lines throughout Idaho Power's service area on a three-year cycle.<sup>20</sup> Additionally, in the RRZs and YRZs, Idaho Power completes annual vegetation line inspections and mid-cycle clearing of the lines in the second year, is increasing the number of trees removed, and is completing 100% quality control reviews of contractor line clearing work by certified arborists.

#### **8.3.3.1. Distribution Line Clearing Cycles**

Idaho Power is actively working to clear distribution lines on a three-year cycle. In RRZs and YRZs, Idaho Power's goal is to perform mid-cycle pruning in the second year to remove faster growing vegetation to ensure the lines are clear of vegetation for the full pruning cycle. In addition, Idaho Power clears lines based upon "special request" in the situations that fast growing, unexpected growth occurs and is reported by any employee or customer.

#### **8.3.3.2. Distribution Vegetation Inspections**

In addition to regular cycle pruning activities, utility arborists are annually conducting ground patrols to identify potential vegetation hazards of each distribution line identified in the RRZs and YRZs. In addition, distribution patrol personnel also inspect the lines in the RRZs annually. During these inspections, patrol personnel identify infrastructure defects and hazardous vegetation, within or adjacent to the ROWs, that could fall in or onto the distribution lines or associated facilities. The patrol personnel then evaluate the hazardous vegetation as to the level of threat posed by categorizing the vegetation as a *high priority*, *medium hazard*, or *low hazard*. Any hazardous vegetation found is reported to the utility arborist and documented. Any hazardous vegetation categorized as a *high priority* and that presents a risk to cause an outage at any moment shall also be reported without any intentional time delay to the Grid

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<sup>20</sup> Idaho Power will test a three-year cycle for a period of 4 or 5 years to verify that such a cycle can be maintained and that the expected benefits are realized.



Operator. The utility arborist will conduct a follow-up inspection if potential hazard trees or grow-ins are identified. The utility arborist prioritizes and schedules any remedial action for all reported vegetation issues.

#### **8.3.3.3. Distribution Line Clearing Procedures**

In most cases, vegetation is cleared as scheduled work and includes, but is not limited to, the removal of dead branches overhanging power lines, weak branch attachments, damaged root base or dead or dying trees leaning toward Idaho Power facilities. Vegetation clearing methods include crews using chain saws or specialized pruning machines. Trees are cleared using a pruning procedure called directional or natural pruning, a method recommended by the International Society of Arboriculture, and the ANSI A300 standards.

However, when appropriate and in compliance and permission with federal and state requirements, tree-growth regulators and spot herbicide treatments are applied as effective techniques for reducing re-growth of sprouting deciduous shrubs and trees and extending maintenance cycles.

Through its vegetation management program, Idaho Power has a target to maintain clearance distance between vegetation and conductors as follows:

- Five feet for conductors energized at 600 through 50,000 volts.
- Clearances may be reduced to three feet if the vegetation is not considered to be readily climbable because the lowest branch is greater than eight feet above ground level.
- New tree growth that is no larger than ½ inch in diameter may intrude into this minimum clearance area provided it does not come closer than six inches to the conductor. This new growth is identified during line patrols and removed.
- For conductors energized below 600 volts, vegetation is pruned to prevent the vegetation from causing unreasonable strain on electric conductors.

#### **8.3.3.4. Distribution Line Clearing Quality Control and Assurance**

Similar to the transmission section, in non-wildfire risk zones, audits are performed on a random sample of pruning worksites. These audits are performed through a combination of the contracted arborists that planned the work and Idaho Power's utility arborists. Due to the elevated risk of wildfire in YRZs and RRZs, audits will be performed on pruning work performed in YRZs and RRZs regardless of the reason for the patrols and pruning.

#### **8.3.4. Pole Clearing of Vegetation**

Idaho Power has historically cleared vegetation from the base of certain transmission wood poles and a limited number of distribution wood poles in Idaho. These vegetation clearing practices have been deemed an effective method of minimizing wildfire damage to existing wood poles. Where acceptable and permissible, Idaho Power removes or clears vegetation in a 20-foot radius

surrounding the wood poles and applies a 10-year weed-control ground sterilant (SpraKil SK-26 Granular). Idaho Power submitted an SF-299 application with the Oregon BLM Vale District Office to prepare an Environmental Assessment to use the same ground sterilant on transmission and distribution facilities in Oregon. BLM staff estimate issuing herbicide permits in mid-2024.



## 9. WILDFIRE RESPONSE

### 9.1. Overview

Idaho Power responds to wildfires involving or impacting its facilities and/or resulting in a system outage; depending on the specific circumstances, Idaho Power may also respond to wildfires with the potential to result in an outage. Idaho Power's actions include without limitation:

- Taking appropriate steps, where safe to do so, to protect Idaho Power-owned facilities from fire damage;
- Restoring electrical service following an outages; and,
- Communicating with and informing customers.

These actions are taken on a 24-hour basis.

### 9.2. Response to Active Wildfires

Idaho Power field crews are trained to respond to active wildfires to monitor the situation regarding Idaho Power's facilities. Although they carry certain fire suppression equipment for use on very small fires in limited situations, Idaho Power's crews are not professionally trained firefighters and are instructed not to place themselves in a hazardous position when responding to wildfires. When responding to an active wildfire, Idaho Power personnel immediately report to, and take appropriate direction from, the Incident Commander (IC) or other fire response entity official with jurisdiction over the incident.

### 9.3. Emergency Line Patrols

At certain times, unplanned de-energization of lines requires qualified line personnel to conduct "emergency" patrols (inspections) of the de-energized lines. These patrols identify outage causes, damaged facilities, ingress/egress routes, and restoration requirements (number of crews, crew sizes, and necessary materials).

### 9.4. Restoration of Electrical Service

Idaho Power personnel restore electrical service when it is safe to do so following a wildfire. Trained field crews report to the site where damage has occurred with equipment and new materials and develop a plan to remove and rebuild damaged facilities. Depending on the situation, contracted field crews—such as line crews and vegetation management crews—are also deployed to assist in restoration efforts. Restoration work may take hours or, in some rare cases, days to complete. Depending on the extent of damage, customers may need to

perform repairs on their facilities and pass inspections by local agencies prior to having full electric service restored.

Due to the unique construction, need for specialized equipment, and—in many cases—remote location of many of Idaho Power’s transmission lines, Idaho Power developed a *Transmission Emergency Response Plan*. This plan includes restoration processes related to all transmission voltage classes from 46 through 500 kV. The plan outlines the basic approach and certain details about notification, materials, damage assessment, coordination, and preparedness.

#### **9.4.1. Mutual Assistance**

Idaho Power is a member of the Western Region Mutual Assistance Agreement (WRMAA), of which the majority of western United States electric utilities are also members. Member utilities provide emergency repair and restoration assistance to other member utilities requesting assistance when dealing with damaged electric facilities following a significant wildfire or weather event. In the event of a catastrophic wildfire that causes widespread damage to Idaho Power’s system, Idaho Power may request restoration assistance via the WRMAA as a last resort option after utilizing available internal personnel and contracted entities.

### **9.5. Public Outreach and Communications**

In 2022, Idaho Power developed and began following an *Outage Communication Playbook* (Playbook) to guide PSPS and load shed protocols. The Playbook ensures consistent and reliable communication to internal and external stakeholders. External communication includes targeted customers, Public Safety Partners, and operators of critical facilities. The Playbook guides activities and identifies key roles and responsibilities of internal Idaho Power employees. Supplemental information and resources are also included to ensure effective and consistent communication is made prior to, during, and after an event.



## 10. COMMUNICATING ABOUT WILDFIRE

### 10.1. Objective

Idaho Power communicates information about this WMP, including PSPS, and wildfire issues in general, to employees, customers, government officials, the public and other stakeholders. Topics of these communications vary due to timing and audience. For example, all customers can benefit from outage preparedness tips and information about how we are hardening the grid. We discuss PSPS plans in greater detail with Public Safety Partners and operators of critical facilities, as well as customers who live in PSPS zones.

The following core messages are the foundation for all wildfire-related communications:

- How customers can prepare for wildfire-related outages, including where to find outage and PSPS information and how to sign up for alerts and update contact information
- Ways customers can reduce wildfire risk
- Idaho Power's work to protect the grid from wildfire and reduce wildfire risk

### 10.2. Community Outreach

#### 10.2.1. Community Engagement

Idaho Power presents and distributes information on its WMP to a wide variety of stakeholders including the BLM, U.S. Forest Service, and county and city officials.

Idaho Power engages with various Public Safety Partners, including local governments, emergency managers, and Idaho and Oregon's ESF-12 and social service and welfare agencies (e.g., Oregon's Department of Human Services). These engagements focus on wildfire awareness, prevention, and outage preparedness. For example, the company worked with the Boise City Fire Department to develop updates to the Boise City Fire Code related to Wildland-Urban interface areas.

Idaho Power meets with all Public Safety Partners at least once a year and more frequently as needed. In counties with active local emergency planning committees, Idaho Power is an engaged member. The company uses a variety of methods to communicate with Public Safety Partners, including personal contact via phone, email, and text. We meet with identified Public Safety Partners annually and document their communication preferences in our outreach database. During an event, this information will be used to contact each partner.

Idaho Power conducted over 20 WMP and PSPS plan presentations in 2022. At each one, stakeholders were asked to provide feedback to inform future versions of the WMP.

Notable presentations included:

- Local emergency management planning committee meetings across our service area
- Public meetings in communities with PSPS zones and in all Oregon counties we serve
- Idaho Emergency Preparedness Conference
- Idaho Public Health Planning Conference
- Snake River Fire Chiefs annual meeting held in Oregon
- Idaho VOAD (Volunteer Organizations Active in Disasters) Annual Conference
- Seven public meetings in Ontario, Huntington, and Halfway at the end of fire season to gain feedback from customers and stakeholders to help inform future plans. Similar meetings will be held in Idaho counties prior to the 2023 fire season.

Idaho Power has also conducted functional exercises with Public Safety Partners before wildfire season. These exercises mimic fire emergencies, including PSPS events, to improve all parties' wildfire preparedness. For example, in June 2022, Idaho Power conducted a PSPS mock event in our Idaho service area. Several Public Safety Partners were included in the event to test our communication and coordination protocols. The event was held over a three-day period and assumed PSPS events across several wildfire risk zones. Following the event, participants were asked to provide feedback, which has been incorporated into our plan. Feedback received included:

- Public Health Districts were added as Public Safety Partner contacts. Previously, the Idaho Department of Health and Welfare had planned to communicate to the Public Health Districts in case of a PSPS event. Through the event, we identified that this created a delay in communication to the Public Health Districts.
- Back-up contacts for the Idaho Public Utility Commission were identified in case our primary ESF-12 contact is unavailable.
- The Idaho Office of Emergency Management requested they receive a list of critical facilities that could be impacted by the PSPS event. We added this step to our protocols for Idaho and Oregon.

In addition, Idaho Power participated in two mock events, one conducted by Malheur County and the second with the Idaho Office of Emergency Management's Cascade Rising event. Each event mimicked large power outages. While these were not PSPS-specific, we were able to



test and discuss our outage communication protocols. Through those events, two opportunities were identified:

- The Red Cross was added as a Public Safety Partner in Malheur County based on their role in coordinating and supporting CRCs.
- The emPower program was identified as a tool to help notify customers on DMEs if a PSPS event is predicted. Idaho Power is working with the Idaho Department of Health and Welfare, the Independent Living Network, and the Idaho Office of Emergency Management to expand this program to all Idaho counties.

#### **2022 Public Safety Partner Feedback Summary**

County emergency managers, the Idaho Office of Emergency Management, the Oregon Office of Emergency Management, and the Idaho Department of Health and Welfare reviewed Idaho Power's WMP plan, PSPS protocols, community outreach strategy and materials, critical facilities, and CRC strategies. Feedback received has been incorporated into our programs. Improvements based on this feedback include:

- Updates to identified critical facilities
- Changes to outreach materials to include county specific information as requested
  - Example: Sign-up information was included for counties with active emergency alert systems
- Revised GIS tools that will be provided to Public Safety Partners if a PSPS event is forecasted

### **10.2.2. Community Resource Centers**

Each county in Idaho Power's service area has unique needs during outage events and requires a customized, flexible approach. During annual meetings with county emergency managers, Idaho Power developed county-specific strategies in preparation for potential large-scale, extended outages. These strategies include working with emergency managers to identify CRC locations to be used, as needed, in a PSPS event. The company formulated strategies for Oregon counties in 2022 and will further explore county strategies for Idaho in 2023. If a PSPS event is forecasted, Idaho Power will strive to work directly with local Public Safety Partners to identify and meet the needs of the local community. Services provided in collaboration with emergency managers could include:

- Stand-up of CRC
- CRC location(s) and logistics included in community outreach/outage notifications

- CRC resources
  - Food, water, and other basic needs
  - Charging stations
  - Auxiliary service coordination such as medical services, housing assistance, family reunification, etc.

### **10.3. Customer Communications**

Safety is one of Idaho Power's core values. It guides our communication strategy for wildfire-related communication to our customers. Communication methods and timing vary based on the audience we are trying to reach and the goal of the communication.

Communication generally falls into two categories: 1) broad outreach to all customers, and 2) targeted outreach to customers in PSPS zones. The company uses a variety of outreach methods to reach a broad customer base with messages about wildfire safety, summer outage preparedness, and grid hardening efforts.

Outreach to customers in PSPS zones was more targeted and frequent. Idaho Power repeatedly urged these customers to update or confirm accurate contact information.





# Outreach Samples WILDFIRE SEASON 2022



## PUBLIC MEETING

Join Idaho Power for a town hall meeting on our **Wildfire Mitigation and Public Safety Power Shutoff (PSPS)** plans. Learn about:

- What to expect.
- How Idaho Power is protecting the grid from wildfire.
- What we're doing to deliver power safely and reliably.
- How to prepare and stay informed during outage.

**When is a PSPS used?**  
A PSPS is when a company like Idaho Power proactively turns off power in a certain area where wildfire risk is especially high due to extreme weather conditions. It is a last-resort effort to protect our customers, communities, employees and equipment from wildfire.

The decision to call a PSPS is based on forecasts and on-the-ground observations of many factors, including:







Idaho Power has identified this area in the Crouch-Garden Valley area where a PSPS is most likely.



**Town Hall Meeting**  
Time: 5 p.m.  
Date: June 30, 2022  
Place: Crouch Town Hall

For an interactive map of all Idaho Power PSPS zones, visit [idahopower.com/PSPS](https://idahopower.com/PSPS).



## BE WILDFIRE READY

Every summer, wildfires threaten our forests, farms, homes and businesses. They can also cause power outages. In extreme weather conditions, these outages could last hours or even days, especially if a public safety power shutoff (PSPS) is necessary.

**Here are some tips for staying safe in a wildfire-related outage:**



**Update** your contact information at [idahopower.com/contactupdate](https://idahopower.com/contactupdate).



**Prepare** for medical needs like refrigerated medicine or electrically powered medical equipment. This could mean finding a place to go during an outage or using a back-up generator.



**Make a plan** for feeding and watering pets and livestock in case power to your well pump goes out.

Visit [idahopower.com/wildfire](https://idahopower.com/wildfire) for more tips on wildfire safety, such as how to build a summer outage kit, and to learn what Idaho Power is doing to protect the grid.



## GUARDING THE GRID



## AYUDANOS A PREVENIR INCENDIOS.

Siempre extingue  
tu fogata para la  
seguridad de todos.



**Figure 14**  
Outreach samples for the 2022 wildfire season

### 10.3.1. Key Communication Methods

Idaho Power communicates with customers and the public before and throughout wildfire season to inform them of steps the company is taking to reduce wildfire risk and ways they can help prevent wildfires and prepare for outages. Various communication mediums used to accomplish this include:

- **Connections** (This monthly newsletter is an effective way to give customers more in-depth information about the work Idaho Power does, but it is not an effective way to communicate urgent information.)



**Figure 15**  
May 2022 edition of *Connections*

- Videos on topics like vegetation management and PSPS





**Figure 16**

[Idaho Power developed an educational video on how we protect wooden poles from wildfire](#)

- Emails, texts, and phone calls telling customers how to prepare for wildfires, encouraging them to update their contact information, and providing information about grid hardening efforts
  - The company used a new communication tool to notify all customers in PSPS zones by text message, phone call, or email. We mailed letters to customers we couldn't reach with this tool. Every year, the company will work to obtain accurate contact information for all customers in PSPS zones.
- News media (news releases, appearances on broadcast TV and radio shows, interviews, etc.)
- Social media (posts on Facebook, Instagram, and Twitter are an efficient way to reach large numbers of customers and the public in a timely manner). Social media continues to be a critical tool for engaging with customers and communicating wildfire safety. The company's social media campaign for wildfire season focused on three main themes:
  - Wildfire prevention: What Idaho Power is doing and what customers can do to reduce wildfire risk
  - Outage preparation: How customers, especially those who live or have businesses in high-risk areas, should prepare for wildfire-related outages
  - Grid maintenance: How Idaho Power protects the grid, keeping energy safe, reliable and affordable, even during wildfire season.



**Figure 17**  
Sample image of social media post

Social media posts are focused on various aspects of each theme, such as putting out campfires as shown in Figure 18 below; creating defensible spaces around homes and businesses; building a summer outage kit as shown in Figure 17, above; and updating contact information. Posts also include information on installing SPU's on the power distribution system and wrapping wood poles with fire-resistant mesh.

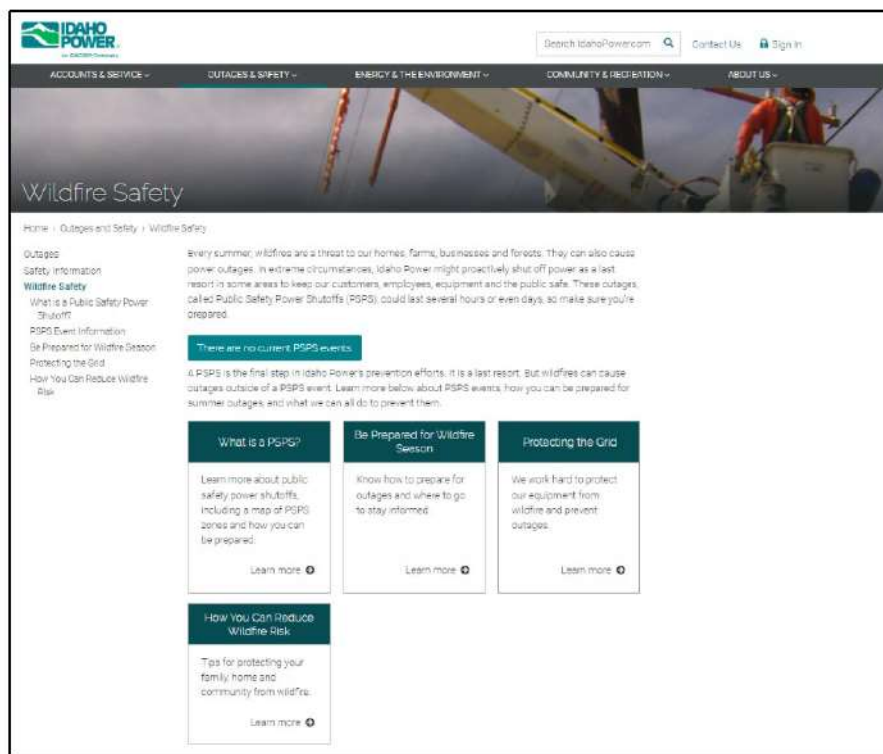


**Figure 18**  
Sample image of social media post

- Postcards and flyers
- Paid advertising (radio, digital, and print advertisements)



- Idaho Power's website (wildfire safety information, such as videos, safety tips, and the latest version of the WMP) can be found at <https://www.idahopower.com/outages-safety/wildfire-safety/>.



**Figure 19**  
Idaho Power's Wildfire Safety landing webpage

- As shown in Figure 19, on this webpage, the company introduces wildfire and its relationship to delivering power, information on PSPS, and the following links:
  - What is a PSPS?: Explanation of PSPS events, including a map customers can use to determine if their homes or businesses are inside a PSPS zone
  - Be Prepared for Wildfire Season: Preparation tips like building an outage kit and making a plan for feeding livestock, etc.
  - Protecting the Grid: Idaho Power measures to enhance grid resiliency and reduce wildfire risk; an interactive map showing red and yellow risk zones and a link to the WMP
  - How You Can Reduce Wildfire Risk: Tips for preventing wildfires when camping, using fireworks, hauling trailers, etc.
  - PSPS Event Information: Real-time information on active PSPS events, estimated shutoff time, outage duration, and customers impacted



- Public engagement with the company holding at least one public meeting per year in both Oregon and Idaho, offering a virtual meeting with additional access and functionality options. Feedback opportunities are also provided during and after the meetings.



**Figure 20**  
Wildfire mitigation meeting PowerPoint cover slide

### **10.3.2. Timing of Outreach**

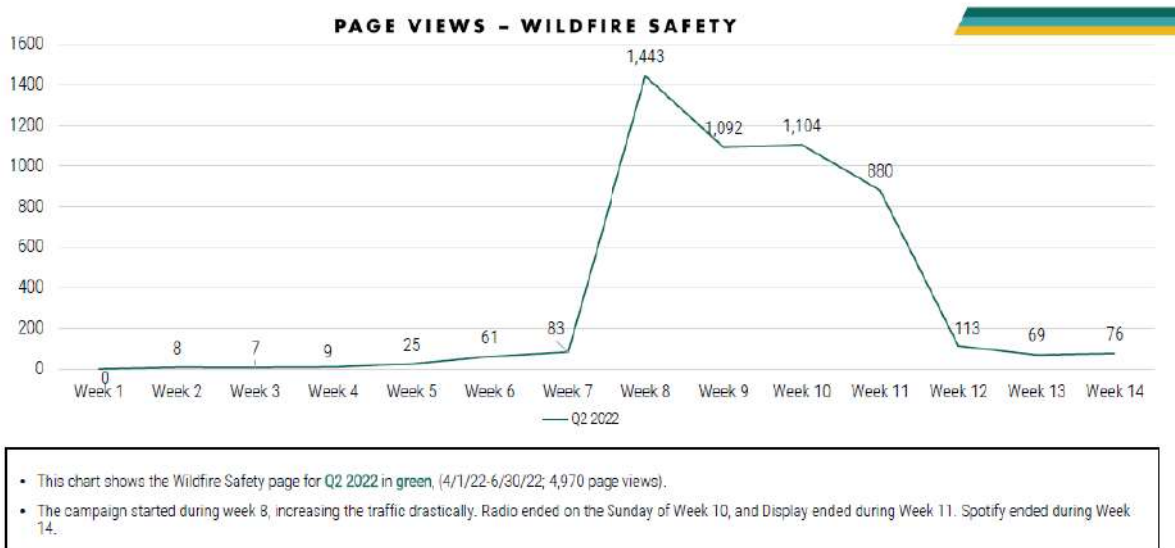
The timing of the outreach generally occurs before and during wildfire season. In 2022, Idaho Power originally planned to begin preseason wildfire outreach in early- to mid-April. Due to an unusually wet and cold spring (Boise had accumulating snow on the valley floor on May 9) and a desire to maximize impact, the company delayed release of social media posts, ads, and other communications until the weather changed such that wildfire was more prominently on people's minds. The tone of early communications was meant to encourage customers to think about wildfire season, how they could prepare for it, their role in preventing wildfires, and steps Idaho Power is taking to keep the grid safe and reduce wildfire risk. When the potential for wildfire increased, communications shifted in tone. Messaging put more emphasis on asking customers, especially those in PSPS zones, to update their contact information and prepare for wildfire.

### **10.3.3. Communication Metrics**

Idaho Power uses metrics and monitoring of communication activities to evaluate the effectiveness of our outreach efforts. Idaho Power published a [Wildfire Safety](#) landing webpage



in April 2022 with information on wildfire safety, PSPS, and interactive maps. In the roughly six weeks that followed, before general outreach efforts began, the page saw fewer than 200 hits. However, a campaign of radio, print, and online ads began in earnest in late June and traffic immediately jumped, with 1,443 hits the first week of the campaign as shown in the following graph. Traffic stayed high for about a month before dropping off again.



**Figure 21**  
Wildfire safety webpage views

The following is a summary of metrics from Idaho Power's 2022 paid communication campaign.

- **Radio**—Idaho Power's wildfire-safety radio ad campaign ran from May 16 to July 31 in the Idaho Falls, Twin Falls, and Boise markets. The Boise market includes eastern Oregon, reaching as far west as Baker City. The campaign included a total of 4,327 paid and public safety announcement (PSA) match spots; 967 of which were in Spanish and played on Spanish language stations.
- **Programmatic Display Ads**—Idaho Power's digital display ads appeared on regional websites from May 16 to July 31. These ads resulted in a total of 3,496 clicks in Idaho and Oregon to our wildfire landing webpage, with almost 3.7 million impressions. Almost three-quarters (74.21%) of these impressions occurred via mobile devices.
- **2021 Versus 2022**—Idaho Power's 2021 wildfire-safety campaign was comparable to what we deployed in previous years, with the company relying mainly on displays on the Idaho Power website. The 2022 campaign was a much more robust, intricately planned and carefully executed effort. It involved a larger outreach goal and more ads on radio and Spotify that ultimately led to 1.24 million more impressions than the 2021 wildfire-safety campaign.

### 2022 WMP Communication Summary

Idaho Power used traditional and social media in 2022 to inform customers about the company's WMP, efforts to protect the grid from wildfire, how customers could reduce wildfire risk, how to prepare for wildfire-related outages, and PSPS. Outlets included:

- Newspapers—Print ads and news coverage
- Radio—Paid ads in English and Spanish and news coverage
- TV news coverage
- Printed flyers
- Social media
- Idaho Power website
- Digital display ads
- Postcards—Used to inform customers of the PSPS program and invitations for public meetings
- Spotify—Paid ads
- News Releases—Includes news releases with other Oregon utilities
- Customer email
- Customer newsletters
- Text Messages—Customers in PSPS zones
- Phone Calls—Customers in PSPS zones
- Letters—Customers in PSPS zones

The following updates to the website were made to include new pages focused on wildfire safety in 2022:

- Searchable map of PSPS zones by customer address
- Summer outage preparation
- How Idaho Power protects the grid including mitigation efforts
- How customers can help prevent wildfires
- An active PSPS event page that provides details of active PSPS areas and outage duration information

Additionally:

- Postcards were sent to all customers in PSPS zones to inform them of program details
- Printed 2,600 outage preparedness flyers (English and Spanish) and gave to the Idaho Commission on Aging for delivery with Meals on Wheels
- Wildfire themed customer newsletter (*Connections*) was sent to all customers in May
- Wildfire themed customer email sent to all customers with email addresses on file (approx. 350,000) in May
- Implemented a “pop-up” in the customer My Account web page encouraging customers to update contact information
- Post fire-season postcards were mailed to all Oregon customers in November for invitation to public meetings



## 10.4. Idaho Power Internal Communications—Employees

Idaho Power communicates with its employees in a variety of ways:

- *News Scans* for all employees



**Figure 22**  
May 2, 2022, edition of *News Scans*

- Emails
- Leader communications
- GIS-based visual communication of risk zones and affected overhead lines
- Online training for employees influenced by the WMP
- In-person, hands-on, training for certain field employees

## 11. PERFORMANCE MONITORING AND METRICS

### 11.1. Wildfire Mitigation Plan Compliance

The Chief Operating Officer (COO) is the designated oversight officer for the Idaho Power WMP. The Vice President of Planning, Engineering and Construction (VP) is responsible for compliance monitoring, necessary training, and annual review of this WMP.

### 11.2. Internal Audit

Idaho Power's internal audit department, Audit Services, will periodically conduct an independent and objective evaluation of the WMP to assess compliance with policies and procedures and evaluate achievement of the Plan's objectives. Idaho Power's Compliance department will also periodically review Idaho Power's compliance with federal reliability standards regarding vegetation management practices.

### 11.3. Annual Review

Idaho Power will conduct an annual review of its WMP and incorporate necessary updates prior to wildfire season.

### 11.4. Wildfire Risk Map

The Wildfire Risk Map was established in 2020 by an external consultant. As noted in Section 2 of this report, the 2020 analysis was based, in part, on population census data from 2010. Idaho Power plans to reconduct risk modeling in 2023 to include 2020 Census data and explore other areas of consequence as described in Section 3.2.1. Idaho Power intends to review our risk modeling approach on an annual basis and perform modeling updates biennially.

### 11.5. Situational Awareness

Idaho Power will share its FPI regularly and broadly with Idaho Power personnel and contractors during wildfire season to ensure condition-specific operating requirements are met.

### 11.6. Wildfire Mitigation—Field Personnel Practices

Idaho Power crews and certain personnel are required to follow the *Field Personnel Practices* when working on lines in the RRZs and YRZs during a red FPI. Specific requirements are found in Idaho Power's *Field Personnel Practices* which is consulted by such crews working in these areas.



## 11.7. Wildfire Mitigation—Operations

Each year in preparation for the fire season, Idaho Power reviews and establishes:

- Temporary operating procedures for transmission lines during the fire season
- An operational strategy for distribution lines during time periods of elevated wildfire risk during the fire season
- Use of PSPS as a tool of last resort to prevent Idaho Power T&D facilities from becoming a wildfire ignition source or contributing to the spread of wildfires

## 11.8. Wildfire Mitigation—T&D Programs

This section lists metrics used to evaluate Idaho Power’s asset management and vegetation management programs. The metrics are based on progress made towards completing mitigation activities, such as quantities of inspected units. Work is identified and prioritized each year and approved by executive management. Idaho Power’s goal is to complete 100% of the work plan each year; however, emergencies or other unplanned events can occur and disrupt the annual work plan. All work is completed in accordance with safety and applicable requirements and industry standards.

**Table 11**  
T&D programs metrics

Transmission	
Transmission Asset Management Programs	Description
Aerial Visual Inspection Program	Perform annual patrols and document identified defects according to priority. Complete repairs according to priority definition.
Ground Visual Inspection Program	Perform annual patrols and document identified defects according to priority. Complete repairs according to priority definition.
Detailed Visual (High Resolution Photography) Inspection Program	Perform 10-year cycle patrols and document identified defects according to priority. Complete repairs according to priority definition.
Wood Pole Inspection and Treatment Program	Perform 10-year cycle patrols and document identified defects according to priority. Complete repairs according to priority definition.
Cathodic Protection and Inspection Program	Perform 10-year structure-to-soil potential testing on select towers with direct-buried anodes. Perform 10-year rectifier and ground-bed testing on ICCP systems. Annually inspect and record DC voltage and current readings of rectifiers. Complete repairs and adjustments.
Wood Pole Wildfire Protection Program	Inspect and install wraps on selected poles.
Distribution	
Distribution Asset Management Programs	Description
Wood Pole Inspection and Treatment Program	Perform 10-year cycle patrols and document identified defects according to priority. Complete repairs according to priority definition.
Line Equipment Inspection Program	Complete annual inspections and data analysis and mitigate defects

## Ground Detailed Inspection Program

## Thermography (Infra-Red) Inspections

## Distribution Infrastructure Hardening Program

Replace "small conductor" with new 4acsr or larger conductor

Replace or repair damaged conductor

Re-tension loose conductors including "flying taps" and slack spans as required

Replace wood-stubbed poles with new wood poles

Replace white and yellow square tagged poles with new wood poles

Replace wood pins/wood crossarm with new steel pins/fiberglass crossarms

Replace steel insulator brackets with new steel pins/fiberglass crossarms

Replace wedge deadends on primary taps with new polymer deadend strain insulators

Replace aluminum deadend strain insulators with new polymer deadend strain insulators

Replace porcelain switches with new polymer switches

Replace hot line clamps

Replace aluminum stirrups

Install avian cover

Relocate arresters

Install bird/animal guarding

Update capacitor banks

Replace swelling capacitors

Replace oil-filled switches with vacuum style

Replace porcelain switches with polymer switches

Replace certain expulsion arresters

Install disconnect switches on CSP transformers

Install avian cover

Update down guys

Replace/Install down-guy insulators with fiberglass insulators

Tighten down guys

Tighten hardware

Correct 3rd party pole attachment violations (report to Joint Use Department)

Replace certain expulsion fuses

Perform annual patrols and document identified defects according to priority. Complete repairs according to priority definition.

Complete inspections of targeted lines and equipment using thermal imaging (infra-red) cameras.

Complete annual work plan

## Vegetation Management

### Transmission

Pre-Fire Season Inspection and Mitigation

Line Clearing Cycles: Strive to maintain 3-year cycle for valley areas & 6-year cycle for mountain areas

Tree Removals - Hazard Trees

Targeted Pole Clearing

100% QA/QC Audits in RRZs and YRZs

### Distribution

Pre-Fire Season Inspection and Mitigation

Line Clearing Cycle: Strive to maintain 3-year cycle

Mid-Cycle Pruning in RRZs and YRZs

### Description

Perform annual pre-fire season inspections no later than June 15 of each year and mitigate noted "hot spots"  
Complete annual cycle pruning work plan

Remove targeted hazard trees

Complete annually targeted structures

Complete annually QA/QC audits

### Description

Perform annual pre-fire season inspections no later than June 15 of each year in RRZs and YRZs and mitigate noted "hot spots"  
Complete annual cycle pruning work plan

Complete annual mid-cycle pruning work plan in RRZs and YRZs



Tree Removals - Cycle Busters/Hazard Trees

Complete annual cycle pruning work plan

Targeted Pole Clearing

Complete annually targeted structures

100% QA/QC Audits in RRZs and YRZs

Complete annually QA/QC audits

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## 11.9. Long-term Metrics

In 2022, Idaho Power identified new metrics to measure the performance of the WMP and its effectiveness over time. Vegetation management and grid hardening work is expected to reduce outages and improve reliability in wildfire risk zones. A new approach in gauging the effectiveness of the WMP includes tracking reliability data and specific outage counts based on causes or failures that are considered potential drivers of ignition. The following outage causes were established as baseline potential drivers of ignition and will be monitored for each wildfire risk zone:

- Tree/Vegetation Contact
- Equipment Failure
- Loose Hardware
- Corrosion
- Animal Contact

Historical data was analyzed in 2022 in both RRZ and YRZ to establish baseline metrics that will be used to measure performance over time. Potential drivers of ignition in wildfire risk zones through October have decreased by 8% compared to the previous four-year average. This improvement occurred despite being in early stages of wildfire hardening and enhanced vegetation management activities. The use of outage data to gauge overall WMP performance is expected to be a long-term metric and it takes several years to develop trendlines and averages to draw definitive conclusions and a causal relationship to wildfire mitigation activities. In 2023, the company plans to continue to develop long-term benchmarks based on outage counts and cause codes and will refine our approach by expanding the use of data analytics.

**Appendix A**

The Wildland Fire Preparedness and Prevention Plan.



# Wildland Fire Preparedness and Prevention Plan

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  - D. Decision Making for Field Work Activities
3. Preparedness—Tools and Equipment
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## 1. Plan Overview

### A. Intent of Plan

The purpose of this Wildland Fire Preparedness and Prevention Plan (Plan) is to provide guidance to Idaho Power Company (IPC) employees to help prevent the accidental ignition and spread of wildland fires (wildfires) due to employee work activities in locations and under conditions where wildfire risk is heightened. It is expected that all IPC employees be aware of the provisions of this Plan, operate in accordance with the Plan and conduct themselves in a fire-safe manner.

### B. Scope of Plan

The scope of this Plan includes tools, equipment, and field behaviors IPC employees incorporate when working in locations and under conditions where wildfire ignition is heightened.

Operations of Transmission and Distribution (T&D) lines facilities, vegetation management, and T&D lines programs that mitigate wildfire risks are not included in this Plan; they are referenced in the separate Wildfire Mitigation Plan.

## 2. Situational Overview and Applicability

### A. Wildfire Season

The provisions of this Plan shall be applicable during wildfire season. Within IPC's service area, wildfire season is defined as the closed fire season of May 10 through October 20 of each year, as established by Idaho State Law, Title 38-115.

Should any local, state, or federal government land management agency (i.e., the BLM, U.S. Forest Service, Oregon Department of Forestry, Idaho Department of Lands, etc.) issue any wildfire related order that extends wildfire season beyond that specified above, then compliance with that agency's order shall govern.

Many variables—such as drought conditions, weather, and fuel moisture—can cause the wildfire season to begin and/or end earlier or later. In summary, flexibility, judgment, attention to current and forecasted field conditions, and attention to governmental agency issued wildfire orders are necessary such that operational practices can be adjusted accordingly.

### B. Wildfire Risk Zones

IPC's Wildfire Mitigation Plan includes a Wildfire Risk Map of IPC's service area. This Wildfire Risk Map may be accessed at the Idaho Power SharePoint site. All lands in the vicinity of IPC facilities are mapped as Red Zone, Yellow Zone or areas of minimal wildfire risk (i.e., not within a Red or Yellow Zone). Red and Yellow Zones are designated as wildfire risk zones (WRZ). The provisions of this Plan shall apply to work activities taking place during wildfire season in these WRZs.

Should any local, state, or federal government land management agency (i.e., BLM, U.S. Forest Service, Oregon Department of Forestry, Idaho Department of Lands, etc.) issue any wildfire related order, then compliance with that agency's order shall govern if their order is more restrictive than that set forth in this Plan.

### C. Fire Potential Index

Idaho Power's Atmospheric Science department has developed an FPI rating system that forecasts wildfire potential across IPC's service area. The FPI considers many current and forecasted elements such as meteorological (winds-surface and aloft, temperatures, relative humidity, precipitation, etc.) and fuel state (both live and dead). The FPI is designed and calibrated for IPC's service area; specifically, those areas in proximity to IPC transmission, distribution, and generation facilities.

The FPI consists of a numerical score ranging from 1 (very green, wet fuels with low to no wind and high humidity) to 16 (very brown and dry, both live and dead dry fuels with low humidity and high temperatures). The FPI scores are grouped into the following 3 index levels:

- **Green:** FPI score of 1 through 11
- **Yellow:** FPI score of 12 through 14
- **Red:** FPI score of 15 through 16

During wildfire season, Idaho Power will determine a daily FPI as described in Section 5 of the WMP. This weather forecast and FPI dashboard is contained within IPC geographic information system (GIS) viewers available to all IPC employees.

### D. Decision Making for Field Work Activities

Employees working in the field shall be cognizant of current and forecasted weather and field conditions. Awareness of these conditions, and exercising appropriate judgment, is essential when considering whether to undertake work activities when combinations of high temperatures, low humidity, dry fuels, and/or wind are present or forecasted to be present.

The following process steps shall apply to employees and crews contemplating field work during wildfire season:

#### Planned or Scheduled Work Activities:

1. Fire Potential Indices:
  - a) Employees working in the field—NOT working on transmission or primary distribution lines should:



- i. Be aware of the current and forecasted weather and the FPI level for the area in which the work will be performed, through the FPI dashboard.
  - ii. Once the FPI level for the work zone is identified, proceed with work but consider utilizing Prevention—Practices of Field Personnel (see Section 6 of this Plan).
- b) Employees working in the field—working on transmission or primary distribution lines should:
- i. Be aware of the current and forecasted weather and the FPI level for the area in which the work will be performed.
  - ii. Once the FPI level for the work zone is identified, proceed as follows for each FPI level:
    1. **Green FPI in All Zones:** Proceed with the work.  
Consider utilizing Prevention—Practices of Field Personnel (see section 4 of this Plan)
    2. **Yellow FPI in All Zones:** Proceed with the work.  
Consider utilizing Prevention—Practices of Field Personnel (see section 4 of this plan)
    3. **Red FPI**
      - a) **In Normal Zone:** Proceed with the work.  
Consider utilizing Prevention—Practices of Field Personnel (see Section 6 of this plan)
      - b) **In Medium Zone:** Proceed with the work. However, it is a requirement to follow the Prevention—Practices of Field Personnel (see Section 6 of this plan)
      - c) **In High Zone: STOP.** No planned work activities shall take place unless approved by operations level manager. Work consideration will be restoration of electric service or work deemed critical to providing safe, reliable electric service. If work is approved to proceed it is a requirement to follow the Prevention—Practices of Field Personnel (see Section 6 of this plan).

Fire Potential Index (FPI)	High	15 to 16 (Red)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  <b>REQUIRED</b>	<b>STOP/NO WORK</b>
		12 to 14 (Yellow)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)
	Normal	1 to 11 (Green)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)	Proceed with work  Utilize Prevention/ Practices of Field Personnel  (Optional)
			None	Yellow (Tier 2)	Red (Tier 3)

2. Land Management Agency Restrictions: Follow the requirements and restrictions of any wildfire restrictions related order that is issued by local, state, or federal land management agencies.
  - a) Immediately upon receiving knowledge of an order, The Environmental Services department will notify, via email, operations leadership within Power Supply, Customer Operations and Business Development, and T&D Engineering and Construction of wildfire related requirements and restrictions orders that are issued by local, state, or federal land management agencies.

#### Emergency Response and Outage Restoration Work Activities:

Follow the same steps as identified above for planned work activities. However, it is recognized that the nature of emergency response and outage restoration situations will often require exceptions to the above. In these situations, leadership should be consulted, and appropriate judgment should be used given the nature of the emergency or outage at hand.

### **3. Preparedness—Tools and Equipment**

#### **A. Required Personal Protective Equipment**



Standard IPC Personal Protective Equipment (PPE) shall be worn in accordance with the IPC Safety Standard.

When entering a designated fire area being managed by the BLM or the U.S. Forest Service, additional PPE requirements may be in force by those agencies. These typically include:

- Hardhat with chinstrap
- Long sleeve flame-resistant (FR) shirt and FR pants
- Leather gloves
- Exterior leather work boots, 8" high, lace-type with Vibram type soles
- Fire shelter

## B. Required Tools and Equipment

Employees NOT working on transmission or distribution lines: Standard tools and equipment in accordance with the IPC Safety Standard and Fleet Services.

Employees working on transmission or distribution lines: IPC and the State of Idaho BLM entered into a March 2019 Master Agreement that governs various IPC and BLM interactions, including wildfire prevention related provisions. In addition to State of Idaho BLM lands, IPC has elected to apply these requirements to all work activities taking place on all WRZ in Idaho, Nevada, Montana, and Oregon. These requirements include:

- During the wildfire season (May 10–October 20) or during any other wildfire season ordered by a local, state, or federal jurisdiction, IPC, including those working on IPC's behalf, will equip at least 1 on-site vehicle with firefighting equipment, including, but not limited to:
  - a) Fire suppression hand tools (i.e. shovels, rakes, Pulaski's, etc.),
  - b) a 16-20-pound fire extinguisher,
  - c) a supply of water, sufficient for initial attack, with a mechanism to effectively spray the water (i.e. backpack pumps, water sprayer, etc.). This requirement to carry water is dependent on the vehicle type and weight restrictions. For example, a mini-excavator would not be required to carry water since there is no safe way to do so, or a loaded bucket truck may not be required to carry water because of weight limitations.
- At a minimum, equip each truck that will be driven in the WRZs during wildfire season with at least:
  - a) One round, pointed shovel at least 8-inches wide, with a handle at least 26 inches long
  - b) One axe or Pulaski with a 26-inch handle or longer
  - c) A combination of shovels, axes, or Pulaskis available to each person on the crew



- d) One fire extinguisher rated no less than 2A:10BV (5 pounds)
- e) 30-200 gallons of water in a fire pumper and 5-gallon back packs

IPC personnel will be trained to use the above tools and equipment to aid in extinguishing a fire ignition before it gets out of control and take action that a prudent person would take to control the fire ignition while still accounting for their own personal safety.

#### C. Land Management Agency Restrictions and Waivers

The Environmental Services department will notify operations leadership within Power Supply, Customer Operations and Business Development, and T&D Engineering and Construction of any wildfire related requirements and restrictions orders that are issued by local, state, or federal land management agencies. Typical orders issued each fire season include:

- BLM. During BLM's Stage II Fire Restrictions, IPC's Environmental Services department will obtain an appropriate waiver. Field personnel shall take appropriate precautions when conducting work activities that involve an internal combustion engine, involve generating a flame, involve driving over or parking on dry grass, involve the possibility of dropping a line to the ground, or involve explosives. Precautions include a Fire Prevention Watch Person who will remain in the area for 1 hour following the cessation of that activity. Also, IPC personnel will not smoke unless within an enclosed vehicle, building, or designated recreation site or while stopped in an area at least 3 feet in diameter that is barren or cleared of all flammable materials. All smoking materials will be removed from work sites. No smoking materials are to be discarded.
- State of Oregon Department of Forestry (ODF). Prior to each summer fire season, the ODF issues a "Fire Season Requirements" document that specifies required tools, equipment, and work practices. In addition to State of Oregon lands, IPC has elected to apply these requirements to all work activities taking place on all WRZ, BLM lands, and Forest Service lands within the State of Oregon. Go to <https://www.oregon.gov/ODF/Fire/Pages/Restrictions.aspx> for ODF's Fire Season Requirements order.
- Other sites for reference that contain fire restriction orders include:
  - Oregon—Blue Mountain Interagency Fire Center at <http://bmidc.org/index.shtml>
  - Nevada—Fire Information at <https://www.nevadafireinfo.org/restrictions-and-closures>
  - Montana—<https://firerestrictions.us/mt/>

### 4. Prevention—Practices of Field Personnel

#### A. General Employee Practices

The below listing includes, but is not limited to, practices and behaviors employees shall incorporate depending on the FPI and level of WRZs during fire season.

1. Daily tailboards must include discussion around fire mitigation planning. Discussion topics include, but are not limited to:
  - a. Items 2 through 7 below
  - b. Water suppression
  - c. Hand tools
  - d. Welding blankets
  - e. Mowing high brush areas (weed wacker)
  - f. Watering down the worksite before setting up equipment
2. Weather conditions and terrain to be worked shall be considered and evaluated. Items to be considered include, but are not limited to:
  - a. Identify the FPI for the area being worked (see Section 3.2.2)
  - b. Monitor weather forecasts and wind and humidity conditions
  - c. Identify surroundings. i.e., wildland-urban interface, BLM lands, Forest Service lands, proximity to any homes and structures, etc.
  - d. Identify local fire departments and locations
  - e. Evaluate the terrain you are working in (steep or flat)
  - f. Consider whether the work will occur during the day or at night
3. Work procedures and tools that have potential to cause a spark or flash shall be considered and evaluated. Items to be considered include, but are not limited to:
  - a. Performing energized work
  - b. Grinding or welding
  - c. Trees contacting electrical conductors
  - d. Hot saws
  - e. Chainsaws
  - f. Weed wackers
  - g. Sawzalls
4. Monitoring the worksite throughout the project.

It is imperative that all crews and equipment working in the WRZs areas are continuously monitoring and thoroughly inspecting the worksite throughout the project. This includes prior to leaving the work area for the night or before moving on to the next structure.
5. Employee cooking stoves.

When working in remote locations, often employees bring food that needs to be cooked. Open flames should not be allowed. Cook stoves may be permitted by leadership but special precautions must be followed to use:

  - a. The stove or grill must be in good repair and of sturdy construction
  - b. Stoves must be kept clean, grease build up is not allowed
  - c. Fueling of the stove must follow the fueling procedures when liquid fuels are used
  - d. Cooking must be in areas free of combustible materials



6. Smoking on the job site.

Carelessly discarded smoking materials can result in wildfire ignition. The following practices shall be followed:

- a. Do not discard any tobacco products from a moving vehicle.
- b. Smoking while standing in or walking through forests or other outdoor areas when IPC's FPI rating is above a Green level is prohibited.
- c. All employees must smoke **only in designated areas** and smoking materials must be disposed of in half filled water bottles or coffee containers half filled with sand. Smoking materials shall not be discarded on any site.

7. Post job site inspection.

Final inspection or post-checking the work site for any ignition hazards that may remain is essential to the proper completion of the work and true mitigation of the hazards.

Post-checking the work will help ensure the hazards were mitigated and provide a final chance to see if any new hazards or hot spots exist before leaving the work site.

B. Behaviors Relating to Vehicles and Combustion Engine Power Tools

It is important to consider work procedures, equipment conditions, employee actions, potential causes, and other sources that could lead to fire ignition. Some work practices may be performed on roadways that have little to no risk of fire ignition. Leadership should consider scheduling off-road equipment use during times of green fire risk. Employees should also consider alternative tools, work methods or enhanced suppression tools to reduce the risk or spread of fire.

1. Additional heat may bring vegetative materials to an easier point of ignition.

This includes, but is not limited to, the following vehicles:

- a. Pickups, crew cabs, line-beds, buckets trucks (large and small), backhoes, excavators and rope trucks, and any other motorized equipment.

2. Vehicle Procedures:

- a. Inspect all engine exhaust, spark arresters and electrical systems of vehicles used off road, daily for debris, holes or exposed hot components and to ensure that heat shields and protective components are in place.
- b. Conduct inspections of the vehicle undercarriage before entering or exiting the project area to clear vegetation that may have accumulated near the vehicle's exhaust system.
- c. Vehicles shall be parked overnight in areas free from flammable vegetation at a minimum distance of 10 feet.
- d. Vehicles and equipment will not be stationary or in use in areas where grass, weeds or other flammable vegetation will be in contact with the exhaust system.
- e. If there is no other workable option for the location that doesn't include weeds, grass or other flammable vegetation, the vegetation and debris will need to be removed.



- f. Consider using a fire-resistant material such as a welding blanket to cover flammable material to act as a heat shield; fire blankets may be a suitable option to avoid removal of vegetation.
- 3. Hot brakes on vehicles and equipment:
  - a. Park vehicles in areas free of combustible materials.
  - b. Hot brake emergency parking, during times of yellow or red FPI shall be cleared of combustible materials for a distance of at least 10 feet from the heat source.
- 4. Fueling procedures:
  - a. Tools or equipment should NOT be fueled while running.
  - b. Cool down period must be given to allow equipment time to no longer be considered a fire risk.
  - c. Allow for a ten-foot radius from all ignition sources.
  - d. Any combustible debris should be cleared from the immediate area.
  - e. Never smoke while fueling.
  - f. Designate fueling areas for all gas-powered tools.
- 5. Combustion engine power tools:

Poorly maintained or missing spark arrester screens may allow sparks to escape and cause ignition of vegetation. Ensure proper spark arrester screens are in place for the following tools:

  - a. Generators
  - b. Pony motors
  - c. Pumps
  - d. Chain saws
  - e. Hot saws
  - f. Weed eaters
  - g. Brush hog

Inspect spark arresters daily; clean or replace when clogged, damaged or missing or remove from service until repaired.

## 5. Reporting

### A. Fire Ignition

All fire ignitions shall be immediately reported to regional or system dispatch. Dispatch will notify local fire authorities. All work shall immediately stop and necessary steps taken to extinguish the fire with available tools, water, and equipment. If the fire gets too large to safely contain or extinguish, ensure all employees are accounted for and get to a safe location.

### B. Fire Reporting

When reporting a fire ignition to regional or system dispatch provide the following information:

1. Your name
2. Location-reference points including an address, road or street name, cross streets, mountain range, GPS coordinates, as applicable
3. Fire information
4. Size and behavior of the fire
5. Weather conditions

## **6. Training**

Each employee who performs work in wildland fire designated zones shall be trained on the content of this document and be required to complete annual refresher courses through the Workday system. Employees are required to complete fire extinguisher and fire shelter training annually as part of the lineman safety compliance. Documentation of all training shall be retained in Workday.



## 7. Roles and Responsibilities

Employee	<ol style="list-style-type: none"> <li>1. Be familiar with the requirements specified in this Plan and operate in accordance with this Plan.</li> <li>2. Be aware of daily weather forecast and FPI level.</li> <li>3. Be aware of whether field work will be performed in a WMZ.</li> </ol>
Crew Foreman and Front-Line Leaders	<ol style="list-style-type: none"> <li>1. Establish expectations to direct report employees they are to be familiar with, and follow, Plan requirements.</li> <li>2. Ensure the crew or team conducts field operations in accordance with this Plan.</li> <li>3. Be aware of daily weather forecast and FPI level (by viewing the FPI dashboard or by calling into dispatch or a leader):               <ol style="list-style-type: none"> <li>a) Ensure employees are aware of the FPI level.</li> <li>b) Ensure work practices comply with this Wildland Fire Preparedness and Prevention Plan when the FPI is "Red" and the WMZ is Yellow.</li> <li>c) Ensure no work takes place when FPI is "Red" and the WMZ is Red. Any exceptions to be discussed with manager.</li> </ol> </li> <li>4. Ensure annual training of employees is completed prior to wildfire season.</li> <li>5. Ensure required tools and equipment are in place prior to wildfire season.</li> </ol>
Manager (Regional Operations Manager, Area Manager, T&D Construction Manager)	<ol style="list-style-type: none"> <li>1. Establish expectations to Crew Foremen and Front-Line Leaders they are to operate in accordance with Plan requirements.</li> <li>2. Support Crew Foremen and Front-Line Leaders in scheduling training and making required tools and equipment available.</li> <li>3. View daily weather forecast and FPI dashboard:               <ol style="list-style-type: none"> <li>a) Authorize any exceptions to working when FPI is "Red" and the WRZ is Red.</li> <li>b) Ensure specified audits are timely completed.</li> </ol> </li> </ol>
Meteorology Department	<ol style="list-style-type: none"> <li>1. Provide daily weather forecast and update the FPI dashboard contained within the IPC Enviro Viewer.</li> </ol>
Environmental Services Department	<ol style="list-style-type: none"> <li>1. Monitor local, state, and federal land management agencies for any wildfire restriction orders that are issued.</li> <li>2. Communicate content of any orders issues to Power Supply, COBD, and PEC operations leadership.</li> </ol>
Operations Procurement Department	<ol style="list-style-type: none"> <li>1. Ensure contractors have a copy of this Plan and that contractual requirements are in place to ensure adherence to the Plan.</li> </ol>
Vice-President of Planning, Engineering and Construction (VP of PEC)	<ol style="list-style-type: none"> <li>1. Ensure annual review/update of this Plan is conducted following the completion of each wildfire season.</li> </ol>

## 8. Audit

Prior to the start of wildfire season (May 10), all vehicles associated with work on transmission and distribution lines will be audited by leadership to ensure that those working in WRZs are properly equipped with firefighting equipment. The following checklist must be completed, dated, and signed by a member of leadership (front-line supervisor or above) and kept with the crew or individual until fire season has ended (Oct 20). A copy of each audit checklist shall be sent to the respective manager and senior manager.

**Wildland Fire Preparedness Audit Checklist:**

Inspector: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Crew: \_\_\_\_\_

**Crew:**

At least 1 vehicle will be equipped with the following:

- Fire suppression hand tools (shovels, Pulaski, axes, etc.) for each member of the crew
- A 16–20-pound fire extinguisher (2-10-pound fire extinguishers)
- A supply of water, sufficient for initial attack, with an effective spraying mechanism (i.e., backpack pumps, water sprayer, etc.)
- 30–75-gallon mechanical fire pumper

**Individual Truck:**

- One round, pointed shovel at least 8-inches wide, with a handle at least 26 inches long
- One axe or Pulaski with a 26-inch handle or longer
- A combination of shovels, axes, or Pulaskis to each person on the crew
- One fire extinguisher rated no less than 2A:10BV (5 pounds)
- 30-200 gallons of water in a fire pumper and 5-gallon back packs

**Personal protective equipment (PPE) IPC and BLM standards: Each employee will be required to have the following PPE:**

- Hard hat with a chin strap
- Safety glasses
- Hearing protection
- Long sleeve FR shirt FR pants
- Leather gloves
- Exterior leather work boots 8" high lace type with Vibram type soles
- Fire shelter



**Appendix B**

The Public Safety Power Shutoff (PSPS) Plan.





# **Idaho Power Company's Wildfire Public Safety Power Shutoff Plan**

**December 2021**

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# 1. INTRODUCTION

Wildfires in the Pacific west have increased in their intensity in recent years. In an effort to keep Idaho Power's customers and the communities it serves safe and continue improving the resiliency of Idaho Power's transmission and distribution facilities, Idaho Power implemented a Wildfire Mitigation Plan in 2021, focused on situational awareness, field personnel safety practices and operational wildfire mitigation strategies to prevent the accidental ignition of wildfires. As part of its operational mitigation practices, Idaho Power has developed this Public Safety Power Shutoff Plan (PSPS Plan or Plan) to proactively de-energize electrical facilities in identified areas of extreme wildfire risk to reduce the potential of those electrical facilities becoming a wildfire ignition source or contributing to the spread of wildfires. This Plan identifies the relevant considerations, process flow and implementation protocol before, during and after a PSPS event. The Plan will be active during wildfire season and reviewed annually and updated as necessary prior to the start of the next wildfire season.

This Plan identifies PSPS implementation considerations and responsibilities for different Idaho Power departments before, during and after PSPS events. Table 2 describes the different phases Idaho Power will use during PSPS events and Figure 7 depicts the communication audiences and timeline Idaho Power will ideally follow during an event. Finally, this Plan describes activities Idaho Power will undertake to prepare and improve the Plan over time, including interactions with local emergency agencies, and briefly describes the financial administration of the Plan.

## 2. LIST OF ACRONYMS

**AAR**—After Action Review

**BLM**—Bureau of Land Management

**COO**—Chief Operations Officer

**ECMWF**—European Centre for Medium-Range Forecasts

**EMT**—Emergency Management Team

**ERC**—Energy Release Component

**F100**—100-Hour Fuel Moisture

**FPI**—Wildfire Mitigation Plan Fire Potential Index

**FWW**—Fire Weather Watch

**GBCC**—Great Basin Coordination Center

**GIS**—Geographic Information System

**IPUC**—Idaho Public Utility Commission

**IRWIN**—Integrated Reporting of Wildland-Fire Information

**LSO**—Load Serving Operations

**NIFC**—National Interagency Fire Center

**NOAA**—National Oceanic and Atmospheric Administration

**NWS**—National Weather Service

**OPUC**—Oregon Public Utility Commission

**PEC**—Planning, Engineering and Construction

**PSPS**—Public Safety Power Shutoff

**RFW**—National Weather Service issued Red Flag Warning

**SGM**—Smart Grid Meter

**SME**—Subject Matter Expert

**T&D**—Transmission & Distribution

**TDER**—Transmission & Distribution Engineering and Reliability

**UKMET**—United Kingdom Meteorological Office

**WMP**—Wildfire Mitigation Plan

**WRF**—Weather Research and Forecasting

### 3. DEFINITIONS

(1) Critical Facilities—Refers to the facilities identified by Idaho Power that, because of their function or importance, have the potential to threaten life safety or disrupt essential socioeconomic activities if their services are interrupted.

(2) ESF-12—Refers to Emergency Support Function-12 and is the Idaho Power Company liaison from the State Office of Emergency Management for energy utilities issues during an emergency for both Idaho and Oregon.<sup>1</sup>

(3) Exercise—Refers to planned activities and assessments that ensure continuity of operations, provide and direct resources and capabilities and gather lessons-learned to develop core capabilities needed to respond to incidents.

(4) Community—Refers to a group of people that share goals, values and institutions.<sup>2</sup>

(5) Local Emergency Manager—Refers to a jurisdiction's role that oversees the day-to-day emergency management programs and activities.<sup>3</sup>

(6) Public Safety Partners—As defined by Idaho Power refers to ESF-12, Local Emergency Management and Idaho's and Oregon's Department of Human Services (or equivalent).

(7) Public Safety Power Shutoff or PSPS—A proactive de-energization of a portion of an Electric Utility's electrical network, based on the forecasting of and measurement of extreme wildfire weather conditions.

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<sup>1</sup> Federal Emergency Management Institute (FEMA) National Response Framework (NRF) Emergency Support Functions (ESF) [National Response Framework | FEMA.gov](https://www.fema.gov/national-response-framework).

<sup>2</sup> FEMA definition under "Communities" (pg. 26) [National Response Framework \(fema.gov\)](https://www.fema.gov/national-response-framework).

<sup>3</sup> FEMA definition under "Local Government" (pg. 29) [National Response Framework \(fema.gov\)](https://www.fema.gov/national-response-framework).



## 4. PUBLIC SAFETY POWER SHUTOFF OVERVIEW

In recent years, the western United States (U.S.) has experienced an increase in the intensity of wildland fires (wildfires). A variety of factors have contributed in varying degrees to this trend, including climate change, increased human encroachment in wildland areas, historical land management practices and changes in wildland and forest health. Recent events in western states have increased awareness of electric utilities' role in wildfire prevention and mitigation.

In an effort to keep Idaho Power's customers and the communities it serves safe and continue improving the resiliency of Idaho Power's transmission and distribution (T&D) facilities, Idaho Power implemented a Wildfire Mitigation Plan (WMP) in 2021 focused on situational awareness, field personnel safety practices and operational wildfire mitigation strategies. As part of its operational mitigation practices, Idaho Power developed this Wildfire Public Safety Power Shutoff Plan (PSPS Plan or Plan) to proactively de-energize electrical facilities in identified areas of extreme wildfire risk to reduce the potential of those electrical facilities becoming a wildfire ignition source or contributing to the spread of wildfires. Based on the inherently disruptive nature of power outages, Public Safety Power Shutoff (PSPS) events must be carefully evaluated under this Plan to balance wildfire risk with potential PSPS impacts on Idaho Power customers and the communities it serves.

The unpredictable nature of wildfire and weather patterns create significant challenges with forecasting PSPS events. Real-time evaluations and decision-making are therefore critical in making PSPS determinations and, depending on the associated wildfire risk, those determinations may result in proactive de-energization in areas not originally anticipated.

## 5. SCOPE

This PSPS Plan identifies the relevant considerations, process flow and implementation protocol before, during and after a PSPS event. The Plan will be active during wildfire season and reviewed and updated annually as necessary prior to the start of the next wildfire season. Wildfire season (also known as "closed season") is defined by Idaho Code § 38-115 as extending from May 10 through October 20 each year, or as otherwise extended by the Director of the Idaho Bureau of Land Management (BLM). Oregon's wildfire season generally aligns with Idaho's wildfire season and is designated by the State Forester each year pursuant to Oregon Revised Statute 477.505.

## 6. KEY TENETS

- Advancing the safety of Idaho Power employees, customers and the general public
- Collaborating with key external stakeholders (agencies, counties, local governments, public safety partners, first responders)



- Minimizing both potential wildfire risk and power outage impacts on communities and customers
- Maintaining reliable electric service

## 7. WILDFIRE ZONES

Idaho Power's WMP identifies areas of heightened wildfire risk within its service territory reflected by the following risk zones:

- Tier 2 Yellow Risk Zones are deemed increased risk areas.
- Tier 3 Red Risk Zones are deemed higher risk areas.

In its WMP, Idaho Power identifies operational practices specific to these zones of heightened wildfire risk for purposes of (1) reducing potential wildfire risk associated with Idaho Power's T&D facilities and field operations, and (2) improving the resiliency of the Idaho Power's T&D system impacted by wildfire. This PSPS Plan sets forth Idaho Power's PSPS evaluation criteria and processes, including operational and communication protocol, for implementing a PSPS.

## 8. PSPS IMPLEMENTATION CONSIDERATIONS

Idaho Power will initiate a PSPS if the company determines a combination of critical conditions indicate the T&D system at certain locations is at an extreme risk of being an ignition source and wildfire conditions are severe enough for the rapid growth and spread of wildfire. Idaho Power will evaluate as a whole (not relying on one single factor but a combination of all factors), without limitation, the criteria set forth in 9.1–9.17 below.

### 8.1. Fire Potential Index

In addition to the Risk Zone designations in its WMP, Idaho Power developed a Fire Potential Index (FPI) to forecast wildfire potential across Idaho Power's service area. The FPI converts data on weather; prevalence of fuel (shrubs, trees, grasses); and topography into a numerical FPI score to forecast the short-term wildfire threat in geographical areas throughout Idaho Power's service area. FPI scores range from 1 (very green, wet fuels with low to no wind and high humidity) to 16 (very brown and dry, both live and dead dry fuels with low humidity and high temperatures). FPI scores are grouped into the following 3 index levels:

- 1) Green—lower fire potential: FPI score of 1 through 11
- 2) Yellow—elevated fire potential: FPI score of 12 through 14
- 3) Red—highest fire potential: FPI score of 15 and 16

The FPI supports operational decision-making to reduce potential wildfire risk. During wildfire season, Idaho Power will determine a daily FPI as described in Section 5.2 of the WMP. The FPI



forecast is broken into four 6-hour time periods throughout each seven-day forecast. FPI information is provided via email, certain Geographic Information System (GIS) viewers and an FPI dashboard accessible to both Idaho Power employees and contractors from Idaho Power's website. The WMP details operational mitigation efforts in Red Risk Zones when the FPI score in that Red Risk Zone is also Red, including stopping planned work and changing distribution protection operations. A Red FPI score will be a consideration in Idaho Power's determination of whether to initiate a PSPS.

## 8.2. National Weather Service Red Flag Warning

A Red Flag Warning (RFW) is a forecast warning issued by the National Weather Service (NWS) to inform the public, firefighters and land management agencies that conditions are ideal for wildland fire combustion and rapid spread. RFWs are often preceded by a Fire Weather Watch (FWW), which indicates weather conditions that could occur in the next 12–72 hours. The NWS has developed different zones across the nation for providing weather alerts (such as RFWs) to more discrete areas. These zones are shown on this NWS webpage: [Fire Weather](#). RFWs for Idaho Power's service territory include Idaho Zones (IDZ) 401, 402, 403, 413, 420 and 422; and Oregon Zones (OR) 636, 637, 642, 634, 644, 645 and 646; and are monitored and are factored into Idaho Power's determination of whether to initiate a PSPS. Boise and Pocatello NWS offices will not issue RFWs if fuels are moist and fire risk is low. The following thresholds are used by most NWS offices:

- Daytime:
  - Relative humidity of 25% or less
  - Sustained winds greater than or equal to 10 miles per hour (mph) with gusts greater than or equal to 20 mph over a four-hour time period
- Nighttime:
  - Relative humidity of 35% or less
  - Sustained winds greater than or equal to 15 mph with gusts greater than or equal to 25 mph over a three-hour time period
- Lightning:
  - The NWS rarely issues RFWs for lightning in the western United States. For this to occur, the Lightning Activity Level—a measure of lightning potential specifically as it relates to wildfire risk—needs to be at 3 or higher.

## 8.3. NWS Fire Weather Forecasts

The NWS provides detailed forecasts for the different weather zones with an emphasis on fire weather indicators (wind speed, relative humidity, lightning potential). A discussion



summarizing the weather patterns and highlighting fire threats is included in their [extended forecast](#).

## 8.4. Publicly Available Weather Models

Idaho Power's Atmospheric Science department uses the following weather models to predict weather timing, duration and intensity:

- [Pivotal Weather Link](http://pivotalweather.com/model.php) ([pivotalweather.com/model.php](http://pivotalweather.com/model.php)): Provides numerical weather data, including a NWS blend of models, European Centre for Medium-Range Weather Forecasts (ECMWF), United Kingdom Meteorological Office weather service information and GOES-16 satellite information.
- [Graphical Weather Link](http://graphical.weather.gov/sectors/conusFireWeek.php) ([graphical.weather.gov/sectors/conusFireWeek.php](http://graphical.weather.gov/sectors/conusFireWeek.php)): A NWS website providing weather, water and climate data, forecasts and warnings for the United States for the protection of life and property. The Fire Weather page provides a daily and weekly view of multiple weather and environmental conditions influencing wildfire activity.

## 8.5. Idaho Power Weather Model

Idaho Power maintains its own Weather Research and Forecasting (WRF) model using high-resolution data from Idaho Power's weather stations across its service area. This model, along with publicly available weather models, helps develop weather forecasts that include timing, duration and intensity of weather systems. An Idaho regional WRF low-resolution map view is available to the public at [atmo.boisestate.edu/view/](http://atmo.boisestate.edu/view/).

## 8.6. Storm Prediction Center Fire Weather Outlooks

The Storm Prediction Center's [Fire Weather Outlook](#) provides a current, one-day-ahead and three- to eight-day forecast for wildfires over the contiguous United States. This forecast takes into account pre-existing fuel conditions combined with predicted weather conditions that result in a significant risk of wildfire ignition or spread.

## 8.7. Current Weather Observations

Identifying real-time wildfire weather and associated risks requires predicting conditions that could trigger a PSPS based on observing current weather conditions. Resources available for observing current weather conditions include direct, real-time data from Idaho Power's network of weather stations, available real-time wind speed information from Idaho Power's network of Smart Grid Meters (SGM), as well as [Windy: Wind Map and Weather Forecast](#) and the National Weather Service National Oceanic and Atmospheric Administration's (NOAA) [Weather and Hazards Viewer](#).



## 8.8. National Significant Wildland Fire Potential Forecast Outlook

[The National Significant Wildland Fire Potential Forecast Outlook](#) provides wildland fire expectations for the current month, the following month and a seasonal look at the two months beyond that. The main objective of this tool is to provide information to fire management decisionmakers for proactive wildland fire management, reducing firefighting costs and improving firefighting efficiency.

## 8.9. Great Basin Coordination Center Morning Briefing

The Great Basin Coordination Center ([GBCC](#)) is the focal point for coordinating the mobilization of resources for wildland fire and other incidents throughout the Great Basin Geographic Area, which encompasses Utah, Nevada, Idaho south of the Salmon River, the western Wyoming mountains and the Arizona Strip. The GBCC hosts a morning briefing (around 10 a.m. most mornings) that provides situational awareness for Idaho Power's service area.

## 8.10. GBCC Current and Predicted ERC and F100

The GBCC as described above also provides [day-ahead](#) Energy Release Component (ERC), 100-Hour Fuel Moisture (F100) and other fuels conditions information that helps Idaho Power understand wildfire potential in the service area.

## 8.11. Agency Input

Idaho Power works with Boise NWS Fire Forecasters through daily briefings and NIFC Predictive Service Forecasters on an as-needed basis, generally regarding data clarification, to streamline the transfer of data, information and communications about wildland fire critical to Idaho Power's service area.

Idaho Power works with other agencies, including the U.S. BLM and U.S. Forest Service, as wildland fires approach and impact Idaho Power T&D facilities.

## 8.12. De-Energization Windspeed Considerations

Idaho Power's service area covers 24,000 square miles across southern Idaho and eastern Oregon. The environmental factors across this area vary drastically from high desert landscape to mountainous terrain. Weather and environmental conditions also vary greatly within this area. Regional vegetation becomes "conditioned" to withstand different environmental conditions, which also influences de-energization thresholds. Idaho Power developed windspeed considerations, which it will continue to refine with additional data and weather technology based on historic wind conditions compared to system outage information.

## 8.13. Engineering Assessment

Idaho Power follows robust transmission and distribution maintenance and inspection practices. When a potential PSPS event is identified, Idaho Power's T&D Maintenance and Engineering department will evaluate potential impacts to current or planned maintenance activities.

## 8.14. Alternative Protective Measures

Considering the significant potential impact of a PSPS to customers, Idaho Power will thoroughly evaluate other potential alternatives for reducing wildfire risk prior to implementing a PSPS.

## 8.15. Real-time Field Observations

Idaho Power uses SGMs for various purposes on its the distribution systems, including communication (where available) to provide near real-time information and to detect wind speed with anemometers. This information is displayed on a GIS viewer and used to inform Idaho Power's evaluation and decision-making during storm events.

Idaho Power may also deploy field personnel to evaluate if a PSPS event should be initiated.

## 8.16. Other

Idaho Power plans to evaluate expanding existing capabilities to enhance weather forecasting and add new capabilities to detect fires.

# 9. RESPONSIBILITIES

Developing and implementing PSPS protocol involves various groups throughout the company. Below is a non-exhaustive list of responsibilities by department, representatives of which will work together to promote organized, consistent and safe implementation of PSPS events.

## 9.1. Load Serving Operations

- Develop and implement safe and reliable power shutoff protocols and procedures
- Ensure System and Regional Dispatch employees are appropriately trained to perform relevant responsibilities under this PSPS Plan, and that such employees receive timely information regarding wildfire risk and weather conditions for purposes of performing those responsibilities in the event of a PSPS
- Assist with PSPS evaluation and decision-making



- Safely restore service to PSPS areas when notified by Customer Operations it is safe to re-energize
- Provide required notifications to public safety partners to enhance public safety
- Participate in After-Action Reviews (AAR) (further discussed in Section 13 below) and ensure modifications to PSPS protocol are implemented as necessary

## **9.2. Atmospheric Science**

- Monitor daily, weekly and long-term weather forecasts
- Monitor fuels conditions and trends
- Monitor Fire Weather Watches, Red Flag Warnings and High Wind Watches and Warnings
- Communicate with external agencies for increased situational and conditional awareness. Increase communications as conditions require
- Communicate internally to Idaho Power's Transmission & Distribution Engineering and Reliability (TDER) senior manager when extreme conditions indicate a PSPS event is likely
- Support PSPS activities such as planning, training and exercises
- Assist in PSPS information-gathering, evaluation and decision-making
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.3. TDER Senior Manager**

- Oversee wildfire mitigation program and support cross-departmental collaboration
- Monitor daily, weekly and long-term weather and wildfire forecasts
- Monitor Fire Weather Watches, Red Flag Warnings and High Wind Watches and Warnings
- Develop and lead training modules for PSPS implementation
- Activate the PSPS Assessment Team if a PSPS is likely
- Communicate with Oregon and Idaho ESF-12

- Ensure PSPS activities such as operations planning, training and exercises occur annually
- Ensure a coordinated and cohesive external and internal communication and notification plan is in place and reviewed annually
- Coordinate with Atmospheric Science to continue evaluating enhancements to situational awareness capabilities
- Participate in AARs and provide input on, and monitor as necessary, modifications to PSPS protocol

## **9.4. Customer Operations and T&D Construction**

- Develop and implement safe and reliable power shutoff protocols and procedures
- Ensure field personnel are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Assist in PSPS information-gathering, evaluation and decision-making
- Ensure crews and equipment are available to support PSPS events
- Perform field observations, line patrols and other PSPS tasks as necessary
- Perform required repairs to safely re-energize the system after a PSPS event
- Request/obtain air patrol contractors for line inspections as required
- Participate, with assistance from Corporate Communications, in Idaho Power's general external education campaign
- Develop, with assistance from Corporate Communications, a cohesive notification framework with public safety partners while consistently evaluating ways to increase communication and outreach effectiveness
- Engage with public safety partners and critical facilities before, during and after a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.5. Supply Chain/Stores**

- Ensure preparedness for wildfire season with materials readily available for restoration purposes



- Work with Customer Operations and T&D Construction in response to a PSPS event, which could include pre-event activities such as staging materials and supplies
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.6. Fleet/Equipment Resource Pool**

- Ensure employees are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Ensure readiness of employees and resource pool equipment for a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.7. Supply Chain Contracting**

- Ensure contract resources are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Work with Customer Operations to provide contracting resources as required
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.8. Substation Operations**

- Monitor substations and perform actions to support PSPS operations
- Coordinate activities with Dispatch and Customer Operations
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.9. Corporate Communications**

Corporate Communications will develop and execute PSPS communications to Idaho Power customers and employees and support other business units in their communication efforts with regulators, critical facility operators, public safety partners and other stakeholders.

Corporate Communications will:



- In coordination with Customer Operations and Regulatory Affairs, work with public safety partners, critical facilities, regulators and other stakeholders to develop a comprehensive, coordinated and cohesive customer notification framework.
- With input from public safety partners, develop and implement a wildfire education and awareness campaign focused on wildfire prevention and mitigation, PSPS awareness and outage preparedness for customers.
- In the event of a PSPS:
  - To the extent possible and in coordination with Customer Service and IT, notify customers before, during and after a PSPS event with the following information:
    - Expected timing and duration of the PSPS event
    - 24-hour contact information and website resources
  - Provide up-to-date information on a dedicated Idaho Power PSPS webpage prominently linked on the Idaho Power homepage.
  - Distribute information via media and social media channels.
- Participate in AARs and modify communication practices as necessary.

## 9.10. Distribution Engineering and Reliability

- Support Dispatch and Customer Operations in developing de-energization and re-energization plans for PSPS events
- Monitor and verify the protection system operated correctly after any device operations caused by events on the circuit as appropriate
- Evaluate and enact protective device setting changes as required.
- Support rapid repairs of damaged infrastructure as needed.
- Support Load Serving Operations in planning improvements to PSPS operational capabilities
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## 9.11. Safety

- Ensure the safety professionals are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Provide PSPS training for field personnel
- Assist in AARs after a PSPS event (or potential event in which the PSPS Team is activated)

## 9.12. Vegetation Management

- Following de-energization, and when it is safe to do so, Customer Operations will report impacts to infrastructure and assets from vegetation, as appropriate. Vegetation Management will then work toward removing vegetation debris necessary for re-energization.
- Ensure contractors and field personnel are appropriately trained to perform all relevant responsibilities under this PSPS Plan.
- Use reasonable efforts to ensure contract resources are available and prepared for PSPS events.
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary.

## 9.13. Geographic Information Systems

- Work with Customer Operations and Corporate Communications to develop PSPS boundary information for PSPS GIS maps required for the PSPS website
- Before wildfire season and during preliminary notifications of a potential PSPS event, provide relevant GIS data within the confines of applicable law to public safety partners

## 9.14. Customer Service

- Respond to customer calls and respond to questions with information provided by Corporate Communications
- Ensure customer service representatives are trained to manage customer interactions during a PSPS event

## **9.15. Communication Systems (Stations)**

- Provide monitoring and on-call presence for the following:
  - Radio communications and infrastructure
  - Network infrastructure and connectivity
  - SCADA communications
- Ensure readiness to deploy mobile 2-way radio trailer during a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

## **9.16. Customer Operations Support**

- May lead AARs to ensure modifications to PSPS protocol are implemented as necessary

## **9.17. Legal**

- Provide legal guidance in evaluating a potential PSPS event
- May direct AARs after a PSPS event (or potential event in which the PSPS Team is activated)
- May be involved in reviewing communications to customers, public safety partners and critical facilities

## **9.18. Regulatory**

- May provide regulatory guidance in evaluating a potential PSPS event
- May be involved in reviewing communications to customers, public safety partners and critical facilities
- Assist in/direct regulatory reporting/filing activities



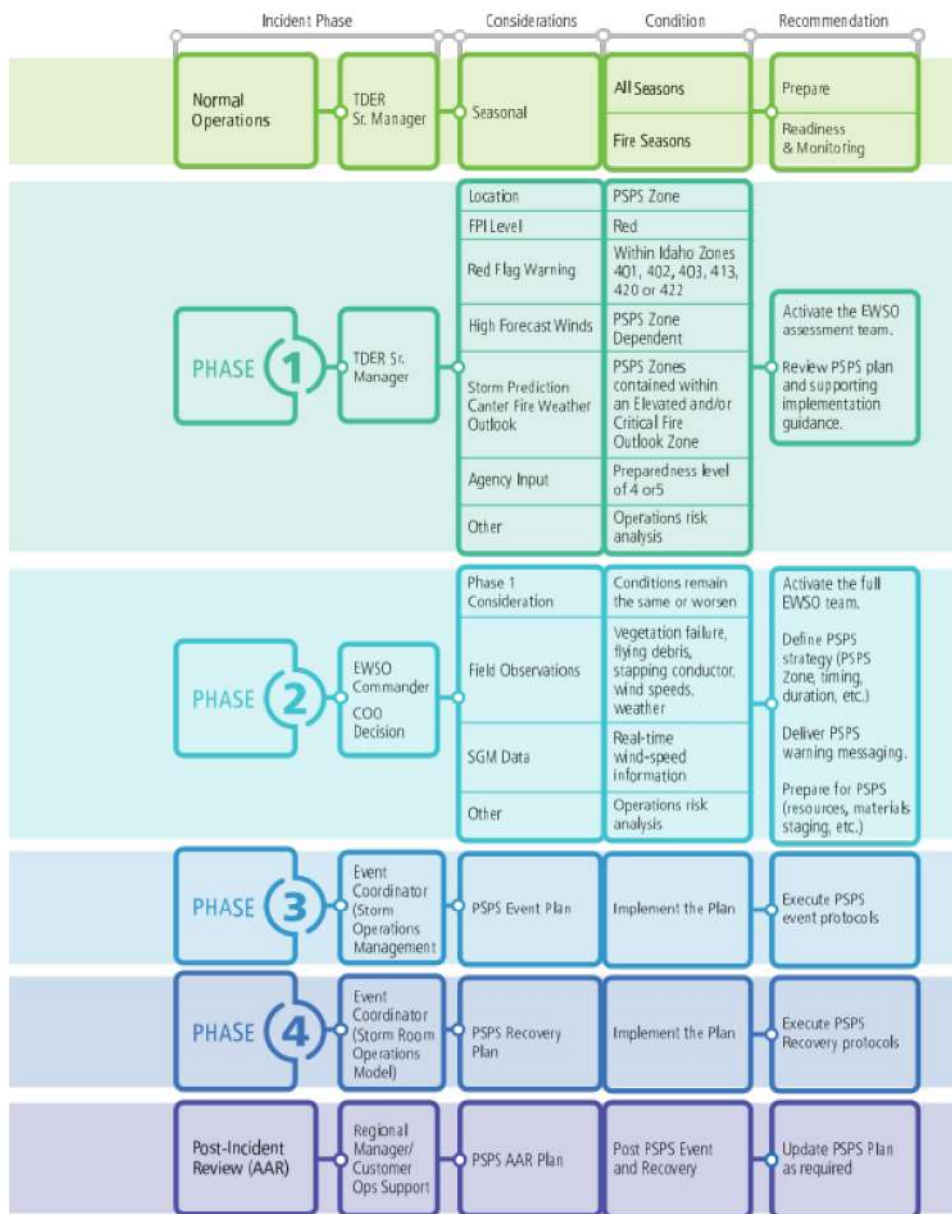
## 10. PSPS OPERATIONS

### 10.1. General

Section 11 details the phases, and protocol within each phase, of a PSPS event. Additional procedures are found in plans linked below and the attached Appendices as referenced herein.

Table 2 below summarizes the PSPS phases.

**Table 1**  
Incident phase decision triggers



## 10.2. PSPS Preparedness

PSPS preparedness is a cyclical effort involving Idaho Power, public safety partners, state and local governments, communities and customers. Idaho Power's main objectives of preparedness are: 1) performing wildfire prevention and mitigation activities; and 2) engaging with external public safety partners, critical facilities and communities to develop relationships and provide education to safely and effectively implement this plan. The TDER senior manager coordinates and facilitates activities of multiple Idaho Power business units for wildfire prevention and mitigation activities while Customer Operations and Corporate Communications facilitates public outreach and coordination efforts with external stakeholders.



**Figure 1**  
PSPS Preparedness Cycle

Idaho Power's goal is to take a community approach to wildfire preparedness by educating and encouraging individual preparedness and relying on existing protocols and procedures currently available through local governments and emergency response professionals.

### 10.2.1. Idaho Power Programs

Idaho Power's [WMP](#) facilitates PSPS preparedness through vegetation management protocol specific to wildfire season, distribution and transmission hardening efforts, situational awareness coinciding with wildfire operational protocol, training programs, communications strategies and coordinated planning with both internal and external stakeholders. This PSPS Plan and emergency response protocol correspond with Idaho Power's WMP preparedness measures in an effort to further reduce wildfire risk consistent with industry best practices and regulatory requirements.



### **10.2.2. Coordination with Government Entities**

Coordination with local government and emergency response entities is critical to Idaho Power's reliance on existing protocols and procedures developed by these external stakeholders.

Customer Operations engages in these coordination efforts through ongoing communications and additional activities as required by this Plan. Activities include, without limitation:

- Being a trusted energy advisor to mayors, city managers, county leaders, elected officials and other stakeholders
- Educating and encouraging individual preparedness
- Educating stakeholders about Idaho Power wildfire preparedness and mitigation efforts, PSPS planning and capabilities
- Enhancing relationships with external stakeholders for improving interoperability and wildfire coordination
- Enhancing relationships with community services partnerships

### **10.2.3. Community Preparedness**

Engage with public sector agencies and communities where PSPS events are likely to leverage existing emergency response plans and resources to increase the effectiveness of PSPS communications.

### **10.2.4. Information Sharing**

Coordinate with public safety partners in advance of a PSPS event to prepare information needed by these partners and establish communication protocols for critical decision-making before and during a PSPS event, including restoration activities.

### **10.2.5. Notifications and Emergency Alerts**

Collaborate with agencies in advance of PSPS events to allow for use of existing notification methods to communicate effectively during PSPS events.

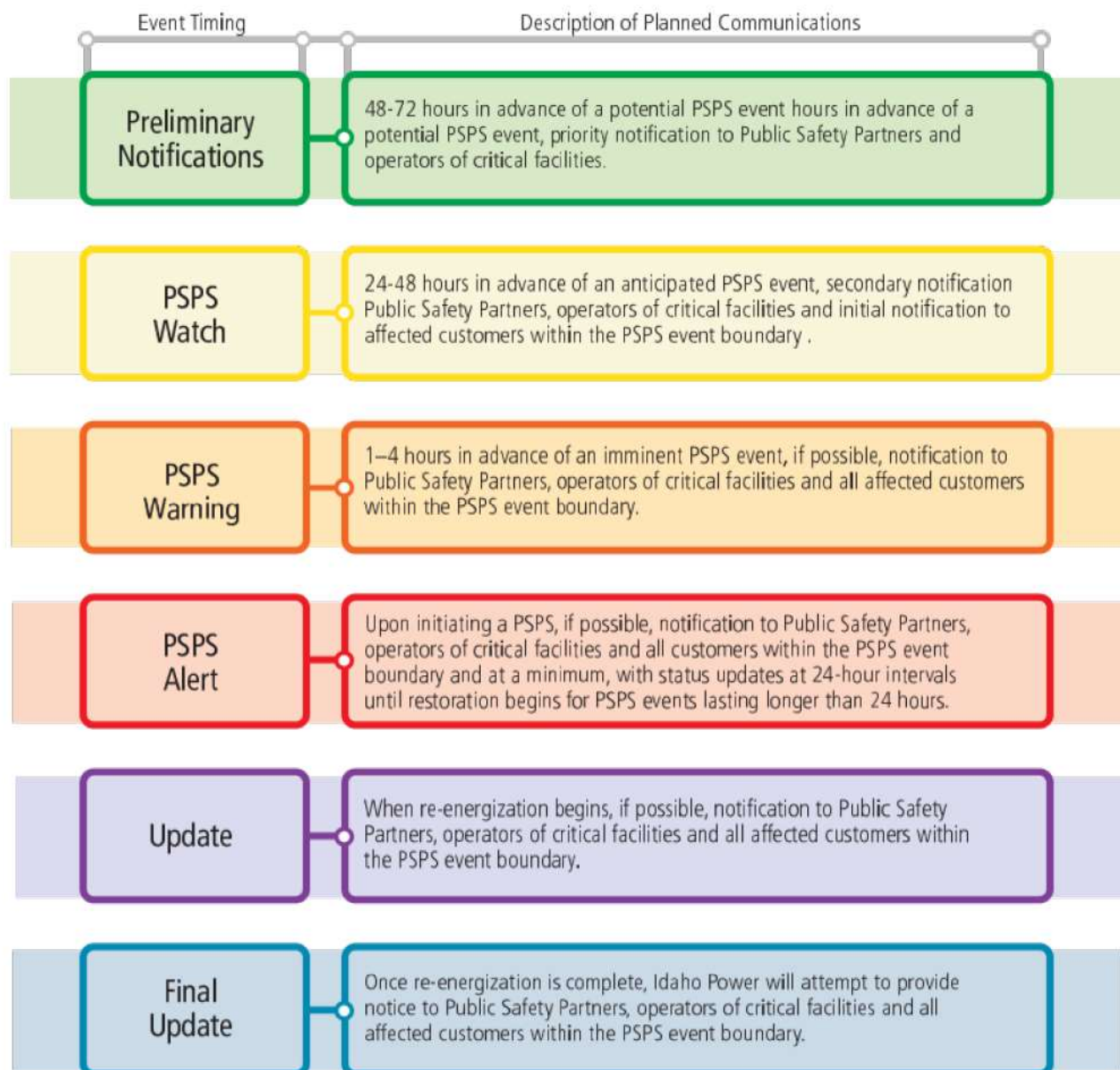
### **10.2.6. Training and Exercises**

Coordinate and participate in tabletop exercises with public safety partners to enhance knowledge of each other's emergency operations for smooth interactions during PSPS events.



### 10.3. Proactive Communications

Although the size of Idaho Power's service area, geographic and environmental diversity, and unpredictable nature of Idaho and Oregon weather make it challenging, Idaho Power is committed to providing as much advance notice as reasonably possible in preparation for a PSPS event. Table 3 provides Idaho Power's optimal communication timeline for PSPS events, circumstances permitting.



**Figure 2**  
PSPS Event Communication Timeline

## **10.4. Wildfire Season Operations**

As described here and in Idaho Power's WMP, normal operations during wildfire season differs from normal operations during the rest of the year based on heightened requirements specifically targeted at predicting and reducing wildfire risk.

### **10.4.1. Situational Awareness Activities**

During wildfire season, Idaho Power closely monitors fire conditions and weather patterns. Idaho Power's Atmospheric Science team prepares a monthly "Seasonal Wildfire Outlook" report beginning in April and continuing through wildfire season containing information on regional drought conditions obtained from the National Drought Monitor, weather and climate outlook, seasonal precipitation and temperature outlooks from NOAA and the NWS, and a regional wildfire outlook.

During wildfire season, the Atmospheric Scientists will determine a daily FPI as described in Section 5.2 of the WMP describing shorter-term weather and fire conditions specific to WMP risk zones across Idaho Power's service territory and in identified risk zones where transmission facilities extend beyond service territory boundaries.

### **10.4.2. GIS Wildfire Information**

Idaho Power's GIS team pulls regional wildfire information from a feature layer sourced by the GIS mapping software company ESRI, which pulls the data from the Integrated Reporting of Wildland-Fire Information (IRWIN) and the National Interagency Fire Center (NIFC). This information is added to multiple GIS viewers utilized by Idaho Power employees. These viewers also overlay current wildfire information to geospatially show physical relationships to transmission and distribution lines which provides valuable situational awareness in understanding wildfire activity near Idaho Power's T&D systems. This information is updated near real-time.

### **10.4.3. Key Grid Interdependent Utilities and Agencies**

Idaho Power exchanges dispatch information with key grid interdependent utilities and energy providers to expedite communication and coordination during wildfire events. These contacts include Avista, Bonneville Power Administration, Northwestern Energy, NVEnergy, Oregon Trail Electric Cooperative, PacifiCorp, Raft River Electric, Seattle City Light and U.S. Bureau of Reclamation. Idaho Power also exchanges dispatch information with NIFC, BLM Fire Dispatch and various National Forest Service District Offices—including Idaho Power dispatch receiving BLM and US Forest Service incident command information during wildfire events—to improve communication and coordinate fire-related activities.



## **10.5. Phase 1**

The decision to implement a PSPS event will be based on the best available data for weather and other fire-related conditions as detailed above in Section 8—PSPS Implementation Considerations. Multiple events may require simultaneous management such as other storm-related outages or other PSPS events.

### **10.5.1. PSPS Assessment Team Activation**

Idaho Power will transition from normal wildfire season operations to Phase 1 of a PSPS event at the direction of the TDER senior manager. During Phase 1, Idaho Power will activate the PSPS Assessment Team, which includes the TDER senior manager, a regional senior manager of the area potentially impacted, Load Serving Operations (LSO) senior manager, a documentation subject matter expert (SME), and representatives from the Atmospheric Science team and Corporate Communications. The PSPS Assessment Team will hold conference calls as needed to discuss current and forecasted weather conditions and other critical information regarding a potential PSPS event. The TDER senior manager will facilitate PSPS Assessment Team meetings and conference calls and the PSPS Assessment Team will be responsible for determining whether to recommend maintain Phase 1, escalate to Phase 2, or de-escalate to normal operations. The PSPS Assessment Team will decide if Idaho Power will issue a preliminary notification of a potential PSPS event to public safety partners, critical facilities operators and ESF-12 as described in Table 3 above. During Phase 1, the PSPS Assessment Team will review the PSPS Plan and supporting documents. An operational risk assessment will be performed as well to determine current operational factors (existing outages, facilities under construction, personnel availability, etc.), risks and vulnerabilities. Ultimate determination will be made whether to escalate to Phase 2 by the TDER senior manager. Within one hour of Phase 2 notification, the full PSPS team will be placed on stand-by and team member availability will be determined. The full PSPS team is the PSPS Assessment Team plus the VP of Planning, Engineering and Construction, the Customer Operations VP and VP of Power Supply or their assigns.

### **10.5.2. Community Notifications**

Depending on the situation and timing, public safety partners and critical facility operators may be notified during this phase. These notifications may include emails, text messages and/or phone calls as described in Idaho Power internal processes and procedures.

## **10.6. Phase 2**

Phase 2 actions are determined by additional situational awareness activities, timing of forecasted weather events and risk tolerance. Upon transitioning to Phase 2, Idaho Power will provide external notifications as called out in Table 3 above with specific roles and responsibilities as described in internal process and procedure documents.



### **10.6.1. Activate Event Coordinator**

Idaho Power will assign an Event Coordinator as outlined in Wildfire Mitigation and PSPS Plan. The event coordinator's main role is to coordinate activities across the region associated with PSPS implementation and restoration.

### **10.6.2. Conduct Operational Risk Analysis**

The PSPS Assessment Team will present its operational risk analysis recommendation to the VP of PEC, VP of Customer Operations and the COO who will then evaluate the PSPS Assessment Team's recommendation, and the COO will make the final determination of whether to proceed to Phase 3 implementation of a PSPS event.

### **10.6.3. Request to Delay a PSPS Event**

There may be requests to delay proactive de-energization from the public safety partners. This may occur for several reasons, with the most anticipated being loss of power for pumping water to fight wildfires. Delay requests should be routed through dispatch and sent to the PSPS Team for evaluation. The PSPS Team will provide the COO a recommendation on whether to approve the proactive de-energization delay and the COO will make the final decision. As soon as practicable after receiving the request, Idaho Power will notify the ESF-12 liaison of the delay request and basis of such request, as well as the final determination and the underlying justification.

### **10.6.4. PSPS Event Strategy**

Regional operations personnel developed action plans and switching orders as part of their preparedness activities. These plans and switching orders will be reviewed and refined as necessary based on the current and forecasted conditions and will include situation-specific tactics and detailed instructions.

### **10.6.5. Field Observations and Response Teams**

Regional Operations will coordinate field personnel to be mobilized and dispatched to strategic locations, including areas with limited weather and system condition visibility, to perform field observations for on-the-ground, real-time information critical to inform decisions on proactive de-energization. Field observations include—without limitation—conditional assessments of system impacts from wind and vegetation, flying debris and snapping conductors.

### **10.6.6. Customer and Community Notifications**

Depending upon the timing and situation, Idaho Power may use various forms of communication (including media outreach) to provide information and updates to public safety partners, critical facility operators, and customers, particularly those impacted by the PSPS event. Information and updates will include the reason for the potential de-energization, where to find



real-time updates on outage status and other relevant safety and resources. Internal processes and procedures will be followed to ensure accurate, up-to-date communication is provided.

## **10.7. Phase 3**

Upon the COO making a determination to proactively de-energize, the LSO representative of the PSPS Team will inform System and Regional Dispatch Operations and request coordination of the estimated time to begin the PSPS. The regional manager, or their assigned representative of the region in which the PSPS will take place, will coordinate with the event coordinator to pre-position field personnel where manual de-energization is required and to stand by for orders to de-energize. System and Regional Dispatch Operations will implement the PSPS according to their established processes. Stations and communications system operations personnel will be prepared to support PSPS activities as needed. Idaho Power will take the following community-centered actions as soon as safely possible. Regional teams will follow internal processes and procedures to safely and effectively implement a PSPS event.

### ***10.7.1. Customer and Community Notification***

Relying on internal processes and procedures, Idaho Power will use various forms of communication (including media outreach) to provide information and updates to customers and other stakeholders, particularly those impacted by the PSPS event. Information and updates will include the reason for the de-energization, where to find real-time updates on outage status and other relevant safety and resource information regarding the PSPS. Specific protocols may be included in individual work group plans.

## **10.8. Phase 4**

### ***10.8.1. System Inspections***

When it is safe to do so, Idaho Power will begin line patrolling activities to inspect T&D circuits and other potentially impacted Idaho Power facilities. Patrol personnel will report system conditions back to System and Regional Dispatch Operations for coordination with field crews. Patrols will be performed as required to ensure conditions and equipment are safe to re-energize.

### ***10.8.2. Repair and Recovery***

Line crews will repair T&D facilities as coordinated with System and Regional Dispatch Operations, replacing damaged equipment and performing other actions to support safe re-energization of the T&D system.



### **10.8.3. Incident Management Support**

Support throughout the PSPS event will continue as described in Idaho Power's Wildfire Mitigation and PSPS Operational Plan. The PSPS Team will continue to monitor fire and weather conditions. Logistics and mutual assistance requirements will be determined and acted upon per existing plans and processes. If timely re-energization is not possible based on the magnitude of the event, the EMT will be notified for additional support.

### **10.8.4. Communicate PSPS Event Conclusion**

Idaho Power will use various forms of communication (including media outreach) to inform customers and other stakeholders, particularly those impacted by the PSPS event, when repairs are complete and it is safe to re-energize the system. This may occur in stages as different feeders or feeder sections are repaired and safe to re-energize. This will be viewable on the outage map on Idaho Power's website during the event. Idaho Power will also leverage existing public agency outreach and notification systems as done at other points in the PSPS process.

### **10.8.5. Re-energization**

Once re-energization activities are completed and service is restored, crews and support staff will demobilize and return to normal fire season operations as described in internal process and procedure documents.

## **10.9. Post-incident Review**

During the PSPS phases the documentation SME will collect and maintain in the Regional Dispatch Operations logs incident information required for reporting purposes.

Following conclusion of a PSPS event, the Regional Manager or their assigned representative will conduct informal, high-level debriefs to identify potential modifications to PSPS protocol based on lessons learned during the event. The regional manager or assigned representative will consolidate the feedback and provide to the documentation SME.

Also following the PSPS event, the TDER senior manager will conduct an AAR with the PSPS Team to identify potential modifications to PSPS protocol based on lessons learned during the event. The TDER senior manager will consolidate the feedback and provide to the documentation SME.

After wildfire season, the Customer Operations support leader may conduct an AAR focusing on operational processes, communications, customer support as well as emergency response and restoration. Idaho Power may also request feedback from external stakeholders on coordination efforts, communications and outreach effectiveness for integration into the AAR report.



## **11. FINANCIAL ADMINISTRATION**

Idaho Power will track expenses related to PSPS events for OPUC and IPUC reporting and potential recovery. Expense should be tracked for the entire PSPS event (Phase 1 through conclusion of the Post-Incident Review and filing the PSPS event report with the OPUC) to include, without limitation, time reporting, equipment and supplies used to set up customer resource centers and provided to customers (e.g., water, ice, etc.)

## **12. REPORTING**

Employees are required to manage information regarding PSPS events pursuant to Idaho Power's Information Retention Policy and underlying standards. Idaho Power will submit reports to the IPUC and OPUC as required.

## **13. AFTER-ACTION REPORT**

An AAR is a structured review or de-brief process used to evaluate the effectiveness of the Plan and potential areas for improvement. This process may be performed after a PSPS event and may be confidential at the direction of Legal to improve the PSPS processes and procedures.

## **14. TRAINING**

Idaho Power will strive to provide annual training, prior to or shortly after the beginning of wildfire season, to relevant employees on their respective roles in performing this PSPS Plan.

## **15. EXERCISES**

Idaho Power will exercise this PSPS Plan at least annually using various scenarios and testing all or any portion(s) of the Plan which may include:

- Testing text and/or phone alerts with a test group of public safety partners
- Testing tactical operational plans such as reporting field observations or positioning employees at manually operated disconnects to test timing for de-energization and field inspections of T&D assets
- Discussing and/or practicing roles and responsibilities of both strategic and tactical operations, including decision-making handoffs and hypothetical scenarios
- Discussing and/or developing re-energization plans
- Testing capacity limits on incoming and outgoing communications systems

**Appendix C**

## Oregon Wildfire Requirements and Recommendations.

**Oregon Requirements and Recommendations**

This appendix provides additional information specific to wildfire-related requirements, as well as wildfire-related recommendations, in Oregon.

**Oregon Administrative Rule (OAR) Requirements**

Below is a mapping of wildfire mitigation plan rules to sections within Idaho Power's WMP.

*Wildfire Protection Plan Filing Requirements—OAR 860-300-0020*

Oregon Requirement—OAR 860-300-0020	Corresponding Location in WMP
(1) <i>Wildfire Protection Plans and Updates must, at a minimum, contain the following requirements as set forth in Section 3(2)(a)-(h), chapter 592, Oregon Laws 2021 and as supplemented below:</i>	See Section 3: Quantifying Wildland Fire Risk
(a) <i>Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions, and are:</i>	See Idaho Power website for details of wildfire risk zones outside of service territory
(A) <i>Within the service territory of the Public Utility, and</i>	See Section 3.2.2: Wildfire Risk Areas
(B) <i>Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generation and transmission assets.</i>	See Figure 3: Boardman to Hemingway (B2H) Proposed Route Risk Zones
(b) <i>Identified means of mitigating wildfire risk that reflects a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk.</i>	See Section 4: Costs and Benefits of Wildfire Mitigation
(c) <i>Identified preventative actions and programs that the Public Utility will carry out to minimize the risk of utility facilities causing wildfire.</i>	See Section 5: Situational Awareness; Section 6: Mitigation—Field Personnel Practices; Section 7: Mitigation—Operations; Section 8: Mitigation—T&D Programs; and Section 8.3: T&D Vegetation Management
(d) <i>Discussion of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure.</i>	See Section 10.2 Community Outreach and Section 10.2.1: Community Engagement  See Appendix B: Idaho Power's Public Safety Power Shutoff Plan, Section 10.2.1: Coordination with Government Entities and Section 10.2.2: Community Preparedness
(e) <i>Identified protocol for the de-energization of power lines and adjusting of power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure.</i>	See Section 7.4: Public Safety Power Shutoff and Appendix B: Idaho Power's Public Safety Power Shutoff Plan
(f) <i>Identification of the community outreach and public awareness efforts that the Public Utility will use before, during and after a wildfire season.</i>	See Section 10: Communicating About Wildfire



Oregon Requirement—OAR 860-300-0020	Corresponding Location in WMP
<i>(g) Description of procedures, standards, and time frames that the Public Utility will use to inspect utility infrastructure in areas the Public Utility identified as heightened risk of wildfire.</i>	For Transmission, see Section 8.2.1: Transmission Asset Management Programs (with information on aerial, ground, detailed visual, pole, and other protection programs)  For Distribution, see Section 8.2.2: Distribution Asset Management Programs (with information on visual, pole, and line equipment inspection programs)
<i>(h) Description of the procedures, standards, and time frames that the Public Utility will use to carry out vegetation management in areas the Public Utility identified as heightened risk of wildfire.</i>	See Section 8.3.2: Transmission Vegetation Management and Section 8.3.3: Distribution Vegetation Management
<i>(i) Identification of the development, implementation, and administrative costs for the plan, which includes discussion of risk-based cost and benefit analysis, including consideration of technologies that offer co-benefits to the utility's system.</i>	See Section 4: Costs and Benefits of Wildfire Mitigation, specifically Section 4.3: Wildfire Mitigation Cost Summary and Section 4.4: Mitigation Activities
<i>(j) Description of participation in national and international forums, including workshops identified in Section 2, chapter 592, Oregon Laws 2021, as well as research and analysis the Public Utility has undertaken to maintain expertise in leading edge technologies and operational practices, as well as how such technologies and operational practices have been used develop implement cost effective wildfire mitigation solutions.</i>	See Section 2: Government, Industry, and Peer Utility Engagement

### *Risk Analysis—OAR 860-300-0030*

Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(1) The Public Utility must include in its Wildfire Mitigation Plan risk analysis that describes wildfire risk within the Public Utility's service territory and outside the service territory of the Public Utility but within the Public Utility's right of way for generation and transmission assets. The risk analysis must include, at a minimum:</i>	See Section 3: Quantifying Wildland Fire Risk
<i>(a) Defined categories of overall wildfire risk and an adequate discussion of how the Public Utility categorizes wildfire risk. Categories of risk must include, at a minimum:</i>	See Section 3.2.2: Wildfire Risk Areas and risk zone map on Idaho Power's website for detailed map of wildfire risk zones
<i>(A) Baseline wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple years. Examples include topography, vegetation, utility equipment in place, and climate;</i>	See Section 3.2 for discussion of fixed risk elements
<i>(B) Seasonal wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple months but may be dynamic throughout the year or from year to year; Examples include cumulative precipitation, seasonal weather conditions, current drought status, and fuel moisture content;</i>	See Section 3.2.1 for discussion of variable risk elements that change throughout the year
<i>(C) Risks to residential areas served by the Public Utility; and</i>	See Section 3.2.1 paragraph 4 addresses the consideration of residential areas in risk analysis

Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(D) Risks to substation or powerline owned by the Public Utility.</i>	See Section 3.2.1 paragraph 4 addresses overhead power lines. Note: Idaho Power does not model wildfire progression or spread within substations due to zero vegetation within the fenced area.  Also see Section 3.2.2.1 for discussion of risk modeling of proposed Boardman to Hemingway transmission line
<i>(b) a narrative description of how the Public Utility determines areas of heightened risk of wildfire using the most updated data it has available from reputable sources.</i>	See Section 3.2.2: Wildfire Risk Modeling Process and the 2023 Risk Modeling Update
<i>(c) a narrative description of all data sources the Public Utility uses to model topographical and meteorological components of its wildfire risk as well as any wildfire risk related to the Public Utility's equipment.</i>	See Section 11.4: Wildfire Risk Map
<i>(A) The Public Utility must make clear the frequency with which each source of data is updated; and</i>  <i>(B) The Public Utility must make clear how it plans to keep its data sources as up to date as is practicable.</i>	See Section 11.4: Wildfire Risk Map
<i>(d) The Public Utility's risk analysis must include a narrative description of how the Public Utility's wildfire risk models are used to make decisions concerning the following items:</i>  <i>(A) Public Safety Power Shutoffs</i>  <i>(B) Vegetation Management;</i>  <i>(C) System Hardening;</i>  <i>(D) Investment decisions; and</i>  <i>(E) Operational decisions.</i>	A) See Section 7.5.2: PSPS Plan  B) See Section 8.3: T&D Vegetation Management  C) See Executive Summary on Infrastructure Hardening; Section 8.2.2: Distribution Asset Management Programs; Section 11.9: Long-Term Metrics  D) Risk analysis informs Red and Yellow Risk Zones mitigation activities. See Section 4: Costs and Benefits of Wildfire Mitigation and Section 4.4 Mitigation Activities  E) See Section 7.2: Operational Protection Strategy and Appendix A: Wildland Fire Preparedness and Prevention Plan
<i>(e) For updated Wildfire Mitigation Plans, the Public Utility must include a narrative description of any changes to its baseline wildfire risk that were made relative to the previous plan submitted by the utility, including the Public Utility's response to changes in baseline wildfire risk, seasonal wildfire risk, and Near-term Wildfire Risk.</i>	For the 2023 WMP, Idaho Power did not make changes to baseline wildfire risk, but will evaluate and discuss changes in the 2024 WMP.



Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(2) To the extent practicable, the Public Utility must confer with other state agencies when evaluating the risk analysis included in the Public Utility's Wildfire Mitigation Plan.</i>	See Executive Summary section on Lessons Learned: Community Feedback

### *Wildfire Mitigation Plan Engagement Strategies—OAR 860-300-0040*

Oregon Requirement—OAR 860-300-0040	Corresponding Location in WMP
<i>(1) The Public Utility must include in its Wildfire Mitigation Plan a Wildfire Mitigation Plan Engagement Strategy. The Wildfire Mitigation Plan Engagement Strategy will describe the utility's efforts to engage and collaborate with Public Safety partners and Local Communities impacted by the Wildfire Mitigation Plan in the preparation of the Wildfire Mitigation Plan and identification of related investments and activities. The Engagement Strategy must include, at a minimum:</i>	See Section 10: Communicating About Wildfire
<i>(a) Accessible forums for engagement and collaboration with Public Safety Partners, Local Communities, and customers in advance of filing the Wildfire Mitigation Plan. The Public Utility should provide, at minimum:</i>	See Section 10.2: Community Outreach and Section 10.2.1: Community Engagement
<i>(A) One public information and input session hosted in each county or group of adjacent counties within reasonable geographic proximity and streamed virtually with access and functional needs considerations; and</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(B) One opportunity for engagement strategy participants to submit follow-up comments to the public information and input session.</i>	
<i>(b) A description of how the Public Utility designed the Wildfire Mitigation Plan Engagement Strategy to be inclusive and accessible, including consideration of multiple languages and outreach to access and functional needs populations as identified with local Public Safety Partners.</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(2) The Public Utility must include a plan for conducting community outreach and public awareness efforts in its Wildfire Mitigation Plan. It must be developed in coordination with Public Safety Partners and informed by local needs and best practices to educate and inform communities inclusively about wildfire risk and preparation activities.</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(a) The community outreach and public awareness efforts will include plans to disseminate informational materials and/or conduct trainings that cover:</i>	For (A) – (D), see Section 10.2.1: Community Engagement; Section 10.3: Customer Communications; and Section 10.3.1: Key Communication Methods
<i>(A) Description of PSPS including why one would need to be executed, considerations determining why one is required, and what to expect before, during, and after a PSPS;</i>	
<i>(B) A description of the Public Utility's wildfire mitigation strategy;</i>	
<i>(C) Information on emergency kits/plans/checklists;</i>	
<i>(D) Public Utility contact and website information.</i>	



Oregon Requirement—OAR 860-300-0040	Corresponding Location in WMP
<p><i>(d) Discussion of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure.</i></p> <p><i>(b) In formulating community outreach and public awareness efforts, the Wildfire Mitigation Plan will also include descriptions of:</i></p> <p><i>(A) Media platforms and other communication tools that will be used to disseminate information to the public;</i></p> <p><i>(B) Frequency of outreach to inform the public;</i></p> <p><i>(C) Equity considerations in publication and accessibility, including, but not limited to:</i></p> <p><i>(i) Multiple languages prevalent to the area;</i></p> <p><i>(ii) Multiple media platforms to ensure access to all members of a Local Community.</i></p>	<p>See Section 10.2.1: Community Engagement</p> <p>For (A)-(C): See Section 10.2.1: Community Engagement; Section 10.3: Customer Communications, and Section 10.3.1: Key Communication Methods</p>
<p><i>(3) The Public Utility must include in its Wildfire Mitigation Plan a description of metrics used to track and report on whether its community outreach and public awareness efforts are effectively and equitably reaching Local Communities across the Public Utility's service area.</i></p>	<p>See Section 10.3.3: Communication Metrics</p>
<p><i>(4) The Public Utility must include a Public Safety Partner Coordination Strategy in its Wildfire Mitigation Plan. The Coordination Strategy will describe how the Public Utility will coordinate with Public Safety Partners before, during, and after the fire season and should be additive to minimum requirements specified in relevant Public Safety Power Shut Off requirements described in OAR 860-300-0050. The Coordination Strategy should include, at a minimum:</i></p> <p><i>(a) Meeting frequency and location determined in collaboration with Public Safety Partners;</i></p> <p><i>(b) Tabletop Exercise plan that includes topics and opportunities to participate;</i></p> <p><i>(c) After action reporting plan for lessons learned in alignment with Public Safety Partner after action reporting timeline and processes.</i></p>	<p>See Section 10.2.1: Community Engagement</p>

## OPUC Order Nos. 22-133 and 22-312

This appendix also addresses recommendations received from Oregon Public Utility Commission (OPUC) Staff in Docket No. UM 2209 and approved by the OPUC Order Nos. 22-133 and 22-312. The italicized text below reflects OPUC Staff's specific recommendations for the company.

**Recommendations Pertaining to OPUC Order No. 22-312****Category: Cost Allocation**

- 1) *Provide detailed cost allocation assumptions of the transmission and distribution patrol, maintenance, and repair program, separated by transmission and distribution, as well as any associated maintenance and repair program including justification and reasoning for the cost allocation between Idaho and Oregon.*
- 2) *Provide details explaining the proposed cost allocation between Idaho and Oregon associated with wildfire mitigation program capital investments.*

Idaho Power removed the cost allocation information contained in an earlier version of the WMP, as the WMP is intended as an evolving document and not one related to prudence of specific investments.

To address Staff's interest in this subject, the company will file a wildfire mitigation-related cost deferral application with the OPUC in December 2022 so it may be reviewed in concert with the 2023 WMP.

**Category: Risk Framework**

- 3) *Provide detailed explanation of the strategy pertaining to its risk analysis framework.*

See Executive Summary of WMP. Idaho Power carried out a review of risk management processes and will consider the ISO 31000-2018 framework and process in the 2023 WMP.

**Recommendations Pertaining to OPUC Order No. 22-133**

The following summarizes OPUC Staff's recommendations for the company to include in its 2023 WMP.

**Risk Modeling—OAR 860-300-0020 (1)(a)(A) & (B):**

- 1) *Provide details regarding the mileage of overhead facilities that lie within its designated YRZs and RRZs.*

See Section 3.2.2. for details of overhead line mileage in designated wildfire risk zones.

- 2) *Idaho Power provide details of the analysis completed for establishing the risk tiers and the threshold values utilized for classifying the YRZs and RRZs.*

See Section 3.2.2. Tier levels were established based on quantitative results of modeling and numerous workshops held with our consultant and individuals having local knowledge of topography, fuels, fire history, and overhead facilities in their area. Tier levels were generated algorithmically as a starting point in the analysis and refined through workshops. Idaho Power did not base tier levels solely on risk scores.



- 3) *Idaho Power provide information regarding an analysis of the risk from specific utility asset types.*

See Section 3.2.1. The company used equal probability of ignition occurring on overhead transmission and distribution facilities in quantifying wildfire risk. As we mature our risk modeling methodology, the company plans to include reliability data to improve risk models.

- 4) *Idaho Power provide details of the process and timing that will be followed to evaluate the established heightened wildfire risk zones, and what data inputs and portions of the analysis will be reviewed annually.*

See sections 3.2.1. and 11.4. Idaho Power is planning to update its risk modeling in 2023.

- 5) *Idaho Power address the concerns raised by STOP B2H Coalition as thoroughly as possible.*

Idaho Power met with Stop B2H Coalition representative Jim Kreider on November 11, 2022, to provide an overview of the risk analysis performed for the Boardman to Hemingway (B2H) route. A presentation was delivered that highlighted Idaho Power's approach to quantifying wildfire risk and provided details of analysis performed along the B2H route that exceeded analysis performed in other locations within the service area. Risk analysis conducted along the B2H route includes quantifying wildfire risk similarly to other overhead facilities as described in Section 3. In addition, the following was also performed:

- Analysis of surface fuels within 1 mile of the B2H route to determine the potential of crown fire
- Determination of the influence of topographical slope on resistance to control and spread rate within 1 mile of the B2H route
- A review of temperature, precipitation, and relative humidity of the project site
- A review of the wildland urban interface and estimation of land use area within 1 and 10 miles of the project site
- A review of historic ignitions and the perimeter of historic fires within 50 miles of the project site going back 50 years

Transmission design engineers at Idaho Power also reviewed the design of lattice and H-frame structures proposed for B2H construction. A review was performed to identify the design characteristics that lead to decreased potential of ignition. This information was shared with Mr. Kreider and the overall fire potential for the area surrounding Morgan Lake. Mr. Kreider provided good feedback and recommended that Idaho Power meet with the new fire chief for the La Grande Rural Fire District and Baker County to compare risk maps and methodology. Idaho Power agreed and will have more engagement with Mr. Kreider and agencies in 2023. Additionally, the company plans to include the B2H route when reconducting risk modeling in 2023.



WMP Effectiveness—OAR 860-300-0020 (1)(b):

- 6) *Include a description of how it will measure the overall effectiveness of its wildfire mitigation activities, as well as information on wildfires in the service territory for the prior year.*

See the Executive Summary and Section 11.9. Metrics include tracking and monitoring mitigation programs to identify gaps and areas requiring corrective action. Long-term metrics were incorporated in 2022 to track potential drivers of ignition with respect to outage counts.

Plan Objectives—OAR 860-300-0020 (1)

- 7) *Idaho Power include details on whether the objectives of key preventative actions outlined in previous year's WMP have been met.*

See the Executive Summary.

- 8) *Idaho Power describe, to what degree, the preventable measures outlined in previous year's WMP have reduced the risk of the utility's infrastructure from causing ignitions.*

See Section 11.9. Idaho Power believes that mitigation activities have reduced wildfire risk but we need more time in concluding the magnitude of risk reduction. Idaho Power expects that reliability data and outage analytics will provide greater confidence of risk reduction with time.

- 9) *Idaho Power describe any adjustments made to its wildfire prevention programs that were included in previous year's WMP.*

See the Executive Summary. Adjustments were made to pre-season wildfire patrols due to snow levels. Also, Idaho Power did not meet all vegetation management production goals set for the year and had to adjust quality assurance and control audits from 100% in wildfire risk zones to a random sample approach.

Outreach Efforts—OAR 860-300-0020 (1)(d)

- 10) *Idaho Power include more detailed information about how it used learnings from the previous year to improve its 2023 Plan. The company should consider Public Safety Partner input through After Action Reports (from exercises and events), surveys or other feedback mechanisms, and company lessons learned.*

See the Executive Summary and Section 10.2.1.

- 11) *Idaho Power include clarification about CRCs in its 2023 WMP Update, to include:*

See sections 10.2.1. and 10.2.2.

- 12) *Idaho Power incorporate the following in its 2023 WMP:*

- *Map showing areas of its service territory at higher risk for PSPS events.*

See PSPS program in Appendix B.

- *List of Public Safety Partners the company engages with related to WMP.*

Idaho Power maintains routine contact with county emergency managers and state-level Public Safety Partners for both Oregon and Idaho. Specific contacts can be provided upon request.

- *Frequency of communication with Public Safety Partners.*

See sections 10.2.1. and 10.2.2.4.

- *Methods of communication with Public Safety Partners.*

See Section 10.2.1.

- *Feedback received from Public Safety Partners, and description of how the information influences the WMP.*

See Section 10.2.1.

#### Lessons Learned—OAR 860-300-0020 (1)(e)

- 13) *Idaho Power include previous year's lessons learned regarding de-energization of power lines to include findings from after action reports, including survey results from exercises and actual events (when available), in its 2023 WMP.*

See the Executive Summary. While Idaho Power did not call a PSPS event in 2022, there were several lessons learned from functional exercises and one near PSPS event that was subsequently canceled due to precipitation.

- 14) *Idaho Power include more information about the analysis completed to make their programmatic decisions of modifying system operations. The information should clarify why the company describes plans for RRZs not YRZs, and differences in system operations between transmission lines and distribution circuits.*

See Section 7.2.

#### Communication and Outreach—OAR 860-300-0020 (1)(f)

- 15) *Idaho Power incorporate the following its 2023 WMP:*

- *Examples of messaging;*
- *Selection process for methods of outreach;*
- *Determination of target audience;*



- *Metric and criteria used to evaluate effectiveness of outreach;*
- *Outcome of previous year's outreach evaluation;*
- *Description of company personnel and external resources responsible for outreach efforts;*
- *Description of timing of the outreach, including before, during, and after wildfire season;*
- *Description of Wildfire Mitigation Information/Resources maintained by the company on its website; and*
- *Description of Social Media Campaign developed and implemented by the company to inform customers about potential wildfire impacts (i.e., potential loss of power, preparedness, safety and awareness, etc.).*

See Section 10.2.

*16) Idaho Power conduct wildfire training and exercises and include a discussion about community outreach and public awareness efforts prior to the upcoming fire season to clarify these activities, and to solicit input from participating Stakeholders.*

See the Executive Summary and Section 10.2.

*Asset Inspections—OAR 860-300-0020 (1)(g)*

*17) Idaho Power clearly identify inspection and correction procedures and protocols for non-wildfire risk zones, inspection and correction procedures and protocols for RRZs, and inspection and correction procedures and protocols for YRZs, along with the impacted line miles and structure counts for transmission and distribution assets in Oregon.*

See Section 3.2.2. for line miles in wildfire risk zones and Section 8.2. for details of programs taking place in those zones.

*18) Idaho Power include logic and details of analysis completed for their inspection and correction programming decisions in YRZs (and if any future RRZs) in Oregon.*

See Section 8.2.

*Vegetation Management—OAR 860-300-0020 (1)(h)*

*19) Idaho Power clearly identify vegetation management practices and protocols for non-wildfire risk zones, vegetation management practices and protocols for RRZs, and vegetation management practices and protocols for YRZs, along with the impacted line miles and structure counts for transmission and distribution assets in Oregon.*

See Section 8.3.

*20) Idaho Power provide logic and details of analysis completed for their programming decisions in YRZs (and if any future RRZs) in Oregon regarding vegetation management practices and protocols.*

See sections 4.4.6. and 8.3.

*21) Idaho Power provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the RRZs, YRZs, including measures employed and resource types.*

See sections 8.3.2. and 8.3.3.4.

*22) Idaho Power provide analysis of any historical events pertaining to its power lines, specific equipment type, vegetation, and wildfires that informed the program's design and monitoring approach.*

See Section 3.2.2.

Expert Forums—OAR 860-300-0020 (1)(i)

*23) Idaho Power discuss the impact of participation in expert forums (see OAR 860-300-0020(1)U)) on identification of solutions most likely to provide the benefits anticipated. This should include:*

- Cited research, reports, and studies used in any analysis, unless the source is confidential.*
- How the factors unique to the company's facilities and service territory were used when considering the applicability of specific options to its systems.*

See Section 2.3. In addition to participation in wildfire mitigation forums, Idaho Power spent significant time in 2022 developing a six-year roadmap to integrate new technology into the WMP. This consisted of researching products and meeting with 30 different companies throughout the year. We worked with the Electric Power Research Institute on gaining feedback of the performance and mitigation benefit of different technologies. Covered conductor was a key area of focus and helped develop a pilot plan. Additionally, the company has invested in the Westly Group, a fund that invests in startups focused on the digitalization and sustainability of energy, mobility, buildings, and industrial technology. One of our focus areas with the Westly Group in 2022 was reviewing new wildfire technologies.



The following were references used during the year to form changes in the 2023 WMP.

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### Advanced Relay Protection

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- Eaton Power Systems (2021). *Overcurrent Fault Data in The Form6*



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**Risk Management**

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*Group Participation and Learnings—OAR 860-300-0020 (1)0)*

*24) Idaho Power include more specifics on what it has learned by participating in these groups. Staff would like assurance the company is leveraging the learnings from other utilities and experts to facilitate implementation of solutions with the highest benefit cost ratio.*

See Section 2.3.

*25) Idaho Power include its contribution to these forums including any research projects it is supporting or participating in.*

See Section 2.3.



BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES       )  
AND CHARGES FOR ELECTRIC SERVICE       )  
IN THE STATE OF IDAHO AND FOR          )  
ASSOCIATED REGULATORY ACCOUNTING      )  
TREATMENT.                               )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

JAMES "BO" HANCHEY

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is James "Bo" Hanchey. My business  
5 address is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as Vice President of Customer  
7 Operations and Chief Safety Officer.

8           Q.     Please describe your educational background  
9 and what educational opportunities you have had while at  
10 Idaho Power.

11          A.     I received an Associate Degree in Applied  
12 Science in electric power technology from Bismarck State  
13 College in 2019 and a Bachelor of Science degree in  
14 business management from the same school in 2023.  
15 Additionally, in 2021 I completed the University of Idaho's  
16 Energy Executive Course.

17          Q.     Please describe your work experience with  
18 Idaho Power.

19          A.     I began working with the Company in 1997 at  
20 the Twin Falls Operations Center as a materials handler and  
21 have held various field operations and customer service-  
22 related positions of increasing responsibility since.  
23 Specifically, in 1999 I became an apprentice lineman and in  
24 2003 obtained my Bureau of Apprenticeship and Training  
25 certificate from the United States Department of Labor. By

1 2014 I had advanced through different leadership and  
2 management roles to become a Regional Manager. In 2018, I  
3 assumed the role of Customer Service Senior Manager, and in  
4 2019 I was promoted to my current position as Vice  
5 President of Customer Operations and Chief Safety Officer.

6 Q. What are your duties as Vice President of  
7 Customer Operations and Chief Safety Officer?

8 A. I am responsible for the planning, directing,  
9 and strategic oversight of all activities within Idaho  
10 Power's Safety and Customer Operations organizations.

11 Q. Please describe Idaho Power's Safety and  
12 Customer Operations organizations.

13 A. The Safety organization within Idaho Power is  
14 comprised of 11 employees, excluding myself, all of whom  
15 are focused on ensuring the safety of employees and  
16 contractors doing business on behalf of Idaho Power, as  
17 well as providing service safely to customers and within  
18 the communities we serve. These employees are tasked with  
19 continuously evaluating and identifying process and  
20 behavior improvements to enhance all aspects of Idaho  
21 Power's Safety First culture.

22 The Customer Operations organization within Idaho  
23 Power is comprised of over 600 employees that are engaged  
24 in activities that provide direct service to the Company's  
25 retail customers and in the communities it serves.

1 Specifically, the organization includes Customer Service,  
2 Customer Relations and Energy Efficiency, Regional  
3 Operations, and Regional Operations Support. Generally,  
4 activities that directly serve the customer are conducted  
5 within this organization, which allows the employees in the  
6 organization to achieve synergies and work together in a  
7 seamless manner. The Customer Operations organization  
8 exists to provide excellent service to customers in the  
9 most cost-effective way possible.

10 Q. What is the purpose of your testimony in this  
11 matter?

12 A. First, I will briefly describe the Company's  
13 Safety First culture and how Idaho Power promotes a culture  
14 of safety with its customers and in the communities it  
15 serves, as well as with the organizations the Company  
16 frequently works and partners with.

17 I will then provide a high-level overview of various  
18 initiatives that the Company has and continues to undertake  
19 to provide an exceptional customer experience and enhance  
20 customer choices and services. I will also discuss how the  
21 Company promotes demand-side management ("DSM")  
22 opportunities, provides superior customer service, and  
23 pursues efficiencies in its operations.





1   tasking and fatigue, may impact one's ability to make safe  
2   decisions. By training employees to be consciously aware  
3   of these factors, it allows them to continually assess  
4   their environment and try to mitigate risk. Another example  
5   of a program implemented by the Company to enhance its  
6   Safety First culture is the development of the Company's  
7   safety accountability framework in 2018. This framework was  
8   created and trained to all employees in 2018 to promote the  
9   Company's Safety First culture as being one of trust,  
10  openness, learning and accountability.

11           Q.     How does the Company promote its Safety First  
12  culture with its customers?

13           A.     The Company routinely sponsors print, digital  
14  or radio ads related to overhead line safety, downed power  
15  lines, wildfire, and water safety, among other topics. In  
16  2022, the Company also authored 33 safety-related social  
17  media posts. Additionally, for customers that the Company  
18  has an email on file for, the Company frequently emails  
19  targeted safety-related tips and reminders. For example, in  
20  Spring and Fall of 2022, the Company emailed irrigation  
21  safety tips to customers who receive irrigation service.  
22  Similarly, in December 2022, the Company emailed  
23  residential customers various tips to promote safe  
24  decorating practices during the winter and holiday season.

1           Aside from the above stated outreach channels, the  
2   Company frequently publishes news briefs that discuss  
3   differing safety topics, six of which were picked up by  
4   local media in 2022, as well as including safety-focused  
5   inserts within customers' bills, an example of which is  
6   included as Exhibit No. 6.

7           Q.     How does the Company promote its Safety First  
8   culture within the communities it serves?

9           A.     The Company frequently provides training to  
10   fire, police, and other first responders to inform them how  
11   to remain safe around power lines. Fundamental to that  
12   training, Idaho Power employees educate first responders on  
13   Idaho Power's process for de-energizing electrical  
14   equipment as part of their response to house fires and  
15   other emergencies. Similarly, the Company has also  
16   published an online first responder training aid called  
17   "Responding to Utility emergencies." This short online  
18   course is available at no-cost to participants and teaches  
19   emergency response personnel how to recognize potential  
20   hazards involving electricity.

21           Idaho Power's education and outreach energy advisors  
22   also work with schools and community groups to conduct  
23   educational presentations. These presentations vary in  
24   content based on the audience but typically aim to promote

1 general safety awareness and certain vital behaviors to  
2 help minimize the occurrence of electrical accidents.

3           The Company also conducts safety presentations at  
4 numerous contractor, customer, or partner agency events  
5 throughout the year. For example, in 2022, Idaho Power's  
6 Safety Director presented information regarding the  
7 Company's safety programs to approximately 200 Idaho  
8 Transportation Department leaders and executives from  
9 across the state. The Company also held two Contractor  
10 Safety Summits in 2022 whereby the Company shared best  
11 practices and information related to the Company's safety  
12 culture and programs with contractors doing business on  
13 behalf of Idaho Power.

14           Q.     Has the Company been recognized for its  
15 employee safety efforts and commitment to safety?

16           A.     Yes. I am proud to share that after achieving  
17 one of the Company's safest years on record in 2021, the  
18 Company was presented with Edison Electric Institute's  
19 ("EEI") Thomas F. Farrell, II Safety Leadership and  
20 Innovation Award in the Member Company Project category.  
21 EEI selected Idaho Power for this award due to the  
22 Company's approach of combining psychological safety and  
23 behavioral safety with practical application of human  
24 performance principles. While the Company is incredibly  
25 proud of EEI's recognition and the corresponding award, it

1 remains cognizant that the pursuit of safety excellence is  
2 a never-ending journey.

3 **II. CUSTOMER RELATIONS**

4 Q. What is the Company's overall approach to  
5 customer relations?

6 A. Idaho Power strives to be regarded as an  
7 exceptional utility by the customers it serves. To  
8 accomplish this, the Company must provide superior and  
9 satisfying customer service and experiences that meet or  
10 exceed its customers' needs and expectations.

11 Q. How does the Company determine the focus for  
12 improving customer relations?

13 A. The Company continually focuses on ways to  
14 cost-effectively improve its relationships with customers  
15 by assessing customer perception of the Company,  
16 identifying performance and experience gaps based on  
17 customer feedback, and reviewing industry best practices  
18 and trends.

19 Q. What is presently being done to address areas  
20 with opportunity for improvement?

21 A. The Company's strategy for addressing areas of  
22 improvement involves integrating customer input into its  
23 processes, systems, and culture while also leveraging cost-  
24 effective technologies to improve service. For instance,  
25 activities supporting this strategy include focusing on

1 improving system reliability, offering new digital  
2 experiences, and enhanced automated customer service  
3 options.

4 Q. Please describe Idaho Power's continuing  
5 practice of surveying its customers regarding their levels  
6 of satisfaction with the Company.

7 A. Idaho Power has contracted with Burke, Inc. to  
8 conduct quarterly customer relationship surveys since 1995.  
9 Burke is a full-service customer market research and  
10 decision support company headquartered in Cincinnati, Ohio,  
11 with regional offices throughout the United States. These  
12 surveys represent Idaho Power's primary customer  
13 satisfaction research and determine the Company's customer  
14 relationship index ("CRI"), which is a key metric used to  
15 evaluate the Company's overall customer satisfaction rate.  
16 Burke offers an extensive survey for the following four  
17 customer segments: Residential, Small Business, Irrigation,  
18 and Large Commercial and Industrial.

19 In addition to the customer satisfaction surveys  
20 performed by Burke, Idaho Power acquires the results of the  
21 annual J.D. Power Electric Utility Residential Customer  
22 Satisfaction Study ("J.D. Power Study"). The J.D. Power  
23 Study is comprised of over 100,000 customer responses  
24 nationwide, including Idaho Power's customers, and is used  
25 by the Company primarily as a benchmark to other electric



1 utilities and, as its name implies, is for residential  
2 customers only.

3 In addition to Burke surveys and the annual J.D.  
4 Power Study, Idaho Power also utilizes customer focus  
5 groups and ad hoc surveys, such as within its online  
6 Empowered Community group, for project-specific qualitative  
7 research, when the situation is appropriate. Further, the  
8 Company also conducts post-construction surveys to help  
9 ensure that working with Idaho Power on new construction  
10 projects remains a satisfying and streamlined experience.

11 Q. Please describe the Company's customer  
12 satisfaction performance results in recent years.

13 A. I am proud to say that based on recent years'  
14 customer satisfaction surveys performed by Burke, Idaho  
15 Power customers' satisfaction remains at a consistently  
16 high level. In addition, the Company has recently  
17 experienced levels of customer satisfaction that were  
18 significantly higher than compared to the Company's  
19 customer satisfaction results presented as part of Idaho  
20 Power's last general rate case ("GRC") in Case No. IPC-E-  
21 11-08. While 2022's customer satisfaction survey performed  
22 by Burke did indicate the Company's level of customer  
23 satisfaction decreased to 83.95 percent, which is a slight  
24 decline compared to the five years immediately prior, which  
25 had an average customer satisfaction score of approximately

1 85.5 percent, the Company understands the decrease to be a  
2 trend within the industry and likely to be partially  
3 attributable to factors outside of the Company's control,  
4 such as inflationary pressures affecting the price of all  
5 goods and services. Despite this decrease, Burke still  
6 attributes the Company's 2022 customer satisfaction results  
7 as signifying that overall, customers have very strong  
8 positive attitudes toward Idaho Power and the level and  
9 quality of service it provides.

10 The results of the 2022 J.D. Power Study indicate  
11 the Company achieved very compelling residential customer  
12 satisfaction results compared to many of its peers.  
13 Specifically, the 2022 J.D. Power Study indicated that  
14 Idaho Power ranked 3<sup>rd</sup> out of 17 within the West Midsize  
15 electric utility segment for overall residential customer  
16 satisfaction, and the Company ranked 6<sup>th</sup> out of 92 investor-  
17 owned utilities in overall residential customer  
18 satisfaction.

19 Q. Please summarize the Burke methodology and the  
20 resulting information made available to the Company.

21 A. On a quarterly basis, Idaho Power receives  
22 results from Burke based on customer interviews. Quarterly  
23 results include an overall index score, thereby determining  
24 the Company's quarterly CRI, as well as more detailed  
25 information in the form of average response data collected

1 for questions in five general categories: (1) Overall  
2 Satisfaction, (2) Excellent Overall Quality, (3) Excellent  
3 Overall Value, (4) Likelihood to Recommend, and (5) Idaho  
4 Power Cares.

5 Q. What is Idaho Power's primary way of measuring  
6 its success in providing customer satisfaction?

7 A. Idaho Power's primary measure for customer  
8 satisfaction is the CRI derived by Burke from quarterly  
9 customer surveys. The CRI is based on research that is  
10 conducted at various points in time throughout the year.  
11 This reduces the potential for any one event or  
12 circumstance to have a significant influence, either good  
13 or bad, on the overall customer satisfaction levels. It is  
14 a statistically reliable measurement of customers'  
15 opinions, and it provides a historical trend that allows  
16 the Company to track its performance over time.

17 The CRI is the best single satisfaction measure  
18 available to Idaho Power because it depicts customers'  
19 overall attitudes toward the Company in five distinct  
20 criteria. The CRI is comprised of five key questions where  
21 a rating ranging from zero (very dissatisfied) to four  
22 (very satisfied) is given for a maximum of 20 points  
23 possible among all five questions. The following are the  
24 five criteria questions that are asked in the quarterly  
25 customer surveys:

1                   (1)     What is your overall level of  
2     satisfaction with Idaho Power?

3                   (2)     How much do you agree or disagree that  
4     the overall quality of the electricity and customer service  
5     and support you get from Idaho Power is excellent?

6                   (3)     Thinking about the price you pay, how  
7     much do you agree or disagree that the overall value of the  
8     electricity and customer service and support you get from  
9     Idaho Power is excellent?

10                  (4)     If asked (by a neighbor new to your  
11     area, by a company that just moved into the area, or by an  
12     irrigator new to your area) how likely would you be to tell  
13     them that Idaho Power is a good company to work with?

14                  (5)     How much do you agree or disagree that  
15     Idaho Power cares about you as a customer and has done  
16     everything possible to earn your loyalty?

17                  Responses for each customer are totaled and divided  
18     by the maximum possible points to establish a percentage  
19     CRI score that is weighted by customer segment revenue. The  
20     CRI can range from a minimum of 0 percent to a maximum of  
21     100 percent.

22                   **III.     CUSTOMER DRIVEN ENHANCEMENTS**

23                  Q.     Based on the various surveys and focus groups  
24     that the Company subscribes to or conducts, what recent

1 initiatives has Idaho Power undertaken to enhance customer  
2 satisfaction?

3           A.       Recently, the Company has focused on pursuing  
4 the enhancement of its digital offerings and solutions to  
5 better align with industry trends and evolving customer  
6 preferences and expectations. Specifically, the Company's  
7 investment in modernizing its My Account platform stemmed  
8 from customers' desire to digitally self-serve and manage  
9 their accounts. Not only does the newest iteration of the  
10 Company's My Account provide increased security measures to  
11 better protect enrolled customers' personal information, it  
12 also allows for flexible payment options for a variety of  
13 circumstances and streamlines enrollment in other optional,  
14 account-related offerings such as Paperless Billing, Auto  
15 Pay, Budget Pay, and Green Power, as well as contributing  
16 to Project Share.

17           Q.       What other notable enhancements are part of  
18 the Company's updated My Account Platform?

19           A.       As part of the Company's updated My Account  
20 platform, enrolled customers can efficiently self-manage  
21 and update their contact information and notification  
22 preferences, as well as easily complete a home energy  
23 profile, which provides customers with continuous insights  
24 on how to save energy and thereby reduce their monthly  
25 bills.



1           Additionally, the Company's updated My Account  
2 platform allows for one-stop enrollment in outage and  
3 account-related alerts, which are provided via each  
4 customer's preferred communication channel(s).

5           Q.     Has the Company implemented any other digital  
6 offerings based on customer feedback or changed  
7 preferences?

8           A.     Yes. In early 2022, the Company released a  
9 Mobile Application ("App") on the Apple and Google Play  
10 stores due to the increasing shift in customers'  
11 preferences toward accessing their account and service-  
12 related information on the go. While the App provides  
13 customers with nearly all the same previously stated My  
14 Account enhancements from the palm of their hand, in  
15 addition to increased security and login functionality  
16 using face or touch identification, it also allows for  
17 optional push notification functionality, thereby providing  
18 enrolled customers with real-time alerts regarding  
19 important billing information or an outage affecting one of  
20 their registered addresses.

21          Q.     Why is the emphasis of improved outage  
22 communications as part of the Company's enhanced My Account  
23 and App so important?

24          A.     Unsurprisingly, reliability of service is a  
25 key driver of customer satisfaction. Though the Company

1 keeps customers' lights on more than 99.9 percent of the  
2 time, if a customer does experience an outage, they expect  
3 timely and relevant information to be provided via their  
4 preferred communication channel, which has increasingly  
5 shifted to digital means. The Company has routinely seen  
6 and heard this growing customer preference when evaluating  
7 the various surveys and focus groups' results.

8 Q. Are customers required to install the App or  
9 register for My Account to receive outage communications?

10 A. No. Although the App and My Account are  
11 required for users to receive address specific, real-time  
12 outage alerts, all customers have the option to view  
13 outage-related information and elect to receive outage-  
14 specific text messages via the Company's outage webpage.  
15 Customers opting to receive outage-specific communications  
16 in this manner are not required to register for My Account.  
17 Instead, only a mobile phone number is required so that  
18 outage-specific text message updates can be provided.

19 Q. What sort of outage updates are provided to  
20 enrolled customers?

21 A. While the content and frequency of outage  
22 communications is constantly evolving to better align with  
23 customers' changing preferences, the Company has made  
24 continual improvements to its outage communications over

1 the years, all of which have currently culminated in  
2 customers receiving updates related to the below topics:

- 3 • Outage location
- 4 • Probable cause of the outage
- 5 • Status of the outage, such as a crew being
- 6 enroute or onsite
- 7 • Estimated time of restoration
- 8 • Power restoration

9 Q. For planned and unplanned outages, has the  
10 Company made any other improvements to enhance customer  
11 communications and the delivery thereof?

12 A. Yes. As part of the Customer Operations  
13 Support group, an Enterprise Communication Coordinator has  
14 been established to oversee all aspects surrounding the  
15 Company's preparation, planning and communication of  
16 planned and unplanned outages. Additionally, the Enterprise  
17 Communication Coordinator is also responsible for  
18 identifying and implementing process and technological  
19 improvements for all outages that may impact customers,  
20 such as the Emergency Outage Notification System  
21 implemented in 2022 which allows the Company to promptly  
22 and, when practicable, proactively notify customers of  
23 pertinent information regarding outage or load shed events  
24 through text and voice messaging. By channeling all these  
25 functions and responsibilities through the Enterprise

1 Communication Coordinator, customer experience and  
2 potential impact can remain forefront.

3 Q. Does the Company conduct mock events to  
4 simulate situations that may require an emergency load shed  
5 or public safety power shutoff?

6 A. Yes. The Company routinely conducts mock  
7 events ahead of wildfire season for these types of  
8 situations so that it can try to identify process  
9 improvements prior to actually needing to enact any such  
10 processes.

11 Q. Are there any other customer-driven  
12 enhancements that the Company has recently implemented?

13 A. Since Idaho Power's last GRC, the Company has  
14 implemented various web portals or webpages to improve  
15 different customer groups' experiences. In particular, the  
16 Company has implemented the following:

- 17 • Energy Assistance Portal: a portal that  
18 streamlines the process for energy assistance  
19 providers to pledge and commit funds to  
20 eligible customers' accounts.
- 21 • Large Business Portal: a portal that allows  
22 Large Commercial and Industrial customers the  
23 ability to view their interval usage data, down  
24 to 15-minute intervals, for the most recent 18  
25 months.

- Construction Portal: a portal that allows customers to electronically submit new service and meter installation requests, as well as receive notifications and project updates.
- Landlord Webpage: a webpage that allows landlords to more easily manage service at their various properties.

#### **IV. DEMAND-SIDE MANAGEMENT**

Q. What is the Company's goal or philosophy toward energy efficiency and demand response programs?

A. The Company is committed to pursuing all cost-effective energy efficiency on behalf of its customers. Idaho Power also pursues cost-effective demand response programs based on system needs identified in the Company's Integrated Resource Plan ("IRP").

Q. How does the Company view energy efficiency and demand response?

A. Cost-effective energy efficiency and demand response programs are the Company's resource of choice - both from a cost standpoint and from an environmental perspective. The cleanest, most efficient resource in the Company's portfolio is the one it does not have to build or acquire. To that end, the Company believes that cost-effective energy efficiency should be pursued aggressively. Idaho Power also believes demand response is a resource



1 that should be pursued based on system needs to meet the  
2 highest risk hours during the summer season. Because the  
3 Company is able to dispatch demand response and potentially  
4 reduce the necessary amount of load, building or acquiring  
5 an additional resource to meet load for a relatively few  
6 number of hours a year might be avoided, which ultimately  
7 benefits all customers by avoiding these costs and keeping  
8 prices lower.

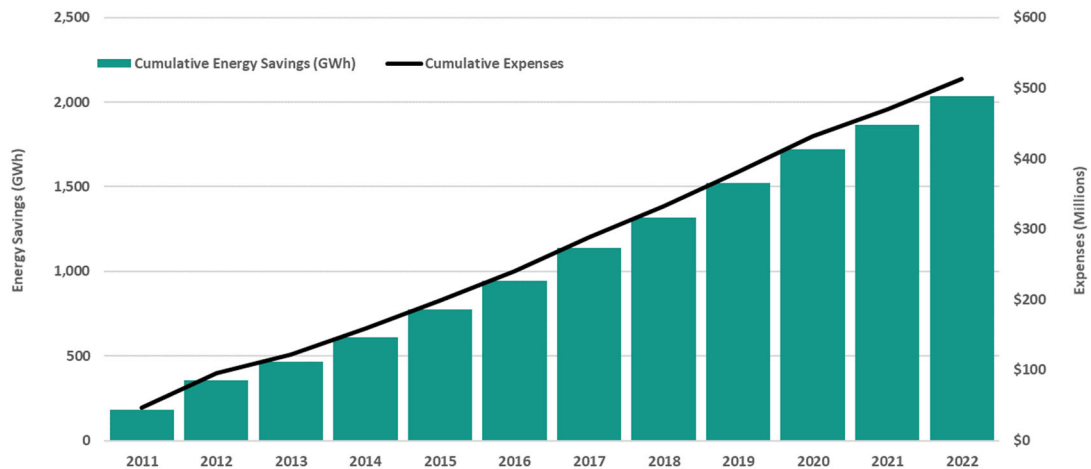
9 Q. Please describe the progress made by the Company  
10 in providing energy efficiency programs.

11 A. The Company's *Demand-Side Management 2022*  
12 *Annual Report* was filed with the Commission on March 15,  
13 2023. As noted in the Annual Report, Idaho Power offers a  
14 combined total of 17 energy efficiency and outreach  
15 programs for all customer segments. Energy savings from  
16 energy efficiency activities increased on a system-wide  
17 basis by 19 percent, as compared to 2021, and overall  
18 energy efficiency activities in 2022 resulted in 169,889  
19 megawatt-hours in energy savings. As shown in Chart 1  
20 below, the Company has spent over \$513 million on energy  
21 efficiency and demand response since 2011 for an average of  
22 about \$43 million per year. These expenses have  
23 cumulatively resulted in over 2,000 gigawatt-hours of  
24 energy savings for the Company's service area. Because  
25 these are cumulative incremental annual savings, the

1 Company believes this is the lower boundary of the total  
2 energy efficiency savings realized by customers since 2011.

3 **Chart 1.**

4 Cumulative Energy Savings & Expenses Since 2011



5

6 Q. Are Idaho Power's energy efficiency programs  
7 proving to be successful?

8 A. Yes. The Company believes that the  
9 quantifiable benefits since its last GRC, as outlined  
10 above, have been substantial and only serve as a starting  
11 point for all the non-quantifiable benefits the energy  
12 efficiency programs have provided. Each program offered has  
13 directly benefited customers and the Company. Programs  
14 either provide monetary incentives to customers for  
15 participation, target educational efforts and long-term  
16 energy saving opportunities, or encourage energy efficient  
17 behavioral changes by customers. Increased participation in  
18 the Company's programs benefits all customers by using  
19 resources wisely while avoiding or delaying the development

1 of supply-side resources.

2 Q. Please describe the progress made by the Company  
3 in providing demand response programs.

4 A. As described in the Company's *Demand-Side*  
5 *Management 2022 Annual Report*, Idaho Power offers three  
6 demand response programs with program options for  
7 Residential, Commercial & Industrial, and Irrigation  
8 customers respectively. In 2022, the demand response  
9 programs had a maximum non-coincident load reduction of 200  
10 megawatts ("MW") from 312 MW of capacity, and the Company  
11 has had an average of 272 MW of demand response capacity  
12 for the Company's service area since its last GRC. Chart 2  
13 shows the total demand response portfolio capacity, the  
14 actual maximum load reduction, and the annual expenses  
15 since 2011. In 2022, about 60 percent of expenses were in  
16 the form of program incentives paid to customers.

17 //

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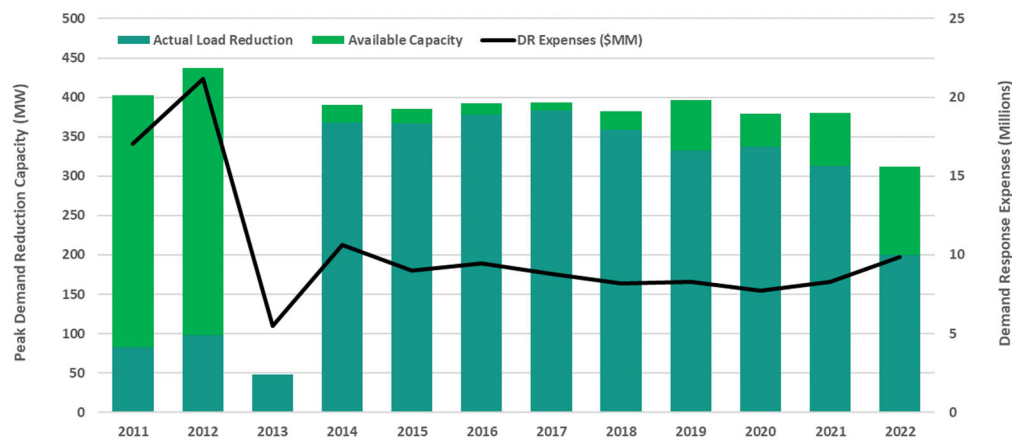
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**Chart 2.**

**Demand Response Capacity, Load Reduction, and Expenses**



Q. Are Idaho Power's demand response programs proving to be successful?

A. Yes. The Company's demand response programs are designed to minimize or delay the need to build or acquire new supply-side resources. The demand response programs are also intended to address the highest need electricity demand hours, thus minimizing the need for selecting supply-side alternatives that would only be needed for a few hours. These potential hours typically occur during low hydro generation and high load events, and the programs are designed to be available to meet potential system capacity deficits during these hours. The deficits are expected to be relatively large in magnitude but short in duration. Therefore, Idaho Power has determined it can be cost-effective for its customers to utilize demand response programs rather than building or acquiring a supply-side resource that would only be required to operate

1 for a small number of hours. Overall, the Company's demand  
2 response programs have been cost-effective every year since  
3 the last GRC and have been successful in accomplishing the  
4 goals stated above.

5 Q. Are there any other benefits outside energy  
6 saving and demand reduction that you consider to be a good  
7 outcome of Idaho Power's energy efficiency and demand  
8 response programs?

9 A. Yes. These programs, along with the Company's  
10 education outreach and customer energy usage information,  
11 provide more opportunities for customer engagement in their  
12 energy management decisions. For example, through the  
13 Company's outreach programs, the customer has opportunities  
14 to learn about their energy consumption and how to use  
15 energy more efficiently. By using My Account, customers can  
16 see how their hourly energy usage is affected by their  
17 energy management decisions and the products they use in  
18 their homes and businesses.

19 Q. What are the sources of funding for the  
20 Company's energy efficiency and demand response activities?

21 A. The majority of the funding for energy  
22 efficiency activities in Idaho comes from the Energy  
23 Efficiency Rider ("Rider") with a lesser amount funded  
24 through base rates. The Company's demand response  
25 incentives are funded through base rates and tracked



1 through the Company's Power Cost Adjustment ("PCA") with  
2 the remaining demand response program expenses, such as  
3 overheads, funded through the Rider.

4 Q. What energy efficiency programs are funded  
5 through base rates?

6 A. Idaho Power funds its low-income  
7 weatherization program, called Weatherization Assistance  
8 for Qualified Customers("WAQC"), through base rates in  
9 compliance with Commission Order No. 29505.

10 Q. Do Idaho Power's energy efficiency activities  
11 affect customer satisfaction?

12 A. Yes. Results of independent surveys show Idaho  
13 Power's efforts to educate and inform customers are  
14 successful: the Company remains one of the top-ranked  
15 utilities for energy efficiency awareness and, as indicated  
16 within the 2022 J.D. Power Study, ranked 3<sup>rd</sup> in the West  
17 Midsize Segment for the same.

18 According to the 2022 customer satisfaction survey  
19 performed by Burke, customers were very satisfied with  
20 Idaho Power regarding offering programs to help customers  
21 save energy and providing customers with information on how  
22 to save energy and money. These results in regard to energy  
23 efficiency undoubtedly play a part in overall customer  
24 satisfaction.

25 Q. Does Idaho Power offer energy efficiency

1 programs to its income-qualified customers?

2           A.       Yes. Idaho Power has two programs designed to  
3 assist income-qualified customers with energy efficiency at  
4 no cost: WAQC and Weatherization Solutions for Eligible  
5 Customers ("Solutions"). The WAQC and Solutions programs  
6 provide financial assistance to regional Community Action  
7 Partnership agencies in Idaho Power's service area. This  
8 assistance helps fund weatherization costs of electrically  
9 heated homes occupied by qualified customers who have  
10 limited incomes. Weatherization improvements enable  
11 residents to maintain a more comfortable, safe, and energy-  
12 efficient home while reducing their monthly electricity  
13 consumption and are available at no cost to qualified  
14 customers who own or rent their homes.

15                               **V. CUSTOMER SERVICE**

16           Q.       Please briefly describe Idaho Power's customer  
17 service organization.

18           A.       Idaho Power operates a centralized Customer  
19 Service Center ("CSC") that provides customers with full-  
20 service access to Customer Service Representatives ("CSR")  
21 weekdays from 7:30 a.m. to 6:30 p.m. MST, and outage and  
22 emergency access to Outage Specialists 24 hours a day,  
23 seven days a week. Idaho Power also employs bilingual CSRs  
24 that provide service to the Company's Spanish-speaking  
25 customers. Additionally, the Company utilizes a third-party

1 language service to help it communicate with other non-  
2 English speaking customers. Over the last five years, an  
3 average of approximately 1.2 million inbound customer calls  
4 were received by the CSC each year.

5 Q. How does the Company try to ensure that  
6 customers calling the CSC have a positive experience?

7 A. "First Call Resolution" is a priority of the  
8 Company's. If a CSR can resolve a customer's concerns on  
9 the first call, the customer is likely to have a more  
10 positive experience. As such, a strong emphasis is placed  
11 on ensuring customers' concerns are addressed as  
12 efficiently and effectively as possible.

13 Q. Please describe how CSRs assist customers who  
14 express having difficulty paying their electric bill.

15 A. The Company's CSRs are committed to helping  
16 all customers expressing difficulty paying their electric  
17 bill and work to identify and offer reasonable payment  
18 arrangement options that may be best suited to assist with  
19 each customer's individual circumstances. Additionally,  
20 when a customer declares their inability to make a payment,  
21 CSRs will provide the customer with the contact information  
22 of their local energy assistance agency so that the  
23 customer may call and request receipt of Low-Income Home  
24 Energy Assistance Program funds or any other bill  
25 assistance that may be available.

1           Q.       Does Idaho Power support any energy assistance  
2 programs for customers who are having difficulty paying  
3 their electricity bill?

4           A.       Yes. Project Share is a year-round energy  
5 assistance program, which was started by Idaho Power in  
6 1982. It is administered by the Salvation Army and funded  
7 by customer donations and Idaho Power shareholder funds.  
8 For Idaho Power's customers, grants from this program can  
9 be used for the payment of electricity bills. During the  
10 last program year, more than 1,300 households in Idaho  
11 Power's communities benefited from Project Share to keep  
12 their homes warm during cold winter months and cool during  
13 hot summer days. In the last five program years ending  
14 September 30, 2022, Idaho Power customers and shareholders  
15 have combined to contribute more than \$1 million to the  
16 program.

17               In recognition of the cost pressures that customers  
18 in need may be experiencing, the contribution amount from  
19 Idaho Power's shareholders to Project Share will be  
20 increased from \$25,000 to \$125,000 during 2023. This  
21 increased contribution amount to Project Share is in  
22 addition to shareholders continuing to cover the entirety  
23 of the program's administrative costs, which ensures 100  
24 percent of customer donations go toward helping those in  
25 need.

1           Q.       Do customers calling the CSC need to speak  
2   with a CSR to retrieve account information, conduct account  
3   transactions, or inquire about an outage affecting their  
4   service address?

5           No. Idaho Power customers have access to account and  
6   outage information 24 hours a day, seven days a week  
7   through an Interactive Voice Response ("IVR") unit, which  
8   has undergone numerous enhancements over the years to  
9   enable additional customer self-serve functionality. As a  
10   result of these updates, the IVR unit was able to contain  
11   and resolve, within the last five years, approximately 48  
12   percent of customer calls.

13          Through the IVR, customers can make payment  
14   arrangements; retrieve billing, payment, and meter reading  
15   information; sign up for Budget Pay; access energy  
16   efficiency and usage information; and receive personalized,  
17   address-specific outage information. Notably, Idaho Power's  
18   IVR system and its enhanced self-serve functionality has  
19   been nationally recognized in recent years by the IVR  
20   Doctors, a leading human factors and usability-consulting  
21   firm in evaluating and improving customer experience and  
22   system performance in automated phone systems.

23          Q.       Has the CSC experienced an impact from the  
24   various self-serve features implemented through the  
25   Company's IVR, App and My Account enhancements?



1           A.       Yes. The CSC has experienced decreases in  
2   annual call volumes, which is likely a result of the  
3   various self-serve enhancements implemented by the Company.  
4   However, the types of calls fielded by CSRs are now  
5   typically related to more complex situations, for which a  
6   self-serve option does not currently exist, or to help  
7   troubleshoot questions that customers may have related to  
8   the App or My Account.

9           Q.       As a result of the reduced call volume, has  
10   the Company made any reorganizations to its CSC?

11          A.       Yes. As the Company continues to intently  
12   focus on continuously improving customers' overall  
13   experience, several positions within the CSC were  
14   recalibrated to focus on operational efficiencies and  
15   identify ways to enhance customers' satisfaction when  
16   interacting with Idaho Power. As an example, Idaho Power's  
17   call routing system was improved after the Company  
18   identified that customers were too often being placed in  
19   the wrong call queue, thereby necessitating transfers  
20   between CSRs. As a result of the improved call routing  
21   system, customers are now more frequently placed in the  
22   correct call queue and able to have their questions  
23   answered in a more timely and effective manner.

24          Q.       How have call handle times been affected?

1           A.     As part of the Company's effort to ensure  
2 customers are placed in the right call queue, customers  
3 likelier to be facing a more complex situation are routed  
4 to CSRs best equipped to handle such questions, which may  
5 result in slightly longer hold and handle times, whereas  
6 calls more routine in nature are typically placed in a  
7 separate queue with lower hold and handle times. The result  
8 of this approach is that customers' hold times are  
9 minimized for relatively simple requests because CSRs can  
10 handle them in quicker fashion. Conversely, situations  
11 necessitating additional handle time and care are afforded  
12 the same.

13           Q.     Have there been other types of positions added  
14 within the CSC to enhance customer experience?

15           A.     Within the last few years, the Company shifted  
16 several CSRs to a Customer Solution Advisor ("CSA") role.  
17 CSAs are an extension of the Company's field  
18 representatives and assist with customer engagement when a  
19 field visit is not possible or practicable. While CSAs  
20 typically engage with new commercial and irrigation  
21 customers to explain their bills or discuss energy  
22 efficiency options, they are also responsible for answering  
23 customers' questions related to on-site generation. Often  
24 the types of calls CSAs handle require thorough knowledge

1 of the Company's field practices and tariff schedules,  
2 thereby necessitating a more specialized role.

3 Q. Are there any other recently implemented  
4 customer experience initiatives that you believe have  
5 resulted in positive customer experiences?

6 A. In 2017, Idaho Power implemented its Idaho  
7 Power Cares Greeting Card program. The program enables CSRs  
8 and other customer-facing employees to send a greeting card  
9 produced by Hallmark Cards, Inc. to a customer when they  
10 feel it is warranted. Such examples of these cards' topics  
11 include, but are not limited to, thank you, care and  
12 concern, sympathy, new home, baby, and birthday. In 2022,  
13 the Idaho Power Cares program sent an average of 14 cards  
14 each day.

15 Q. Does the Company believe its Idaho Power Cares  
16 program has a positive impact on customers?

17 A. Yes. Idaho Power often receives thank you  
18 cards, emails, phone calls or social media posts from  
19 customers thanking the Company for sending them a  
20 personalized card. In doing so, the Company reaffirms to  
21 customers its commitment to them and to try and provide an  
22 exceptional customer service experience.

23 Q. Aside from the CSC, are there other positions  
24 within your organization that routinely engage with  
25 customers?

1           A.       Yes. The Company has several Energy Advisors  
2 who are responsible for engaging with their respective  
3 customer segment, typically in the field, and conducting  
4 education and outreach efforts. Like CSAs, Energy Advisors  
5 assist customers with understanding their bills and promote  
6 Idaho Power's energy efficiency programs; however, they  
7 also act as energy consultants during customers' projects  
8 and help resolve any concerns that customers may have.

9           Q.       Do you believe the initiatives and various  
10 enhancements within the Customer Operations organization  
11 have met the Company's commitment to provide superior  
12 service to its customers?

13          A.       Yes.    believe the organizational changes and  
14 technological improvements made over the last several years  
15 demonstrate Idaho Power's commitment to its customers to  
16 provide superior and satisfying service.

17          Q.       In your opinion, should the Company's  
18 requested rate increase be viewed as reasonable based upon  
19 the Company's customer service and customer satisfaction  
20 performance?

21          A.       Yes. By providing the Company with fair and  
22 timely recovery of its revenue requirement, the Commission  
23 will be recognizing that the Company has adequately  
24 addressed customer needs and that the Company's investments  
25 that support customer service and satisfaction have been

1 appropriately incurred on behalf of customers.

2 Q. Does this conclude your direct testimony in  
3 this case?

4 A. Yes, it does.

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**DECLARATION OF BO HANCHEY**

I, Bo Hanchey, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Bo Hanchey. I am employed by  
Idaho Power Company as Vice President of Customer  
Operations and Chief Safety Officer.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony and Exhibit No. 6 in this  
matter.

3. To the best of my knowledge, my pre-filed  
direct testimony and exhibit are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
Bo Hanchey

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**HANCHEY, DI  
TESTIMONY**

**EXHIBIT NO. 6**



## Safety is a Value at Idaho Power

We work in an industry where hazards are part of the everyday job. That's why Safety First is a core value we live by at Idaho Power. It means our employees will return home to their families in the same condition they left, and that our customers can count on us to take care of them as well.

As part of our safety culture, Idaho Power employees go through rigorous training, adhere to strict safety standards and are empowered to speak up if they notice hazards. This has led to some of our safest years on record.

This January, Idaho Power was recognized by the Edison Electric Institute (EEI) with the Thomas F. Farrell, II Safety Leadership and Innovation Award for our approach of combining psychological and behavioral safety with practical human performance principles. Put simply, we teach our employees how our brains process information and how we can use the right mindset combined with vital behaviors to perform work safely.

**"I applaud Idaho Power for its leadership and commitment to protecting the health and safety of its employees. Idaho Power's continuous innovations have helped to shape health and safety education and many of the protocols used across our industry, and this award is well deserved."**

**~ Tom Kuhn, EEI President**

We're proud of our safety record, but most importantly, we're proud of our safety culture and grateful that our employees return home safely to their families. We're also privileged to serve as a pillar of safety in our communities, whether it's helping tend to car crash victims or giving electrical safety presentations to classrooms (see below!). You can count on Idaho Power to put safety first!

### We Offer Free Safety Presentations!

Did you know Idaho Power's education and outreach energy advisors work with schools

and community groups to increase understanding about the energy industry, including electrical safety?

For school children (K-6), topics range from basic concepts of electricity and its safe use around the home to high-voltage safety demonstrations. For older students and adults, we offer a presentation centered on electrical safety in our communities. We can also customize sessions to suit your needs.

For more information about the presentations we offer and additional resources, visit our website at [idahopower.com/learn](https://idahopower.com/learn) or view our [Community Education Guide](#). To schedule a presentation, email [learn@idahopower.com](mailto:learn@idahopower.com) or contact your education and outreach energy advisor.

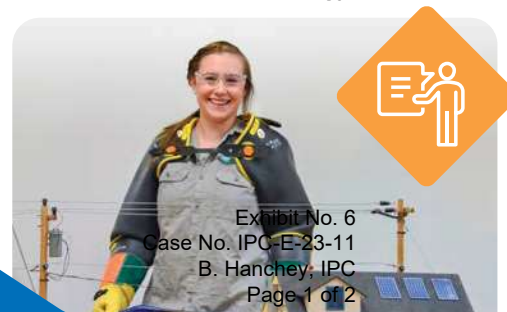


Exhibit No. 6  
Case No. IPC-E-23-11  
B. Hanchev, IPC  
Page 1 of 2





# Do You Know What to Do Around Downed Power Lines?

You should always assume power lines are energized and dangerous — most are. But most are also high in the air or buried underground for your safety. So, what should you do if a power line has fallen on the ground, or on your vehicle? High winds, heavy snowfall and wildfires can cause power lines to fall. So can vehicle accidents with power poles. Here's the essential information you need to stay safe.

- Stay at least 100 feet back from any downed line and keep others away as well.
- Call 911, and contact Idaho Power immediately at 208-388-2323 or 1-800-488-6151 (outside the Treasure Valley).
- Never touch a downed line or use any object to move a downed power line.
- Never remove tree limbs or other objects near or touching a downed line.
- If someone touches a downed power line, do not touch or try to rescue them. You risk becoming a victim yourself. Call 911 immediately.

## If a power line falls on your vehicle:

- Stay inside until help arrives, and warn others not to touch the vehicle. Call for help.
- If you must leave the vehicle because of a fire or other life-threatening situations, jump out and as far away as possible with both feet landing on the ground at the same time. Keeping your feet together, shuffle away from the scene at least 100 feet. **DO NOT** touch the vehicle and the ground at the same time. For a demonstration, watch our Downed Power Line Safety video at [idahopower.com/PowerLineSafety](http://idahopower.com/PowerLineSafety).



YouTube

## From the Energy Efficient Kitchen

July 2022  
Dessert

### Peach Melba Yogurt Parfait

- |                                  |  |
|----------------------------------|--|
| 1½ cups Greek-style honey yogurt | 3 fresh peaches, pitted and cut into bite-sized pieces |
| 1½ cups nonfat plain yogurt      | 1½ cups fresh raspberries                              |
|                                  | ¼ cup sliced, toasted almonds                          |



In a medium bowl, stir together yogurts until smooth. Spoon ½ cup fresh peaches into six parfait glasses. Top each with ¼ cup yogurt mixture, ¼ cup raspberries and additional ¼ cup yogurt mixture. Garnish with sliced almonds. Makes six servings.

Recipe selected from Idaho Power's Centennial Celebration Cookbook.



## How Idaho Power Keeps the Grid Safe

Ever wonder what measures Idaho Power takes to ensure the safety of the power grid and how it might affect your community? Maintaining a safe, reliable power system is at the heart of what we do every day. Here are some of the ways we strive to keep the grid safe:

- We design and build equipment to meet or exceed industry standards.
- Our personnel monitor the grid 24/7, and employees stand ready to respond anytime in the event of an emergency.
- We proactively inspect and regularly maintain our equipment using visual inspections and technology like thermal imaging, drones and helicopters.
- We replace older underground power lines and install them in more modern, safer conduit.
- We protect against wildfires by wrapping high-risk poles in mesh, clearing vegetation from around their base, and trimming trees to keep them away from power lines. We also replace or install new equipment to protect or "harden" our grid against wildfires.
- We work with emergency responders and de-energize our equipment if the need arises.

For more information on how Idaho Power protects the grid for wildfire season — and what you can do to prepare — visit [idahopower.com/wildfire](http://idahopower.com/wildfire).



Exhibit No. 6  
Case No. IPC-E-23-11  
B. Hanchey, IPC  
Page 2 of 2

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES       )  
AND CHARGES FOR ELECTRIC SERVICE       )  
IN THE STATE OF IDAHO AND FOR          )  
ASSOCIATED REGULATORY ACCOUNTING      )  
TREATMENT.                               )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

SARAH GRIFFIN





1 Manager at Boise Cascade. I began my employment with Idaho  
2 Power in October 2007 as an HR Professional where my role  
3 was to provide guidance to leaders in managing performance,  
4 developing and delivering leader and employee training, and  
5 conducting workplace investigations. Since my initial hire,  
6 I have served in increasingly broad and expansive roles,  
7 including HR Leader, HR Manager, and Director of HR,  
8 ultimately moving into my current role of Vice President of  
9 HR in October 2019.

10 Q. What is the purpose of your testimony?

11 A. The purpose of my testimony is to provide  
12 justification for the labor and total compensation costs  
13 included in the Company's test year. I will describe the  
14 Company's overall compensation philosophy and explain why  
15 the level of compensation requested in this case is  
16 necessary to provide safe, reliable, affordable electricity  
17 to customers. As part of this discussion, I will also  
18 provide the justification for the requested increase in  
19 cost recovery related to the Company's pension plan, which  
20 serves as a key component of Idaho Power's overall  
21 compensation package.

22 Q. How is the remainder of your testimony  
23 organized?

24 A. My testimony consists of seven sections that  
25 address the current labor market, the components of Idaho

1 Power's total compensation or "Total Rewards" package, and  
2 how those components are determined. My testimony then  
3 concludes with a summary of costs related to Total Rewards  
4 included in the Company's filing.

- 5 • Section I: Idaho Power's Total Rewards  
6 Philosophy
- 7 • Section II: Current Labor Market Challenges
- 8 • Section III: Base Wage Benchmarking
- 9 • Section IV: Incentive Compensation
- 10 • Section V: Benefits Benchmarking
- 11 • Section VI: Retirement Benefits
- 12 • Section VII: Total Rewards Costs in 2023 Test  
13 Year

14 **I. IDAHO POWER'S TOTAL REWARDS PHILOSOPHY**

15 Q. Please provide a general discussion of Idaho  
16 Power's Total Rewards philosophy.

17 A. Idaho Power's Total Rewards philosophy is to  
18 provide a balanced, competitive, and sustainable total  
19 compensation and benefits package, ensuring it attracts and  
20 retains high-quality employees and motivates them to  
21 achieve performance goals that benefit customers at a fair  
22 and just cost. Maintaining a competitive Total Rewards  
23 package allows the Company to recruit and retain a highly  
24 skilled workforce that possesses a deep knowledge and  
25 understanding of the complex energy business that builds

1 and becomes more valuable as employees gain more experience  
2 over time. The competitiveness of Idaho Power's Total  
3 Rewards package also supports the Company's intent to  
4 maintain a flexible workforce that can easily adjust work  
5 duties and assignments to meet changing demands and  
6 operational needs. In support of this philosophy, the  
7 Company monitors its Total Rewards package, and adjusts it  
8 accordingly in order to maintain a market-competitive total  
9 compensation package.

10 Q. What are the components of Idaho Power's Total  
11 Rewards package?

12 A. The Total Rewards package is comprised of base  
13 wages and "at-risk" incentive pay, as well as competitive  
14 benefits programs including health and welfare, retirement  
15 and other benefits.

16 Q. How often is the Company's Total Rewards  
17 package reviewed?

18 A. While certain components of the Company's  
19 Total Rewards package are reviewed annually, a  
20 comprehensive benchmarking analysis that evaluates the  
21 total cost of Idaho Power's employee benefits (as a  
22 percentage of pay) as compared to peer utility companies is  
23 performed biennially. Table 1 below summarizes the  
24 frequency of review for the various components of the  
25 Company's Total Rewards package, as well as the actions

1 that are taken based on each review. I will describe each  
2 of these review processes in greater detail later in my  
3 testimony.

4 **Table 1: Total Rewards Review Frequency by Component**

Total Rewards Component	Review Frequency	Outcome
Salary Structure	Annually	General Wage Adjustment %
Benefits Programs	Annually	Program/rate changes
Comprehensive Compensation Analysis	Continually, targeting each position every 5-7 years or less	Market adjustment, up or down

5  
6 Q. How does Idaho Power analyze whether it is  
7 providing market-competitive compensation and benefits?

8 A. Idaho Power's compensation benchmarking  
9 process evaluates positions on an ongoing basis, with the  
10 goal of a comprehensive review occurring approximately  
11 every 5-7 years, particularly for positions that have a  
12 significant number of incumbents, to ensure that Idaho  
13 Power maintains market-competitive compensation levels and  
14 remains an employer of choice.

15 Q. What data sources does Idaho Power rely on for  
16 these analyses?

17 A. The Company uses a variety of data sources in  
18 the compensation benchmarking process. Non-exempt<sup>1</sup> trade  
19 positions are typically benchmarked against intermountain

---

<sup>1</sup> "Exempt" positions refer to non-hourly, salaried positions, while "non-exempt" positions are paid on an hourly basis.



1 utility peer contract data. The Company also participates  
2 in and purchases data from Willis Towers Watson's ("WTW")  
3 *Energy Services Middle Management, Professional and Support*  
4 *Compensation Survey* to benchmark management, professional  
5 exempt, office-based non-exempt, and other non-exempt  
6 support roles.

7 Q. What is WTW and how does Idaho Power utilize  
8 their survey data?

9 A. WTW is a nationally recognized HR consulting  
10 firm, and the *Energy Services Middle Management,*  
11 *Professional and Support Compensation Survey* is the most  
12 widely used salary survey in the utility industry. WTW also  
13 provides a biennial review of the cost to Idaho Power of  
14 providing benefits (as a percentage of pay) compared to the  
15 corresponding costs incurred by a peer group of "Energy  
16 Services" and "General Industry" companies. Benefits  
17 reviewed and benchmarked include health, retirement, and  
18 other services, including time off and disability programs.  
19 The Company utilizes WTW's *Benefits Online* survey data and  
20 benchmarking information from Idaho Power's benefits  
21 consulting firm, KPD, when reviewing benefit programs and  
22 cost.

23 Q. How does the Company use the Total Rewards  
24 benchmarking information to adjust employee compensation  
25 and benefit offerings?



1 recently this has become more difficult, particularly for  
2 employees with specialized or high-demand skills, and the  
3 Company anticipates this trend will continue. In light of  
4 these challenges, which I will describe in more detail  
5 later in my testimony, ensuring the Company offers a  
6 competitive Total Rewards package that emphasizes long-term  
7 employment is increasingly important in order to attract  
8 and retain a high-quality workforce.

9 Q. What factors have caused the labor market to  
10 become more challenging since 2011?

11 A. Multiple factors have caused a paradigm shift  
12 in the labor market since 2011. Primary factors impacting  
13 Idaho Power have been increased competition for local  
14 workers due to remote work options resulting from the  
15 COVID-19 pandemic ("pandemic"), historic increases in  
16 housing costs in Idaho Power's service area, and the need  
17 to hire and retain talent to operate in an increasingly  
18 complex environment, exemplified by new processes such as  
19 participation in the Energy Imbalance Market ("EIM") and  
20 more sophisticated resource modeling and planning within  
21 the integrated resource planning ("IRP") process.

22 Q. How did the pandemic impact the ability to  
23 attract and retain qualified employees?

24 A. Due to mandatory remote working conditions  
25 that resulted from the pandemic, many companies throughout

1 the world transitioned to a higher percentage of full  
2 remote or hybrid remote job offerings. While certain hands-  
3 on positions were less impacted by this change, many in-  
4 office positions in the Company saw a paradigm shift in the  
5 labor market, which directly impacts Idaho Power's ability  
6 to attract and retain high-quality employees.

7         Rather than competing strictly in the local job  
8 markets, Idaho Power is now competing for employees with  
9 any company throughout the world that offers the ability to  
10 work remotely, many of whom are paying wage rates that are  
11 much higher and often reflective of those offered in much  
12 larger cities. This impact - most acutely felt by  
13 Information Technology ("IT") and Cyber Security positions  
14 - comes at a time when technology and security have grown  
15 increasingly complex.

16         Q.       Has Idaho Power's workforce changed over the  
17 last decade with respect to age and proximity to  
18 retirement?

19         A.       Yes. At the time of the Company's last GRC, as  
20 of December 31, 2011, approximately 39 percent of employees  
21 were eligible to retire within five years while 43 percent  
22 of employees had fewer than 10 years of service. As of  
23 April 2023, the Company now has approximately 30 percent  
24 eligible to retire within five years while more than half

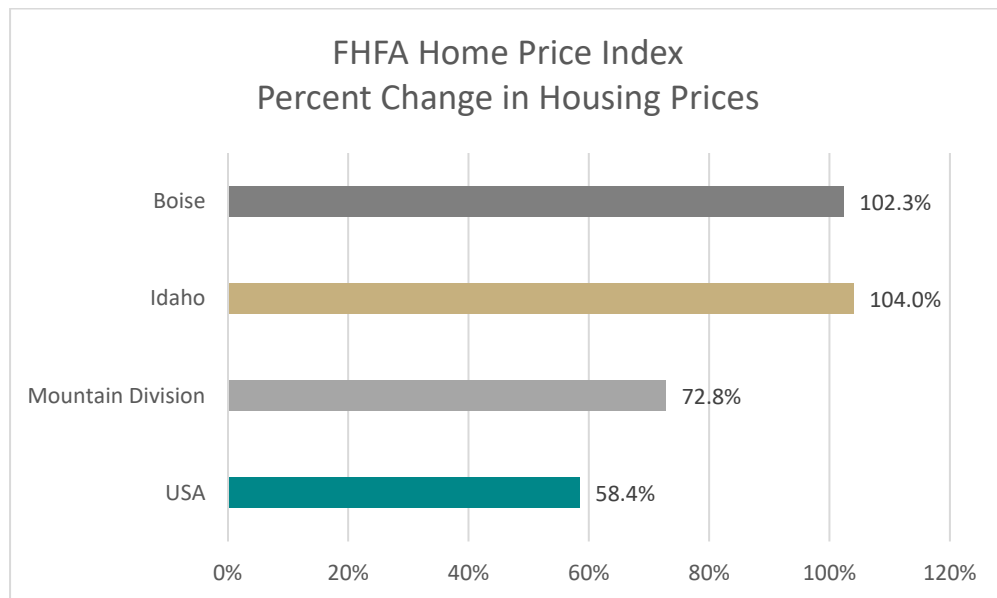
1 of the Company's employees have fewer than 10 years of  
2 service.

3 Q. How have housing costs in Idaho changed since  
4 the Company filed its last GRC in 2011?

5 A. According to the most recent House Price Index  
6 ("HPI") Quarterly Report (Q4 2022) issued by the Federal  
7 Housing Financing Agency ("FHFA"), Idaho leads the nation  
8 in the five-year increase in housing prices, as  
9 demonstrated in Figure 1 below. These elevated housing  
10 prices serve as an additional hurdle to hiring employees  
11 who do not currently reside within the area.

12 **Figure 1.**

13 Home Price Index Percent Changes, Q4 2022



14

15 Q. How do higher housing costs impact Idaho Power's  
16 ability to hire quality candidates?



1           A.       For candidates external to Idaho Power's  
2   service area, housing costs serve as a key decision point  
3   when evaluating whether to accept a job offer. While Idaho  
4   Power prefers to and focuses on hiring locally, many  
5   specialized positions require broader recruiting sources,  
6   especially in light of the recruiting challenges detailed  
7   previously in my testimony. Where Idaho Power was  
8   historically able to market Idaho as high quality-of-life  
9   and low cost-of-living compared to other states, the  
10   historic increase in housing costs has degraded the  
11   Company's ability to market Idaho as low cost-of-living.

12           Q.       How have changes in the electric utility  
13   industry resulted in the need to hire and retain  
14   specialized talent since the Company's last general rate  
15   case?

16           A.       As discussed further in the Direct Testimony  
17   of Company Witness Ms. Lisa Grow, Idaho Power's business  
18   has become increasingly complex for a number of reasons,  
19   including unprecedented customer growth and changing  
20   technology that requires talented, long-term employees to  
21   operate and maintain. While I am not the Company's  
22   technical expert in these areas, from an HR perspective,  
23   implementing and maintaining initiatives such as  
24   participation in the EIM, the development of long-term  
25   capacity expansion modeling for IRP and resource

1 procurement purposes, and complex billing procedures for  
2 increasingly prominent technologies such as rooftop solar  
3 all impact Idaho Power's labor needs.

4 Q. How have the challenges you described impacted  
5 Idaho Power's labor recruitment and retention?

6 A. The challenges above have led to increased  
7 difficulty in hiring and retaining employees, as evidenced  
8 by the Company's time-to-fill open positions, the size of  
9 qualified applicant pools, and the Company's employee  
10 turnover rates.

11 Q. What does the time-to-fill metric measure?

12 A. Time-to-fill measures the number of days it  
13 takes to fill an open position, from the date a job  
14 requisition is posted to the date a new hire accepts the  
15 position.

16 Q. How have Idaho Power's time-to-fill open  
17 positions and the size of qualified applicant pools changed  
18 in recent years?

19 A. The Company has experienced longer hiring  
20 times in recent years, with a time-to-fill rate increasing  
21 from an average of 38 days in 2019 to 43 days in 2022.  
22 Although this change may appear small, the compounded  
23 effects of a longer time-to-fill rate and smaller candidate  
24 pools for job postings have impacted Idaho Power's ability  
25 to hire qualified candidates in a timely manner.

1           Q.     Can you provide some examples of the smaller  
2 candidate pools for job postings, as indicated in the  
3 previous response?

4           A.     Yes. For example, Idaho Power's external  
5 Journeyman Lineworker postings received an average of 22  
6 applicants in 2020 compared to fewer than six in 2022. For  
7 more technical positions, this decrease has been even more  
8 dramatic. The System Administrator positions that were  
9 posted in 2020 had an average candidate pool size of 73,  
10 while the same position posted in 2022 had an average  
11 candidate pool size of fewer than nine. Further, Engineer  
12 postings averaged over 50 candidates in 2020 compared to  
13 fewer than 20 in 2022

14          Q.     Are these hiring challenges unique to Idaho  
15 Power?

16          A.     No. In an article dated May 11, 2023, the  
17 Idaho Press reported that the City of Boise is experiencing  
18 similar hiring challenges and has a 10 percent vacancy  
19 rate. The article further states that "in Idaho, there are  
20 1.5 jobs per each available person."<sup>2</sup>

21          Q.     How has increased scarcity in candidate pools  
22 impacted Idaho Power?

---

<sup>2</sup> ['Has not resolved itself': City of Boise still facing job vacancies | Local News | idahopress.com](#)

A. Due to relatively limited candidate pools, the Company has had to resort to hiring at an entry level for many professional positions where someone with more experience is needed to fill the position but there are no or a limited number of candidates. This has particularly been the case for technical positions where there were not sufficient qualified applicants or the salary requirements of qualified applicants could not be met. This results in additional training resources and time to get candidates up to speed in the position and makes retention of these workers even more critical as they gain valuable knowledge and experience. This further supports the need to emphasize long-term retention in the Company's Total Rewards package, exemplified by the structure of the Company's defined benefit pension plan.

16 Q. How has the Company's turnover rate changed as  
17 a result of the current labor market?

A. The labor market forces detailed above have resulted in increased turnover rates in recent years. The overall voluntary turnover rate, which includes both regular voluntary terminations and retirements, increased by 49 percent from 2012 to 2022. The Company's voluntary turnover rate (excluding retirements) as of December 31, 2022 nearly doubled compared to prior to 2020. According to exit interview data, 48 percent of these employees left the

1 Company for more pay and/or additional advancement  
2 opportunities. Furthermore, these statistics are not unique  
3 to Idaho Power. Within the Idaho Press article referenced  
4 previously, the City of Boise HR Director Sarah Borden  
5 stated that last January "45 percent of non-retirees said  
6 that either compensation or cost of living was driving them  
7 to make this decision (to leave)."<sup>3</sup>

8 Q. Has Idaho Power experienced a corresponding  
9 increase in declined job offers?

10 A. Yes. The number of declined offers more than  
11 tripled from 2020 to 2022. The majority of these declined  
12 offers were situations where either salary requirements  
13 could not be met or there were competing offers that were  
14 beyond what the Company could provide.

15 Q. How has Idaho Power responded to the changing  
16 labor market and the challenges it presents?

17 A. In light of these challenges, Idaho Power has  
18 modified its recruiting approach with the ultimate goal of  
19 attracting and retaining a talented workforce while keeping  
20 costs low for customers. First, where Idaho Power formerly  
21 was able to rely solely on local sources for its job  
22 postings, the Company has expanded its use of nationwide  
23 job boards to help promote and target qualified candidates  
24 and has attempted to source candidates through resumé

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<sup>3</sup> *Id.*



1 databases. Additionally, in the post-pandemic era in which  
2 many job seekers prioritize remote work opportunities,  
3 Idaho Power began offering hybrid work options for  
4 qualified positions.

5 Q. How do these challenges impact the Company's  
6 Total Rewards philosophy?

7 A. Given these challenges, now more than ever,  
8 offering an attractive Total Rewards package is crucial not  
9 only for the hiring of high-quality employees, but for the  
10 retention of employees as well. It is vital that Idaho  
11 Power's Total Rewards package can attract quality employees  
12 who will serve as long-term productive members of the  
13 Company's workforce. Given challenges in hiring, it is even  
14 more crucial that the Company's Total Rewards package  
15 incents long-term employment, highlighting the need for the  
16 Company's defined benefit pension plan that I will detail  
17 later in my testimony. In its entirety, the setting of a  
18 competitive Total Rewards package is crucial to the ability  
19 of Idaho Power to cost-effectively maintain safe and  
20 reliable service. Each component of the Total Rewards  
21 package - Base Wages, Incentive Pay, Benefits, and Pension  
22 - will be detailed in Sections III through VI of my  
23 testimony, respectively.

24 **III. BASE WAGE BENCHMARKING**

25 Q. What are base wages?

1           A.       Base wages are the base level compensation an  
2 employee receives as part of the Company's Total Rewards.  
3 For non-exempt employees, base wages are determined by an  
4 hourly wage applied to hours worked, while for exempt  
5 employees base wages reflect the employee's annual base  
6 salary.

7           Q.       How does Idaho Power determine the market-  
8 based pay structure for a job?

9           A.       Base compensation is established when a job is  
10 created using peer utility wage data obtained from salary  
11 surveys and union contracts, along with similar internal  
12 positions already matched to market data. These reviews  
13 typically involve at least three years of wage data to  
14 ensure that compensation trends are considered and to  
15 prevent frequent changes to position wages based on one to  
16 two years of data.

17           In addition to market survey data, the job  
18 evaluation process includes a review of the basic education  
19 and experience requirements, physical requirements, and  
20 behavioral competencies for the position. This proactive,  
21 comprehensive review ensures the Company has accurate,  
22 competitive, and safe job requirements and descriptions.

23           Q.       Please describe the standard the Company uses  
24 to set base wages.

1           A.       The Company has a grade and step pay system.  
2   The highest step in any grade is step 13. Each position is  
3   assigned a grade as reflective of the market, and the  
4   Company standard for remaining competitive is to set the  
5   step 13 pay of each grade to be approximately equal to the  
6   median pay for a comparable position in the peer-compared  
7   market. Targeting the median of market pay is a  
8   compensation-setting best practice. It is a conservative  
9   approach that allows Idaho Power to manage costs while  
10   ensuring the Company is able to provide competitive pay  
11   within the grade and step system.

12           Q.       How does Idaho Power ensure its base wages do  
13   not exceed the market median over time?

14           A.       On an annual basis, the Company reviews a  
15   variety of data to determine the appropriate General Wage  
16   Adjustment ("GWA") to remain competitive. The Company  
17   reviews market survey data from WTW and peer utility  
18   contracts, the Consumer Price Index ("CPI"), and other  
19   economic data that ultimately informs the recommendation to  
20   the Board of Directors for the Company's GWA. On a longer-  
21   term basis, Idaho Power performs a comprehensive job review  
22   for individual positions to ensure base wages are  
23   competitive and appropriate relative to market.

24           Q.       Has the Company's job review process evolved  
25   since the last GRC?

1           A.       Yes. The Company's 2011 base wage and total  
2   compensation benchmarking analysis focused on five specific  
3   positions.<sup>4</sup> The information and resulting decisions  
4   regarding compensation levels were then used to inform  
5   decisions for a broader set of jobs with similar functions  
6   referred to as a job category or "job family."<sup>5</sup>

7           In 2017, the Company developed a process to expand  
8   this review from five specific positions and their  
9   associated "job family" to performing a review of all jobs  
10   on an ongoing proactive basis. This is in addition to the  
11   practice of reviewing jobs when there are significant  
12   changes in job responsibilities or market conditions  
13   resulting in challenges for the Company in recruiting  
14   and/or retaining the talent necessary to provide safe,  
15   reliable, and affordable energy to customers.

16          Q.       Please generally describe the current job  
17   review process.

18          A.       Positions are evaluated using market data from  
19   third-party salary surveys, primarily from WTW. The Company  
20   relies on data specific to the energy services industry,  
21   with a focus on information from companies with comparable  
22   levels of annual revenue and regulation. Where appropriate,

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<sup>4</sup> These five positions represented approximately 11 percent of the total employees at Idaho Power in 2011 and 2012.

<sup>5</sup> The combined number of employees in each of the selected jobs represented approximately 22 percent of the total workforce in 2011 and 2012.

1 peer utility contracts are also reviewed along with similar  
2 internal positions. The Company also reviews job postings  
3 of peer utilities.

4 Q. Has the Company made progress in reviewing all  
5 jobs at Idaho Power using this job review process?

6 A. Yes. While the job review process slowed in  
7 2020 due to the impact of the pandemic on the Company's  
8 workforce and HR staff, Idaho Power is currently  
9 progressing through its full review of all positions within  
10 the Company. The table below shows the number of jobs that  
11 have been reviewed since implementing this new process in  
12 2017. When this program was implemented, the Company  
13 focused first on jobs with the highest number of  
14 incumbents, rather than smaller or single incumbent  
15 positions.

16 **Figure 2.**

17 Job Review Completion Progress, 2017 - Current



18



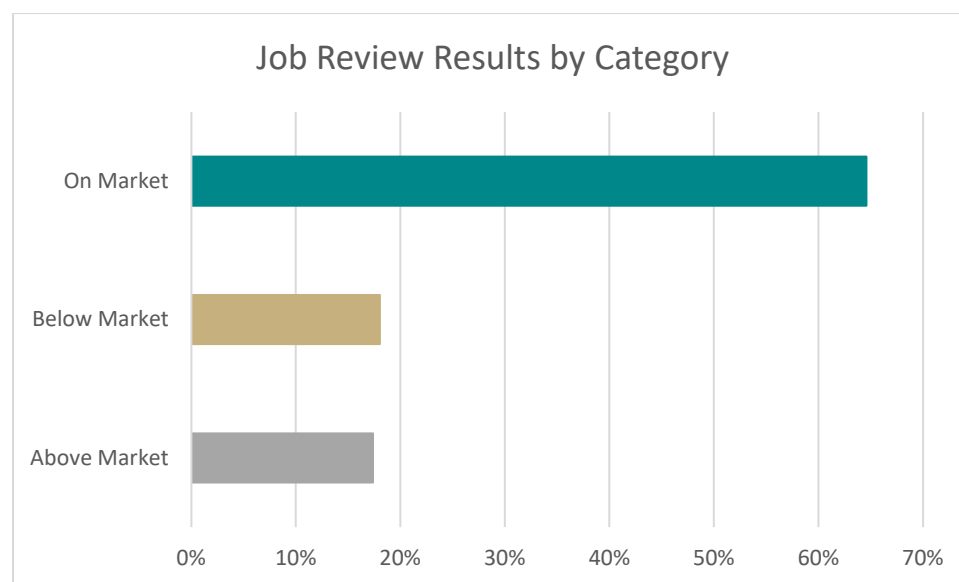
1           As of 2023, there are 665 total distinct jobs in the  
2 Company. Of those, reviews for 417 are complete, 4 are in  
3 progress, and 244 remain.

4           Q.     What changes have occurred as a result of the  
5 Company's broader job review?

6           A.     As shown in the chart below, the majority of  
7 the jobs reviewed were on-market, indicating that Idaho  
8 Power's wage-setting process is functioning as intended.  
9 For jobs that were found to be above market, employees are  
10 placed into a reduction-in-grade program that brings them  
11 into alignment with the lower rate of the new reduced grade  
12 of the position. When positions are determined to be below  
13 market, the incumbents are generally moved to the  
14 equivalent step of the position's new grade.

15   **Figure 3.**

16   Comprehensive Job Review Results by Category



17

1 Q. What has been the recent trend for wages and  
2 salaries in the marketplace?

3 A. Data indicates that wages and salaries are  
4 generally increasing in the marketplace. The Company  
5 reviews several factors to determine appropriate increases  
6 based on what is trending in the market, including salary  
7 budget surveys, union contract negotiations, and cost-of-  
8 living and economic factors.

9 Q. Have you observed any recent trends in salary  
10 budget surveys and union contract negotiations?

11 A. Yes. Recent salary survey projections for  
12 merit and salary structure movement showed an increase over  
13 prior years. Union contract annual adjustments, as well as  
14 market adjustments for many positions were negotiated at an  
15 all-time high, with several peer utilities granting  
16 increases in the double digits for certain roles. As shown  
17 in Table 2 below, first year contract wage increases for  
18 lineman ranged from 7-18 percent.

19 **Table 2: Peer Utility Wage Increases for Lineman**

Northwest Peer Utilities	Old Hourly Rate <sup>1,2</sup>	New Hourly Rate <sup>1,3</sup>	% of Increase
Avista	\$48.63	\$55.39	13.90%
Northwestern	\$48.24	\$51.94	7.70%
NV Energy	\$52.38	\$62.18	18.70%
Pacific Power	\$48.91	\$56.03	14.60%
Rocky Mountain Power	\$49.29	\$54.40	10.40%

20 1) All data collected from publicly available job postings or union contracts

21 2) Hourly rate effective final year of old union contract

22 3) Hourly rate effective first year of new union contract

23

1 Q. Have you observed any changes in cost-of-  
2 living and economic factors impacting employee  
3 compensation?

4 A. With respect to cost-of-living and economic  
5 factors, CPI indicates a continued upward trend through  
6 2022, as indicated in Table 3 below, with inflation spiking  
7 in 2021 and 2022 relative to prior years. In 2022 alone,  
8 CPI in the Mountain Division CPI-U ("Urban") increased 9.6  
9 percent.

10 **Table 3: Consumer Price Index, 2018–2022**

<b>Consumer Price Index – CPI-U (12 mo. Change through September)</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Average</b>
US City Average	2.30%	1.70%	1.40%	5.40%	8.20%	3.80%
West (Includes AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY)	3.40%	2.60%	1.60%	5.30%	8.30%	4.20%
West – Size Class B/C (2.5 million or less)	2.80%	2.30%	2.00%	5.70%	8.30%	4.20%
Mountain Division (Includes AZ, CO, ID, MT, NV, NM, UT, WY)	n/a	2.90%	1.80%	6.00%	9.60%	5.10%

11  
12 As discussed earlier in my testimony, housing prices  
13 have increased at a historic rate in Idaho. This is further  
14 evidenced in Table 4 below, which shows a 37.06 percent  
15 increase in housing costs in 2021, and a 19.13 percent  
16 increase in 2022.

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**Table 4: Home Price Index, 2018-2022**

Home Price Index	2018	2019	2020	2021	2022
National	6.50%	5.10%	6.10%	18.80%	17.67%
Mountain Division (AZ, CO, ID, MT, NV, NM, UT, WY)	9.60%	5.90%	7.90%	25.50%	21.36%
Idaho	13.05%	11.40%	10.78%	37.06%	19.13%
Boise	16.59%	13.60%	11.25%	41.11%	15.00%
Source: Federal Housing Finance Agency (12 Mo. Change Through Q2 2022)					

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Q. What is the result of the Company's general

wage benchmarking process in light of these recent trends,

and how does this impact the base wage levels reflected in

the Company's filing?

A. Since the filing of the Company's last GRC,

Idaho Power has adjusted base wages through annual GWAs, as

well as the comprehensive job review process described

previously in my testimony. This approach ensures that the

Company's base wages are regularly reviewed, resulting in

competitive market-based rates that effectively balance

Idaho Power's ability to attract and retain a quality

workforce while keeping costs low for customers. Idaho

Power's annual GWA process has assisted the Company in

keeping pace with recent market trends, while the position-

by-position review has indicated that Idaho Power's base

wages are competitive relative to market for the majority

of positions.

As shown in the Figure 3 above, for a small

proportion of reviewed positions, up or down adjustments

have been applied in the event the comprehensive review

1 indicated an adjustment was warranted. The graph also shows  
2 that the number of positions that experienced wage  
3 decreases is very similar to the number of positions that  
4 experienced wage increases, indicating that on average the  
5 Company's benchmarking process is functioning as intended.

6 This process, combined with the market forces  
7 described earlier in my testimony, results in total  
8 operations and maintenance ("O&M") base wage costs included  
9 in the 2023 test year of \$133.7 million. Company Witness  
10 Mr. Matthew Larkin discusses the 2023 test year O&M labor  
11 forecast in more detail in his testimony.

#### 12 **IV. INCENTIVE COMPENSATION**

13 Q. What is incentive pay?

14 A. Incentive pay is an "at-risk" part of Idaho  
15 Power's Total Rewards package that is awarded based on  
16 performance goals established by the Compensation Committee  
17 of the Company's Board of Directors. Unlike base pay, which  
18 is guaranteed, incentive pay will not be paid unless the  
19 Company's performance meets or exceeds predetermined  
20 metrics.

21 Q. How is Idaho Power's incentive pay designed?

22 A. Idaho Power's incentive plan consists of three  
23 components: 1) an electrical network reliability goal, 2) a  
24 customer satisfaction goal, and 3) a profit-sharing goal



1 based on net income. The intent of the plan is to focus on  
2 key areas where employees can have an impact.

3 Q. Please generally describe the incentive  
4 metrics.

5 A. The three metrics are intended to motivate  
6 employee performance in ways that positively impact  
7 customers. The network reliability goal considers the  
8 frequency and duration of customer outages. The customer  
9 satisfaction goal is based on the 12-month average of the  
10 customer relationship index ("CRI"), which details the  
11 Company's performance through the eyes of the customer. The  
12 CRI consists of five specific questions asked of Idaho  
13 Power's customers by an independent survey company and  
14 addresses issues such as overall satisfaction, quality,  
15 value, advocacy, and loyalty. The profit-sharing component  
16 is based on achievement against financial targets,  
17 motivating employees to work toward the financial health of  
18 Idaho Power, which is necessary to provide safe, reliable,  
19 and affordable service.

20 Each component has an identified threshold, target,  
21 and maximum, or in other words, a low, medium, and high  
22 level of payout based on actual results compared to  
23 predetermined metrics. The payout levels are set each year  
24 by the Board of Directors to ensure they continue to  
25 stretch employee performance in service of customers.

1 Q. Which components of the Company's incentive  
2 plan are included in the Company's 2023 test year?

3 A. Consistent with prior Commission direction,<sup>6</sup>  
4 Idaho Power has only included the components of incentive  
5 pay that the Commission has determined are directly related  
6 to identifiable customer benefits, which in this case are  
7 network reliability and customer satisfaction. These  
8 components are included in the test year at the 2 percent  
9 target (medium) incentive level. Idaho Power has excluded  
10 any costs related to the profit-sharing component.

11 Q. Has Idaho Power excluded any other components  
12 of its incentive pay from its request in this case?

13 A. Yes. Idaho Power has excluded executive  
14 incentive pay. This is consistent with Commission treatment  
15 of these costs in prior ratemaking proceedings.

16 Q. What is the Company requesting in this case  
17 with regard to incentive-related costs?

18 A. As discussed by Mr. Larkin, incentive pay  
19 totaling \$10.2 million related to the customer satisfaction  
20 and reliability components is included in the 2023 test  
21 year.

22 **V. BENEFITS BENCHMARKING**

23 Q. What is Idaho Power's benefits strategy?

---

<sup>6</sup> IPC-E-08-10, Order No. 30722 at 17.

1           A.       Idaho Power strives to offer its employees a  
2   comprehensive and competitive package of health and  
3   welfare, retirement, and insurance benefits programs. As  
4   with base compensation and at-risk pay, it is important for  
5   the Company to offer a cost-competitive benefits package  
6   with features that address the needs of employees and is  
7   sufficient to attract and retain well-qualified and skilled  
8   employees. As discussed previously in my testimony,  
9   benefits that incent long-term employment are crucial in  
10   today's environment.

11 Q. What are the major components of Idaho Power's  
12 benefits package?

13           A.       Major components of Idaho Power's benefits  
14   package include health and welfare benefits (medical,  
15   prescription, dental, and vision programs), other benefits  
16   (disability, life insurance, and flexible time off), and  
17   retirement benefits.

18 Q. Does Idaho Power benchmark its total benefits  
19 and compare overall benefit costs?

20           A.       Yes. The Company monitors its benefit programs  
21   on an ongoing basis to ensure the appropriate balance  
22   between benefit cost and maintaining a competitive position  
23   in the market.

24 Q. What is Idaho Power's annual benefits  
25 benchmark review process?



1 and other benefit plan offerings in order to accurately  
2 benchmark them against other peers. For consistency of  
3 comparison, the results of the study are typically  
4 presented as benefits costs as a percentage of pay.

5 In addition to the Energy Services BENVAl study, the  
6 Company also contracts WTW to create a custom BENVAl study  
7 that uses all industry survey data and provides an in-depth  
8 peer utility comparison of the Company's health and welfare  
9 and retirement benefits design. This information is  
10 included in the Company's analysis of its Total Rewards  
11 package and is provided to Idaho Power's Board of Directors  
12 Compensation Committee. The results of this report are used  
13 to broadly evaluate the total value and cost of the  
14 Company's benefits and market competitiveness.

15 Q. What is Idaho Power's peer group in the BENVAl  
16 study?

17 A. Idaho Power's BENVAl peer group consists of  
18 upwards of 34 similarly situated energy services companies  
19 across the nation, as well as a subset of utility companies  
20 of similar size. In 2021, there were 663 All Industry  
21 companies included in the analysis, as detailed in Table 5  
22 below.

23 //

24 //

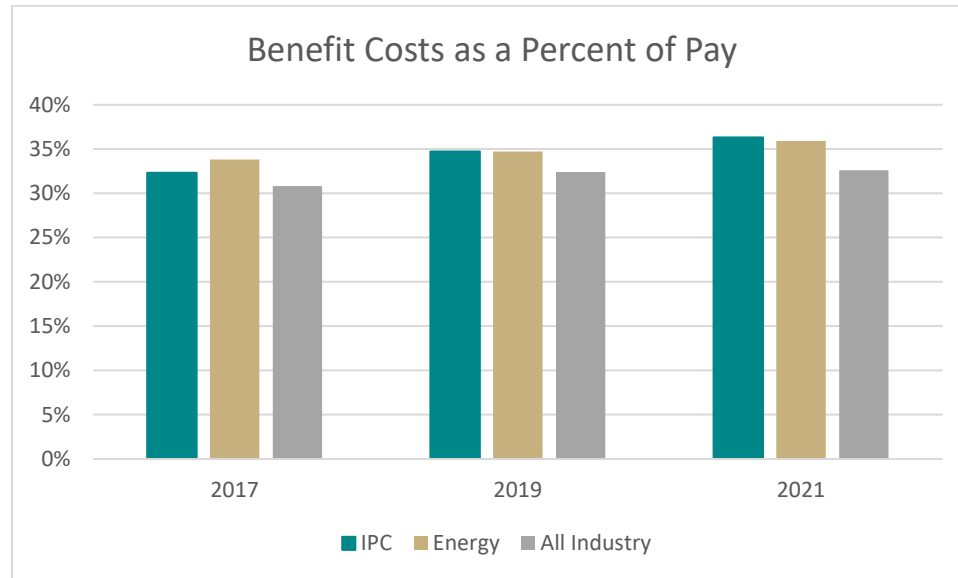
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1 **Figure 4.**

2 Composite BENVAL Results: 2017, 2019, 2021



3

4

5 Q. What benefit cost trends can be seen from the  
6 recent BENVAL survey results?

7

8 A. A review of the data from the 2017, 2019, and  
9 2021 studies shows that total benefit costs are rising  
10 across the board. As indicated in the prior figure,  
11 percentage of pay has increased between surveys from 2017,  
12 2019, and 2021. These trends, coupled with the increase in  
13 CPI and overall wages discussed earlier in my testimony,  
14 indicate that the costs of maintaining a market-competitive  
benefits package are increasing over time.

15

16 Q. What has been the Company's approach to  
managing rising health and welfare care costs?

17

18 A. The Company is continually evaluating trends  
and actively working with KPD and associated third-party

1 administrators on strategies to manage overall healthcare  
2 costs. These strategies include prescription benefits and  
3 formularies, conservative care strategies, case management,  
4 medical policy review, and telemedicine. In addition, there  
5 is ongoing vendor evaluation and management to ensure the  
6 Company is getting the best service at the lowest cost.

7 Q. Given the upward pressure on health and other  
8 benefit costs, what is Idaho Power doing to ensure its  
9 total benefit costs remain in line with the market?

10 A. The Company continues to benchmark benefit  
11 program offerings and costs on an annual basis to ensure  
12 its offerings remain in line with market.

13 Q. Are there any final conclusions that can be  
14 drawn from the benefits benchmarking information you have  
15 provided?

16 A. Yes. As demonstrated by the BENVAL results  
17 provided in my testimony, Idaho Power's total benefits  
18 offered as a percentage of pay are in line with the peer  
19 utilities, indicating the Company's benefits package and  
20 its underlying benchmarking process are functioning as  
21 intended. Additionally, given the labor market challenges  
22 discussed throughout my testimony, Idaho Power believes it  
23 is prudent to more heavily weight its benefits package  
24 toward components that incent long-term employment (i.e.,  
25 retirement benefits). In light of recent trends in rising

1 costs, Idaho Power has actively managed the costs of its  
2 benefit programs while simultaneously ensuring its  
3 offerings are competitive, to support the hiring and  
4 retention of long-term, quality employees.

5 Q. What is the Company requesting in this case  
6 with regard to benefits-related costs?

7 A. The O&M benefits-related costs (excluding  
8 pension) included in the 2023 test year are approximately  
9 \$68.1 million.

10 **VI. RETIREMENT BENEFITS**

11 Q. What are the components of the Company's  
12 retirement benefits package?

13 A. The Company's retirement benefits package  
14 includes three components: (1) a defined contribution or  
15 401(k) benefit plan, (2) a defined benefit (pension) plan,  
16 and (3) a retiree medical benefit plan.

17 Q. Why are retirement benefits important?

18 A. The retirement benefits package is a  
19 significant part of the overall Total Rewards desired by  
20 employees that have a long-term view of their employment  
21 future. As discussed earlier in my testimony, changes in  
22 the labor market have made the hiring of quality,  
23 experienced employees more difficult, which is exacerbated  
24 by the shift to a younger, more transient workforce.

1 Because of this, retirement benefits that encourage long-  
2 term employment are more important than ever.

3 Consistent with the high value the electric industry  
4 places on long-term planning and reliability, Idaho Power  
5 likewise values employees with a long-term perspective as  
6 part of its highly skilled workforce. In structuring a  
7 retirement benefits package as part of its Total Rewards,  
8 the Company strives to have a competitive package that  
9 supports employees' financial needs in retirement while  
10 appropriately sharing market risk between the Company and  
11 its retirees.

12 Q. What is the Company requesting in this case  
13 with respect to defined benefit pension plan expense?

14 A. As discussed further in Mr. Larkin's  
15 testimony, the Company seeks approval of \$35 million of  
16 Idaho jurisdictional pension cost amortization.

17 Q. Why is the defined benefit plan so important  
18 to the Company and its employees?

19 A. The Company has placed additional weight in  
20 its Total Rewards package on the defined benefit plan  
21 because it rewards and incents longevity, which in turn  
22 facilitates reduced employee development costs due to the  
23 retention of knowledge and expertise. As a result, the  
24 Company is able to better maintain the needed skilled



1 workforce with less time and expense incurred for training  
2 and developing new employees.

3 Q. What changes have been made to Idaho Power's  
4 retirement plans?

5 A. The Company's retirement benefits package has  
6 evolved over the years. Prior to 1984, the Company had just  
7 two components to its retirement benefits package: (1) a  
8 defined benefit plan, and (2) a retiree medical benefit  
9 plan.

10 In 1984, the Company adjusted the overall retirement  
11 benefits package to include the third component of a 401(k)  
12 benefit plan. With the addition of this component in 1984  
13 and adjustment to the other components, the Company has  
14 shifted portions of the overall package cost and benefit  
15 risks to retirees in order to maintain a competitive risk  
16 sharing balance between the Company and retirees.  
17 Simultaneously with the inclusion of a 401(k) component of  
18 the retirement benefits package, the Company eliminated  
19 cost of living adjustments as part of its defined benefit  
20 component, thus shifting inflationary market risk to  
21 retirees.

22 In 1999, the Company further reduced its  
23 inflationary market risk by: (1) capping the Company  
24 contribution expenditures toward retiree medical plan costs  
25 for employees hired prior to 1999, and (2) eliminating

1 Company contributions toward retiree medical plan costs for  
2 employees hired in or after 1999.

3 In 2010, the Company reduced the current defined  
4 benefit percentage factor for employees hired on or after  
5 January 1, 2011, to 1.2 percent per year from the previous  
6 factor of 1.5 percent per year.

7 Q. Why does the Company continue to offer a  
8 defined benefit plan when many of its peers have closed  
9 their defined benefit plan offerings to new entrants and  
10 transitioned to alternative retirement plan options such as  
11 enhanced defined contribution plans or 401(k) plans?

12 A. On an ongoing basis, the Company considers  
13 alternatives that could provide similar retiree benefits,  
14 including retention incentives, but continues to find the  
15 defined benefit plan is the least-cost way to provide  
16 retirement benefits as part of the Company's Total Rewards  
17 package for employees, which I will address in more detail  
18 later in my testimony. The Company also believes the  
19 defined benefit plan rewards and incents longevity, which  
20 in turn facilitates retention of essential knowledge and  
21 expertise in the Company's employees and reduces  
22 development and training costs due to turnover, ultimately  
23 resulting in savings for customers.



1           Q.       How do defined contribution and defined  
2 benefit plans differ with regard to plan costs if employees  
3 choose to separate from Idaho Power within the first five  
4 years of employment?

5           A.       Under Idaho Power's defined benefit plan, if  
6 an employee separates before they reach five full years of  
7 service they will not be vested in the plan and the  
8 separated employee will leave the Company with no pension  
9 benefits, which ultimately results in no cost to customers.  
10 The highest voluntary turnover rate at Idaho Power is the  
11 0-to-5-year group, which results in lower costs for  
12 customers from the defined benefit plan compared to other  
13 options. Alternately, a defined contribution plan is  
14 portable and is required to vest more quickly, so an  
15 employee separating from the Company essentially owns the  
16 investments, including any Company contribution once  
17 vested. Therefore, this would result in higher costs to  
18 customers compared to the defined benefit plan if the  
19 employee chooses to separate from the Company.

20           To compound this issue, as previously stated in my  
21 testimony, there is less incentive to stay with Idaho Power  
22 under the defined contribution plan because at the time of  
23 separation the investment will continue to grow over time,  
24 which matches the pattern that would occur if the employee  
25 were to remain employed by the Company. So, under the

1 defined contribution plan, there is less incentive for an  
2 employee to stay with Idaho Power long-term, while there is  
3 more potential harm to customers in terms of elevated labor  
4 costs if the employee chooses to separate within five years  
5 of service.

6 Q. Does offering a defined benefit plan cause  
7 additional costs for Idaho Power's customers compared to a  
8 defined contribution plan?

9 A. No - the opposite is true. Over the career of  
10 an employee, the cost for providing a defined contribution  
11 benefit that is roughly the equivalent of a defined benefit  
12 plan is more expensive.

13 Q. Has Idaho Power procured an analysis that  
14 details the comparative long-term costs and benefits of  
15 these plans?

16 A. Yes. Idaho Power asked its third-party  
17 actuary, Milliman, to prepare an analysis comparing one of  
18 Idaho Power's Northwest regional peer's recently negotiated  
19 retiree benefit program with its union. Under this plan,  
20 the utility will offer new hires after December 31, 2023,  
21 an enhanced defined contribution plan that roughly provides  
22 the equivalent income replacement to Idaho Power's current  
23 1.2 percent defined benefit plan and defined contribution  
24 plan to those that work at the company until age 65. The  
25 results of this analysis show the financial cost over the



career of a new employee to be roughly 40 percent higher under the enhanced 401(k) plan to provide for the same level of benefits as shown in the following table.

**Table 6: Employer Cost for Benefit Plans -  
as a percentage of total pay (salary + bonus)**

	Idaho Power	NW Peer Utility
Defined Benefit (1.2% Formula)	6.1%	N/A
Matching Defined Contribution	3.9%	5.6%
Guaranteed Defined Contribution	N/A	8.4%
Total	10.0%	14.0%
Age 65 Replacement Ratio*	52.0%	53.0%

\* Based on a hire age of 32, bonus percentage of 6%, and defined contribution investment returns of 6.5% pre-retirement and 5% post retirement

Q. Did Idaho Power Perform any analysis in addition to Milliman's enhanced 401(k) plan comparison?

A. Yes. In addition to the enhanced 401(k) plan comparison, Idaho Power asked Milliman to re-perform a similar analysis but with actual data as presented in the Company's last pension-related case (Case No. IPC-E-10-25). The analysis provided by the Company in that case indicated that under a range of economic conditions and investment return scenarios that could occur over a nine-year period, the Company's defined pension plan was the lowest cost retirement plan option relative to a defined contribution plan. After reviewing this analysis, the Commission accepted Idaho Power's 2011 retirement benefits package in Order No. 32239.

1           To refresh this analysis, Milliman evaluated all new  
2 employees hired after Idaho Power reduced the defined  
3 benefit percentage factor for employees hired on or after  
4 January 1, 2011, to 1.2 percent per year from the previous  
5 factor of 1.5 percent. Milliman compared the costs incurred  
6 for those employees for the Company's current defined  
7 benefit plan to a defined contribution plan that provides  
8 the same estimated income replacement for employees that  
9 work at Idaho Power until retirement, with the goal of  
10 resulting in the same total retirement benefits for each of  
11 those employees hired from January 1, 2011, through  
12 December 31, 2022.

13           Q.     What was the result of the analysis performed  
14 by Milliman?

15           A.     Looking at actual Idaho Power employees that  
16 were hired on or after January 1, 2011, through December  
17 31, 2022, the current defined benefit plan saved an  
18 estimated \$36 million in required contributions when  
19 compared to the modeled cost of the defined contribution  
20 plan.

21           Q.     What are the primary reasons for these cost  
22 savings?

23           A.     There are two primary reasons for the  
24 difference: 1) asset returns, and 2) differences in  
25 termination benefits.

1           Q.       How did expected asset returns differ between  
2 defined benefit and defined contribution plans?

3           A.       The asset return for the defined benefit plan  
4 was assumed to be 7.4 percent, while the defined  
5 contribution plan was assumed to earn 6.5 percent during  
6 employment and 5 percent during retirement. The defined  
7 benefit plan is professionally managed with access to a  
8 larger universe of investments, including private illiquid  
9 investments that cannot be utilized in a defined  
10 contribution plan.

11           In addition, the defined benefit plan can  
12 consistently invest for the long-term, resulting in a  
13 higher expected long-term rate of return, whereas a defined  
14 contribution participant typically chooses to de-risk their  
15 investments prior to retirement to avoid short-term market  
16 risk. Participants, therefore, typically respond by  
17 reducing risk and earnings potential while leading up to  
18 and living in retirement. This reduced earnings potential  
19 reduces the efficiency of a defined contribution plan as  
20 compared with a defined benefit plan and also increases  
21 costs to customers. In addition, the defined contribution  
22 participant does not have the benefit of sharing longevity  
23 risk with all of the other plan participants, so  
24 participants will need to save more money prior to  
25 retirement.

1           Q.       How do differences in termination benefits  
2     cause the defined benefit plan to be less expensive?

3           A.       In Idaho Power's defined benefit plan,  
4     employees are not vested in their benefit until they work a  
5     full five years with the Company. Defined contribution  
6     plans are required by law to have faster vesting schedules.  
7     For the comparison prepared for Idaho Power, Milliman used  
8     a three-year vesting assumption, which is the maximum cliff  
9     vesting allowed by law for a defined contribution plan.

10           The Milliman study confirmed what the Company  
11     testified would happen in 2010<sup>7</sup> and also validated the  
12     conclusions reached by the Commission in Order No. 32239.  
13     This study confirms that defined contribution plans are  
14     more expensive than defined benefit plans in achieving  
15     similar levels of benefits. As demonstrated by the Milliman  
16     studies, Idaho Power's defined benefit pension plan will  
17     continue to save customers money going forward compared to  
18     an enhanced defined contribution plan.

19           Q.       What is the requested level of cost recovery  
20     associated with pension expense in this case?

21           A.       Mr. Larkin quantifies and details the  
22     requested level of pension-related cost recovery at \$35  
23     million.

---

<sup>7</sup> *Id.*

1           Q.     Do you believe the Company's current defined  
2 benefit plan is in the best interest of the Company, its  
3 employees, and customers?

4           A.     Yes. Idaho Power's defined benefit plan serves  
5 as a key component of its Total Rewards package. As  
6 discussed throughout my testimony, labor recruitment and  
7 retention has experienced significant challenges in recent  
8 years, and these trends are expected to continue. A defined  
9 benefit plan that not only rewards employees at an  
10 appropriate level, but does so while encouraging long-term  
11 employment, benefits the Company and customers through the  
12 retention of a highly skilled workforce and avoided costs  
13 associated with hiring, onboarding, and training.

14                   **VII. TOTAL REWARDS COSTS IN 2023 TEST YEAR**

15           Q.     What are the expected Total Reward costs for  
16 the 2023 test year?

17           A.     As shown in Table 7 below, the cost for the  
18 Company's Total Rewards in the 2023 test year is  
19 approximately \$247.2 million. This is comprised of \$133.7  
20 million in O&M wages, \$68.1 million for O&M benefits, \$10.2  
21 million for incentive, and \$35.2 million for pension. The  
22 test year labor costs are discussed more fully in Mr.  
23 Larkin's testimony.

24     //

25     //

1                   **Table 7: Total Reward Costs – 2023 Test Year**

<b>Total Reward Component</b>	<b>2023 Test Year</b>
O&M Wages*	\$       133.7
O&M Benefits*	\$       68.1
Incentive	\$       10.2
Pension	\$       35.2
<b>Total</b>	<b>\$       247.2</b>

\* Includes DSM wages and benefits

2  
3                   Q.       What has the Company done to manage its Total  
4 Rewards costs since the last GRC?

5                   A.       As discussed in the testimony of Ms. Grow, the  
6 Company manages its labor budget carefully, requiring the  
7 vice president responsible for each business unit to  
8 approve of unbudgeted positions. This careful management of  
9 labor costs is evidenced by the fact that even with adding  
10 approximately 117,000 customers between 2012 and 2022,  
11 employee headcount has decreased by a total of 17 people  
12 over the same period.

13                  Furthermore, the Company actively manages labor  
14 costs by benchmarking each component of its Total Rewards  
15 package to make sure it is competitive with the market and  
16 makes adjustments when necessary, while balancing its Total  
17 Rewards package to ensure it can attract and retain high-  
18 quality employees and motivate them to achieve performance  
19 goals that benefit customers and shareholders.

20        //



1           Q.     Does this conclude your direct testimony in  
2 this case?

3           A.     Yes, it does.

4           //

5           //

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**DECLARATION OF SARAH GRIFFIN**

I, Sarah Griffin, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Sarah Griffin. I am employed by  
Idaho Power Company as Vice President of Human Resources.

2. To the best of my knowledge, my pre-filed  
direct testimony is true and accurate.

I hereby declare that the above statement is  
true to the best of my knowledge and belief, and that I  
understand it is made for use as evidence before the Idaho  
Public Utilities Commission and is subject to penalty for  
perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
Sarah Griffin

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            )  
AUTHORITY TO INCREASE ITS RATES     ) CASE NO. IPC-E-23-11  
AND CHARGES FOR ELECTRIC SERVICE     )  
IN THE STATE OF IDAHO AND FOR        )  
ASSOCIATED REGULATORY ACCOUNTING    )  
TREATMENT.                             )  
\_\_\_\_\_

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

ADRIEN M. MCKENZIE, CFA

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<b><u>Exhibit</u></b>	<b><u>Description</u></b>
7	Qualifications of Adrien M. McKenzie
8	ROE Analysis—Summary of Results
9	Regulatory Mechanisms
10	Capital Structure
11	DCF Model—Electric Group
12	br + sv Growth Rate
13	CAPM
14	ECAPM
15	Risk Premium
16	Expected Earnings
17	Flotation Cost Study
18	DCF Model—Non-Utility Group

## **I. INTRODUCTION**

1 Q. Please state your name and business address.

2 A. Adrien M. McKenzie, 3907 Red River, Austin,  
3 Texas, 78751.

4 Q. In what capacity are you employed?

5 A. I am President of Financial Concepts and  
6 Applications, Inc. ("FINCAP"), a firm providing financial,  
7 economic, and policy consulting services to business and  
8 government.

9 Q. Please describe your educational background and  
10 qualifications.

11 A. A description of my background and  
12 qualifications, including a resume containing the details of my  
13 experience, is attached as Exhibit 7.

### **A. Overview**

15 Q. What is the purpose of your testimony in this  
16 case?

17 A. The purpose of my testimony is to present to the  
18 Idaho Public Utilities Commission ("IPUC" or "Commission") my  
19 independent assessment of the just and reasonable return on  
20 equity ("ROE") for the jurisdictional utility operations of  
21 Idaho Power Company ("Idaho Power" or the "Company"). In  
22 addition, I also examine the reasonableness of Idaho Power's

1 common equity ratio, considering both the specific risks faced  
2 by the Company and other industry guidelines.

3 Q. Please summarize the information and materials  
4 you rely on to support the opinions and conclusions contained  
5 in your testimony.

6 A. To prepare my testimony, I use information from a  
7 variety of sources that would normally be relied upon by a  
8 person in my capacity. I am familiar with the organization,  
9 finances, and operations of Idaho Power from my involvement in  
10 prior proceedings before the IPUC, the Public Utility  
11 Commission of Oregon ("OPUC"), and the Federal Energy  
12 Regulatory Commission ("FERC"). In connection with this filing,  
13 I consider and rely upon corporate disclosures, publicly  
14 available financial reports and filings, and other published  
15 information relating to Idaho Power. I also review information  
16 relating generally to capital market conditions and  
17 specifically to investor perceptions, requirements and  
18 expectations for utilities. These sources, coupled with my  
19 experience in the fields of finance and utility regulation,  
20 have given me a working knowledge of the issues relevant to  
21 investors' required return for Idaho Power, and they form the  
22 basis of my analyses and conclusions.

23 Q. How is your testimony organized?



1           A.       First, I summarize my conclusions and  
2   recommendations, giving special attention to the importance of  
3   financial strength and the implications of regulatory  
4   mechanisms and other risk factors. I also comment on the  
5   reasonableness of the Company's proposed capital structure.

6           Next, I briefly review Idaho Power's operations and  
7   finances. I discuss current conditions in the capital markets  
8   and their implications in evaluating a just and reasonable  
9   return for the Company. I then explain the development of the  
10   proxy group of electric utilities used as the basis for my  
11   quantitative analyses. With this as a background, I discuss  
12   well-accepted quantitative analyses to estimate the current  
13   cost of equity for the proxy group of electric utilities. These  
14   include the discounted cash flow ("DCF") model, the Capital  
15   Asset Pricing Model ("CAPM"), the empirical CAPM ("ECAPM"), an  
16   equity risk premium approach based on allowed ROEs, and  
17   reference to expected earned rates of return for electric  
18   utilities, which are all methods that are commonly relied on in  
19   regulatory proceedings.

20          Based on the results of my analyses, I evaluate a fair  
21   ROE for Idaho Power. My evaluation takes into account the  
22   specific risks for the Company's utility operations and Idaho  
23   Power's requirements for financial strength. Further,  
24   consistent with the fact that utilities must compete for

1 capital with firms outside their own industry, I corroborate my  
2 utility quantitative analyses by applying the DCF model to a  
3 group of low-risk non-utility firms.

4 **B. Summary and Conclusions**

5 Q. What is your recommended ROE for Idaho Power?

6 A. I apply the DCF, CAPM, ECAPM, risk premium, and  
7 expected earnings analyses to a proxy group of electric  
8 utilities, with the results being summarized on Exhibit 8. As  
9 shown there, I recommend a cost of equity range for the  
10 Company's electric operations of 10.0 percent to 11.0 percent,  
11 or 10.1 percent to 11.1 percent after adjusting for the impact  
12 of common equity flotation costs. It is my conclusion that the  
13 10.6 percent midpoint of this range represents a just and  
14 reasonable ROE that is adequate to compensate Idaho Power's  
15 investors, while maintaining the Company's financial integrity  
16 and ability to attract capital on reasonable terms.

17 **II. RETURN ON EQUITY FOR IDAHO POWER**

18 Q. What is the purpose of this section?

19 A. This section presents my conclusions regarding  
20 the fair ROE applicable to Idaho Power's jurisdictional utility  
21 operations. I also describe the relationship between ROE and  
22 preservation of a utility's financial integrity and the ability  
23 to attract capital. Finally, I discuss the reasonableness of  
the Company's capital structure request in this case.

1     **A. Importance of Financial Strength**

2             Q.       What is the role of the ROE in setting a  
3     utility's rates?

4             A.       The ROE is the cost of attracting and retaining  
5     common equity investment in the utility's physical plant and  
6     assets. This investment is necessary to finance the asset base  
7     needed to provide utility service. Investors commit capital  
8     only if they expect to earn a return on their investment  
9     commensurate with returns available from alternative  
10    investments with comparable risks. Moreover, a just and  
11    reasonable ROE is integral in meeting sound regulatory  
12    economics and the standards established by the U.S. Supreme  
13    Court. The Bluefield case set the standard against which just  
14    and reasonable rates are measured:

15            A public utility is entitled to such rates as will  
16            permit it to earn a return on the value of the  
17            property which it employs for the convenience of  
18            the public equal to that generally being made at  
19            the same time and in the same general part of the  
20            country on investments in other business  
21            undertakings which are attended by corresponding  
22            risks and uncertainties. . . . The return should  
23            be reasonable, sufficient to assure confidence in  
24            the financial soundness of the utility, and should  
25            be adequate, under efficient and economical  
26            management, to maintain and support its credit and  
27            enable it to raise money necessary for the proper  
28            discharge of its public duties.<sup>1</sup>

---

<sup>1</sup> *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S.  
679 (1923) ("Bluefield").

1 The *Hope* case expanded on the guidelines for a reasonable ROE,  
2 reemphasizing its findings in *Bluefield* and establishing that  
3 the rate-setting process must produce an end-result that  
4 allows the utility a reasonable opportunity to cover its  
5 capital costs. The Court stated:

6 From the investor or company point of view it is  
7 important that there be enough revenue not only for  
8 operating expenses but also for the capital costs  
9 of the business. These include service on the debt  
10 and dividends on the stock. . . . By that standard,  
11 the return to the equity owner should be  
12 commensurate with returns on investments in other  
13 enterprises having corresponding risks. That  
14 return, moreover, should be sufficient to assure  
15 confidence in the financial integrity of the  
16 enterprise, so as to maintain credit and attract  
17 capital.<sup>2</sup>

18  
19 In summary, the Supreme Court's findings in *Hope* and *Bluefield*  
20 established that a just and reasonable ROE must be sufficient  
21 to 1) fairly compensate the utility's investors, 2) enable the  
22 utility to offer a return adequate to attract new capital on  
23 reasonable terms, and 3) maintain the utility's financial  
24 integrity. These standards should allow the utility to fulfill  
25 its obligation to provide reliable service while meeting the  
26 needs of customers through necessary system replacement and  
27 expansion, but the Supreme Court's requirements can only be  
28 met if the utility has a reasonable opportunity to actually  
29 earn its allowed ROE.

---

<sup>2</sup> *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*").

1 While the *Hope* and *Bluefield* decisions did not establish a  
2 particular method to be followed in fixing rates (or in  
3 determining the allowed ROE),<sup>3</sup> these and subsequent cases  
4 enshrined the importance of an end result that meets the  
5 opportunity cost standard of finance. Under this doctrine, the  
6 required return is established by investors in the capital  
7 markets based on expected returns available from comparable  
8 risk investments. Coupled with modern financial theory, which  
9 has led to the development of formal risk-return models (e.g.,  
10 DCF and CAPM), practical application of the *Bluefield* and *Hope*  
11 standards involves the independent, case-by-case consideration  
12 of capital market data in order to evaluate an ROE that will  
13 produce a balanced and fair end result for investors and  
14 customers.

15 Q. Throughout your testimony you refer repeatedly to  
16 the concepts of "financial strength," "financial integrity" and  
17 "financial flexibility." Would you briefly describe what you  
18 mean by these terms?

19 A. These terms are generally synonymous and refer to  
20 the utility's ability to attract and retain the capital that is  
21 necessary to provide service at reasonable cost, consistent  
22 with the Supreme Court standards. Idaho Power's plans call for

---

<sup>3</sup> *Id.* at 602 (finding, "the Commission was not bound to the use of any single formula or combination of formulae in determining rates." and, "[I]t is not theory but the impact of the rate order which counts.)

1 a continuation of capital investments to preserve and enhance  
2 service reliability for its customers. The Company must  
3 generate adequate cash flow from operations, together with  
4 access to capital from external sources, to fund these  
5 requirements and for repayment of maturing debt.

6 Rating agencies and potential debt investors tend to  
7 place significant emphasis on maintaining strong financial  
8 metrics and credit ratings that support access to debt capital  
9 markets under reasonable terms. This emphasis on financial  
10 metrics and credit ratings is shared by equity investors who  
11 also focus on cash flows, capital structure and liquidity, much  
12 like debt investors. Investors understand the important role  
13 that a supportive regulatory environment plays in establishing  
14 a sound financial profile that will permit the utility access  
15 to debt and equity capital markets on reasonable terms in both  
16 favorable financial markets and during times of potential  
17 disruption and crisis.

18 Q. What part does regulation play in ensuring that  
19 Idaho Power has access to capital under reasonable terms and on  
20 a sustainable basis?

21 A. Regulatory signals are a major driver of  
22 investors' risk assessment for utilities. Investors recognize  
23 that constructive regulation is a key ingredient in supporting  
24 utility credit ratings and financial integrity. Security



1 analysts study commission orders and regulatory policy  
2 statements to advise investors about where to put their money.  
3 As Moody's Investors Service ("Moody's") noted, "the regulatory  
4 environment is the most important driver of our outlook because  
5 it sets the pace for cost recovery."<sup>4</sup> Similarly, S&P Global  
6 Ratings ("S&P") observed that, "Regulatory advantage is the  
7 most heavily weighted factor when S&P Global Ratings analyzes a  
8 regulated utility's business risk profile."<sup>5</sup> The Value Line  
9 Investment Survey ("Value Line") summarizes these sentiments:

10 As we often point out, the most important factor  
11 in any utility's success, whether it provides  
12 electricity, gas, or water, is the regulatory  
13 climate in which it operates. Harsh regulatory  
14 conditions can make it nearly impossible for the  
15 best run utilities to earn a reasonable return on  
16 their investment.<sup>6</sup>  
17

18 In addition, the ROE set by regulators impacts investor  
19 confidence in not only the jurisdictional utility, but also in  
20 the ultimate parent company that is the entity that actually  
21 issues common stock.

22 Q. Do customers benefit from the utility's financial  
23 flexibility?

---

<sup>4</sup> Moody's Investors Service, *Regulation Will Keep Cash Flow Stable As Major Tax Break Ends*, Industry Outlook (Feb. 19, 2014).

<sup>5</sup> S&P Global Ratings, *Assessing U.S. Investors-Owned Utility Regulatory Environments*, RatingsExpress (Aug. 10, 2016).

<sup>6</sup> Value Line Investment Survey, *Water Utility Industry* (Jan. 13, 2017) at p. 1780.

1           A.       Yes. Providing an ROE sufficient to maintain the  
2   Company's ability to attract capital under reasonable terms,  
3   even in times of financial and market stress, is not only  
4   consistent with the economic requirements embodied in the U.S.  
5   Supreme Court's Hope and Bluefield decisions, but it is also in  
6   customers' best interests. Customers enjoy the benefits that  
7   come from ensuring that the utility has the financial  
8   wherewithal to take whatever actions are required to ensure  
9   safe and reliable service.

10   ***B.       Conclusions and Recommendations***

11           Q.       What are your findings regarding the fair ROE for  
12   Idaho Power?

13           A.       Considering the economic requirements necessary to  
14   support continuous access to capital under reasonable terms and  
15   the results of my analysis, I recommend a 10.6 percent ROE for  
16   Idaho Power's electric utility operations, which is consistent  
17   with the case-specific evidence presented in my testimony. The  
18   bases for my conclusion are summarized below:

- 19           • In order to reflect the risks and prospects  
20           associated with Idaho Power's electric utility  
21           operations, my analyses focus on a proxy group  
22           of twenty other electric utilities.
- 23           • Because investors' required ROE is  
24           unobservable and no single method should be  
25           viewed in isolation, I apply the DCF, CAPM,  
26           ECAPM, and risk premium methods to estimate a  
27           just and reasonable ROE for Idaho Power, as  
28           well as referencing the expected earnings  
29           approach.

- As summarized on Exhibit 8, considering the results of these analyses, and giving less weight to extremes at the high and low ends of the range, I conclude that the cost of equity for a regulated electric utility is in the 10.0% to 11.0% range.
- My evaluation of a fair ROE also incorporated an upward adjustment of 10 basis points to account for flotation costs, which are a legitimate cost incurred to raise equity capital supporting Idaho Power's investment in utility infrastructure. Incorporating this flotation cost adjustment resulted in my recommended ROE range of 10.1% to 11.1%.
- My ROE recommendation for Idaho Power's electric operations is the midpoint of this range, or 10.6%.

Q. What did the DCF results for your select group of non-utility firms indicate with respect to your evaluation?

A. As shown on page 3 of Exhibit 18, average DCF estimates for a low-risk group of firms in the competitive sector of the economy ranged from 10.4 percent to 10.9 percent. While I did not base my recommendations on these results, they confirm that an ROE of 10.6 percent falls in a reasonable range to maintain Idaho Power's financial integrity, provide a return commensurate with investments of comparable risk, and support the Company's ability to attract capital.

### **III. FUNDAMENTAL ANALYSES**

Q. What is the purpose of this section?

A. This section briefly reviews the operations and finances of Idaho Power. As a predicate to my quantitative

1 analyses, it examines conditions in the capital markets and the  
2 general economy. An understanding of the fundamental factors  
3 driving the risks and prospects of electric utilities is  
4 essential in developing an informed opinion of investors'  
5 expectations and requirements that are the basis of a fair rate  
6 of return.

7 **A. Idaho Power**

8 Q. Briefly describe Idaho Power and its utility  
9 operations.

10 A. Idaho Power is a wholly-owned subsidiary of  
11 IDACORP, Inc. ("IDACORP") and is principally engaged in  
12 providing integrated retail electric utility service to  
13 approximately 618,000 customers in a 24,000 square mile area in  
14 southern Idaho and eastern Oregon. Approximately 95 percent of  
15 Idaho Power's retail revenue is attributable to customers  
16 located in Idaho. During 2022, Idaho Power's energy deliveries  
17 totaled 17.1 million megawatt-hours ("MWh"). Sales to  
18 residential customers comprised 39 percent of operating  
19 revenues, with 21 percent to commercial, 13 percent to  
20 industrial end-users, and 10 percent attributable to irrigation  
21 pumping. Idaho Power also participates in the wholesale power  
22 market, with wholesale energy sales accounting for 4 percent of  
23 operating revenues during 2022. At year-end 2022, Idaho Power

1 had total assets of \$7.4 billion, with total revenues amounting  
2 to approximately \$1.6 billion.

3 In addition to its three natural gas-fired generating  
4 facilities in southern Idaho and interests in two coal-fired  
5 plants located in Wyoming and Nevada, Idaho Power's existing  
6 generating units include 17 hydroelectric generating plants  
7 located in southern Idaho and eastern Oregon with a nameplate  
8 capacity of 1,799 Megawatts ("MW"), or 51.6 percent of Company-  
9 owned generating capacity. The electrical output of these hydro  
10 plants, which has a significant impact on total energy costs,  
11 is dependent on stream flows. The Company has experienced  
12 prolonged periods of persistent below-normal water conditions,  
13 with hydroelectric generation supplying approximately 31  
14 percent of total energy needs in 2022, versus an average of  
15 about 43 percent over the 2017 to 2021 period. Additionally,  
16 Idaho Power has undertaken a substantial capital program for  
17 new capacity and energy resources, and in 2022 began  
18 construction of two utility-scale battery storage facilities.

19 Idaho Power's retail electric operations are subject to  
20 the jurisdiction of the IPUC and the OPUC, with the interstate  
21 jurisdiction regulated by FERC. Additionally, Idaho Power's  
22 hydroelectric facilities are subject to licensing under the  
23 Federal Power Act, which is administered by FERC, as well as  
24 the Oregon Hydroelectric Act. Relicensing is not automatic

1 under federal law, and Idaho Power must demonstrate that it has  
2 operated its facilities in the public interest, which includes  
3 adequately addressing environmental concerns.

4 Q. What credit ratings have been assigned to Idaho  
5 Power?

6 A. Moody's has assigned the Company an issuer rating  
7 of Baal, while S&P has assigned a corporate credit rating of  
8 BBB to Idaho Power.

9 Q. Has Idaho Power made significant capital  
10 investments in its system?

11 A. Yes. Idaho Power has made significant new  
12 investments to maintain and modernize its utility  
13 infrastructure, and to otherwise meet customer demand and  
14 provide adequate and reliable service. Since its last rate case  
15 in 2011, Idaho Power's rate base has increased by more than  
16 one-third.<sup>7</sup>

17 Q. Does Idaho Power anticipate the need for capital  
18 going forward?

19 A. Yes. The Company must undertake investments for  
20 necessary replacement and expansion of its electric utility  
21 system as it continues to provide safe and reliable service to  
22 its customers. For 2023 to 2027, Idaho Power is estimating

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<sup>7</sup> IDACORP, Inc., *Spring 2023 Investor Outreach*, Investor Information  
(February/March 2023) at 6.



1 annual capital expenditures of approximately \$650 million.<sup>8</sup>  
2 This represents almost a two-fold increase over the previous  
3 five years. In addition, the Company remains obligated to repay  
4 maturing long-term debt. Continued support for Idaho Power's  
5 financial integrity and flexibility will be instrumental in  
6 attracting the capital necessary to fund these projects in an  
7 effective manner.

8 **B. Outlook for Capital Costs**

9 Q. Please summarize current economic conditions.

10 A. U.S. real GDP contracted 3.4% during 2020, but  
11 with the easing of COVID-19 lockdowns, the economic outlook  
12 improved significantly in 2021, with GDP growing at a pace of  
13 5.7 percent. Regional increases in COVID-19 cases, expiration  
14 of government assistance payments, and declines in wholesale  
15 trade led GDP to decline in the first two quarters of 2022.  
16 More recently, expanding exports and higher consumer spending  
17 led real GDP to grow by 3.2 percent and 2.6 percent in the  
18 third and fourth quarters of 2022, respectively.<sup>9</sup> Meanwhile,  
19 indicators of employment remained stable, with the national  
20 unemployment rate at 3.5 percent in March 2023.<sup>10</sup>

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<sup>8</sup> *Id.* at 5.

<sup>9</sup> <https://www.bea.gov/news/2023/gross-domestic-product-fourth-quarter-and-year-2022-third-estimate-gdp-industry-and> (last visited Apr. 22, 2023).

<sup>10</sup> <https://www.bls.gov/news.release/pdf/empst.pdf> (last visited Apr. 16, 2023).

1           The underlying risk and price pressures associated with  
2   the COVID-19 pandemic were overshadowed by a dramatic increase  
3   in geopolitical risks in early 2022. These events have also  
4   been accompanied by heightened economic uncertainties as  
5   inflationary pressures due to COVID-19 supply chain disruptions  
6   were further stoked by sharp increases in global commodity  
7   prices. The substantial disruption in the energy economy and  
8   dramatic rise in inflation led to sharp declines in global  
9   equity markets as investors reacted to the related exposures.

10   S&P concluded that:

11           The balance of risks is firmly on the downside—  
12           with rapid monetary tightening potentially  
13           pushing major economies into recession; growing  
14           geopolitical tensions exacerbating Europe’s  
15           energy crisis; lingering high prices pressuring  
16           costs and eroding households’ purchasing power;  
17           and China grappling with structural factors that  
18           are undermining its economic growth.<sup>11</sup>

19   Stimulative monetary and fiscal policies, coupled with  
20   economic ramifications stemming from supply-chain disruptions  
21   and rapid price rises in the energy and commodities markets,  
22   have led to increasing concern that inflation may remain  
23   significantly above the Federal Reserve’s longer-run benchmark  
24   of 2 percent. In June 2022, inflation, as measured by the  
25   Consumer Price Index (“CPI”), peaked at its highest level  
26   since November 1981. Since then, CPI inflation has gradually

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<sup>11</sup> S&P Global Ratings, *Global Credit Conditions Q4 2022: Darkening Horizons*, Comments (Sept. 29, 2022).

1 moderated to 5.0 percent in March 2023<sup>12</sup>. The so-called "core"  
2 price index, which excludes more volatile energy and food  
3 costs, rose at an annual rate of 5.6 percent in March 2023.  
4 Similarly, Personal Consumption Expenditures ("PCE") inflation  
5 rose 5.0 percent in February 2023, or 4.6 percent after  
6 excluding more volatile food and energy costs<sup>13</sup>. As Federal  
7 Reserve Chair Powell has noted:

8           Although inflation has moderated recently, it  
9           remains too high. The longer the current bout of  
10          high inflation continues, the greater the chance  
11          that expectations of higher inflation will become  
12          entrenched.<sup>14</sup>

13 More recently, turmoil in the banking sector has shaken  
14 investor confidence and increased volatility in bond and  
15 equity markets. The Federal Reserve and U.S. Treasury took  
16 quick and dramatic action to shore up banks' liquidity needs  
17 and strengthen public confidence in the banking system, but as  
18 Moody's noted, "bank stress has added uncertainty to the  
19 outlook."<sup>15</sup>

20           Q.       How have these developments impacted the Federal  
21 Reserve's monetary policies?

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<sup>12</sup> <https://www.bls.gov/news.release/cpi.nr0.htm> (last visited Apr. 14, 2023).

<sup>13</sup> <https://www.bea.gov/news/2023/personal-income-and-outlays-february-2023> (last visited Apr. 14, 2023).

<sup>14</sup> Federal Reserve, *Transcript of Chair Powell's Press Conference* (Feb. 1, 2023), <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230201.pdf> (last visited Feb. 21, 2023).

<sup>15</sup> Moody's Investors Service, *Baseline US macro forecasts unchanged but outlook more uncertain*, Sector Comment (Apr. 12, 2023).

1           A.       As of its policy meeting in May 2023, the Federal  
2 Open Market Committee ("FOMC") has responded to concerns over  
3 accelerating inflation by raising the benchmark range for the  
4 federal funds rate by a total of 5.00 percent since March  
5 2022.<sup>16</sup> In addition to these increases, Chair Powell has  
6 surmised that the significant draw-down of its balance sheet  
7 holdings that began in June 2022 could be the equivalent of  
8 another one quarter percent rate hike over the course of a  
9 year.<sup>17</sup> Chair Powell noted that, "The process of getting  
10 inflation back down to 2 percent has a long way to go and is  
11 likely to be bumpy,"<sup>18</sup> with the recent banking crisis amply  
12 demonstrating these latent risks.

13           Q.       What impact do rising inflation expectations have  
14 on the return that equity investors require from Idaho Power?

15           A.       Implicit in the required rate of return for long-  
16 term capital—whether debt or common equity—is compensation for  
17 expected inflation. This is highlighted in the textbook,  
18 *Financial Management, Theory and Practice*:

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<sup>16</sup> The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.

<sup>17</sup> Federal Reserve, *Transcript of Chair Powell's Press Conference* (May 4, 2022),

<https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220504.pdf>.

<sup>18</sup>

<https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230322.pdf>.

1           The four most fundamental factors affecting the  
2           cost of money are (1) production opportunities,  
3           (2) time preferences for consumption, (3) risk,  
4           and (4) inflation.<sup>19</sup>

5           In other words, a part of investors' required return is  
6           intended to compensate for the erosion of purchasing power due  
7           to rising price levels. This inflation premium is added to the  
8           real rate of return (pure risk-free rate plus risk premium) to  
9           determine the nominal required return. As a result, higher  
10          inflation expectations lead to an increase in the cost of  
11          equity capital.

12          Q.       Have these developments impacted the risks faced  
13          by utilities and their investors?

14          A.       Yes. Concerns over weakening credit quality  
15          prompted S&P to revise its outlook for the regulated utility  
16          industry from "stable" to "negative."<sup>20</sup> As S&P explained:

17               Even before the current downturn and COVID-19, a  
18               confluence of factors, including the adverse  
19               impacts of tax reform, historically high capital  
20               spending, and associated increased debt, resulted  
21               in little cushion in ratings for unexpected  
22               operating challenges.<sup>21</sup>

23  
24          Meanwhile, rising inflation expectations also pose a challenge  
25          for utilities, with S&P recently noting that "the threat of

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<sup>19</sup> Eugene F. Brigham, Louis C. Gapenski, and Michael C. Ehrhardt, *Financial Management, Theory and Practice*, Ninth Edition (1999) at 126.

<sup>20</sup> S&P Global Ratings, *COVID-19: The Outlook For North American Regulated Utilities Turns Negative*, RatingsDirect (April 2, 2020).

<sup>21</sup> S&P Global Ratings, *North American Regulated Utilities Face Tough Financial Policy Tradeoffs To Avoid Ratings Pressure Amid The COVID-19 Pandemic*, RatingsDirect (May 11, 2020).

1 inflation comes at a time when credit metrics are already  
2 under pressure relative to downside ratings thresholds."<sup>22</sup> S&P  
3 noted that "risk will continue to pressure the credit quality  
4 of the industry in 2022."<sup>23</sup> As S&P elaborated:

5           Recently, several new credit risks have emerged,  
6           including inflation, higher interest rates, and  
7           rising commodity prices. Persistent pressure  
8           from any of these risks would likely lead to a  
9           further weakening of the industry's credit  
10          quality in 2022.<sup>24</sup>

11  
12 Similarly, on November 10, 2022, Moody's revised its outlook  
13 for the regulated utilities sector to "negative" from  
14 "stable," citing "increasingly challenging business and  
15 financial conditions stemming from higher natural gas prices,  
16 inflation and rising interest rates."<sup>25</sup>  
17 In affirming its negative outlook on the industry, S&P  
18 recently cited weak financial measures, rising energy prices  
19 and capital spending, and increased environmental risks as key  
20 challenges, noting that, "The industry outlook remains  
21 negative and has been negative since early 2020."<sup>26</sup> Value Line

---

<sup>22</sup> S&P Global Ratings, *Will Rising Inflation Threaten North American Investor-Owned Regulated Utilities' Credit Quality?* (Jul. 20, 2021).

<sup>23</sup> S&P Global Ratings, *For The First Time Ever, The Median Investor-Owned Utility Ratings Falls To The 'BBB' Category*, RatingsDirect (Jan. 20, 2022).

<sup>24</sup> *Id.*

<sup>25</sup> Moody's Investors Service, *Regulated Gas Utilities--US, 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates*, Outlook (Nov. 10, 2022).

<sup>26</sup> S&P Global Ratings, *North American Regulated Utilities, The industry's outlook remains negative*, Industry Top Trends (Jan. 23, 2023).



1 echoed these sentiments for electric utilities in the Western  
2 US, concluding that:

3 The current macroeconomic environment is a  
4 challenging period for this group. The main  
5 difficulties are wage inflation, higher interest  
6 rates, and high commodity prices for raw  
7 materials and purchased power.<sup>27</sup>

8 Q. Do changes in utility company beta values  
9 corroborate an increase in industry risk?

10 A. Yes. Beta measures a utility's stock price  
11 volatility relative to the market as a whole and reflects the  
12 tendency of a stock's price to follow changes in the market.  
13 A stock that tends to respond less to market movements has a  
14 beta less than 1.00, while stocks that tend to move more than  
15 the market have betas greater than 1.00. Beta is the only  
16 relevant measure of investment risk under modern capital  
17 market theory and is widely cited in academics and in the  
18 investment industry as a guide to investors' risk perceptions.  
19 As shown later in my testimony in Table 2, the average beta  
20 for the Electric Group is 0.89.<sup>28</sup> Prior to the pandemic, the  
21 average betas for this same group of electric utilities was  
22 0.57.<sup>29</sup> The significant shift in pre- and post-pandemic beta  
23 values for the Electric Group is further exemplified in Figure  
24 1 below. As illustrated there, the average beta value for the

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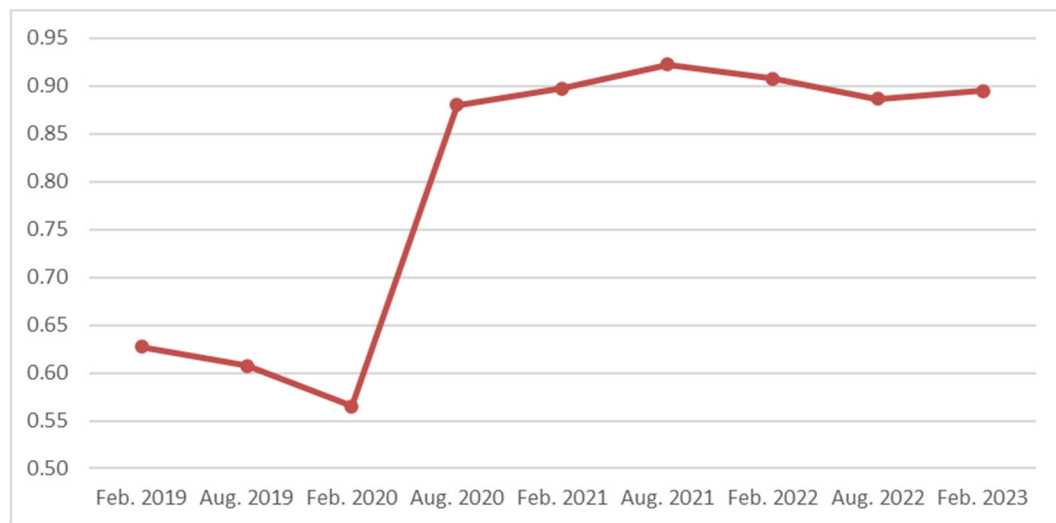
<sup>27</sup> The Value Line Investment Survey, *Electric Utility (West) Industry* (Apr. 21, 2023).

<sup>28</sup> As indicated on Exhibit 13, this is based on data as of March 31, 2023.

<sup>29</sup> The Value Line Investment Survey, *Summary & Index* (Feb. 14, 2020).

Electric Group increased significantly with the beginning of the pandemic in March 2020, continued to increase during 2021, and have remained elevated. This dramatic increase in a primary gauge of investors' risk perceptions is further proof of the rise in the risk of utility common stocks.

**FIGURE 1**  
ELECTRIC GROUP BETA VALUES



Q. Have increased risks and higher inflation resulted in higher capital costs?

A. Yes. While the cost of equity is unobservable, yields on long-term bonds provide a widely referenced benchmark for the direction of capital costs, including required returns on common stocks. Table 1 below compares the average yields on Treasury securities and Baa-rated public utility bonds during March 2023 with those prevailing in 2021.

**TABLE 1**  
BOND YIELD TRENDS

Series	March 2023	2021	Change (bps)
10-Year Treasury Bonds	3.66%	1.44%	222
30-Year Treasury Bonds	3.77%	2.05%	172
Baa Utility Bonds	5.68%	3.35%	233

Source: <https://fred.stlouisfed.org/series/GS30>; Moody's Credit Trends.

As shown above, trends in bond yields document a substantial increase in the returns on long-term capital demanded by investors. With respect to utility bond yields—which are the most relevant indicator in gauging the implications for the Company's common equity investors—average yields are now over 230 basis points above the level prevailing during 2021.

Q. What implications do these trends have in evaluating a fair ROE for Idaho Power?

A. The upward move in interest rates suggests that long-term capital costs—including the cost of equity—have increased significantly. Exposure to rising interest rates, inflation, and capital expenditure requirements also reinforce the importance of buttressing Idaho Power's credit standing. Considering the potential for financial market instability, competition with other investment alternatives, and investors' sensitivity to risk exposures in the utility industry,

1 maintaining credit strength is a key ingredient in maintaining  
2 access to capital at reasonable cost.

3 Q. Would it be reasonable to disregard the  
4 implications of current capital market conditions in  
5 establishing a fair ROE for Idaho Power?

6 A. No. They reflect the reality in which Idaho Power  
7 must attract and retain capital. The standards underlying a  
8 fair rate of return require an authorized ROE for the Company  
9 that is competitive with other investments of comparable risk  
10 and sufficient to preserve its ability to maintain access to  
11 capital on reasonable terms. These standards can only be met by  
12 considering the requirements of investors over the time period  
13 when the rates established in this proceeding will be in  
14 effect. If the upward shift in investors' risk perceptions and  
15 required rates of return for long-term capital is not  
16 incorporated in the allowed ROE, the results will fail to meet  
17 the comparable earnings standard that is fundamental in  
18 determining the cost of capital. From a more practical  
19 perspective, failing to provide investors with the opportunity  
20 to earn a rate of return commensurate with Idaho Power's risks  
21 will weaken its financial integrity, while hampering the  
22 Company's ability to attract the capital necessary to provide  
23 safe and reliable service.

#### IV. COMPARABLE RISK PROXY GROUP

1 Q. What is the purpose of this section of your  
2 testimony?

3 A. This section explains the basis of the proxy  
4 group of publicly traded companies I use to estimate the cost  
5 of equity, examines alternative objective indicators of  
6 investment risk for these firms, and compares the investment  
7 risks applicable to Idaho Power with my reference group.

8 Q. What key principles underpin the evaluation of a  
9 proxy group?

10 A. The United States Supreme Court's *Hope* and  
11 *Bluefield* decisions<sup>30</sup> establish a standard of comparison  
12 between a subject utility and other companies of comparable  
13 risk in determining a just and reasonable ROE. The generally  
14 accepted approach is to select a group of companies that are of  
15 similar risk to the subject utility (the "proxy group"), and  
16 then to perform various quantitative analyses based on the  
17 proxy group to estimate investors' required returns. The  
18 results of these analyses, in turn, are used to evaluate a  
19 range of reasonableness and a final recommendation for the ROE  
20 attributable to the subject utility.

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<sup>30</sup> *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923) (*Bluefield*); *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) (*Hope*).

1           Q.     As an initial matter, does the fact that Idaho  
2 Power is wholly owned by IDACORP alter these fundamental  
3 standards?

4           A.     No. While the Company has no publicly traded  
5 common stock and IDACORP is Idaho Power's only shareholder,  
6 this does not change the standards governing the determination  
7 of a just and reasonable ROE for the Company. Ultimately, the  
8 common equity required to support the utility operations of  
9 Idaho Power must be raised in the capital markets, where  
10 investors consider the Company's ability to offer a rate of  
11 return that is competitive with other risk-comparable  
12 alternatives. Idaho Power must compete with other investment  
13 opportunities and unless there is a reasonable expectation that  
14 investors will have the opportunity to earn returns  
15 commensurate with the underlying risks, capital will be  
16 allocated elsewhere, the Company's financial integrity will be  
17 weakened, and investors will demand an even higher rate of  
18 return. Idaho Power's ability to offer a reasonable return on  
19 investment is a necessary ingredient to ensure that customers  
20 continue to enjoy economical rates and reliable service and, by  
21 extension, the preservation of the Company's ability to attract  
22 equity capital.



1     **A.     Determination of the Proxy Group**

2             Q.     How do you implement quantitative methods to  
3     estimate the cost of common equity for Idaho Power?

4             A.     Application of quantitative methods to estimate  
5     the cost of common equity requires observable capital market  
6     data, such as stock prices and beta values. Moreover, even for  
7     a firm with publicly traded stock, the cost of common equity  
8     can only be estimated. As a result, applying quantitative  
9     models using observable market data only produces an estimate  
10    that inherently includes some degree of observation error.  
11    Thus, the accepted approach to increase confidence in the  
12    results is to apply quantitative methods to a proxy group of  
13    publicly traded companies that investors regard as risk-  
14    comparable. The results of the analysis on the sample of  
15    companies are relied upon to establish a range of  
16    reasonableness for the cost of equity for the specific company  
17    at issue.

18            Q.     How do you identify the proxy group of electric  
19    utilities relied on for your analyses?

20            A.     To reflect the risks and prospects associated  
21    with Idaho Power's jurisdictional electric operations, I begin  
22    with those companies included in the Electric Utility industry

1 groups compiled by Value Line.<sup>31</sup> Value Line is one of the most  
2 widely available sources of investment advisory information,  
3 and its industry groups provide an objective source to identify  
4 publicly traded firms that investors would regard to be similar  
5 in operations. I then apply the following criteria to identify  
6 a proxy group of utilities:

- 7 1. Corporate credit ratings from Moody's and S&P  
8 within one notch of the Company's current ratings.  
9 For Moody's, this resulted in a ratings range of  
10 Baa2, Baal, and A3; for S&P the range is BBB-,  
11 BBB, and BBB+.
- 12 2. A Value Line Safety Rank of 1 or 2.
- 13 3. No cuts in common dividend payments during the  
14 past six months and no announcement of a dividend  
15 cut since that time.
- 16 4. No ongoing involvement in a major merger or  
17 acquisition that would distort quantitative  
18 results.

19 These criteria result in a proxy group composed of twenty  
20 companies, which I refer to as the "Electric Group."

21 ***B. Relative Risks of the Electric Group and Idaho Power***

22 Q. How do you evaluate the risks of the Electric  
23 Group relative to Idaho Power?

24 A. My evaluation of relative risk considers four  
25 published benchmarks that are widely relied on by investors—

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<sup>2</sup> In addition to the companies included in Value Line's electric utility industry groups, I also considered Algonquin Power & Utilities Company and Emera, Inc, which would both be regarded as comparable utility investment opportunities by investors. Neither of these companies met my required screening criteria.

1 credit ratings from Moody's and S&P, along with Value Line's  
2 Safety Rank, Financial Strength Rating, and beta values.  
3 Credit ratings are assigned by independent rating agencies for  
4 the purpose of providing investors with a broad assessment of  
5 the creditworthiness of a firm. Ratings generally extend from  
6 triple-A (the highest) to D (in default). Other symbols (e.g.,  
7 "+" or "-") are used to show relative standing within a  
8 category. Because the rating agencies' evaluation includes all  
9 of the factors normally considered important in assessing a  
10 firm's relative credit standing, corporate credit ratings  
11 provide broad, objective measures of overall investment risk  
12 that are readily available to investors. Widely cited in the  
13 investment community and referenced by investors, credit  
14 ratings are also frequently used as a primary risk indicator  
15 in establishing proxy groups to estimate the cost of common  
16 equity.

17 While credit ratings provide the most widely referenced  
18 benchmark for investment risks, other quality rankings  
19 published by investment advisory services also provide  
20 relative assessments of risks that are considered by investors  
21 in forming their expectations for common stocks. Value Line's  
22 primary risk indicator is its Safety Rank, which ranges from  
23 "1" (Safest) to "5" (Riskiest). This overall risk measure is  
24 intended to capture the total risk of a stock and incorporates

1 elements of stock price stability and financial strength.  
2 Given that Value Line is perhaps the most widely available  
3 source of investment advisory information, its Safety Rank  
4 provides useful guidance regarding the risk perceptions of  
5 investors.

6         The Financial Strength Rating is designed as a guide to  
7 overall financial strength and creditworthiness, with the key  
8 inputs including financial leverage, business volatility  
9 measures, and company size. Value Line's Financial Strength  
10 Ratings range from "A++" (strongest) down to "C" (weakest) in  
11 nine steps. These objective, published indicators incorporate  
12 consideration of a broad spectrum of risks, including  
13 financial and business position, relative size, and exposure  
14 to firm-specific factors.

15         As previously mentioned, beta measures a utility's  
16 stock price volatility relative to the market as a whole and  
17 reflects the tendency of a stock's price to follow changes in  
18 the market.

19         Q.       How does the overall risk of your proxy group  
20 compare to Idaho Power?

21         A.       Table 2 compares the Electric Group with the  
22 Company across the four key indices of investment risk  
23 discussed above. Because Idaho Power has no publicly traded

common stock, the Value Line risk measures shown reflect those published for its parent, IDACORP.

**TABLE 2**  
COMPARISON OF RISK INDICATORS

	Credit Ratings		Value Line		
			Safety		Financial Beta
	S&P	Moody's	Rank	Strength	
Electric Group	BBB+	Baa2	2	A	0.89
Idaho Power	BBB	Baa1	1	A+	0.80

Q. What does this comparison indicate regarding investors' assessment of the relative risks associated with your Electric Group?

A. The average S&P credit rating corresponding to the Electric Group is one notch higher than those of Idaho Power, while the average Moody's credit ratings for the proxy group is one notch lower, indicating about the same amount of risk overall. With respect to Value Line's Safety Rank, Financial Strength and beta measures, the average values for the Electric Group indicate slightly greater risk than Idaho Power. Considered together, a comparison of these objective measures, which incorporate a broad spectrum of risks, including financial and business position, relative size, and exposure to company specific factors, indicates that investors would likely conclude that the overall investment risks for

1 Idaho Power are generally comparable to, or slightly less than  
2 those of the firms in the Electric Group.

3 Q. How does Idaho Power's generating resource mix  
4 affect investors' risk perceptions?

5 A. Because a significant portion of Idaho Power's  
6 total energy requirements are provided by hydroelectric  
7 facilities, the Company is exposed to a level of uncertainty  
8 not faced by most utilities. While hydropower confers  
9 advantages in terms of fuel cost savings and diversity, reduced  
10 hydroelectric generation due to below-average water conditions  
11 forces the Company to rely more heavily on wholesale power  
12 markets or more costly thermal generating capacity to meet its  
13 resource needs. As S&P explained:

14 A reduction in hydro generation typically  
15 increases an electric utility's costs by  
16 requiring it to buy replacement power or run more  
17 expensive generation to serve customer loads.  
18 Low hydro generation can also reduce utilities'  
19 opportunity to make off-system sales. At the  
20 same time, low hydro years increase regional  
21 wholesale power prices, creating potentially a  
22 double impact - companies have to buy more power  
23 than under normal conditions, paying higher  
24 prices.<sup>32</sup>

25 With respect to Idaho Power specifically, S&P recently  
26 observed that:

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<sup>32</sup> Standard & Poor's Corporation, *Pacific Northwest Hydrology And Its Impact On Investor-Owned Utilities' Credit Quality*, RatingsDirect (Jan. 28, 2008).



1 The company relies heavily on hydropower  
2 generation and purchased power. Low-cost  
3 hydropower provides more than 50% of the  
4 company's generation under normal water-level  
5 conditions, leading to lower electricity rates.  
6 However, when hydroelectric generation is low,  
7 the company relies on more expensive purchased  
8 power, which exposes the company to the volatile  
9 spot power market. Idaho Power saw reduced  
10 hydropower generation in both 2021 and 2020 due  
11 to precipitation and snow conditions.<sup>33</sup>

12 Q. Have utilities and their customers recently  
13 experienced increased uncertainty in energy markets?

14 A. Yes. The onset of military conflict in Ukraine  
15 led to a dramatic rise in energy market volatility. As with  
16 major weather events, market conditions that lead to  
17 significant spikes in energy prices can place extraordinary  
18 pressure on liquidity as utilities seek to fund higher  
19 procurement costs and maintain service to customers. With  
20 respect to Idaho Power specifically, the Pacific Northwest  
21 recently faced a dramatic increase in gas costs. As the Energy  
22 Information Administration reported:

23 On December 21, 2022, daily natural gas spot  
24 prices at three major trading hubs in the western  
25 United States—Pacific Gas & Electric ("PG&E")  
26 Citygate, Sumas on the Canada-Washington border,  
27 and Malin, Oregon—settled higher than \$50.00 per  
28 million British thermal units ("MMBtu"), the  
29 highest level of any other market and an average

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<sup>33</sup> S&P Global Ratings, *Idaho Power Co.*, RatingsDirect (May 26, 2022).

1 of \$48.12/MMBtu above Henry Hub, the national  
2 benchmark natural gas price.<sup>34</sup>

3 While prices have since moderated, investors recognize  
4 that volatile energy markets, unpredictable stream flows, and  
5 Idaho Power's reliance on wholesale purchases to meet a  
6 significant portion of its resource needs can expose the  
7 Company to the risk of reduced cash flows and unrecovered  
8 power supply costs. The Company's reliance on purchased power  
9 to meet shortfalls in hydroelectric generation magnifies the  
10 importance of strengthening financial flexibility, which is  
11 essential to guarantee access to the cash resources and  
12 interim financing required to cover inadequate operating cash  
13 flows.

14 Q. How has climate change impacted investors'  
15 assessment of Idaho Power's risk exposure?

16 A. The risk posed by climate-related weather events  
17 has served to magnify concerns over Idaho Power's exposure to  
18 below-average water conditions. S&P concluded that "water-  
19 intensive assets like power plants [are] especially vulnerable  
20 in the absence of adaptation," and concluded that Idaho Power  
21 had the highest exposure to water stress of any U.S. utility.<sup>35</sup>

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<sup>34</sup> Energy Information Administration, *Natural Gas Weekly Update* (Dec. 22, 2022).  
[https://www.eia.gov/naturalgas/weekly/archivenew\\_ngwu/2022/12\\_22/#itn-tabs-1](https://www.eia.gov/naturalgas/weekly/archivenew_ngwu/2022/12_22/#itn-tabs-1)  
(last visited Apr. 25, 2023).

<sup>35</sup> S&P Global Ratings, *Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks*, RatingsDirect (Sep. 16, 2021).

1 While noting that the risks of such events are generally  
2 manageable under recovery mechanisms that allow related costs  
3 to be recuperated, S&P also observed that:

4 In the most extreme events, including those of  
5 late, utility companies' exposure to acute and  
6 chronic climate risks can damage assets or  
7 disrupt supplies, which can weaken their  
8 financial position and ultimately credit  
9 quality.<sup>36</sup>

10 Q. Do financial pressures associated with Idaho  
11 Power's planned capital expenditures also impact investors'  
12 risk assessment?

13 A. Yes. Idaho Power's customer growth and regional  
14 transmission constraints are driving the need for additional  
15 resources to meet projected energy and capacity deficits. As  
16 noted earlier, Idaho Power's capital additions are expected to  
17 total approximately \$650 million annually over the 2023 to 2027  
18 period. This represents a substantial investment given the  
19 Company's current rate base of approximately \$3.8 billion. As  
20 Value Line recently observed:

21 The company's system is stressed, and new  
22 capacity resources are entering the pipeline and  
23 they do not come cheap. . . . All this pressure  
24 comes at a time when inflation is still well  
25 higher than usual and the interest on borrowings  
26 is more punishing to the bottom line.<sup>37</sup>  
27

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<sup>36</sup> *Id.*

<sup>37</sup> The Value Line Investment Survey, *IDACORP, Inc.* (Apr. 21, 2023).

1 In addition, Idaho Power remains obligated to repay maturing  
2 long-term debt. Continued support for the Company's financial  
3 integrity and flexibility will be instrumental in attracting  
4 the capital necessary to fund these projects and debt  
5 repayments in an effective manner.

6 Q. Do utilities such as Idaho Power continue to face  
7 environmental risks?

8 A. Yes. Environmental concerns are leading to a  
9 profound transformation in the utility industry. In the  
10 electricity sector, the generation segment is undergoing  
11 material changes in fuel mix, as natural gas and renewable  
12 sources increasingly supplant coal. Over the next decade,  
13 renewable sources are widely expected to account for a rising  
14 share of the electricity generated in the U.S., including a  
15 significant expansion in distributed generation, which will  
16 accompany declining costs and increased efficiency of energy  
17 storage technologies. Accommodating efforts to decarbonize  
18 electric generation will also require significant investment to  
19 modernize the transmission grid. And while this disruption  
20 offers the potential for growth through increased capital  
21 investment, it also conveys higher risks. With respect to Idaho  
22 Power, the Company's carbon emission targets call for achieving  
23 100 percent clean electricity by 2045.

1 Q. What other consideration is relevant to  
2 investors' risk assessment?

3 A. Rising temperatures and reduced rainfall have led  
4 to unusually large and damaging wildfires in the Pacific  
5 Northwest. While Idaho Power does not face the same degree of  
6 exposure attributed to California utilities due to that state's  
7 inverse condemnation laws, S&P nonetheless classifies the  
8 Company as having the second highest exposure to wildfires in  
9 the nation.<sup>38</sup>

10 **C. Regulatory Mechanisms**

11 Q. What regulatory mechanisms are applicable to  
12 Idaho Power's utility operations?

13 A. In addition to a mechanism that accounts for  
14 changes in power supply costs ("PCA"), Idaho Power operates  
15 under the Fixed Cost Adjustment mechanism ("FCA"), which is  
16 designed to break the link between a utility's revenues and the  
17 energy usage of residential and small commercial customers. The  
18 IPUC has also authorized a rider to collect most of the  
19 Company's energy efficiency program costs and a deferral  
20 account for wildfire resiliency costs.

21 Q. Would investors consider the implications of  
22 regulatory mechanisms in evaluating a utility's relative risks?

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<sup>38</sup> S&P Global Ratings, *Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks*, RatingsDirect (Sep. 16, 2021).

1           A.       Yes. In response to increasing sensitivity over  
2     fluctuations in costs and the importance of advancing other  
3     public interest goals such as reliability, energy conservation,  
4     and safety, utilities and their regulators have sought to  
5     mitigate cost recovery uncertainty and align the interest of  
6     utilities and their customers. As a result, decoupling  
7     mechanisms, cost trackers, and future test years have been  
8     increasingly prevalent in the utility industry in recent years,  
9     along with alternatives to traditional ratemaking such as  
10    formula rates and multi-year rate plans. S&P Global Market  
11    Intelligence, *RRA Regulatory Focus* concluded in its recent  
12    review of adjustment clauses that:

13                 More recently and with greater frequency,  
14                 commissions have approved mechanisms that permit  
15                 the costs associated with the construction of  
16                 new generation or delivery infrastructure to be  
17                 used, effectively including these items in rate  
18                 base without the need for a full rate case. In  
19                 some instances, these mechanisms may even  
20                 provide the utilities a cash return on  
21                 construction work in progress.

22                 . . . [C]ertain types of adjustment clauses are  
23                 more prevalent than others. For example, those  
24                 that address electric fuel and gas commodity  
25                 charges are in place in all jurisdictions. Also,  
26                 about two-thirds of all utilities have riders in  
27                 place to recover costs related to energy  
28                 efficiency programs, and roughly half of the  
29                 utilities have some type of decoupling mechanism  
30                 in place.<sup>39</sup>

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<sup>39</sup> S&P Global Market Intelligence, *Adjustment Clause: A state-by-state overview*, RRA Regulatory Focus (Jul. 18, 2022).



1           Q.       How do the regulatory mechanisms approved for  
2   Idaho Power compare to other firms operating in the utility  
3   industry?

4           A.       A broad array of adjustment mechanisms is also  
5   available to the companies in my proxy group of electric  
6   utilities. As documented on Exhibit 9, the companies in the  
7   Electric Group operate under a wide variety of cost adjustment  
8   mechanisms, which encompass revenue decoupling and adjustment  
9   clauses designed to address rising capital investment outside  
10   of a traditional rate case, increasing costs of environmental  
11   compliance measures, as well as riders to address the costs of  
12   energy conservation programs, bad debt expenses, certain taxes  
13   and fees, post-retirement employee benefit costs, storms, and  
14   transmission-related charges. The majority of these proxy  
15   firms also operate in regulatory jurisdictions that allow for  
16   future test years, formula rates, and multi-year rate plans.

17           Meanwhile, under the PCA that currently governs  
18   recovery of electric supply costs for the Company's Idaho-  
19   jurisdictional electric utility operations, 95 percent of the  
20   difference between actual costs and base level costs are  
21   passed through to customers, with 5 percent absorbed/retained  
22   by shareholders.<sup>40</sup> Thus, in addition to the fact that recovery  
23   is deferred when power costs rise above the level included in

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<sup>40</sup> Amounts related to power supplied by Qualifying Facilities are not subject to cost sharing under the PCA.

1 current retail rates, investors recognize that this sharing  
2 mechanism exposes the Company to unrecovered electric supply  
3 costs. Both of these considerations can adversely affect Idaho  
4 Power's operating cash flow and liquidity.

5 In contrast to many of the specific operating companies  
6 associated with the firms in the Utility Group, Idaho Power  
7 does not have an approved cost tracking mechanisms to address  
8 ongoing investment in new generation capacity. Further, the  
9 Idaho jurisdiction has routinely relied on a historical test  
10 year approach, which also creates a lag in cost recovery.  
11 Thus, while investors would consider Idaho Power's regulatory  
12 mechanisms to be supportive of the Company's financial  
13 integrity, they are more limited than those approved for other  
14 firms in the industry.

15 ***D. Capital Structure***

16 Q. Is an evaluation of a utility's capital structure  
17 relevant in assessing its return on equity?

18 A. Yes. Other things equal, a higher debt ratio and  
19 lower common equity ratio, translates into increased financial  
20 risk for all investors. A greater amount of debt means more  
21 investors have a senior claim on available cash flow, thereby  
22 reducing the certainty that each will receive their contractual  
23 payments. This increases the risks to which lenders are  
24 exposed, and they require correspondingly higher rates of

1 interest. From common shareholders' standpoint, a higher debt  
2 ratio means that there are proportionately more investors ahead  
3 of them, thereby increasing the uncertainty as to the amount of  
4 cash flow that will remain.

5 Q. What common equity ratio is implicit in Idaho  
6 Power's capital structure?

7 A. As discussed in the direct testimony of Company  
8 Witness Mr. Brian Buckham, the capital structure used to  
9 compute the overall rate of return for Idaho Power includes  
10 51.0 percent common equity.

11 Q. How does this compare to the average equity  
12 ratios maintained by the Electric Group?

13 A. As shown on page 1 of Exhibit 10, common equity  
14 ratios for the individual firms in the Electric Group ranged  
15 between 33.3 percent and 63.5 percent and averaged 45.0  
16 percent. Meanwhile, the three-to-five-year forecasts published  
17 by Value Line result in common equity ratios ranging from 33.0  
18 percent to 59.5 percent for the Electric Group, with an average  
19 of 45.8 percent.

20 Q. Are there other industry benchmarks that are more  
21 relevant in evaluating Idaho Power's capital structure?

22 A. Yes. Because this proceeding focuses on the ROE  
23 for the regulated electric utility operations of Idaho Power,

1 the capital structures maintained by other operating electric  
2 utilities provide a consistent basis of comparison.

3 Q. What capitalization ratios are maintained by  
4 comparable utility operating companies?

5 A. Pages 2 and 3 of Exhibit 10 display capital  
6 structure data for the group of electric utility operating  
7 companies owned by the firms in the Electric Group. As shown  
8 there, common equity ratios for these utilities range from 42.8  
9 percent to 60.9 percent and average 51.8 percent. This  
10 benchmark provides a direct guide to financing policies that  
11 are consistent with industry-specific risks and the need to  
12 maintain adequate borrowing capacity and financial flexibility.

13 Q. Do ongoing economic and capital market  
14 uncertainties also influence the appropriate capital structure  
15 for Idaho Power?

16 A. Yes. Financial flexibility plays a crucial role  
17 in ensuring the wherewithal of a utility to meet funding needs.  
18 Utilities with higher financial leverage may be foreclosed from  
19 or have limited access to additional borrowing, especially  
20 during times of financial market stress. As Moody's observed:

1 Utilities are among the largest debt issuers in  
2 the corporate universe and typically require  
3 consistent access to capital markets to assure  
4 adequate sources of funding and to maintain  
5 financial flexibility. During times of distress  
6 and when capital markets are exceedingly  
7 volatile and tight, liquidity becomes critically  
8 important because access to capital markets may  
9 be difficult.<sup>41</sup>

10  
11 S&P recently reiterated these concerns, noting that:

12 Because of the industry's high capital spending  
13 and consistent dividends, negative discretionary  
14 cashflow is regularly more than \$100 billion  
15 annually. To fund this large deficit, the  
16 industry requires consistent access to the  
17 capital markets. Rising interest rates,  
18 decreasing equity prices, and inflation could  
19 hamper consistent access to the capital markets,  
20 potentially pressuring credit quality.<sup>42</sup>

21  
22 As a result, the Company's capital structure must maintain  
23 adequate equity to preserve the flexibility necessary to  
24 maintain continuous access to capital even during times of  
25 unfavorable energy or financial market conditions.

26 Q. What other factors do investors consider in their  
27 assessment of a company's capital structure?

28 A. Utilities, including Idaho Power, are facing  
29 significant capital investment plans. Coupled with the  
30 potential for turmoil in capital markets, this warrants a

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<sup>41</sup> Moody's Investors Service, *FAQ on credit implications of the coronavirus outbreak*, Sector Comment (Mar. 26, 2020).

<sup>42</sup> S&P Global Ratings. *North American Regulated Utilities, The industry's outlook remains negative*, Industry Top Trends (Jan. 23, 2023).

1 stronger balance sheet to deal with an uncertain environment.

2 As S&P recently noted:

3 Under our base case, we expect that by 2024 the  
4 industry's capital spending will exceed \$180  
5 billion. Because of the industry's continued  
6 robust capital spending, we expect that industry  
7 will continue to generate negative discretionary  
8 cash flow. This requires that the industry has  
9 consistent access to the capital markets to  
10 finance capital spending and dividends  
11 requirements.<sup>43</sup>

12  
13 In addition, the investment community also considers the  
14 impact of other considerations, such as postretirement benefit  
15 and asset retirement obligations, in its evaluation of a  
16 utility's financial standing.

17 A conservative financial profile, in the form of a  
18 reasonable common equity ratio, is consistent with the need to  
19 accommodate these uncertainties and maintain continuous access  
20 to capital under reasonable terms that is required to fund  
21 operations and necessary system investment, even during times  
22 of adverse capital market conditions.

23 Q. What does this evidence suggest with respect to  
24 Idaho Power's proposed capital structure?

25 A. Idaho Power's ratemaking capital structure falls  
26 within the range of capital structure ratios maintained by the  
27 proxy group and is consistent with industry benchmarks for

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<sup>43</sup> S&P Global Ratings, *For The First Time Ever, The Median Investor-Owned Utility Ratings Falls To The 'BBB' Category*, RatingsDirect (Jan. 20, 2022).



1 other electric utility operating companies. While industry  
2 guidelines provide one benchmark for comparison, each firm must  
3 select its capitalization based on the risks and prospects it  
4 faces, as well as its specific needs to access the capital  
5 markets. Idaho Power's proposed capital structure reflects the  
6 Company's ongoing efforts to maintain its credit standing and  
7 support access to capital on reasonable terms. The  
8 reasonableness of the Company's capital structure is reinforced  
9 by the ongoing uncertainties associated with the utility  
10 industry and the importance of supporting continued system  
11 investment, even during times of adverse industry or market  
12 conditions. Based on this evidence, I conclude that the  
13 Company's capital structure represents a reasonable mix of  
14 capital sources from which to calculate Idaho Power's overall  
15 rate of return.

**V. CAPITAL MARKET ESTIMATES AND ANALYSES**

16 Q. What is the purpose of this section of your  
17 testimony?

18 A. This section presents capital market estimates of  
19 the cost of equity. First, I address the concept of the cost of  
20 common equity, along with the risk-return tradeoff principle  
21 fundamental to capital markets. Next, I describe the  
22 quantitative analyses I conducted to estimate the cost of  
23 common equity for the Electric Group.

1     **A.     Economic Standards**

2             Q.     What fundamental economic principle underlies the  
3     cost of equity concept?

4             A.     The concept of the cost of equity is based on the  
5     tenet that investors are risk averse. In capital markets where  
6     relatively risk-free assets are available (e.g., U.S. Treasury  
7     securities), investors will hold riskier assets only if they  
8     are offered an additional return, or risk premium, above the  
9     rate of return on a risk-free asset. Because all assets compete  
10    for investor funds, riskier assets must yield a higher expected  
11    rate of return than safer assets to induce investors to invest  
12    and hold them.

13            Given this risk-return tradeoff, the required rate of  
14    return ( $k$ ) from an asset ( $i$ ) can generally be expressed as:

15                    $k_i = R_f + RP_i$

16            where:    $R_f$  = Risk-free rate of return, and  
17                    $RP_i$  = Risk premium required to hold asset  $i$ .

18    Thus, the required rate of return for a particular asset at  
19    any time is a function of: (1) the yield on risk-free assets,  
20    and (2) the asset's relative risk, with investors demanding  
21    correspondingly larger risk premiums for bearing greater risk.

22            Q.     Is there evidence that the risk-return tradeoff  
23    principle actually operates in the capital markets?

24            A.     Yes. The risk-return tradeoff can be documented  
25    in segments of the capital markets where required rates of

1 return can be directly inferred from market data and where  
2 generally accepted measures of risk exist. Bond yields, for  
3 example, reflect investors' expected rates of return, and bond  
4 ratings measure the risk of individual bond issues. Comparing  
5 the observed yields on government securities, which are  
6 considered free of default risk, to the yields on bonds of  
7 various rating categories demonstrates that the risk-return  
8 tradeoff does, in fact, exist.

9 Q. Does the risk-return tradeoff observed with fixed  
10 income securities extend to common stocks and other assets?

11 A. It is widely accepted that the risk-return  
12 tradeoff evidenced with long-term debt extends to all assets.  
13 Documenting the risk-return tradeoff for assets other than  
14 fixed income securities, however, is complicated by two  
15 factors. First, there is no standard measure of risk applicable  
16 to all assets. Second, for most assets—including common stock—  
17 required rates of return cannot be observed. Yet there is every  
18 reason to believe that investors demonstrate risk aversion in  
19 deciding whether or not to hold common stocks and other assets,  
20 just as when choosing among fixed-income securities.

21 Q. Is this risk-return tradeoff limited to  
22 differences between firms?

23 A. No. The risk-return tradeoff principle applies  
24 not only to investments in different firms, but also to

1 different securities issued by the same firm. The securities  
2 issued by a utility vary considerably in risk because they have  
3 different characteristics and priorities. As noted earlier, the  
4 last investors in line are common shareholders. They share in  
5 the net earnings, if any, that remain after all other claimants  
6 have been paid. As a result, the rate of return that investors  
7 require from a utility's common stock, the most junior and  
8 riskiest of its securities, must be considerably higher than  
9 the yield offered by the utility's senior, long-term debt.

10 Q. What are the challenges in determining a just and  
11 reasonable ROE for a utility?

12 A. The actual return investors require is not  
13 directly observable. Different methodologies have been  
14 developed to estimate investors' expected return on capital,  
15 but these theoretical tools produce a range of estimates, based  
16 on different assumptions and inputs. The DCF method, which is  
17 frequently referenced and relied on by regulators, is only one  
18 theoretical approach to evaluate the return investors require.  
19 There are a number of other accepted methodologies for  
20 estimating the cost of capital and the ranges produced by these  
21 approaches can vary widely.

22 Q. Is it customary to consider the results of  
23 multiple methods when evaluating a just and reasonable ROE?

1           A.       Yes. In my experience, financial analysts and  
2 regulators routinely consider the results of alternative  
3 approaches in evaluating a fair ROE. No single method can be  
4 regarded as failsafe, with all approaches having advantages and  
5 shortcomings. As FERC has noted, "[t]he determination of rate  
6 of return on equity starts from the premise that there is no  
7 single approach or methodology for determining the correct rate  
8 of return."<sup>44</sup> Similarly, a publication of the Society of  
9 Utility and Regulatory Financial Analysts concluded that:

10           Each model requires the exercise of judgment as  
11 to the reasonableness of the underlying  
12 assumptions of the methodology and on the  
13 reasonableness of the proxies used to validate  
14 the theory. Each model has its own way of  
15 examining investor behavior, its own premises,  
16 and its own set of simplifications of reality.  
17 Each method proceeds from different fundamental  
18 premises, most of which cannot be validated  
19 empirically. Investors clearly do not subscribe  
20 to any singular method, nor does the stock price  
21 reflect the application of any one single method  
22 by investors.<sup>45</sup>

23  
24 As this treatise observed, "no single model is so inherently  
25 precise that it can be relied on solely to the exclusion of  
26 other theoretically sound models."<sup>46</sup> Similarly, *New Regulatory*  
27 *Finance* concluded that:

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<sup>44</sup> *Northwest Pipeline Co.*, Opinion No. 396-C, 81 FERC ¶ 61,036 at 4 (1997).

<sup>45</sup> David C. Parcell, *The Cost of Capital - A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts (2010) at 84.

<sup>46</sup> *Id.*

1           There is no single model that conclusively  
2           determines or estimates the expected return for  
3           an individual firm. Each methodology possesses  
4           its own way of examining investor behavior, its  
5           own premises, and its own set of simplifications  
6           of reality. Each method proceeds from different  
7           fundamental premises that cannot be validated  
8           empirically. Investors do not necessarily  
9           subscribe to any one method, nor does the stock  
10          price reflect the application of any one single  
11          method by the price-setting investor. There is  
12          no monopoly as to which method is used by  
13          investors. In the absence of any hard evidence  
14          as to which method outdoes the other, all  
15          relevant evidence should be used and weighted  
16          equally, in order to minimize judgmental error,  
17          measurement error, and conceptual infirmities.<sup>47</sup>

18  
19       Thus, while the DCF model is a recognized approach, it is not  
20       without shortcomings and does not otherwise eliminate the need  
21       to ensure that the "end result" is fair. The Indiana Utility  
22       Regulatory Commission has recognized this principle:

23       //

24       //

---

<sup>47</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006)  
at 429.



1           There are three principal reasons for our  
2           unwillingness to place a great deal of weight on  
3           the results of any DCF analysis. One is. . .  
4           the failure of the DCF model to conform to  
5           reality. The second is the undeniable fact that  
6           rarely if ever do two expert witnesses agree on  
7           the terms of a DCF equation for the same utility  
8           - for example, as we shall see in more detail  
9           below, projections of future dividend cash flow  
10          and anticipated price appreciation of the stock  
11          can vary widely. And, the third reason is that  
12          the unadjusted DCF result is almost always well  
13          below what any informed financial analysis would  
14          regard as defensible, and therefore require an  
15          upward adjustment based largely on the expert  
16          witness's judgment. In these circumstances, we  
17          find it difficult to regard the results of a DCF  
18          computation as any more than suggestive.<sup>48</sup>

19  
20       More recently, FERC recognized the potential for any  
21       application of the DCF model to produce unreliable results.<sup>49</sup>  
22       As this discussion indicates, consideration of the results of  
23       alternative approaches reduces the potential for error  
24       associated with any single method. Just as investors inform  
25       their decisions through the use of a variety of methodologies,  
26       my evaluation of a fair ROE for the Company considered the  
27       results of multiple financial models.

28           Q.       What does this discussion imply with respect to  
29       estimating the ROE for a utility?

30           A.       Although the ROE cannot be observed directly, it  
31       is a function of the returns available from other alternatives

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<sup>48</sup> *Ind. Michigan Power Co.*, Cause No. 38728, 116 PUR4th, 1, 17-18 (IURC 8/24/1990).

<sup>49</sup> *Coakley v. Bangor Hydro-Elec. Co.*, Opinion No. 531, 147 FERC ¶ 61,234 at P 41 (2014).

1 and the risks of the investment. Because it is not readily  
2 observable, the ROE for a particular utility must be estimated  
3 by analyzing information about capital market conditions  
4 generally, assessing the relative risks of the company  
5 specifically, and employing alternative quantitative methods  
6 that focus on investors' required rates of return. These  
7 methods typically attempt to infer investors' required rates of  
8 return from stock prices, interest rates, or other capital  
9 market data.

#### 10 ***B. Discounted Cash Flow Analysis***

11 Q. How is the DCF model used to estimate the cost of  
12 common equity?

13 A. DCF models are based on the assumption that the  
14 price of a share of common stock is equal to the present value  
15 of the expected cash flows (i.e., future dividends and stock  
16 price) that will be received while holding the stock,  
17 discounted at investors' required rate of return. Rather than  
18 developing annual estimates of cash flows into perpetuity, the  
19 DCF model can be simplified to a "constant growth" form:<sup>50</sup>

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<sup>50</sup> The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (i.e., no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity. Nevertheless, the DCF method provides a workable and practical approach to estimate investors' required return that is widely referenced in utility ratemaking.

$$P_0 = \frac{D_1}{k_e - g}$$

where:  $P_0$  = Current price per share;  
 $D_1$  = Expected dividend per share in coming year;  
 $k_e$  = Cost of equity; and,  
 $g$  = Investors' long-term growth expectations.

The cost of common equity ( $k_e$ ) can be isolated by rearranging terms within the equation:

$$k_e = \frac{D_1}{P_0} + g$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield ( $D_1/P_0$ ); and 2) growth ( $g$ ). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

Q. What steps are required to apply the constant growth DCF model?

A. The first step in implementing the constant growth DCF model is to determine the expected dividend yield ( $D_1/P_0$ ) for the firm in question. This is usually calculated based on an estimate of dividends to be paid in the coming year divided by the current price of the stock. The second, and more controversial, step is to estimate investors' long-term growth expectations ( $g$ ) for the firm. The final step is to add the

1 firm's dividend yield and estimated growth rate to arrive at an  
2 estimate of its cost of common equity.

3 Q. How do you determine the dividend yields for the  
4 utilities in the Electric Group?

5 A. I rely on Value Line's estimates of dividends to  
6 be paid by each of these utilities over the next twelve months  
7 as  $D_1$ . This annual dividend is then divided by a 30-day average  
8 stock price for each utility to arrive at the expected dividend  
9 yield. The expected dividends, stock prices, and resulting  
10 dividend yields for the firms in the Electric Group are  
11 presented on page 1 of Exhibit 11. As shown there, dividend  
12 yields for the firms in the Electric Group range from 2.5  
13 percent to 5.0 percent and averaged 3.9 percent.

14 Q. What is the next step in applying the constant  
15 growth DCF model?

16 A. The next step is to evaluate long-term growth  
17 expectations, or "g", for the firm in question. In constant  
18 growth DCF theory, earnings, dividends, book value, and market  
19 price are all assumed to grow in lockstep, and the growth  
20 horizon of the DCF model is infinite. But implementation of the  
21 DCF model is more than just a theoretical exercise; it is an  
22 attempt to replicate the mechanism investors used to arrive at  
23 observable stock prices. A wide variety of techniques can be

1 used to derive growth rates, but the only "g" that matters in  
2 applying the DCF model is the value that investors expect.

3 Q. What are investors most likely to consider in  
4 developing their long-term growth expectations?

5 A. When I implement the DCF model, we are solely  
6 concerned with replicating the forward-looking evaluation of  
7 real-world investors. In the case of utilities, dividend growth  
8 rates are not likely to provide a meaningful guide to  
9 investors' current growth expectations. Utility dividend  
10 policies reflect the need to accommodate business risks and  
11 investment requirements in the industry, as well as potential  
12 uncertainties in the capital markets. As a result, dividend  
13 growth in the utility industry generally lags growth in  
14 earnings as utilities conserve financial resources.

15 A measure that plays a pivotal role in determining  
16 investors' long-term growth expectations is future trends in  
17 earnings per share ("EPS"), which provide the source for  
18 future dividends and ultimately support share prices. The  
19 importance of earnings in evaluating investors' expectations  
20 and requirements is well accepted in the investment community,  
21 and surveys of analytical techniques relied on by professional  
22 analysts indicate that growth in earnings is far more  
23 influential than trends in dividends per share ("DPS").

1           The availability of projected EPS growth rates is also  
2 key to investors relying on this measure as compared to future  
3 trends in DPS. Apart from Value Line, investment advisory  
4 services do not generally publish comprehensive DPS growth  
5 projections, and this scarcity of dividend growth rates  
6 relative to the abundance of earnings forecasts attests to  
7 their relative influence. The fact that securities analysts  
8 focus on EPS growth, and that DPS growth rates are not  
9 routinely published, indicates that projected EPS growth rates  
10 are likely to provide a superior indicator of the future long-  
11 term growth expected by investors.

12           Q.     Do the growth rate projections of security  
13 analysts also consider historical trends?

14           A.     Yes. Professional security analysts study  
15 historical trends extensively in developing their projections  
16 of future earnings. Hence, to the extent there is any useful  
17 information in historical patterns, that information is  
18 incorporated into analysts' growth forecasts.

19           Q.     What growth rates are security analysts currently  
20 projecting for the firms in the proxy group?

21           A.     EPS growth projections for each of the firms in  
22 the Electric Group reported by Value Line, IBES,<sup>51</sup> and Zacks

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<sup>51</sup> Formerly Institutional Brokers Estimate System, IBES growth rates are now compiled and published by Refinitiv.



1 Investment Research (Zacks) are displayed on page 2 of Exhibit  
2 11.

3 Q. What other technique can be used to estimate  
4 investors' expectations of future long-term growth when  
5 applying the constant growth DCF model?

6 A. In constant growth theory, growth in book equity  
7 is equal to the product of the earnings retention ratio (one  
8 minus the dividend payout ratio) and the earned rate of return  
9 on book equity. Furthermore, if the earned rate of return and  
10 the payout ratio are constant, growth in earnings and dividends  
11 will be equal to growth in book value. Despite the fact that  
12 these conditions are never met in practice, this "sustainable  
13 growth" approach may provide a rough guide for evaluating a  
14 firm's growth prospects and is sometimes proposed in regulatory  
15 proceedings.

16 The sustainable growth rate is calculated by the  
17 formula,  $g = br + sv$ , where "b" is the expected retention ratio,  
18 "r" is the expected earned return on equity, "s" is the  
19 percent of common equity expected to be issued annually as new  
20 common stock, and "v" is the equity accretion rate. Under DCF  
21 theory, the "sv" factor is a component of the growth rate  
22 designed to capture the impact of issuing new common stock at  
23 a price above, or below, book value. The sustainable, "br+sv"  
24 growth rates for each firm in the proxy group are summarized

1 on page 2 of Exhibit 11, with the underlying details being  
2 presented on Exhibit 12.

3           The sustainable growth rate analysis shown on Exhibit  
4 12 incorporates an "adjustment factor" because Value Line's  
5 reported returns are based on year-end book values. Since  
6 earnings is a flow over the year while book value is  
7 determined at a given point in time, the measurement of  
8 earnings and book value are distinct concepts. It is this  
9 fundamental difference between a flow (earnings) and a point  
10 estimate (book value) that makes it necessary to adjust to  
11 mid-year in calculating the ROE. Given that book value will  
12 increase or decrease over the year, using year-end book value  
13 (as Value Line does) understates or overstates the average  
14 investment that corresponds to the flow of earnings. To  
15 address this concern, earnings must be matched with a  
16 corresponding measure of book value, or the resulting ROE will  
17 be distorted. The adjustment factor determined in Exhibit 12  
18 is solely a means of converting Value Line's end-of-period  
19 values to an average return over the year, and the formula for  
20 this adjustment is supported in recognized textbooks and has  
21 been adopted by other regulators.<sup>52</sup>

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<sup>52</sup> See, Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 305-306; *Bangor Hydro-Electric Co. et al.*, 122 FERC ¶ 61,265 at n.12 (2008).

1 Q. Are there significant shortcomings associated  
2 with the "br+sv" growth rate?

3 A. Yes. First, in order to calculate the sustainable  
4 growth rate, it is necessary to develop estimates of investors'  
5 expectations for four separate variables; namely, "b", "r",  
6 "s", and "v." Given the inherent difficulty in forecasting each  
7 parameter and the difficulty of estimating the expectations of  
8 investors, the potential for measurement error is significantly  
9 increased when using four variables, as opposed to referencing  
10 a direct projection for EPS growth. Second, empirical research  
11 in the finance literature indicates that sustainable growth  
12 rates are not as significantly correlated to measures of value,  
13 such as share prices, as are analysts' EPS growth forecasts.<sup>53</sup>  
14 The "sustainable growth" approach is included for completeness,  
15 but evidence indicates that analysts' forecasts provide a  
16 superior and more direct guide to investors' growth  
17 expectations. Accordingly, I give less weight to cost of equity  
18 estimates based on br+sv growth rates in evaluating the results  
19 of the DCF model.

20 Q. What cost of common equity estimates are implied  
21 for the Electric Group using the DCF model?

22 A. After combining the dividend yields and  
23 respective growth projections for each utility, the resulting

---

<sup>53</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006)  
at 307.

1 cost of common equity estimates are shown on page 3 of Exhibit  
2 11.

3 Q. In evaluating the results of the constant growth  
4 DCF model, is it appropriate to eliminate illogical estimates  
5 at the extreme low or high end of the range?

6 A. Yes. It is essential that the cost of equity  
7 estimates produced by quantitative methods pass fundamental  
8 tests of reasonableness and economic logic. Accordingly, DCF  
9 estimates that are implausibly low or high should be  
10 eliminated.

11 Q. Have other regulators employed such tests?

12 A. Yes. FERC has noted that adjustments are  
13 justified where applications of the DCF approach and other  
14 methods produce illogical results. FERC evaluates low-end DCF  
15 results against observable yields on long-term public utility  
16 debt and has recognized that it is appropriate to eliminate  
17 estimates that do not sufficiently exceed this threshold.<sup>54</sup>  
18 FERC's current practice is to exclude low-end cost of estimates  
19 that fall below the six-month average yield on Baa-rated  
20 utility bonds, plus 20 percent of the CAPM market risk  
21 premium.<sup>55</sup> In addition, FERC also excludes estimates that are

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<sup>54</sup> See, e.g., *Southern California Edison Co.*, 131 FERC ¶ 61,020 at P 55 (2010).

<sup>55</sup> Based on the six-month average yield at March 2023 of 5.75 percent and the 7.8 percent market risk premium shown on Exhibit 13, this implies a current low-end threshold of approximately 7.3 percent.

1 "irrationally or anomalously high."<sup>56</sup> Similarly, the Staff of  
2 the Maryland Public Service Commission ("MDPSC") has also  
3 eliminated DCF values where they do not offer a sufficient  
4 premium above the cost of debt to be attractive to an equity  
5 investor.<sup>57</sup>

6 Q. Do you exclude any estimates at the low or high  
7 end of the range of DCF results?

8 A. Yes. As highlighted on page 3 of Exhibit 11,  
9 after considering these benchmarks and the distribution of  
10 individual estimates, I eliminate low-end DCF estimates ranging  
11 from -7.6 percent to 7.3 percent, as well as a high-end DCF  
12 result of 19.8 percent. After removing these illogical values,  
13 the lower end of the DCF results is set by a cost of equity  
14 estimate of 7.4 percent, while the upper end is established by  
15 a cost of equity estimate of 14.9 percent. While a 14.9 percent  
16 cost of equity estimate may exceed the other values, low-end  
17 DCF estimates in the 7.4 percent to 8.1 percent range are  
18 assuredly far below investors' required rate of return. Taken  
19 together and considered along with the balance of the results,  
20 the remaining values provide a reasonable basis on which to  
21 frame the range of plausible DCF estimates and evaluate  
22 investors' required rate of return.

---

<sup>56</sup> *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 171 FERC ¶ 61,154 at P 152 (2020).

<sup>57</sup> See, e.g., Maryland Public Service Commission, Case No. 9670, *Direct Testimony and Exhibits of Drew M. McAuliffe* (Dec. 2, 2021) at 15-16.

1 Q. What cost of equity estimates are implied by your  
2 DCF results for the Electric Group?

3 A. As shown on page 3 of Exhibit 11 and summarized  
4 in Table 3, below, after eliminating illogical values,  
5 application of the constant growth DCF model resulted in the  
6 following ROE estimates:

7 **TABLE 3**

8 DCF RESULTS - ELECTRIC GROUP

<u>Growth Rate</u>	<u>Average</u>	<u>Midpoint</u>
Value Line	9.2%	9.4%
IBES	10.3%	10.2%
Zacks	10.0%	11.5%
br + sv	9.0%	9.4%

9 ***C. Capital Asset Pricing Model***

10 Q. Please describe the CAPM.

11 A. The CAPM is a theory of market equilibrium that  
12 measures risk using the beta coefficient. Assuming investors  
13 are fully diversified, the relevant risk of an individual asset  
14 (e.g., common stock) is its volatility relative to the market  
15 as a whole, with beta reflecting the tendency of a firm's stock  
16 price to follow changes in the market. A stock that tends to  
17 respond less to market movements has a beta of less than 1.0,  
18 while stocks that tend to move more than the market have betas  
19 greater than 1.0. The CAPM is mathematically expressed as:



1                    $R_j = R_f + \beta_j (R_m - R_f)$

2           where:  $R_j$  = required rate of return for stock  $j$ ;  
3                $R_f$  = risk-free rate;  
4                $R_m$  = expected return on the market portfolio; and,  
5                $\beta_j$  = beta, or systematic risk, for stock  $j$ .

6           Under the CAPM formula above, a stock's required return  
7   is a function of the risk-free rate ( $R_f$ ), plus a risk premium  
8   that is scaled to reflect the relative volatility of a firm's  
9   stock price, as measured by beta ( $\beta$ ). Like the DCF model, the  
10   CAPM is an *ex-ante*, or forward-looking model based on  
11   expectations of the future. As a result, in order to produce a  
12   meaningful estimate of investors' required rate of return, the  
13   CAPM must be applied using estimates that reflect the  
14   expectations of actual investors in the market, not with  
15   backward-looking, historical data.

16           Q.       Why is the CAPM approach relevant when evaluating  
17   the cost of equity for Idaho Power?

18           A.       The CAPM approach (which also forms the  
19   foundation of the ECAPM) generally is considered to be the most  
20   widely referenced method for estimating the cost of equity  
21   among academicians and professional practitioners, with the  
22   pioneering researchers of this method receiving the Nobel Prize  
23   in 1990. Because this is the dominant model for estimating the  
24   cost of equity outside the regulatory sphere, the CAPM (and  
25   ECAPM) provides important insight into investors' required rate  
26   of return for utility stocks.

1 Q. How do you apply the CAPM to estimate the ROE?

2 A. Application of the CAPM to the Electric Group  
3 based on a forward-looking estimate for investors' required  
4 rate of return from common stocks is presented in Exhibit 13.  
5 In order to capture the expectations of today's investors in  
6 current capital markets, the expected market rate of return is  
7 estimated by conducting a DCF analysis on the dividend paying  
8 firms in the S&P 500.

9 The dividend yield for each firm is obtained from Value  
10 Line, and the growth rate is equal to the average of the  
11 earnings growth projections for each firm published by IBES,  
12 Value Line, and Zacks, with each firm's dividend yield and  
13 growth rate being weighted by its proportionate share of total  
14 market value. After removing companies with growth rates that  
15 were negative or greater than 20 percent, the weighted average  
16 of the projections for the individual firms implies an average  
17 growth rate over the next five years of 9.5 percent. Combining  
18 this average growth rate with a year-ahead dividend yield of  
19 2.1 percent results in a current cost of common equity  
20 estimate for the market as a whole ( $R_m$ ) of 11.6 percent.  
21 Subtracting a 3.8 percent risk-free rate based on the average  
22 yield on 30-year Treasury bonds for the six-months ending  
23 March 2023 produces a market equity risk premium of 7.8  
24 percent.

1 Q. What is the source of the beta values you use to  
2 apply the CAPM?

3 A. I rely on the beta values reported by Value Line,  
4 which in my experience Value Line is the most widely referenced  
5 source for beta in regulatory proceedings. As noted in *New*  
6 *Regulatory Finance*:

7 Value Line is the largest and most widely  
8 circulated independent investment advisory  
9 service, and influences the expectations of a  
10 large number of institutional and individual  
11 investors. ... Value Line betas are computed on a  
12 theoretically sound basis using a broadly based  
13 market index, and they are adjusted for the  
14 regression tendency of betas to converge to  
15 1.00.<sup>58</sup>  
16

17 Q. What else should be considered in applying the  
18 CAPM?

19 A. Financial research indicates that the CAPM does  
20 not fully account for observed differences in rates of return  
21 attributable to firm size. Accordingly, a modification is  
22 required to account for this size effect. As explained by  
23 Morningstar:

24 One of the most remarkable discoveries of  
25 modern finance is the finding of a relationship  
26 between firm size and return. On average, small  
27 companies have higher returns than large ones.  
28 . . . The relationship between firm size and  
29 return cuts across the entire size spectrum; it  
30 is not restricted to the smallest stocks.<sup>59</sup>  
31

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<sup>58</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 71.

<sup>59</sup> Morningstar, *2015 Ibbotson SBBI Classic Yearbook*, at 99.

1 According to the CAPM, the expected return on a security  
2 should consist of the riskless rate, plus a premium to  
3 compensate for the systematic risk of the particular security.  
4 The degree of systematic risk is represented by the beta  
5 coefficient. The need for the size adjustment arises because  
6 differences in investors' required rates of return that are  
7 related to firm size are not fully captured by beta. To  
8 account for this, researchers have developed size premiums  
9 that need to be added to account for the level of a firm's  
10 market capitalization in determining the CAPM cost of equity.<sup>60</sup>  
11 Accordingly, my CAPM analysis also incorporates an adjustment  
12 to recognize the impact of size distinctions, as measured by  
13 the market capitalization for the firms in the Electric Group.

14 Q. What is the basis for the size adjustment?

15 The size adjustment required in applying the CAPM is  
16 based on the finding that *after controlling for risk*  
17 *differences reflected in beta*, the CAPM overstates returns to  
18 companies with larger market capitalizations and understates  
19 returns for relatively smaller firms. The size adjustments  
20 utilized in my analysis are sourced from Kroll, who now publish  
21 the well-known compilation of capital market series originally  
22 developed by Professor Roger G. Ibbotson of the Yale School of

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<sup>60</sup> Originally compiled by Ibbotson Associates and published in their annual yearbook entitled, *Stocks, Bonds, Bills and Inflation*, these size premia are now developed by Kroll and presented in its *Cost of Capital Navigator*.

1 Management, and most recently published by Kroll. Calculation  
2 of the size adjustments involve the following steps:

- 3 1. Divide all stocks traded on the NYSE, NYSE  
4 MKT, and NASDAQ indices into deciles based on  
5 their market capitalization.
- 6 2. Using the average beta value for each decile,  
7 calculate the implied excess return over the  
8 risk-free rate using the CAPM.
- 9 3. Compare the calculated excess returns based  
10 on the CAPM to the actual excess returns for  
11 each decile, with the difference being the  
12 increment of return that is related to firm  
13 size, or "size adjustment."

14 *New Regulatory Finance* observed that "small market-cap  
15 stocks experience higher returns than large market-cap stocks  
16 with equivalent betas," and concluded that "the CAPM  
17 understates the risk of smaller utilities, and a cost of  
18 equity based purely on a CAPM beta will therefore produce too  
19 low an estimate."<sup>61</sup>

20 Q. What is the implied ROE for the Electric Group  
21 using the CAPM approach?

22 A. As shown on Exhibit 13, after adjusting for the  
23 impact of firm size, the CAPM approach implies an average ROE  
24 for the Electric Group of 11.2 percent.

#### 25 ***D. Empirical Capital Asset Pricing Model***

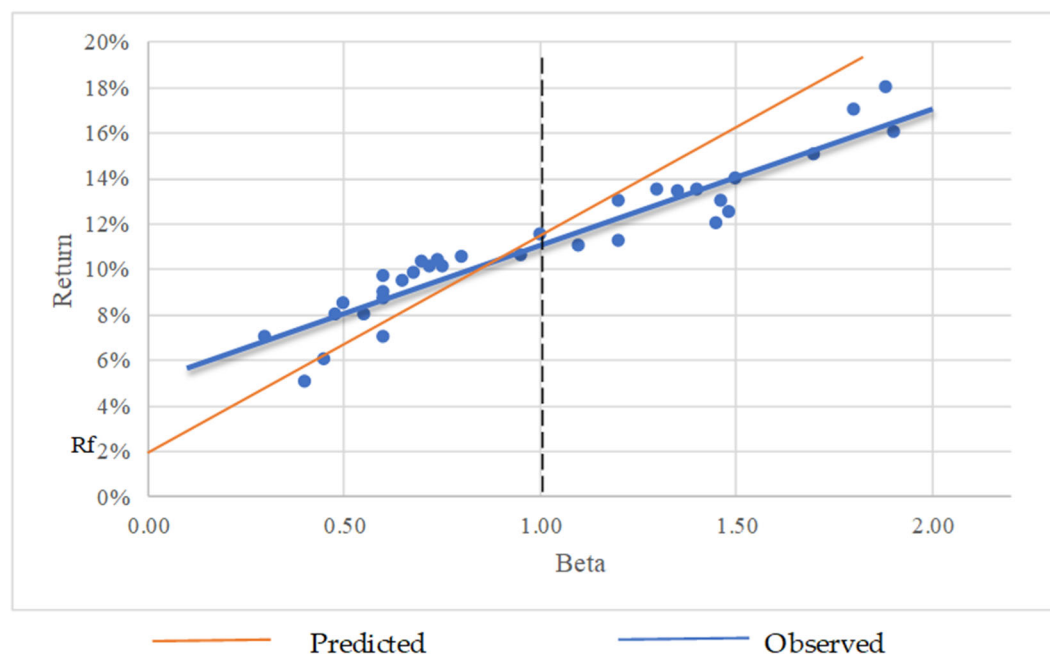
26 Q. How does the ECAPM approach differ from  
27 traditional applications of the CAPM?

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<sup>61</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 187.

A. Empirical tests of the CAPM have shown that low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted. In other words, the CAPM tends to overstate the actual sensitivity of the cost of capital to beta, with low-beta stocks tending to have higher returns and high-beta stocks tending to have lower risk returns than predicted by the CAPM. This is illustrated graphically in the figure below:

**FIGURE 2**  
CAPM - PREDICTED VS. OBSERVED RETURNS



Because the betas of utility stocks, including those in the Electric Group, are generally less than 1.0, this implies that cost of equity estimates based on the traditional CAPM would understate the cost of equity. This empirical finding is



1 widely reported in the finance literature, as summarized in

2 *New Regulatory Finance:*

3 As discussed in the previous section, several  
4 finance scholars have developed refined and  
5 expanded versions of the standard CAPM by  
6 relaxing the constraints imposed on the CAPM,  
7 such as dividend yield, size, and skewness  
8 effects. These enhanced CAPMs typically produce  
9 a risk-return relationship that is flatter than  
10 the CAPM prediction in keeping with the actual  
11 observed risk-return relationship. The ECAPM  
12 makes use of these empirical relationships.<sup>62</sup>

13 Based on a review of the empirical evidence, *New*  
14 *Regulatory Finance* concluded the expected return on a security  
15 is represented by the following formula:

$$16 \quad R_j = R_f + 0.25(R_m - R_f) + 0.75[\beta_j(R_m - R_f)]$$

17 Like the CAPM formula presented earlier, the ECAPM  
18 represents a stock's required return as a function of the  
19 risk-free rate ( $R_f$ ), plus a risk premium. In the formula above,  
20 this risk premium is composed of two parts: (1) the market  
21 risk premium ( $R_m - R_f$ ) weighted by a factor of 25 percent, and  
22 (2) a company-specific risk premium based on the stock's  
23 relative volatility [ $\beta_j(R_m - R_f)$ ] weighted by 75 percent. This  
24 ECAPM equation, and its associated weighting factors,  
25 recognizes the observed relationship between standard CAPM  
26 estimates and the cost of capital documented in the financial

---

<sup>62</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 189.

1 research, and corrects for the understated returns that would  
2 otherwise be produced for low beta stocks.

3 Q. Have other regulators relied on the ECAPM?

4 A. Yes. Staff witnesses for the MDPSC have relied on  
5 this approach in prior testimony, noting that "the ECAPM model  
6 adjusts for the tendency of the CAPM model to underestimate  
7 returns for low Beta stocks," and concluding that, "the ECAPM  
8 gives a more realistic measure of the ROE than the CAPM model  
9 does."<sup>63</sup> The Staff of the Colorado Public Utilities Commission  
10 has recognized that, "The ECAPM is an empirical method that  
11 attempts to enhance the CAPM analysis by flattening the risk-  
12 return relationship,"<sup>64</sup> and relied on the same ECAPM equation  
13 presented above.<sup>65</sup>

14 The New York Department of Public Service also  
15 routinely incorporates the results of the ECAPM approach,  
16 which it refers to as the "zero-beta CAPM."<sup>66</sup> The Regulatory  
17 Commission of Alaska has also relied on the ECAPM approach,  
18 noting that:

19 Tesoro averaged the results it obtained from CAPM  
20 and ECAPM while at the same time providing  
21 empirical testimony that the ECAPM results are  
22 more accurate than [sic] traditional CAPM

---

<sup>63</sup> *Direct Testimony and Exhibits of Julie McKenna*, Maryland PSC Case No. 9299 (Oct. 12, 2012) at 9.

<sup>64</sup> Proceeding No. 13AL-0067G, *Answer Testimony and Schedules of Scott England* (July 31, 2013) at 47.

<sup>65</sup> *Id.* at 48.

<sup>66</sup> See, e.g., New York Department of Public Service, Cases 19-E-0065 19-G-0066, *Prepared Fully Redacted Testimony of Staff Finance Panel* (May 2019) at 94-95.

1 results. The reasonable investor would be aware  
2 of these empirical results. Therefore, we adjust  
3 Tesoro's recommendation to reflect only the ECAPM  
4 result.<sup>67</sup>

5 The Wyoming Office of Consumer Advocate, an independent  
6 division of the Wyoming Public Service Commission, has also  
7 relied on this ECAPM formula,<sup>68</sup> as has a witness for the Office  
8 of Arkansas Attorney General.<sup>69</sup> In a 2018 decision, the Montana  
9 Public Service Commission determined that "[t]he evidence in  
10 this proceeding has convinced the Commission that the [ECAPM]  
11 should be the primary method for estimating . . . the cost of  
12 equity."<sup>70</sup>

13 Q. What cost of equity estimate is indicated by the  
14 ECAPM?

15 A. My application of the ECAPM was based on the same  
16 forward-looking market rate of return, risk-free rates, and  
17 beta values discussed earlier in connections with the CAPM. As  
18 shown on Exhibit 14, applying the forward-looking ECAPM  
19 approach to the firms in the Electric Group results in an  
20 average cost of equity estimate of 11.4 percent, after

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<sup>67</sup> Regulatory Commission of Alaska, Order No. P-97-004(151) (Nov. 27, 2002) at 145.

<sup>68</sup> Wyoming Public Service Commission, Docket No. 30011-97-GR-17, *Pre-Filed Direct Testimony of Anthony J. Ornelas* (May 1, 2018) at 52-53.

<sup>69</sup> Arkansas Public Service Commission, Docket No. 17-071-U, *Direct Testimony of Marlon F. Griffing, PH.D.* (May 29, 2018) at 33-35.

<sup>70</sup> Montana Public Service Commission, Docket No. D2017.9.80, Order No. 7575c (Sep. 26, 2018) at P 114.

1 incorporating the size adjustment corresponding to the market  
2 capitalization of the individual utilities.

3 ***E. Utility Risk Premium***

4 Q. Briefly describe the risk premium method.

5 A. The risk premium method extends the risk-return  
6 tradeoff observed with bonds to estimate investors' required  
7 rate of return on common stocks. The cost of equity is  
8 estimated by first determining the additional return investors  
9 require to forgo the relative safety of bonds and to bear the  
10 greater risks associated with common stock, and then adding  
11 this equity risk premium to the current yield on bonds. Like  
12 the DCF model, the risk premium method is capital market  
13 oriented. However, unlike DCF models, which indirectly impute  
14 the cost of equity, risk premium methods directly estimate  
15 investors' required rate of return by adding an equity risk  
16 premium to observable bond yields.

17 Q. Is the risk premium approach a widely accepted  
18 method for estimating the cost of equity?

19 A. Yes. The risk premium approach is based on the  
20 fundamental risk-return principle that is central to finance,  
21 which holds that investors will require a premium in the form  
22 of a higher return in order to assume additional risk. This  
23 method is routinely referenced by the investment community and

1 in academia and regulatory proceedings and provides an  
2 important tool in estimating a fair ROE for Idaho Power.

3 Q. How do you implement the risk premium method?

4 A. I estimate equity risk premiums for utilities  
5 based on surveys of previously authorized ROEs. Authorized ROEs  
6 presumably reflect regulatory commissions' best estimates of  
7 the cost of equity, however determined, at the time they issued  
8 their final order. Such ROEs should represent a balanced and  
9 impartial outcome that considers the need to maintain a  
10 utility's financial integrity and ability to attract capital.  
11 Moreover, allowed returns are an important consideration for  
12 investors and have the potential to influence other observable  
13 investment parameters, including credit ratings and borrowing  
14 costs. When considered in the context of a complete and  
15 rigorous analysis, this data provides a logical and frequently  
16 referenced basis for estimating equity risk premiums for  
17 regulated utilities.

18 Q. How do you calculate the equity risk premiums  
19 based on allowed returns?

20 A. The ROEs authorized for electric utilities by  
21 regulatory commissions across the U.S. are compiled by S&P  
22 Global Market Intelligence and published in its *RRA Regulatory*  
23 *Focus* report. On page 2 of Exhibit 15, the average yield on  
24 public utility bonds is subtracted from the average allowed ROE

1 for electric utilities to calculate equity risk premiums for  
2 each year between 1974 and 2022.<sup>71</sup> As shown there, over this  
3 period these equity risk premiums for electric utilities  
4 average 3.89 percent, and the yields on public utility bonds  
5 average 7.83 percent.

6 Q. Is there any capital market relationship that  
7 must be considered when implementing the risk premium method?

8 A. Yes. The magnitude of equity risk premiums is not  
9 constant and equity risk premiums tend to move inversely with  
10 interest rates. In other words, when interest rate levels are  
11 relatively high, equity risk premiums narrow, and when interest  
12 rates are relatively low, equity risk premiums widen. The  
13 implication of this inverse relationship is that the cost of  
14 equity does not move as much as, or in lockstep with, interest  
15 rates. Accordingly, for a 1 percent increase or decrease in  
16 interest rates, the cost of equity may only rise or fall some  
17 fraction of 1 percent. When implementing the risk premium  
18 method, adjustments are required to incorporate this inverse  
19 relationship if the current interest rates is different from  
20 the average interest rate over the study period.

21 Current bond yields are lower than those prevailing  
22 over the risk premium study period. Given that equity risk  
23 premiums move inversely with interest rates, these lower bond

---

<sup>71</sup> My analysis encompasses the entire period for which published data is available.



1 yields also imply an increase in the equity risk premium. In  
2 other words, higher required equity risk premiums partially  
3 offset the impact of declining interest rates on the ROE.

4 Q. Is this inverse relationship confirmed by  
5 published financial research?

6 A. Yes. There is considerable empirical evidence  
7 that when interest rates are relatively high, equity risk  
8 premiums narrow, and when interest rates are relatively low,  
9 equity risk premiums are greater. This inverse relationship  
10 between equity risk premiums and interest rates has been widely  
11 reported in the financial literature. As summarized by New  
12 *Regulatory Finance*:

13 Published studies by Brigham, Shome, and Vinson  
14 (1985), Harris (1986), Harris and Marston (1992,  
15 1993), Carleton, Chambers, and Lakonishok (1983),  
16 Morin (2005), and McShane (2005), and others  
17 demonstrate that, beginning in 1980, risk  
18 premiums varied inversely with the level of  
19 interest rates - rising when rates fell and  
20 declining when rates rose.<sup>72</sup>

21  
22 Other regulators have also recognized that, while the  
23 cost of equity trends in the same direction as interest rates,

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<sup>72</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 128.

1 these variables do not move in lock-step.<sup>73</sup> This relationship  
2 is illustrated in the figure on page 3 of Exhibit 15.

3 Q. What ROE is implied by the risk premium method  
4 using surveys of allowed returns?

5 A. Based on the regression output between the  
6 interest rates and equity risk premiums displayed on page 3 of  
7 Exhibit 15, the equity risk premium for electric utilities  
8 increases by approximately 43 basis points for each percentage  
9 point drop in the yield on average public utility bonds. As  
10 illustrated on page 1 of Exhibit 15 with an average yield on  
11 public utility bonds for the six-months ending March 2023 of  
12 5.75 percent, this implies a current equity risk premium of  
13 4.89 percent for electric utilities. Adding this equity risk  
14 premium to the average yield on Baa-rated utility bonds implies  
15 a current ROE of 10.64 percent.

16 ***F. Expected Earnings Approach***

17 Q. What other analysis do you conduct to estimate  
18 the ROE?

19 A. I also evaluate the ROE using the expected  
20 earnings method. Reference to rates of return available from  
21 alternative investments of comparable risk can provide an

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<sup>73</sup> See, e.g., California Public Utilities Commission, Decision 08-05-035 (May 29, 2008); Entergy Mississippi Formula Rate Plan FRP-7, [https://www.entergy-mississippi.com/userfiles/content/price/tariffs/eml\\_frp.pdf](https://www.entergy-mississippi.com/userfiles/content/price/tariffs/eml_frp.pdf) (last visited Apr. 25, 2023); *Martha Coakley et al. v. Bangor Hydro-Elec. Co. et al.*, 147 FERC ¶ 61,234 at P 147 (2014).

1 important benchmark in assessing the return necessary to assure  
2 confidence in the financial integrity of a firm and its ability  
3 to attract capital. This expected earnings approach is  
4 consistent with the economic underpinnings for a just and  
5 reasonable rate of return established by the U.S. Supreme Court  
6 in *Bluefield* and *Hope*. Moreover, it avoids the complexities and  
7 limitations of capital market methods and instead focuses on  
8 the returns earned on book equity, which are readily available  
9 to investors.

10 Q. What economic premise serves as the foundation  
11 for the expected earnings approach?

12 A. The simple, but powerful concept underlying the  
13 expected earnings approach is that investors compare each  
14 investment alternative with the next best opportunity. If the  
15 utility is unable to offer a return similar to that available  
16 from other opportunities of comparable risk, investors will  
17 become unwilling to supply the capital on reasonable terms. For  
18 existing investors, denying the utility an opportunity to earn  
19 what is available from other similar risk alternatives prevents  
20 them from earning their opportunity cost of capital. This  
21 outcome would violate the *Hope* and *Bluefield* standards and  
22 undermine the utility's access to capital on reasonable terms.

23 Q. How is the expected earnings approach typically  
24 implemented?

1           A.       The traditional comparable earnings test  
2 identifies a group of companies that are believed to be  
3 comparable in risk to the utility. The actual earnings of those  
4 companies on the book value of their investment are then  
5 compared to the allowed return of the utility. While the  
6 traditional comparable earnings test is implemented using  
7 historical data taken from the accounting records, it is also  
8 common to use projections of returns on book investment, such  
9 as those published by recognized investment advisory  
10 publications (e.g., Value Line). Because these projected  
11 returns on book value equity are analogous to the forward-  
12 looking allowed ROE on a utility's rate base, this measure of  
13 opportunity costs results in a direct, "apples to apples"  
14 comparison.

15           Moreover, regulators do not set the returns that  
16 investors earn in the capital markets, which are a function of  
17 dividend payments and fluctuations in common stock prices—both  
18 of which are outside their control. Regulators can only  
19 establish the allowed ROE, which is applied to the book value  
20 of a utility's investment in rate base, as determined from its  
21 accounting records. This is analogous to the expected earnings  
22 approach, which measures the return that investors expect the  
23 utility to earn on book value. As a result, the expected  
24 earnings approach provides a meaningful guide to ensure that

1 the allowed ROE is similar to what other utilities of  
2 comparable risk will earn on invested capital. This expected  
3 earnings test does not require theoretical models to  
4 indirectly infer investors' perceptions from stock prices or  
5 other market data. As long as the proxy companies are similar  
6 in risk, their expected earned returns on invested capital  
7 provide a direct benchmark for investors' opportunity costs  
8 that is independent of fluctuating stock prices, market-to-  
9 book ratios, debates over DCF growth rates, or the limitations  
10 inherent in any theoretical model of investor behavior.

11 Q. What ROE is indicated for Idaho Power based on  
12 the expected earnings approach?

13 A. For the firms in the Electric Group, the year-end  
14 returns on common equity projected by Value Line over its  
15 forecast horizon are shown on Exhibit 16. As I explained  
16 earlier in my discussion of the br+sv growth rates used in  
17 applying the DCF model, Value Line's returns on common equity  
18 are calculated using year-end equity balances, which  
19 understates the average return earned over the year.<sup>74</sup>  
20 Accordingly, these year-end values were converted to average  
21 returns using the same adjustment factor discussed earlier and

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<sup>74</sup> For example, to compute the annual return on a passbook savings account with a beginning balance of \$1,000 and an ending balance of \$5,000, the interest income would be divided by the average balance of \$3,000. Using the \$5,000 balance at the end of the year would understate the actual return.

1 developed on Exhibit 12. As shown on Exhibit 16, Value Line's  
2 projections for the Electric Group suggest an average ROE of  
3 11.0 percent.

4 **G. Flotation Costs**

5 Q. What other consideration is relevant in setting  
6 the return on equity for a utility?

7 A. The common equity used to finance the investment  
8 in utility assets is provided from either the sale of stock in  
9 the capital markets or from retained earnings not paid out as  
10 dividends. When equity is raised through the sale of common  
11 stock, there are costs associated with "floating" the new  
12 equity securities. These flotation costs include services such  
13 as legal, accounting, and printing, as well as the fees and  
14 discounts paid to compensate brokers for selling the stock to  
15 the public. Also, some argue that the "market pressure" from  
16 the additional supply of common stock and other market factors  
17 may further reduce the amount of funds a utility nets when it  
18 issues common equity.

19 Q. Is there an established mechanism for a utility  
20 to recognize equity issuance costs?

21 A. No. While debt flotation costs are recorded on  
22 the books of the utility, amortized over the life of the issue,  
23 and thus increase the effective cost of debt capital, there is  
24 no similar accounting treatment to ensure that equity flotation



1 costs are recorded and ultimately recognized. No rate of return  
2 is authorized on flotation costs necessarily incurred to obtain  
3 a portion of the equity capital used to finance plant. In other  
4 words, equity flotation costs are not included in a utility's  
5 rate base because neither that portion of the gross proceeds  
6 from the sale of common stock used to pay flotation costs is  
7 available to invest in plant and equipment, nor are flotation  
8 costs capitalized as an intangible asset. Unless some provision  
9 is made to recognize these issuance costs, a utility's revenue  
10 requirements will not fully reflect all of the costs incurred  
11 for the use of investors' funds. Because there is no accounting  
12 convention to accumulate the flotation costs associated with  
13 equity issues, they must be accounted for indirectly, with an  
14 upward adjustment to the cost of equity being the most  
15 appropriate mechanism.

16 Q. Is there academic evidence that supports a  
17 flotation cost adjustment?

18 A. Yes. The financial literature and evidence in  
19 this case provides a sound theoretical and practical basis to  
20 include consideration of flotation costs for Idaho Power. An  
21 adjustment for flotation costs associated with past sales of  
22 common stock is appropriate, even when the utility is not  
23 contemplating any new sales of common stock. The need for a  
24 flotation cost adjustment to compensate for past common stock

offerings has been recognized in the financial literature. In a *Public Utilities Fortnightly* article, for example, Brigham, Aberwald, and Gapenski demonstrated that even if no further stock issues are contemplated, a flotation cost adjustment in all future years is required to keep shareholders whole, and that the flotation cost adjustment must consider total equity, including retained earnings.<sup>75</sup> Similarly, *New Regulatory Finance* contains the following discussion:

Another controversy is whether the flotation cost allowance should still be applied when the utility is not contemplating an imminent common stock issue. Some argue that flotation costs are real and should be recognized in calculating the fair rate of return on equity, but only at the time when the expenses are incurred. In other words, the flotation cost allowance should not continue indefinitely, but should be made in the year in which the sale of securities occurs, with no need for continuing compensation in future years. This argument implies that the company has already been compensated for these costs and/or the initial contributed capital was obtained freely, devoid of any flotation costs, which is an unlikely assumption, and certainly not applicable to most utilities. ... The flotation cost adjustment cannot be strictly forward-looking unless all past flotation costs associated with past issues have been recovered.<sup>76</sup>

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<sup>75</sup> E. F. Brigham, D. A. Aberwald, and L. C. Gapenski, *Common Equity Flotation Costs and Rate Making*, Pub. Util. Fortnightly (May 2, 1985).

<sup>76</sup> Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 335.

Q. Can you illustrate why investors will not have the opportunity to earn their required ROE unless a flotation cost adjustment is included?

A. Yes. Assume a utility sells \$10 worth of common stock at the beginning of year 1. If the utility incurs flotation costs of \$0.48 (5 percent of the net proceeds), then only \$9.52 is available to invest in rate base. Assume that common shareholders' required rate of return is 10.5 percent, the expected dividend in year 1 is \$0.50 (*i.e.*, a dividend yield of 5 percent), and that growth is expected to be 5.5 percent annually. As developed in Table 4 below, if the allowed rate of return on common equity is only equal to the utility's 10.5 percent "bare bones" cost of equity, common stockholders will not earn their required rate of return on their \$10 investment, since growth will only be 5.25 percent, instead of 5.5 percent:

**TABLE 4**

**NO FLOTATION COST ADJUSTMENT**

<u>Year</u>	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total Equity</u>	<u>Market Price</u>	<u>M/B Ratio</u>	<u>Allowed ROE</u>	<u>EPS</u>	<u>DPS</u>	<u>Payout Ratio</u>
1	\$9.52	\$ -	\$ 9.52	\$10.00	1.050	10.50%	\$1.00	\$0.50	50.0%
2	\$9.52	\$0.50	\$10.02	\$10.52	1.050	10.50%	\$1.05	\$0.53	50.0%
3	\$9.52	\$0.53	<u>\$10.55</u>	<u>\$11.08</u>	1.050	10.50%	<u>\$1.11</u>	<u>\$0.55</u>	50.0%
Growth			5.25%	5.25%			5.25%	5.25%	

The reason that investors never really earn 10.5 percent on their investment in the above example is that the \$0.48 in flotation costs initially incurred to raise the

common stock is not treated like debt issuance costs (*i.e.*, amortized into interest expense and therefore increasing the embedded cost of debt), nor is it included as an asset in rate base.

Including a flotation cost adjustment allows investors to be fully compensated for the impact of these costs. One commonly referenced method for calculating the flotation cost adjustment is to multiply the dividend yield by a flotation cost percentage. Thus, with a 5 percent dividend yield and a 5 percent flotation cost percentage, the flotation cost adjustment in the above example would be approximately 25 basis points. As shown in Table 5 below, by allowing a rate of return on common equity of 10.75 percent (a 10.5 percent cost of equity plus a 25 basis point flotation cost adjustment), investors earn their 10.5 percent required rate of return, since actual growth is now equal to 5.5 percent:

**TABLE 5**  
INCLUDING FLOTATION COST ADJUSTMENT

<u>Year</u>	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total Equity</u>	<u>Market Price</u>	<u>M/B Ratio</u>	<u>Allowed ROE</u>	<u>EPS</u>	<u>DPS</u>	<u>Payout Ratio</u>
1	\$9.52	\$ -	\$ 9.52	\$10.00	1.050	10.75%	\$1.02	\$0.50	48.9%
2	\$9.52	\$0.52	\$10.04	\$10.55	1.050	10.75%	\$1.08	\$0.53	48.9%
3	\$9.52	\$0.55	<u>\$10.60</u>	<u>\$11.13</u>	1.050	10.75%	<u>\$1.14</u>	<u>\$0.56</u>	48.9%
Growth			5.50%	5.50%			5.50%	5.50%	

The only way for investors to be fully compensated for issuance costs is to include an ongoing adjustment to account for past flotation costs when setting the return on common

1 equity. This is the case regardless of whether the utility is  
2 expected to issue additional shares of common stock in the  
3 future.

4 Q. What is the magnitude of the adjustment to the  
5 "bare bones" cost of equity to account for issuance costs?

6 A. The most common method used to account for  
7 flotation costs in regulatory proceedings is to apply an  
8 average flotation-cost percentage to a utility's dividend  
9 yield. In Exhibit 17, I present a survey of recent open-market  
10 common stock issues for each company in Value Line's electric  
11 and gas utility industries. For all companies in the electric  
12 and gas industries, flotation costs averaged 2.7 percent, or  
13 2.6 percent for electric utilities. Applying the average 2.6  
14 percent expense percentage for electric utilities to the  
15 Electric Group dividend yield of 3.8 percentage produces a  
16 flotation cost adjustment on the order of 10 basis points.

17 Q. Have other regulators recognized flotation costs  
18 in evaluating a fair and reasonable ROE?

19 A. Yes. For example, In Case No. INT-G-16-02 the  
20 IPUC staff noted that applying a flotation cost percentage to  
21 the dividend yield "is referred to as the 'conventional'  
22 approach. Its use in regulatory proceedings is widespread, and  
23 the formula is outlined in several corporate finance

1 textbooks.”<sup>77</sup> In Docket No. UE-991606 the Washington Utilities  
2 and Transportation Commission concluded that a flotation cost  
3 adjustment of 25 basis points should be included in the allowed  
4 return on equity.<sup>78</sup>

5 More recently, the Wyoming Office of Consumer Advocate,  
6 an independent division of the Wyoming Public Service  
7 Commission, recommended a 10 basis point flotation cost  
8 adjustment.<sup>79</sup> Similarly, the South Dakota Public Utilities  
9 Commission has recognized the impact of issuance costs,  
10 concluding that, “recovery of reasonable flotation costs is  
11 appropriate.”<sup>80</sup> Another example of a regulator that approves  
12 common stock issuance costs is the Mississippi Public Service  
13 Commission, which routinely includes a flotation cost  
14 adjustment in its Rate Stabilization Adjustment Rider  
15 formula.<sup>81</sup> The Public Utilities Regulatory Authority of  
16 Connecticut<sup>82</sup> the Minnesota Public Utilities Commission,<sup>83</sup> and

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<sup>77</sup> Idaho Public Utilities Commission, Case No. INT-G-16-02, *Direct Testimony of Mark Rogers* (Dec. 16, 2016) at 18.

<sup>78</sup> Washington Utilities and Transportation Commission Docket No. UE-991606, *et al.*, *Third Supplemental Order* (September 2000) at 95.

<sup>79</sup> Wyoming Public Service Commission, Docket No. 30011-97-GR-17, *Pre-Filed Direct Testimony of Anthony J. Ornelas* (May 1, 2018) at 52-53.

<sup>80</sup> South Dakota Public Utilities Commission, *Northern States Power Co*, EL11-019, Final Decision and Order at P 22 (2012).

<sup>81</sup> See, e.g., Entergy Mississippi Formula Rate Plan FRP-7, [https://cdn.entergy-mississippi.com/userfiles/content/price/tariffs/eml\\_frp.pdf](https://cdn.entergy-mississippi.com/userfiles/content/price/tariffs/eml_frp.pdf) (last visited Apr. 25, 2023).

<sup>82</sup> See, e.g., The Public Utilities Regulatory Authority of Connecticut, Docket No. 14-05-06, Decision (Dec. 17, 2014) at 133-134.

<sup>83</sup> See, e.g., Minnesota Public Utilities Commission, Docket No. E001/GR-10-276, Findings of Fact, Conclusions, and Order at 9.



1 the Virginia State Corporation Commission<sup>84</sup> have also  
2 recognized that flotation costs are a legitimate expense  
3 worthy of consideration in setting a fair and reasonable ROE.

#### **VI. NON-UTILITY BENCHMARK**

4 Q. What is the purpose of this section of your  
5 testimony?

6 A. This section presents the results of my DCF  
7 analysis for a group of low-risk firms in the competitive  
8 sector, which I refer to as the "Non-Utility Group." This  
9 analysis is not directly considered to arrive at my recommended  
10 ROE range of reasonableness; however, it is my opinion that  
11 this is a relevant consideration in evaluating a fair ROE for  
12 the Company.

13 Q. Do utilities have to compete with non-regulated  
14 firms for capital?

15 A. Yes. The cost of capital is an opportunity cost  
16 based on the returns that investors could realize by putting  
17 their money in other alternatives. Clearly, the total capital  
18 invested in utility stocks is only a small fraction of total  
19 common stock investment, and there is a plethora of other  
20 alternatives available to investors. Utilities must compete for  
21 capital, not just against firms in their own industry, but with  
22 other investment opportunities of comparable risk. This

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<sup>84</sup> Virginia State Corporation Commission, Roanoke Gas Company, Case No. PUR-2018-00013, *Final Order*, (Jan. 24, 2020) at 6.

1 understanding is consistent with modern portfolio theory, which  
2 is built on the assumption that rational investors will hold a  
3 diverse portfolio of stocks and not just companies in a single  
4 industry.

5 Q. Is it consistent with the *Bluefield* and *Hope*  
6 cases to consider investors' required ROE for non-utility  
7 companies?

8 A. Yes. The cost of equity capital in the  
9 competitive sector of the economy forms the very underpinning  
10 for utility ROEs because regulation purports to serve as a  
11 substitute for the actions of competitive markets. The Supreme  
12 Court has recognized that it is the degree of risk, not the  
13 nature of the business, which is relevant in evaluating an  
14 allowed ROE for a utility. The *Bluefield* case refers to  
15 "business undertakings attended with comparable risks and  
16 uncertainties." It does not restrict consideration to other  
17 utilities. Similarly, the *Hope* case states:

18 By that standard the return to the equity owner  
19 should be commensurate with returns on  
20 investments in other enterprises having  
21 corresponding risks.<sup>85</sup>  
22

23 As in the *Bluefield* decision, there is nothing to  
24 restrict "other enterprises" solely to the utility industry.

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<sup>85</sup> *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 391 (1944).

1 Q. Does consideration of the results for the Non-  
2 Utility Group improve the reliability of DCF results?

3 A. Yes. Growth estimates used in the DCF model  
4 depend on analysts' forecasts. It is possible for utility  
5 growth rates to be distorted by short-term trends in the  
6 industry, or by the industry falling into favor or disfavor by  
7 analysts. Such distortions could result in biased DCF estimates  
8 for utilities. Because the Non-Utility Group includes low risk  
9 companies from more than one industry, it helps to insulate  
10 against any possible distortion that may be present in results  
11 for a particular sector.

12 Q. What criteria do you apply to develop the Non-  
13 Utility Group?

14 A. My comparable risk proxy group was composed of  
15 those United States companies followed by Value Line that:

- 16 1) pay common dividends;
- 17 2) have a Safety Rank of "1";
- 18 3) have a Financial Strength Rating of "A" or greater;
- 19 4) have a beta of 0.95 or less; and
- 20 5) have investment grade credit ratings from S&P and
- 21 Moody's.

22 Q. How do the overall risks of your Non-Utility  
23 Group compare to the proxy group of electric utilities?

24 A. Table 6 compares the Non-Utility Group to the  
25 Electric Group and Idaho Power across the four key indices of  
26 investment risk discussed earlier.

**TABLE 6**  
COMPARISON OF RISK INDICATORS

	Credit Ratings		Value Line		
			Safety Financial		Beta
	S&P	Moody's	Rank	Strength	
Non-Utility Group	A-	A2	1	A+	0.81
Electric Group	BBB+	Baa2	2	A	0.89
Idaho Power	BBB	Baa1	1	A+	0.80

Note: Idaho Power's Value Line ratings are for its parent company, IDACORP.

As shown above, the risk indicators for the Non-Utility Group suggest equivalent or less risk than for the Electric Group and Idaho Power.

The companies that make up the Non-Utility Group are representative of the pinnacle of corporate America. These firms, which include household names such as Coca-Cola, Kellogg, Procter & Gamble, and Walmart, have long corporate histories, well-established track records, and conservative risk profiles. Many of these companies pay dividends on a par with utilities, with the average dividend yield for the group at 2.3 percent.<sup>86</sup> Moreover, because of their significance and name recognition, these companies receive intense scrutiny by the investment community, which increases confidence that published growth estimates are representative of the consensus expectations reflected in common stock prices.

<sup>86</sup> Exhibit 18 at page 1.

1 Q. What are the results of your DCF analysis for the  
2 Non-Utility Group?

3 A. I apply the DCF model to the Non-Utility Group  
4 using the same analysts' EPS growth projections described  
5 earlier for the Electric Group, with the results being  
6 presented on page 3 of Exhibit 18. As summarized in Table 7,  
7 below, after eliminating illogical values, application of the  
8 constant growth DCF model results in the following cost of  
9 equity estimates:

10 **TABLE 7**

11 DCF RESULTS - NON-UTILITY GROUP

<u>Growth Rate</u>	<u>Average</u>	<u>Midpoint</u>
Value Line	10.9%	11.9%
IBES	10.4%	10.7%
Zacks	10.9%	12.1%

12 As discussed earlier, reference to the Non-Utility  
13 Group is consistent with established regulatory principles.  
14 Required returns for utilities should be in line with those of  
15 non-utility firms of comparable risk operating under the  
16 constraints of free competition. Because the actual cost of  
17 equity is unobservable, and DCF results inherently incorporate  
18 a degree of error, cost of equity estimates for the Non-  
19 Utility Group provide an important benchmark in evaluating a  
20 fair ROE for Idaho Power.

21 Q. Does this conclude your direct testimony?

22 A. Yes, it does.

## DECLARATION OF Adrien M. McKenzie, CFA

I, Adrien M. Mckenzie, CFA, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Adrien M. McKenzie. I am President of Financial Concepts and Applications, Inc. ("FINCAP"), a firm providing financial, economic, and policy consulting services to business and government.

2. On behalf of Idaho Power, I present this pre-filed direct testimony in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1<sup>st</sup> day of June 2023, at Austin, Texas.

Signed:

Adrien M. McKenzie

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 7**



## **EXHIBIT 7**

### **QUALIFICATIONS OF ADRIEN M. MCKENZIE**

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Adrien M. McKenzie. My business address is 3907 Red River Street, Austin, Texas 78751.

**Q. PLEASE STATE YOUR OCCUPATION.**

A. I am a principal in FINCAP, Inc., a firm engaged primarily in financial, economic, and policy consulting in the field of public utility regulation.

**Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.**

A. I received B.A. and M.B.A. degrees with a major in finance from The University of Texas at Austin and hold the Chartered Financial Analyst (CFA<sup>®</sup>) designation. Since joining FINCAP in 1984, I have participated in consulting assignments involving a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. I have extensive experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. I have personally sponsored direct and rebuttal testimony in over 180 proceedings filed with the Federal Energy Regulatory Commission ("FERC") and regulatory agencies in Alaska, Arkansas, Colorado, District of Columbia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming. My testimony addressed the establishment of risk-comparable proxy groups, the application of alternative quantitative methods, and the consideration

of regulatory standards and policy objectives in establishing a fair rate of return on equity for regulated electric, gas, and water utility operations. In connection with these assignments, my responsibilities have included critically evaluating the positions of other parties and preparation of rebuttal testimony, representing clients in settlement negotiations and hearings, and assisting in the preparation of legal briefs.

FINCAP was formed in 1979 as an economic and financial consulting firm serving clients in both the regulated and competitive sectors. FINCAP conducts assignments ranging from broad qualitative analyses and policy consulting to technical analyses and research. The firm's experience is in the areas of public utilities, valuation of closely-held businesses, and economic evaluations (e.g., damage and cost/benefit analyses). Prior to joining FINCAP, I was employed by an oil and gas firm and was responsible for operations and accounting. I am a member of the CFA Institute. A resume containing the details of my qualifications and experience is attached below.

## **ADRIEN M. McKENZIE**

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### **Summary of Qualifications**

Adrien McKenzie has an MBA in finance from the University of Texas at Austin and holds the Chartered Financial Analyst (CFA®) designation. He has over 30 years of experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. Assignments have included a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation.

### **Employment**

*President*  
FINCAP, Inc.  
(June 1984 to June 1987)  
(April 1988 to present)

Economic consulting firm specializing in regulated industries and valuation of closely-held businesses. Assignments have involved electric, gas, telecommunication, and water/sewer utilities, with clients including utilities, consumer groups, municipalities, regulatory agencies, and cogenerators. Areas of participation have included rate of return, revenue requirements, rate design, tariff analysis, avoided cost, forecasting, and negotiations. Develop cost of capital analyses using alternative market models for electric, gas, and telephone utilities. Prepare pre-filed direct and rebuttal testimony, participate in settlement negotiations, respond to interrogatories, evaluate opposition testimony, and assist in the areas of cross-examination and the preparations of legal briefs. Other assignments have involved preparation of technical reports, valuations, estimation of damages, industry studies, and various economic analyses in support of litigation.

*Manager,*  
McKenzie Energy Company  
(Jan. 1981 to May. 1984)

Responsible for operations and accounting for firm engaged in the management of working interests in oil and gas properties.

## **Education**

*M.B.A., Finance,*  
University of Texas at Austin  
(Sep. 1982 to May. 1984)

Program included coursework in corporate finance, accounting, financial modeling, and statistics. Received Dean's Award for Academic Excellence and Good Neighbor Scholarship.

Professional Report: *The Impact of Construction Expenditures on Investor-Owned Electric Utilities*

*B.B.A., Finance,*  
University of Texas at Austin  
(Jan. 1981 to May 1982)

Electives included capital market theory, portfolio management, and international economics and finance. Elected to Beta Gamma Sigma business honor society. Dean's List 1981-1982.

Simon Fraser University,  
Vancouver, Canada and University  
of Hawaii at Manoa, Honolulu,  
Hawaii  
(Jan. 1979 to Dec 1980)

Coursework in accounting, finance, economics, and liberal arts.

## **Professional Associations**

Received Chartered Financial Analyst (CFA®) designation in 1990.

*Member* – CFA Institute.

## **Bibliography**

“A Profile of State Regulatory Commissions,” A Special Report by the Electricity Consumers Resource Council (ELCON), Summer 1991.

“The Impact of Regulatory Climate on Utility Capital Costs: An Alternative Test,” with Bruce H. Fairchild, *Public Utilities Fortnightly* (May 25, 1989).

## **Presentations**

“ROE at FERC: Issues and Methods,” *Expert Briefing on Parallels in ROE Issues between AER, ERA, and FERC*, Jones Day (Sydney, Melbourne, and Perth, Australia) (April 15, 2014).

*Cost of Capital Working Group eforum*, Edison Electric Institute (April 24, 2012).

“Cost-of-Service Studies and Rate Design,” General Management of Electric Utilities (A Training Program for Electric Utility Managers from Developing Countries), Austin, Texas (October 1989 and November 1990 and 1991).

### **Representative Assignments**

Mr. McKenzie has prepared and sponsored prefiled testimony submitted in over 150 regulatory proceedings. In addition to filings before regulatory agencies in Alaska, Arkansas, Colorado, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming, Mr. McKenzie has considerable expertise in preparing expert analyses and testimony before the Federal Energy Regulatory Commission (“FERC”) on the issue of rate of return on equity (“ROE”), and has broad experience in applying and evaluating the results of quantitative methods to estimate a fair ROE. Other representative assignments have included developing cost of service and cost allocation studies, the application of econometric models to analyze the impact of anti-competitive behavior and estimate lost profits; development of explanatory models for nuclear plant capital costs in connection with prudence reviews; and the analysis of avoided cost pricing for cogenerated power.

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI  
TESTIMONY**

**EXHIBIT NO. 8**

**SUMMARY OF RESULTS**

<b>Method</b>	<b>Average</b>
<b>DCF</b>	
Value Line	9.2%
IBES	10.3%
Zacks	10.0%
Internal br + sv	9.0%
<b>CAPM</b>	11.2%
<b>ECAPM</b>	11.4%
<b>Utility Risk Premium</b>	10.6%
<b>Expected Earnings</b>	11.0%

<b>ROE Recommendation</b>			
<b><u>Cost of Equity</u></b>	<b>10.0%</b>	<b>--</b>	<b>11.0%</b>
<b><u>Flotation Cost Adjustment</u></b>			
Electric Group Dividend Yield	3.88%		
Flotation Cost Expense Factor	<u>2.56%</u>		
Flotation Cost Adjustment	0.10%		
<b><u>Recommended ROE Range</u></b>			
Range	<b>10.1%</b>	<b>--</b>	<b>11.1%</b>
Midpoint		<b>10.6%</b>	



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI  
TESTIMONY**

**EXHIBIT NO. 9**

ELECTRIC GROUP

Company	Type of Adjustment Clause (a)									(b)	(c)
	Fuel/PPA	Conserv. Program Expense	Decoupling		New Capital				Trans. Costs	Future Test Year	Formula Rates / MRP
			Full	Partial	Trad. Generation	Renewables/ Non-Trad.	Delivery Infra.	Environ. Compliance			
1 ALLETE	✓	✓	--	--	--	--	--	✓	✓	C	✓
2 Ameren Corp.	✓	✓	✓	✓	--	✓	✓	✓	✓	O,P	✓
3 Avista Corp.	✓	✓	✓	--	--	--	--	--	--	P	✓
4 Black Hills Corp.	✓	✓	--	✓	✓	✓	--	✓	✓	O	✓
5 CMS Energy Corp.	✓	✓	--	--	--	✓	--	--	✓	C	--
6 Dominion Energy	✓	✓	--	--	✓	✓	✓	✓	✓	--	✓
7 DTE Energy Co.	✓	✓	--	--	--	✓	--	--	✓	C	--
8 Duke Energy Corp.	✓	✓	--	✓	✓	✓	✓	✓	✓	C,O,P	✓
9 Entergy Corp.	✓	✓	--	✓	✓	✓	✓	✓	✓	O,P	✓
10 Exelon Corp.	D	✓	✓	✓	--	✓	✓	✓	--	O,P	✓
11 Hawaiian Elec.	✓	✓	--	--	--	✓	--	--	--	C	✓
12 IDACORP, Inc.	✓	✓	✓	--	--	--	--	--	--	C,P	--
13 NorthWestern Corp.	✓	✓	--	--	--	--	--	--	--	--	--
14 OGE Energy Corp.	✓	✓	--	✓	✓	✓	✓	✓	✓	P	✓
15 Otter Tail Corp.	✓	✓	--	--	✓	✓	✓	✓	✓	C,O	✓
16 Pinnacle West Capital	✓	✓	--	✓	--	✓	--	✓	✓	--	✓
17 Portland General Elec.	✓	✓	--	--	✓	✓		✓	✓	C	--
18 Pub Sv Enterprise Grp.	D	✓	--	✓	--	--	✓	✓	--	P	--
19 Semptra Energy	✓	✓	✓	--	--	--	✓	--	✓	C	✓
20 Southern Company	✓	--	--	✓	✓	✓	--	✓	--	C,O	✓

Notes

D - Delivery-only utility.

C - Fully-forecasted test years commonly used in the state listed for this operating company.

O - Fully-forecasted test years occasionally used in the state listed for this operating company.

P - Partially-forecasted test years commonly or occasionally used in the state listed for this operating company.

Source: Exhibit 9, pages 2-4, contain operating company data that are aggregated into the parent company data on this page.

## REGULATORY MECHANISMS

Exhibit 9

Page 2 of 4

ELECTRIC GROUP OPERATING COS.

	Company	State	Fuel/PPA	Type of Adjustment Clause (a)									(b)	(c)		
				Conserv. Program Expense	Decoupling		New Capital						Trans. Costs	Future Test Year	Formula Rates / MRP	
					Full	Partial	Trad. Generation	Renewables/ Non-Trad.	Delivery Infra.	Environ. Compliance						
1	ALLETE															
	Minnesota Power Enterprises Inc.	MN	✓	✓	--	--	--	✓	--	--	✓	C	✓			
2	AMEREN CORP.															
	Ameren Illinois Co.	IL	D	*	✓	--	✓	*	--	✓	--	✓	*	✓	O	✓
	Union Electric Co.	MO	✓	✓	*	--	✓	*	--	✓	*	✓	*	✓	P	--
3	AVISTA CORP.															
	Alaska Electric Light & Power Co.	AK	✓	--	--	--	--	--	--	--	--	--	--	--	--	--
	Avista Corp.	ID	✓	*	✓	✓	*	--	--	--	--	--	--	--	P	--
	Avista Corp.	WA	✓	*	✓	✓	--	*	--	--	--	--	--	--	--	✓
4	BLACK HILLS CORP.															
	Black Hills Colorado Electric Inc.	CO	✓	✓	--	--	✓	*	✓	--	--	✓	--	✓	--	✓
	Black Hills Power Inc.	SD	✓	--	--	--	--	--	--	--	✓	*	✓	*	--	--
	Cheyenne Light Fuel & Power Co.	WY	✓	✓	--	✓	*	--	--	--	--	--	--	--	O	--
5	CMS ENERGY															
	Consumers Energy Co.	MI	✓	✓	--	*	--	--	✓	--	--	✓	*	C	--	--
6	DOMINION ENERGY															
	Virginia Electric & Power Co.	NC	✓	✓	*	--	--	*	--	✓	*	✓	--	--	--	--
	Dominion Energy South Carolina	SC	✓	✓	--	--	✓	*	--	--	✓	--	--	--	--	✓
	Virginia Electric & Power Co.	VA	✓	✓	--	--	✓	✓	✓	✓	✓	✓	✓	--	--	✓
7	DTE ENERGY CO.															
	DTE Electric Co.	MI	✓	✓	--	*	--	--	✓	--	--	✓	*	C	--	--
8	DUKE ENERGY															
	Duke Energy Florida LLC	FL	✓	✓	--	--	✓	*	✓	*	--	*	✓	--	C	✓
	Duke Energy Indiana LLC	IN	✓	✓	--	✓	*	--	✓	✓	✓	*	✓	*	--	✓
	Duke Energy Kentucky Inc.	KY	✓	✓	--	✓	*	--	--	--	✓	--	--	--	O	--
	Duke Energy Carolinas LLC	NC	✓	✓	*	--	--	*	✓	*	--	✓	--	--	--	--
	Duke Energy Progress LLC	NC	✓	✓	*	--	--	*	✓	*	--	✓	--	--	--	--
	Duke Energy Ohio Inc.	OH	D	*	✓	*	✓	*	✓	✓	*	--	✓	P	✓	✓
	Duke Energy Progress LLC	SC	✓	✓	--	--	--	*	--	--	✓	--	--	--	--	✓
	Duke Energy Carolinas LLC	SC	✓	✓	--	--	--	*	--	--	✓	--	--	--	--	✓

## REGULATORY MECHANISMS

Exhibit 9

Page 3 of 4

ELECTRIC GROUP OPERATING COS.

Company	State	Fuel/PPA	Type of Adjustment Clause (a)										(b) (c)			
			Conserv. Program Expense	Decoupling		New Capital					Trans. Costs	Future Test Year	Formula Rates / MRP			
				Full	Partial	Trad. Generation	Renewables/ Non-Trad.	Delivery Infra.	Environ. Compliance							
9 ENTERGY CORP.																
Entergy Arkansas LLC	AR	✓	✓		--	✓	*	✓	*	✓	*	✓	--	✓	P	✓
Entergy New Orleans LLC	LA	✓	✓		--	--		--		✓		--	✓	*	✓	✓
Entergy Louisiana LLC	LA	✓	✓	*	--	✓	*	--		--		--	✓		O	✓
Entergy Mississippi LLC	MS	✓	--		--	✓	*	--		--		--	--	✓	O	✓
Entergy Texas Inc.	TX	✓	*	✓	--	--		✓	*	--		✓	--	✓	--	✓
10 EXELON CORP.																
Delmarva Power & Light Co.	DE	D	*	✓	--	--		--			✓	*	--	✓	P	--
Potomac Electric Power Co.	DC	D	*	--	--	✓	*	--		✓	*	✓	--	--	P	--
Commonwealth Edison Co.	IL	D	*	✓	--	--		--		✓	*	✓	*	✓	O	✓
Baltimore Gas & Electric Co.	MD	D	*	✓	✓	--		--		--		--	--	--	P	--
Delmarva Power & Light Co.	MD	D	*	✓	✓	--		--		--		--	--	--	P	--
Potomac Electric Power Co.	MD	D	*	✓	✓	--		--		--	✓	*	--	--	P	--
Atlantic City Electric Co.	NJ	D	*	✓	*	--	✓	*	--	--	✓	*	✓	*	P	--
PECO Energy Co.	PA	D	*	✓	--	--		--		--	✓	*	--	✓	O	--
11 HAWAIIAN ELEC.																
Hawaiian Electric Co.	HI	✓	✓		--	--		--		✓	*	--	--	--	C	✓
Hawaii Electric Light Co.	HI	✓	✓		--	--		--		--		--	--	--	C	✓
Maui Electric Co.	HI	✓	✓		--	--		--		✓	*	--	--	--	C	✓
12 IDACORP																
Idaho Power Co.	ID	✓	*	✓	✓	*	--	--		--		--	--	--	P	--
Idaho Power Co.	OR	✓	✓		--	--		--		--		--	--	--	C	--
13 NORTHWESTERN CORP.																
NorthWestern Corp.	MT	✓	*	✓	--	--		--		--		--	--	--	--	--
NorthWestern Corp.	SD	✓	✓		--	--		--		--		--	--	--	--	--
14 OGE ENERGY CORP.																
Oklahoma Gas & Electric Co.	AR	✓	✓		--	✓	*	✓		✓		✓		✓	P	--
Oklahoma Gas & Electric Co.	OK	✓	✓	*	--	✓	*	--		--	✓	*	✓	*	✓	✓
15 OTTER TAIL CORP.																
Otter Tail Power Co.	MN	✓	✓		--	--		--		✓		--	✓	✓	C	--
Otter Tail Power Co.	ND	✓	--		--	--		✓	*	✓	*	✓	*	✓	*	O
Otter Tail Power Corp.	SD	✓	✓		--	--		✓	*	--		✓		--	--	--
16 PINNACLE WEST CAPITAL																
Arizona Public Service Co.	AZ	✓	✓		--	✓	*	--		✓		--	✓	✓	--	✓
17 PORTLAND GENERAL ELECTRIC																
Portland General Electric Co.	OR	✓	✓		--	--		✓	*	✓	*	--	✓	*	C	--

## REGULATORY MECHANISMS

Exhibit 9

Page 4 of 4

ELECTRIC GROUP OPERATING COS.

Company	State	Fuel/PPA	Type of Adjustment Clause (a)										(b)	(c)			
			Conserv. Program Expense	Decoupling		New Capital				Trans. Costs	Future Test Year	Formula Rates / MRP					
				Full	Partial	Trad. Generation	Renewables/ Non-Trad.	Delivery Infra.	Environ. Compliance								
18 PUB SV ENTERPRISE GRP																	
Public Service Electric & Gas Co.	NJ	D	*	✓	*	--	✓	*	--	--	✓	*	✓	*	--	P	--
19 SEMPRA ENERGY																	
San Diego Gas & Electric Co.	CA	✓		--		✓	--	--	--	--	--	--	--	--	--	C	✓
Oncor Electric Delivery Co.	TX	D	*	✓		--	--	--	--	--	✓	--	--	✓	--	--	✓
20 SOUTHERN CO.																	
Alabama Power Co.	AL	✓	*	--		--	--	✓	*	✓	--	✓	*	--	--	C	✓
Georgia Power Co.	GA	✓		--		--	--	✓	*	--	--	✓	*	--	--	C	✓
Mississippi Power Co.	MS	✓		--		--	✓	*	--	--	--	✓	*	--	--	O	✓

(a) S&P Global Market Intelligence, *Adjustment clauses: A state by state overview*, Regulatory Focus Topical Special Report (Jul. 18, 2022).

(b) Edison Electric Institute, *Alternative Regulation for Emerging Utility Challenges: 2015 Update* (Nov. 11, 2015).

(c) Formula rates and Multiyear Rate plans approved in the state listed for this operating company. See, U.S. Department of Energy, *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities*, GRID Modernization Laboratory Consortium (Jul. 2017); The Brattle Group, *Exploring the Use of Alternative Regulatory Mechanisms to Establish New Base Rates*, Joint Utilities of Maryland (Mar. 29, 2018); SEC Form 10-K Reports.

Notes

D - Delivery-only utility.

C - Fully-forecasted test years commonly used in the state listed for this operating company.

O - Fully-forecasted test years occasionally used in the state listed for this operating company.

P - Partially-forecasted test years commonly or occasionally used in the state listed for this operating company.

\* For additional context around the specific recovery mechanisms available to the particular operating companies in each state, see the source document.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 10**

# CAPITAL STRUCTURE

Exhibit 10

Page 1 of 3

## ELECTRIC GROUP

	Company	At Year-end 2022 (a)			Value Line Projected (b)		
		Debt	Preferred	Common Equity	Debt	Preferred	Common Equity
1	ALLETE	36.5%	0.0%	63.5%	40.5%	0.0%	59.5%
2	Ameren Corp.	56.9%	0.0%	43.1%	51.0%	0.5%	48.5%
3	Avista Corp.	49.6%	0.0%	50.4%	48.5%	0.0%	51.5%
4	Black Hills Corp.	57.2%	0.0%	42.8%	50.0%	0.0%	50.0%
5	CMS Energy Corp.	65.2%	1.0%	33.8%	61.5%	1.0%	37.5%
6	Dominion Energy	60.2%	2.5%	37.2%	57.0%	2.0%	41.0%
7	DTE Energy Co.	63.4%	0.0%	36.6%	61.0%	0.0%	39.0%
8	Duke Energy Corp.	57.9%	1.6%	40.5%	61.0%	1.5%	37.5%
9	Entergy Corp.	66.1%	0.6%	33.3%	67.0%	0.0%	33.0%
10	Exelon Corp.	60.0%	0.0%	40.0%	64.5%	0.0%	35.5%
11	Hawaiian Elec.	57.9%	0.6%	41.4%	50.0%	0.5%	49.5%
12	IDACORP, Inc.	43.8%	0.0%	56.2%	50.0%	0.0%	50.0%
13	NorthWestern Corp.	48.3%	0.0%	51.7%	49.0%	0.0%	51.0%
14	OGE Energy Corp.	50.8%	0.0%	49.2%	50.0%	0.0%	50.0%
15	Otter Tail Corp.	40.4%	0.0%	59.6%	42.5%	0.0%	57.5%
16	Pinnacle West Capital	55.8%	0.0%	44.2%	54.5%	0.0%	45.5%
17	Portland General Elec.	58.8%	0.0%	41.2%	55.0%	0.0%	45.0%
18	Pub Sv Enterprise Grp.	56.8%	0.0%	43.2%	54.5%	0.0%	45.5%
19	Sempra Energy	44.9%	1.6%	53.5%	46.0%	1.5%	52.5%
20	Southern Company	61.4%	0.0%	38.6%	63.0%	0.0%	37.0%
<b>Minimum</b>		<b>36.5%</b>	<b>0.0%</b>	<b>33.3%</b>	<b>40.5%</b>	<b>0.0%</b>	<b>33.0%</b>
<b>Maximum</b>		<b>66.1%</b>	<b>2.5%</b>	<b>63.5%</b>	<b>67.0%</b>	<b>2.0%</b>	<b>59.5%</b>
<b>Average</b>		<b>54.6%</b>	<b>0.4%</b>	<b>45.0%</b>	<b>53.8%</b>	<b>0.4%</b>	<b>45.8%</b>

(a) SEC Form 10-K reports. Debt includes current maturities.

(b) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).



**ELECTRIC GROUP OPERATING COS.**

	Operating Company	At Year-End 2022 (a)		
		Debt	Preferred	Common Equity
<b>1</b>	<b>ALLETE</b>			
	ALLETE, Inc. (Minnesota Power)	40.3%	0.0%	59.7%
<b>2</b>	<b>AMEREN CORP.</b>			
	Ameren Illinois Co.	43.9%	0.4%	55.6%
	Union Electric Co.	48.6%	0.6%	50.7%
<b>3</b>	<b>AVISTA CORP.</b>			
	Avista Corp.	49.3%	0.0%	50.7%
	Alaska Electric Light & Power	39.1%	0.0%	60.9%
<b>4</b>	<b>BLACK HILLS CORP.</b>			
	Black Hills Power	49.9%	0.0%	50.1%
	Cheyenne Light Fuel & Power	57.2%	0.0%	42.8%
	Black Hills/Colorado Electric Utility Co	52.1%	0.0%	47.9%
<b>5</b>	<b>CMS ENERGY</b>			
	Consumers Energy Co.	50.2%	0.2%	49.6%
<b>6</b>	<b>DOMINION ENERGY</b>			
	Virginia Electric & Power	48.4%	0.0%	51.6%
	Dominion Energy South Carolina	45.2%	0.0%	54.8%
<b>7</b>	<b>DTE ENERGY CO.</b>			
	DTE Electric Co.	50.0%	0.0%	50.0%
<b>8</b>	<b>DUKE ENERGY</b>			
	Duke Energy Carolinas	48.0%	0.0%	52.0%
	Duke Energy Florida	51.8%	0.0%	48.2%
	Duke Energy Indiana	47.8%	0.0%	52.2%
	Duke Energy Ohio	40.5%	0.0%	59.5%
	Duke Energy Progress	51.8%	0.0%	48.2%
	Duke Energy Kentucky	47.0%	0.0%	53.0%
<b>9</b>	<b>ENTERGY CORP.</b>			
	Entergy Arkansas Inc.	52.4%	0.0%	47.6%
	Entergy Louisiana LLC	53.0%	0.0%	47.0%
	Entergy Mississippi Inc.	53.3%	0.0%	46.7%
	Entergy New Orleans Inc.	52.4%	0.0%	47.6%
	Entergy Texas Inc.	51.9%	0.7%	47.4%
<b>10</b>	<b>EXELON CORP.</b>			
	Delmarva Power and Light	49.8%	0.0%	50.2%
	Baltimore Gas & Electric Co.	46.0%	0.0%	54.0%
	Commonwealth Edison Co.	44.5%	0.0%	55.5%
	PECO Energy Co.	46.3%	0.0%	53.7%
	Potomac Electric Power Co.	49.8%	0.0%	50.2%
	Atlantic City Electric Co.	50.1%	0.0%	49.9%

**ELECTRIC GROUP OPERATING COS.**

	Operating Company	At Year-End 2022 (a)		
		Debt	Preferred	Common Equity
11	<b>HAWAIIAN ELEC.</b> Hawaiian Electric Co.	41.5%	0.8%	57.7%
12	<b>IDACORP</b> Idaho Power Co.	45.5%	0.0%	54.5%
13	<b>NORTHWESTERN CORP.</b> NorthWestern Corporation	49.7%	0.0%	50.3%
14	<b>OGE ENERGY CORP.</b> Oklahoma G&E	44.2%	0.0%	55.8%
15	<b>OTTER TAIL CORP.</b> Otter Tail Power Co.	45.1%	0.0%	54.9%
16	<b>PINNACLE WEST CAPITAL</b> Arizona Public Service Co.	49.1%	0.0%	50.9%
17	<b>PORTLAND GENERAL ELECTRIC</b> Portland General Electric	56.8%	0.0%	43.2%
18	<b>PUB SV ENTERPRISE GRP</b> Pub Service Electric & Gas Co.	44.7%	0.0%	55.3%
19	<b>SEMPRA ENERGY</b> San Diego Gas & Electric	49.8%	0.0%	50.2%
	Oncor Electric Delivery	43.3%	0.0%	56.7%
20	<b>SOUTHERN CO.</b> Alabama Power Co.	47.6%	0.0%	52.4%
	Georgia Power Co.	44.2%	0.0%	55.8%
	Mississippi Power Co.	44.4%	0.0%	55.6%
Minimum		<b>39.1%</b>	<b>0.0%</b>	<b>42.8%</b>
Maximum		<b>57.2%</b>	<b>0.8%</b>	<b>60.9%</b>
Average		<b>48.1%</b>	<b>0.1%</b>	<b>51.8%</b>

(a) Data from 2022 SEC Form 10-K and FERC Form 1 reports. Debt includes current maturities.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
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**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 11**

**DIVIDEND YIELD**

		(a)	(b)	
	<b>Company</b>	<b>Price</b>	<b>Dividends</b>	<b>Yield</b>
1	ALLETE	\$ 61.92	\$ 2.71	4.4%
2	Ameren Corp.	\$ 84.03	\$ 2.52	3.0%
3	Avista Corp.	\$ 41.11	\$ 1.84	4.5%
4	Black Hills Corp.	\$ 61.80	\$ 2.50	4.0%
5	CMS Energy Corp.	\$ 60.10	\$ 1.95	3.2%
6	Dominion Energy	\$ 55.51	\$ 2.75	5.0%
7	DTE Energy Co.	\$ 108.71	\$ 3.81	3.5%
8	Duke Energy Corp.	\$ 95.49	\$ 4.02	4.2%
9	Entergy Corp.	\$ 104.69	\$ 4.28	4.1%
10	Exelon Corp.	\$ 41.21	\$ 1.44	3.5%
11	Hawaiian Elec.	\$ 39.02	\$ 1.44	3.7%
12	IDACORP, Inc.	\$ 104.16	\$ 3.16	3.0%
13	NorthWestern Corp.	\$ 56.81	\$ 2.56	4.5%
14	OGE Energy Corp.	\$ 36.13	\$ 1.70	4.7%
15	Otter Tail Corp.	\$ 69.99	\$ 1.76	2.5%
16	Pinnacle West Capital	\$ 75.82	\$ 3.48	4.6%
17	Portland General Elec.	\$ 47.58	\$ 1.88	4.0%
18	Pub Sv Enterprise Grp.	\$ 59.49	\$ 2.28	3.8%
19	Sempra Energy	\$ 149.16	\$ 4.80	3.2%
20	Southern Company	\$ 65.96	\$ 2.72	4.1%
	<b>Average</b>			<b>3.9%</b>

(a) Average of closing prices for 30 trading days ended Mar. 29, 2023.

(b) The Value Line Investment Survey, Summary & Index (Mar. 31, 2023).

**GROWTH RATES**

		(a)	(b)	(c)	(d)
		Earnings Growth			br+sv
	Company	V Line	IBES	Zacks	Growth
1	ALLETE	6.0%	8.7%	7.3%	4.8%
2	Ameren Corp.	6.5%	6.7%	6.9%	5.8%
3	Avista Corp.	3.5%	5.2%	5.2%	4.3%
4	Black Hills Corp.	6.0%	5.4%	2.2%	6.2%
5	CMS Energy Corp.	6.5%	8.0%	8.0%	6.5%
6	Dominion Energy	4.0%	6.1%	14.9%	5.9%
7	DTE Energy Co.	4.5%	7.4%	6.0%	6.2%
8	Duke Energy Corp.	5.0%	5.3%	5.4%	3.6%
9	Entergy Corp.	0.5%	6.6%	6.0%	3.2%
10	Exelon Corp.	n/a	6.3%	6.6%	4.5%
11	Hawaiian Elec.	4.5%	1.3%	3.1%	4.6%
12	IDACORP, Inc.	4.5%	3.0%	3.0%	3.6%
13	NorthWestern Corp.	3.5%	4.5%	1.7%	3.5%
14	OGE Energy Corp.	6.5%	-12.3%	10.2%	5.0%
15	Otter Tail Corp.	4.5%	9.0%	n/a	4.7%
16	Pinnacle West Capital	0.5%	7.1%	n/a	3.3%
17	Portland General Elec.	5.0%	4.2%	6.1%	5.2%
18	Pub Sv Enterprise Grp.	4.5%	2.4%	4.3%	4.9%
19	Sempra Energy	7.0%	4.1%	5.4%	4.7%
20	Southern Company	6.5%	7.3%	4.0%	6.8%

(a) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).

(b) www.finance.yahoo.com (retrieved Mar. 30, 2023).

(c) www.zacks.com (retrieved Mar. 30, 2023).

(d) See Exhibit 12.

COST OF EQUITY ESTIMATES

	(a)	(a)	(a)	(a)
	V Line	IBES	Zacks	br+sv Growth
1 ALLETE	10.4%	13.1%	11.7%	9.2%
2 Ameren Corp.	9.5%	9.7%	9.9%	8.8%
3 Avista Corp.	8.0%	9.7%	9.7%	8.8%
4 Black Hills Corp.	10.0%	9.4%	6.2%	10.2%
5 CMS Energy Corp.	9.7%	11.2%	11.3%	9.8%
6 Dominion Energy	9.0%	11.0%	19.8%	10.9%
7 DTE Energy Co.	8.0%	10.9%	9.5%	9.7%
8 Duke Energy Corp.	9.2%	9.5%	9.6%	7.8%
9 Entergy Corp.	4.6%	10.7%	10.1%	7.3%
10 Exelon Corp.	n/a	9.8%	10.1%	7.9%
11 Hawaiian Elec.	8.2%	5.0%	6.8%	8.3%
12 IDACORP, Inc.	7.5%	6.0%	6.0%	6.7%
13 NorthWestern Corp.	8.0%	9.0%	6.2%	8.1%
14 OGE Energy Corp.	11.2%	-7.6%	14.9%	9.8%
15 Otter Tail Corp.	7.0%	11.5%	n/a	7.2%
16 Pinnacle West Capital	5.1%	11.6%	n/a	7.8%
17 Portland General Elec.	9.0%	8.1%	10.0%	9.2%
18 Pub Sv Enterprise Grp.	8.3%	6.2%	8.2%	8.7%
19 Sempra Energy	10.2%	7.4%	8.6%	7.9%
20 Southern Company	10.6%	11.4%	8.1%	10.9%
<b>Average (b)</b>	<b>9.2%</b>	<b>10.3%</b>	<b>10.0%</b>	<b>9.0%</b>

(a) Sum of dividend yield (Exhibit 11, p. 1) and respective growth rate (Exhibit 11, p. 2).

(b) Excludes highlighted values.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 12**



**BR+SV GROWTH RATE**
**Exhibit 12**
**Page 1 of 2**
**ELECTRIC GROUP**

		(a)	(a)	(a)	(b)	(c)	(d)	(e)		(f)	(g)		
		<b>2027</b>			<b>Adjustment</b>					<b>"sv" Factor</b>			
	<b>Company</b>	<b>EPS</b>	<b>DPS</b>	<b>BVPS</b>	<b>b</b>	<b>r</b>	<b>Factor</b>	<b>Adjusted r</b>	<b>br</b>	<b>s</b>	<b>v</b>	<b>sv</b>	<b>br + sv</b>
1	ALLETE	\$5.00	\$3.00	\$54.00	40.0%	9.3%	1.0246	9.5%	3.8%	0.0271	0.3647	0.99%	4.8%
2	Ameren Corp.	\$5.50	\$3.30	\$55.00	40.0%	10.0%	1.0296	10.3%	4.1%	0.0339	0.5000	1.70%	5.8%
3	Avista Corp.	\$2.85	\$2.05	\$34.95	28.1%	8.2%	1.0305	8.4%	2.4%	0.0498	0.3922	1.95%	4.3%
4	Black Hills Corp.	\$5.25	\$2.95	\$50.75	43.8%	10.3%	1.0297	10.7%	4.7%	0.0340	0.4514	1.53%	6.2%
5	CMS Energy Corp.	\$3.75	\$2.30	\$26.00	38.7%	14.4%	1.0105	14.6%	5.6%	0.0148	0.6000	0.89%	6.5%
6	Dominion Energy	\$5.10	\$3.30	\$43.40	35.3%	11.8%	1.0392	12.2%	4.3%	0.0305	0.5308	1.62%	5.9%
7	DTE Energy Co.	\$8.30	\$4.65	\$60.75	44.0%	13.7%	1.0192	13.9%	6.1%	0.0007	0.5881	0.04%	6.2%
8	Duke Energy Corp.	\$6.80	\$4.30	\$70.00	36.8%	9.7%	1.0133	9.8%	3.6%	0.0004	0.4043	0.02%	3.6%
9	Entergy Corp.	\$6.50	\$5.00	\$73.00	23.1%	8.9%	1.0289	9.2%	2.1%	0.0277	0.3787	1.05%	3.2%
10	Exelon Corp.	\$3.00	\$1.80	\$28.75	40.0%	10.4%	0.9820	10.2%	4.1%	0.0078	0.4524	0.35%	4.5%
11	Hawaiian Elec.	\$2.60	\$1.60	\$25.50	38.5%	10.2%	1.0209	10.4%	4.0%	0.0124	0.4632	0.57%	4.6%
12	IDACORP, Inc.	\$6.10	\$4.00	\$67.30	34.4%	9.1%	1.0238	9.3%	3.2%	0.0101	0.4272	0.43%	3.6%
13	NorthWestern Corp.	\$4.00	\$2.68	\$50.00	33.0%	8.0%	1.0277	8.2%	2.7%	0.0361	0.2308	0.83%	3.5%
14	OGE Energy Corp.	\$3.15	\$1.85	\$26.00	41.3%	12.1%	1.0091	12.2%	5.0%	-	0.3882	0.00%	5.0%
15	Otter Tail Corp.	\$3.65	\$2.20	\$34.25	39.7%	10.7%	1.0195	10.9%	4.3%	0.0079	0.4731	0.37%	4.7%
16	Pinnacle West Capital	\$5.25	\$3.66	\$59.25	30.3%	8.9%	1.0172	9.0%	2.7%	0.0139	0.3763	0.52%	3.3%
17	Portland General Elec.	\$3.50	\$2.24	\$37.00	36.0%	9.5%	1.0316	9.8%	3.5%	0.0398	0.4308	1.71%	5.2%
18	Pub Sv Enterprise Grp.	\$4.50	\$2.80	\$33.75	37.8%	13.3%	1.0151	13.5%	5.1%	(0.0037)	0.5645	-0.21%	4.9%
19	Sempra Energy	\$11.25	\$5.82	\$102.65	48.3%	11.0%	1.0224	11.2%	5.4%	(0.0145)	0.4736	-0.69%	4.7%
20	Southern Company	\$5.15	\$3.10	\$32.25	39.8%	16.0%	1.0216	16.3%	6.5%	0.0050	0.6206	0.31%	6.8%

**BR+SV GROWTH RATE**
**Exhibit 12**
**Page 2 of 2**
**ELECTRIC GROUP**

	(a)	(a)	(h)	(a)	(a)	(h)	(i)	(a)	(a)		(j)	(a)	(a)	(i)
	2022			2027			Chg	2027				Common Shares		
Company	Eq Ratio	Tot Cap	Com Eq	Eq Ratio	Tot Cap	Com Eq	Equity	High	Low	Avg.	M/B	2022	2027	Growth
1 ALLETE	57.8%	\$4,465	\$2,581	59.5%	\$5,550	\$3,302	5.1%	\$100.0	\$70.0	\$85.0	1.574	56.01	61.00	1.72%
2 Ameren Corp.	44.0%	\$24,193	\$10,645	48.5%	\$29,500	\$14,308	6.1%	\$120.0	\$100.0	\$110.0	2.000	262.00	285.00	1.70%
3 Avista Corp.	52.5%	\$4,105	\$2,155	51.5%	\$5,675	\$2,923	6.3%	\$65.0	\$50.0	\$57.5	1.645	71.50	83.00	3.03%
4 Black Hills Corp.	40.3%	\$6,914	\$2,786	50.0%	\$7,500	\$3,750	6.1%	\$105.0	\$80.0	\$92.5	1.823	64.74	71.00	1.86%
5 CMS Energy Corp.	34.5%	\$20,350	\$7,021	37.5%	\$20,800	\$7,800	2.1%	\$75.0	\$55.0	\$65.0	2.500	291.30	300.00	0.59%
6 Dominion Energy	38.5%	\$66,344	\$25,542	41.0%	\$92,200	\$37,802	8.2%	\$105.0	\$80.0	\$92.5	2.131	810.40	870.00	1.43%
7 DTE Energy Co.	37.0%	\$28,000	\$10,360	39.0%	\$32,200	\$12,558	3.9%	\$170.0	\$125.0	\$147.5	2.428	205.69	206.00	0.03%
8 Duke Energy Corp.	43.1%	\$109,744	\$47,300	37.5%	\$144,100	\$54,038	2.7%	\$135.0	\$100.0	\$117.5	1.679	769.00	770.00	0.03%
9 Entergy Corp.	35.2%	\$36,810	\$12,957	33.0%	\$52,410	\$17,295	5.9%	\$135.0	\$100.0	\$117.5	1.610	211.18	230.00	1.72%
10 Exelon Corp.	49.1%	\$70,107	\$34,423	35.5%	\$81,000	\$28,755	-3.5%	\$60.0	\$45.0	\$52.5	1.826	979.00	1000.00	0.43%
11 Hawaiian Elec.	52.8%	\$4,524	\$2,389	49.5%	\$5,950	\$2,945	4.3%	\$55.0	\$40.0	\$47.5	1.863	109.31	113.00	0.67%
12 IDACORP, Inc.	57.2%	\$4,669	\$2,671	50.0%	\$6,775	\$3,388	4.9%	\$130.0	\$105.0	\$117.5	1.746	50.52	52.00	0.58%
13 NorthWestern Corp.	47.8%	\$4,893	\$2,339	51.0%	\$6,050	\$3,086	5.7%	\$75.0	\$55.0	\$65.0	1.300	54.06	62.00	2.78%
14 OGE Energy Corp.	53.0%	\$8,962	\$4,750	50.0%	\$10,400	\$5,200	1.8%	\$50.0	\$35.0	\$42.5	1.635	200.20	200.20	0.00%
15 Otter Tail Corp.	58.5%	\$2,041	\$1,194	57.5%	\$2,525	\$1,452	4.0%	\$75.0	\$55.0	\$65.0	1.898	41.63	42.50	0.41%
16 Pinnacle West Capital	46.1%	\$12,820	\$5,910	45.5%	\$15,425	\$7,018	3.5%	\$110.0	\$80.0	\$95.0	1.603	113.01	118.00	0.87%
17 Portland General Elec.	43.2%	\$6,265	\$2,706	45.0%	\$8,250	\$3,713	6.5%	\$75.0	\$55.0	\$65.0	1.757	89.41	100.00	2.26%
18 Pub Sv Enterprise Grp.	48.7%	\$29,657	\$14,443	45.5%	\$36,900	\$16,790	3.1%	\$85.0	\$70.0	\$77.5	2.296	504.00	500.00	-0.16%
19 Sempra Energy	53.3%	\$47,069	\$25,088	52.5%	\$59,800	\$31,395	4.6%	\$225.0	\$165.0	\$195.0	1.900	316.92	305.00	-0.76%
20 Southern Company	35.6%	\$78,285	\$27,869	37.0%	\$93,500	\$34,595	4.4%	\$100.0	\$70.0	\$85.0	2.636	1060.00	1070.00	0.19%

- (a) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).
- (b) "b" is the retention ratio, computed as (EPS-DPS)/EPS.
- (c) "r" is the rate of return on book equity, computed as EPS/BVPS.
- (d) Computed using the formula  $2 * (1 + 5\text{-Yr. Change in Equity}) / (2 + 5\text{ Yr. Change in Equity})$ .
- (e) Product of average year-end "r" for 2027 and Adjustment Factor.
- (f) Product of change in common shares outstanding and M/B Ratio.
- (g) Computed as  $1 - B/M$  Ratio.
- (h) Product of total capital and equity ratio.
- (i) Five-year rate of change.
- (j) Average of High and Low expected market prices divided by 2027 BVPS.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 13**

## CAPM

Exhibit 13

Page 1 of 1

ELECTRIC GROUP

	(a)	(b)	(c)		(d)	(e)		(f)			
	Market Return ( $R_m$ )										
	Div	Proj.	Cost of	Risk-Free	Risk		Unadjusted	Market	Size	CAPM	
Company	Yield	Growth	Equity	Rate	Premium	Beta	$K_e$	Cap	Adjustment	Result	
1	ALLETE	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$3,500	0.93%	11.8%
2	Ameren Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.85	10.4%	\$22,000	0.45%	10.9%
3	Avista Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$3,200	0.93%	11.8%
4	Black Hills Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.95	11.2%	\$4,600	0.58%	11.8%
5	CMS Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.80	10.0%	\$17,400	0.45%	10.5%
6	Dominion Energy	2.1%	9.5%	11.6%	3.8%	7.8%	0.80	10.0%	\$52,200	-0.26%	9.8%
7	DTE Energy Co.	2.1%	9.5%	11.6%	3.8%	7.8%	0.95	11.2%	\$22,900	0.45%	11.7%
8	Duke Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.85	10.4%	\$78,300	-0.26%	10.2%
9	Entergy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.95	11.2%	\$23,000	0.45%	11.7%
10	Exelon Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	n/a	n/a	\$41,500	-0.26%	n/a
11	Hawaiian Elec.	2.1%	9.5%	11.6%	3.8%	7.8%	0.85	10.4%	\$4,600	0.58%	11.0%
12	IDACORP, Inc.	2.1%	9.5%	11.6%	3.8%	7.8%	0.80	10.0%	\$5,500	0.58%	10.6%
13	NorthWestern Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$3,400	0.93%	11.8%
14	OGE Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	1.00	11.6%	\$7,300	0.57%	12.2%
15	Otter Tail Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$3,000	0.93%	11.8%
16	Pinnacle West Capital	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$8,500	0.57%	11.4%
17	Portland General Elec.	2.1%	9.5%	11.6%	3.8%	7.8%	0.85	10.4%	\$4,400	0.58%	11.0%
18	Pub Sv Enterprise Grp.	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$30,500	0.45%	11.3%
19	Sempra Energy	2.1%	9.5%	11.6%	3.8%	7.8%	0.95	11.2%	\$49,400	-0.26%	11.0%
20	Southern Company	2.1%	9.5%	11.6%	3.8%	7.8%	0.90	10.8%	\$71,300	-0.26%	10.6%
Average							10.7%			11.2%	

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from www.valueline.com (retrieved Mar. 16, 2023).

(b) Average of weighted average earnings growth rates from IBES, Value Line, and Zacks for dividend-paying stocks in the S&P 500 based on data from Refinitiv, as provided by fidelity.com (retrieved Mar. 16, 2023), www.valueline.com (retrieved Mar. 16, 2023), and www.zacks.com (retrieved Mar. 16, 2023). Eliminated growth rates that were greater than 20%, as well as all negative values.

(c) Average yield on 30-year Treasury bonds for six-months ending Mar. 2023 based on data from Moody's Investors Service.

(d) The Value Line Investment Survey, Summary & Index (Mar. 31, 2023).

(e) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).

(f) Kroll, 2023 Supplementary CRSP Decile Size Study Data Exhibits.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**MCKENZIE, DI**  
**TESTIMONY**

**EXHIBIT NO. 14**

ELECTRIC GROUP

		(a)	(b)	(c)	(d)	(e)	(d)		(f)	(g)						
		Market Return ( $R_m$ )														
		Div	Proj.	Cost of	Risk-Free	Risk	Unadjusted	Beta	Adjusted		Unadjusted	Market	Size	ECAPM		
	Company	Yield	Growth	Equity	Rate	Premium	Weight	$RP^1$	Beta	Weight	$RP^2$	Total RP	$K_e$	Cap	Adjustment	Result
1	ALLETE	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$3,500	0.93%	11.9%
2	Ameren Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.85	75%	5.0%	6.9%	10.7%	\$22,000	0.45%	11.2%
3	Avista Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$3,200	0.93%	11.9%
4	Black Hills Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.95	75%	5.6%	7.5%	11.3%	\$4,600	0.58%	11.9%
5	CMS Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.80	75%	4.7%	6.6%	10.4%	\$17,400	0.45%	10.9%
6	Dominion Energy	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.80	75%	4.7%	6.6%	10.4%	\$52,200	-0.26%	10.2%
7	DTE Energy Co.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.95	75%	5.6%	7.5%	11.3%	\$22,900	0.45%	11.8%
8	Duke Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.85	75%	5.0%	6.9%	10.7%	\$78,300	-0.26%	10.5%
9	Entergy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.95	75%	5.6%	7.5%	11.3%	\$23,000	0.45%	11.8%
10	Exelon Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	n/a	75%	n/a	n/a	n/a	\$41,500	-0.26%	n/a
11	Hawaiian Elec.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.85	75%	5.0%	6.9%	10.7%	\$4,600	0.58%	11.3%
12	IDACORP, Inc.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.80	75%	4.7%	6.6%	10.4%	\$5,500	0.58%	11.0%
13	NorthWestern Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$3,400	0.93%	11.9%
14	OGE Energy Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	1.00	75%	5.9%	7.8%	11.6%	\$7,300	0.57%	12.2%
15	Otter Tail Corp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$3,000	0.93%	11.9%
16	Pinnacle West Capital	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$8,500	0.57%	11.6%
17	Portland General Elec.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.85	75%	5.0%	6.9%	10.7%	\$4,400	0.58%	11.3%
18	Pub Sv Enterprise Grp.	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$30,500	0.45%	11.5%
19	Sempra Energy	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.95	75%	5.6%	7.5%	11.3%	\$49,400	-0.26%	11.0%
20	Southern Company	2.1%	9.5%	11.6%	3.8%	7.8%	25%	2.0%	0.90	75%	5.3%	7.2%	11.0%	\$71,300	-0.26%	10.8%
<b>Average</b>												<b>11.0%</b>				<b>11.4%</b>

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from [www.valueline.com](http://www.valueline.com) (retrieved Mar. 16, 2023).

(b) Average of weighted average earnings growth rates from IBES, Value Line, and Zacks for dividend-paying stocks in the S&P 500 based on data from Refinitiv, as provided by [fidelity.com](http://fidelity.com) (retrieved Mar. 16, 2023), [www.valueline.com](http://www.valueline.com) (retrieved Mar. 16, 2023), and [www.zacks.com](http://www.zacks.com) (retrieved Mar. 16, 2023). Eliminated growth rates that were greater than 20%, as well as all negative values.

(c) Average yield on 30-year Treasury bonds for six-months ending Mar. 2023 based on data from Moody's Investors Service.

(d) Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at 190.

(e) The Value Line Investment Survey, Summary & Index (Mar. 31, 2023).

(f) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).

(g) Kroll, 2023 Supplementary CRSP Decile Size Study Data Exhibits.

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**EXHIBIT NO. 15**



## UTILITY RISK PREMIUM

Exhibit 15

Page 1 of 3

### COST OF EQUITY ESTIMATE

#### **Current Equity Risk Premium**

(a) Avg. Yield over Study Period	7.83%
(b) Average Utility Bond Yield	<u>5.49%</u>
Change in Bond Yield	-2.34%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4273</u>
Adjustment to Average Risk Premium	1.00%
(a) Average Risk Premium over Study Period	<u>3.89%</u>
<b>Adjusted Risk Premium</b>	<b>4.89%</b>

#### **Implied Cost of Equity**

(b) Baa Utility Bond Yield	5.75%
Adjusted Equity Risk Premium	<u>4.89%</u>
<b>Risk Premium Cost of Equity</b>	<b>10.64%</b>

- (a) Exhibit 15, page 2.
- (b) Average bond yield on all utility bonds and 'Baa' subset for six-months ending Mar. 2023 based on data from Moody's Investors Service at [www.credittrends.com](http://www.credittrends.com).
- (c) Exhibit 15, page 3.

# UTILITY RISK PREMIUM

Exhibit 15  
Page 2 of 3

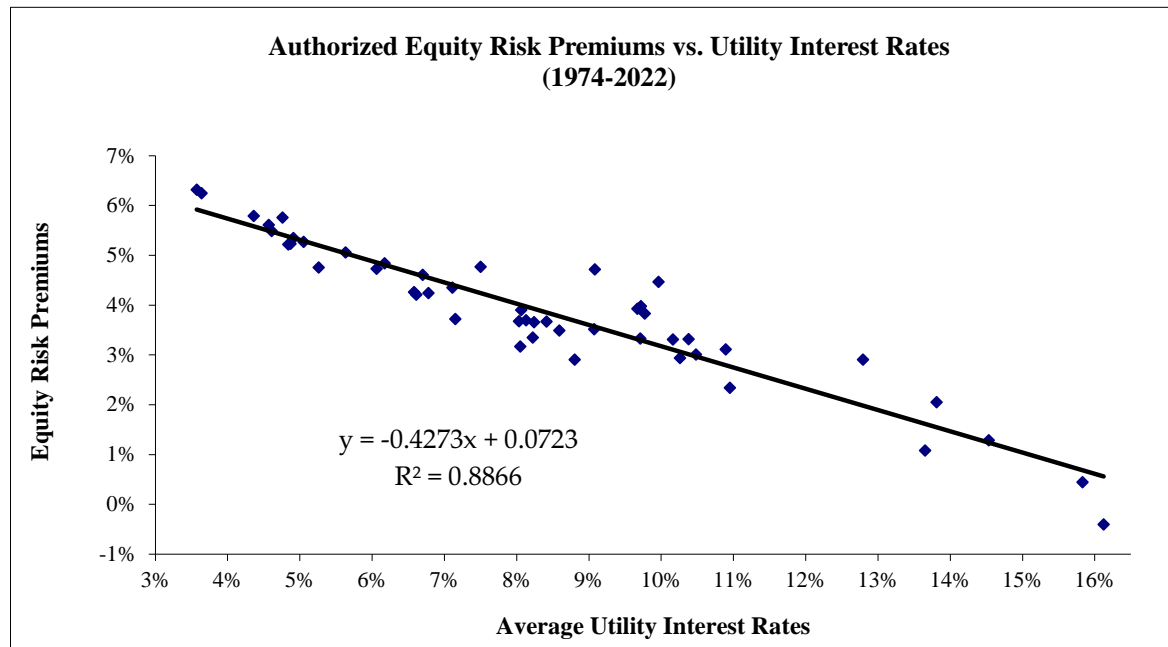
## AUTHORIZED RETURNS

	(a)	(b)	
Year	Allowed ROE	Average Utility Bond Yield	Risk Premium
1974	13.10%	9.27%	3.83%
1975	13.20%	9.88%	3.32%
1976	13.10%	9.17%	3.93%
1977	13.30%	8.58%	4.72%
1978	13.20%	9.22%	3.98%
1979	13.50%	10.39%	3.11%
1980	14.23%	13.15%	1.08%
1981	15.22%	15.62%	-0.40%
1982	15.78%	15.33%	0.45%
1983	15.36%	13.31%	2.05%
1984	15.32%	14.03%	1.29%
1985	15.20%	12.29%	2.91%
1986	13.93%	9.46%	4.47%
1987	12.99%	9.98%	3.01%
1988	12.79%	10.45%	2.34%
1989	12.97%	9.66%	3.31%
1990	12.70%	9.76%	2.94%
1991	12.54%	9.21%	3.33%
1992	12.09%	8.57%	3.52%
1993	11.46%	7.56%	3.90%
1994	11.21%	8.30%	2.91%
1995	11.58%	7.91%	3.67%
1996	11.40%	7.74%	3.66%
1997	11.33%	7.63%	3.70%
1998	11.77%	7.00%	4.77%

	(a)	(b)	
Year	Allowed ROE	Average Utility Bond Yield	Risk Premium
1999	10.72%	7.55%	3.17%
2000	11.58%	8.09%	3.49%
2001	11.07%	7.72%	3.35%
2002	11.21%	7.53%	3.68%
2003	10.96%	6.61%	4.35%
2004	10.81%	6.20%	4.61%
2005	10.51%	5.67%	4.84%
2006	10.34%	6.08%	4.26%
2007	10.32%	6.11%	4.21%
2008	10.37%	6.65%	3.72%
2009	10.52%	6.28%	4.24%
2010	10.29%	5.56%	4.73%
2011	10.19%	5.13%	5.06%
2012	10.02%	4.26%	5.76%
2013	9.82%	4.55%	5.27%
2014	9.76%	4.41%	5.35%
2015	9.60%	4.37%	5.23%
2016	9.60%	4.11%	5.49%
2017	9.68%	4.07%	5.61%
2018	9.56%	4.34%	5.22%
2019	9.65%	3.86%	5.79%
2020	9.39%	3.07%	6.32%
2021	9.39%	3.14%	6.25%
2022	<u>9.52%</u>	<u>4.75%</u>	<u>4.77%</u>
<b>Average</b>	<b>11.72%</b>	<b>7.83%</b>	<b>3.89%</b>

(a) S&P Global Market Intelligence, *Major Rate Case Decisions*, RRA Regulatory Focus; *UtilityScope Regulatory Service*, Argus. Data for "general" rate cases (excluding limited-issue rider cases) beginning in 2006 (the first year such data presented by RRA).

(b) Moody's Investors Service.

**REGRESSION RESULTS****SUMMARY OUTPUT**

<i>Regression Statistics</i>	
Multiple R	0.941588
R Square	0.886588
Adjusted R Square	0.884175
Standard Error	0.004801
Observations	49

**ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.008469	0.008469	367.418596	0.000000
Residual	47	0.001083	0.000023		
Total	48	0.009552			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.072337	0.001875	38.582107	0.000000	0.068565	0.076109	0.068565	0.076109
X Variable 1	-0.427257	0.022290	-19.168166	0.000000	-0.472099	-0.382416	-0.472099	-0.382416

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**EXHIBIT NO. 16**

**EXPECTED EARNINGS APPROACH****Exhibit 16****Page 1 of 1****ELECTRIC GROUP**

	(a)	(b)	(c)
<b>Company</b>	<b>Expected Return on Common Equity</b>	<b>Adjustment Factor</b>	<b>Adjusted Return on Common Equity</b>
1 ALLETE	9.0%	1.0246	9.2%
2 Ameren Corp.	10.0%	1.0296	10.3%
3 Avista Corp.	8.0%	1.0305	8.2%
4 Black Hills Corp.	9.5%	1.0297	9.8%
5 CMS Energy Corp.	14.0%	1.0105	14.1%
6 Dominion Energy	12.0%	1.0392	12.5%
7 DTE Energy Co.	12.5%	1.0192	12.7%
8 Duke Energy Corp.	9.0%	1.0133	9.1%
9 Entergy Corp.	9.0%	1.0289	9.3%
10 Exelon Corp.	10.0%	0.9820	9.8%
11 Hawaiian Elec.	12.5%	1.0209	12.8%
12 IDACORP, Inc.	9.5%	1.0238	9.7%
13 NorthWestern Corp.	8.0%	1.0277	8.2%
14 OGE Energy Corp.	13.0%	1.0091	13.1%
15 Otter Tail Corp.	11.5%	1.0195	11.7%
16 Pinnacle West Capital	9.0%	1.0172	9.2%
17 Portland General Elec.	9.5%	1.0316	9.8%
18 Pub Sv Enterprise Grp.	13.5%	1.0151	13.7%
19 Sempra Energy	11.0%	1.0224	11.2%
20 Southern Company	14.5%	1.0216	14.8%
<b>Average (d)</b>	<b>10.8%</b>		<b>11.0%</b>

- (a) The Value Line Investment Survey (Jan. 20, Feb. 10 and Mar. 10, 2023).  
(b) Adjustment to convert year-end return to an average rate of return from Exhibit 12.  
(c) (a) x (b).  
(d) Excludes highlighted values.

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**EXHIBIT NO. 17**

FLOTATION COST STUDY

Exhibit 17

Page 1 of 1

VALUE LINE UTILITIES

No.	Sym	Company	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Date	Shares Issued	Offering Price	Underwriting Discount (per share)	Underwriting Discount	Offering Expense	Total Flotation Costs	Gross Proceeds Before Flot. Costs	Flotation Cost (%)
1	ALE	ALLETE	4/1/2022	3,200,000	\$63.00	\$2.20500	\$7,056,000	\$700,000	\$7,756,000	\$201,600,000	3.847%
2	LNT	Alliant Energy	11/14/2019	3,717,502	\$52.63	\$0.39500	\$1,468,413	\$500,000	\$1,968,413	\$195,652,130	1.006%
3	AEE	Ameren Corp.	8/5/2019	7,549,205	\$74.30	\$0.12000	\$905,905	\$750,000	\$1,655,905	\$560,905,932	0.295%
4	AEP	American Elec Pwr	4/2/2009	69,000,000	\$24.50	\$0.73500	\$50,715,000	\$400,000	\$51,115,000	\$1,690,500,000	3.024%
5	AGR	Avangrid, Inc.					N/A				
6	AVA	Avista Corp.	12/13/2006	3,162,500	\$25.05	\$0.48000	\$1,518,000	\$300,000	\$1,818,000	\$79,220,625	2.295%
7	BKH	Black Hills Corp.	2/25/2020	1,222,942	\$81.77	\$0.73590	\$899,963	\$230,000	\$1,129,963	\$99,999,967	1.130%
8	CNP	CenterPoint Energy	9/27/2018	60,550,459	\$27.25	\$0.75000	\$45,412,844	\$1,000,000	\$46,412,844	\$1,650,000,008	2.813%
9	CMS	CMS Energy Corp.	3/31/2005	23,000,000	\$12.25	\$0.42880	\$9,862,400	\$325,000	\$10,187,400	\$281,750,000	3.616%
10	ED	Consolidated Edison (a)	6/17/2021	10,100,000	\$76.92	\$0.83000	\$8,383,000	\$450,000	\$8,833,000	\$776,892,000	1.137%
11	D	Dominion Energy (a)	3/29/2018	20,000,000	\$67.33	\$1.89420	\$37,884,000	\$450,000	\$38,334,000	\$1,346,516,000	2.847%
12	DTE	DTE Energy Co.	10/29/2019	2,400,000	\$126.00	\$3.15000	\$7,560,000	\$300,000	\$7,860,000	\$302,400,000	2.599%
13	DUK	Duke Energy Corp. (a)	11/18/2019	25,000,000	\$85.99	\$2.66000	\$66,500,000	\$592,000	\$67,092,000	\$2,149,750,000	3.121%
14	EIX	Edison International	5/13/2020	14,181,882	\$56.41	\$0.98718	\$14,000,000	\$1,000,000	\$15,000,000	\$799,999,964	1.875%
15	ETR	Entergy Corp.	6/8/2018	13,289,037	\$75.25	\$0.80000	\$10,631,230	\$650,000	\$11,281,230	\$1,000,000,034	1.128%
16	EVRG	Evergy Inc.					N/A				
17	ES	Eversource Energy	6/12/2020	6,000,000	\$84.91	\$1.35000	\$8,100,000	\$600,000	\$8,700,000	\$509,460,000	1.708%
18	EXC	Exelon Corp. (a)	8/8/2022	11,300,000	\$43.32	\$0.99000	\$11,187,000	\$900,000	\$12,087,000	\$489,516,000	2.469%
19	FE	FirstEnergy Corp.	9/15/2003	32,200,000	\$30.00	\$0.97500	\$31,395,000	\$423,000	\$31,818,000	\$966,000,000	3.294%
20	HE	Hawaiian Elec.	3/20/2013	7,000,000	\$26.75	\$1.00312	\$7,021,840	\$450,000	\$7,471,840	\$187,250,000	3.990%
21	IDA	IDACORP, Inc.	12/10/2004	4,025,000	\$30.00	\$1.20000	\$4,830,000	\$300,000	\$5,130,000	\$120,750,000	4.248%
22	NEE	NextEra Energy, Inc. (a)	11/3/2016	13,800,000	\$124.00	\$1.89000	\$26,082,000	\$750,000	\$26,832,000	\$1,711,200,000	1.568%
23	NWE	NorthWestern Corp.	11/18/2021	6,074,767	\$53.50	\$1.60500	\$9,750,001	\$900,000	\$10,650,001	\$325,000,035	3.277%
24	OGE	OGE Energy Corp.	8/22/2003	5,324,074	\$21.60	\$0.79000	\$4,206,018	\$325,000	\$4,531,018	\$114,999,998	3.940%
25	OTTR	Otter Tail Corp.					N/A				
26	PNW	Pinnacle West Capital	4/9/2010	6,900,000	\$38.00	\$1.33000	\$9,177,000	\$190,000	\$9,367,000	\$262,200,000	3.572%
27	PNM	PNM Resources	1/7/2020	5,375,000	\$47.21	\$1.99000	\$10,696,250	\$750,000	\$11,446,250	\$253,753,750	4.511%
28	POR	Portland General Elec.	10/27/2022	10,100,000	\$43.00	\$1.23625	\$12,486,125	\$515,000	\$13,001,125	\$434,300,000	2.994%
29	PPL	PPL Corp.	5/10/2018	55,000,000	\$27.00	\$0.29430	\$16,186,500	\$1,000,000	\$17,186,500	\$1,485,000,000	1.157%
30	PEG	Pub Sv Enterprise Grp.	10/2/2003	9,487,500	\$41.75	\$1.25250	\$11,883,094	\$350,000	\$12,233,094	\$396,103,125	3.088%
31	SRE	Sempra Energy	1/5/2018	26,869,158	\$107.00	\$1.92600	\$51,749,998	\$1,500,000	\$53,249,998	\$2,874,999,906	1.852%
32	SO	Southern Company (a)	8/18/2016	32,500,000	\$49.30	\$1.66000	\$53,950,000	\$557,000	\$54,507,000	\$1,602,250,000	3.402%
33	WEC	WEC Energy Group					N/A				
34	XEL	Xcel Energy Inc. (a)	10/30/2019	10,300,000	\$62.69	\$0.63000	\$6,489,000	\$650,000	\$7,139,000	\$645,707,000	1.106%
<b>Average - Electric</b>											<b>2.564%</b>
1	ATO	Atmos Energy Corp.	11/30/2018	7,008,087	\$92.75	\$0.97690	\$6,846,200	\$1,000,000	\$7,846,200	\$650,000,069	1.207%
2	CPK	Chesapeake Utilities	9/23/2016	960,488	\$62.26	\$2.33000	\$2,237,937	\$162,046	\$2,399,983	\$59,799,983	4.013%
3	NJR	New Jersey Resources	12/4/2019	5,700,000	\$41.25	\$1.23750	\$7,053,750	\$500,000	\$7,553,750	\$235,125,000	3.213%
4	NI	NiSource Inc.	5/3/2017	N/A	N/A	N/A	\$10,000,000	\$57,950	\$10,057,950	\$500,000,000	2.012%
5	NWN	Northwest Nat. Holding Co.	3/30/2022	2,500,000	\$50.00	\$1.62500	\$4,062,500	\$450,000	\$4,512,500	\$125,000,000	3.610%
6	OGS	ONE Gas, Inc.					N/A				
7	SWX	Southwest Gas	3/9/2023	3,576,180	\$60.12	\$2.02910	\$7,256,427	\$538,000	\$7,794,427	\$214,999,942	3.625%
8	SR	Spire Inc.	5/9/2018	2,000,000	\$63.05	\$2.10938	\$4,218,760	\$325,000	\$4,543,760	\$126,100,000	3.603%
<b>Average - Gas</b>											<b>3.040%</b>
<b>Average - Electric &amp; Gas</b>											<b>2.654%</b>

Column Notes:

- (1-4) SEC Form 424B for each company (through April 10, 2023).
- (5) Column (2) \* Column (4)
- (6) SEC Form 424B for each company (through April 10, 2023).
- (7) Column (5) + Column (6)
- (8) Column (2) \* Column (3)
- (9) Column (7) / Column (8)

Note (a): Underwriting discount computed as the difference between the current market price and the price offered to the issuing company by the underwriters.



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**EXHIBIT NO. 18**

**DIVIDEND YIELD**

	Company	Industry Group	(a) Price	(b) Dividends	Yield
1	3M Company	Diversified Co.	\$106.36	\$ 6.00	5.6%
2	Abbott Labs.	Med Supp Non-Invasive	\$100.29	\$ 2.04	2.0%
3	Air Products & Chem.	Chemical (Diversified)	\$281.14	\$ 7.00	2.5%
4	Allstate Corp.	Insurance (Prop/Cas.)	\$120.44	\$ 3.56	3.0%
5	Amdocs Ltd.	IT Services	\$92.79	\$ 1.74	1.9%
6	Amgen	Biotechnology	\$234.21	\$ 8.52	3.6%
7	Archer Daniels Midl'd	Food Processing	\$79.03	\$ 1.80	2.3%
8	Becton, Dickinson	Med Supp Invasive	\$237.50	\$ 3.68	1.5%
9	Bristol-Myers Squibb	Drug	\$68.51	\$ 2.31	3.4%
10	Brown & Brown	Financial Svcs. (Div.)	\$55.82	\$ 0.46	0.8%
11	Brown-Forman 'B'	Beverage	\$63.90	\$ 0.82	1.3%
12	Church & Dwight	Household Products	\$84.48	\$ 1.09	1.3%
13	Cisco Systems	Telecom. Equipment	\$49.51	\$ 1.56	3.2%
14	Coca-Cola	Beverage	\$60.07	\$ 1.84	3.1%
15	Colgate-Palmolive	Household Products	\$72.99	\$ 1.92	2.6%
16	Comcast Corp.	Cable TV	\$36.81	\$ 1.16	3.2%
17	Costco Wholesale	Retail Store	\$488.50	\$ 3.75	0.8%
18	Danaher Corp.	Diversified Co.	\$247.94	\$ 1.08	0.4%
19	Gen'l Mills	Food Processing	\$80.16	\$ 2.17	2.7%
20	Gilead Sciences	Drug	\$80.65	\$ 3.00	3.7%
21	Hershey Co.	Food Processing	\$241.73	\$ 4.27	1.8%
22	Home Depot	Retail Building Supply	\$292.87	\$ 8.36	2.9%
23	Hormel Foods	Food Processing	\$41.24	\$ 1.10	2.7%
24	Intercontinental Exch.	Brokers & Exchanges	\$100.99	\$ 1.68	1.7%
25	Johnson & Johnson	Med Supp Non-Invasive	\$154.32	\$ 4.52	2.9%
26	Kimberly-Clark	Household Products	\$126.71	\$ 4.72	3.7%
27	Lilly (Eli)	Drug	\$325.23	\$ 4.52	1.4%
28	Lockheed Martin	Aerospace/Defense	\$475.63	\$ 12.20	2.6%
29	Marsh & McLennan	Financial Svcs. (Div.)	\$161.25	\$ 2.48	1.5%
30	McCormick & Co.	Food Processing	\$73.91	\$ 1.56	2.1%
31	McDonald's Corp.	Restaurant	\$267.83	\$ 6.20	2.3%
32	McKesson Corp.	Med Supp Non-Invasive	\$348.20	\$ 2.28	0.7%
33	Merck & Co.	Drug	\$107.28	\$ 2.92	2.7%
34	Microsoft Corp.	Computer Software	\$262.00	\$ 2.73	1.0%
35	Mondelez Int'l	Food Processing	\$66.46	\$ 1.54	2.3%
36	NewMarket Corp.	Chemical (Specialty)	\$347.55	\$ 8.40	2.4%
37	Northrop Grumman	Aerospace/Defense	\$461.03	\$ 6.92	1.5%
38	Oracle Corp.	Computer Software	\$87.33	\$ 1.60	1.8%
39	PepsiCo, Inc.	Beverage	\$175.49	\$ 4.60	2.6%
40	Pfizer, Inc.	Drug	\$40.85	\$ 1.64	4.0%
41	Procter & Gamble	Household Products	\$140.96	\$ 3.65	2.6%
42	Progressive Corp.	Insurance (Prop/Cas.)	\$141.53	\$ 0.40	0.3%
43	Republic Services	Environmental	\$129.80	\$ 1.98	1.5%
44	Sherwin-Williams	Retail Building Supply	\$219.55	\$ 2.42	1.1%
45	Smucker (J.M.)	Food Processing	\$150.87	\$ 4.14	2.7%
46	Texas Instruments	Semiconductor	\$174.94	\$ 4.96	2.8%
47	Thermo Fisher Sci.	Precision Instrument	\$551.89	\$ 1.40	0.3%
48	Travelers Cos.	Insurance (Prop/Cas.)	\$176.47	\$ 3.72	2.1%
49	Verizon Communic.	Telecom. Services	\$38.05	\$ 2.64	6.9%
50	Walmart Inc.	Retail Store	\$141.28	\$ 2.32	1.6%
51	Waste Management	Environmental	\$152.25	\$ 2.80	1.8%
<b>Average</b>					<b>2.3%</b>

(a) Average of closing prices for 30 trading days ended Mar. 29, 2023.

(b) The Value Line Investment Survey, *Summary & Index* (Mar. 31, 2023).

**GROWTH RATES**

	Company	(a)	(b)	(c)
		Earnings Growth		
		V Line	IBES	Zacks
1	3M Company	7.50%	0.09%	9.50%
2	Abbott Labs.	6.50%	8.30%	5.09%
3	Air Products & Chem.	11.50%	8.79%	11.68%
4	Allstate Corp.	3.50%	-2.19%	7.00%
5	Amdocs Ltd.	7.50%	11.07%	11.00%
6	Amgen	4.50%	4.12%	7.00%
7	Archer Daniels Midl'd	13.00%	-2.80%	6.39%
8	Becton, Dickinson	5.00%	6.30%	7.77%
9	Bristol-Myers Squibb	n/a	4.06%	5.70%
10	Brown & Brown	8.00%	13.22%	n/a
11	Brown-Forman 'B'	14.50%	8.85%	n/a
12	Church & Dwight	6.00%	7.81%	7.64%
13	Cisco Systems	8.50%	7.32%	6.50%
14	Coca-Cola	8.00%	6.06%	6.66%
15	Colgate-Palmolive	6.00%	6.02%	6.21%
16	Comcast Corp.	8.50%	6.40%	12.64%
17	Costco Wholesale	10.50%	9.90%	9.24%
18	Danaher Corp.	16.00%	3.31%	12.00%
19	Gen'l Mills	4.50%	7.04%	7.50%
20	Gilead Sciences	12.00%	2.52%	12.26%
21	Hershey Co.	9.00%	9.64%	7.67%
22	Home Depot	9.00%	2.22%	11.22%
23	Hormel Foods	7.50%	3.30%	5.83%
24	Intercontinental Exch.	7.00%	5.86%	5.40%
25	Johnson & Johnson	8.00%	3.94%	5.53%
26	Kimberly-Clark	7.00%	9.61%	9.86%
27	Lilly (Eli)	11.50%	22.87%	20.62%
28	Lockheed Martin	7.00%	9.55%	6.86%
29	Marsh & McLennan	10.50%	9.08%	8.46%
30	McCormick & Co.	4.50%	3.51%	6.92%
31	McDonald's Corp.	9.00%	7.75%	8.07%
32	McKesson Corp.	10.00%	11.87%	10.36%
33	Merck & Co.	8.50%	10.47%	8.01%
34	Microsoft Corp.	15.00%	11.90%	11.66%
35	Mondelez Int'l	7.50%	6.45%	7.14%
36	NewMarket Corp.	1.00%	7.70%	n/a
37	Northrop Grumman	9.50%	3.00%	3.45%
38	Oracle Corp.	10.00%	9.06%	8.00%
39	PepsiCo, Inc.	6.50%	7.55%	7.63%
40	Pfizer, Inc.	2.00%	-8.00%	9.00%
41	Procter & Gamble	5.50%	5.07%	6.14%
42	Progressive Corp.	6.50%	28.64%	23.89%
43	Republic Services	12.50%	8.97%	9.11%
44	Sherwin-Williams	7.00%	9.07%	10.30%
45	Smucker (J.M.)	4.00%	3.79%	4.00%
46	Texas Instruments	4.50%	10.00%	9.33%
47	Thermo Fisher Sci.	11.00%	7.77%	12.50%
48	Travelers Cos.	7.50%	8.83%	10.71%
49	Verizon Communic.	2.50%	0.13%	4.15%
50	Walmart Inc.	7.50%	5.09%	5.50%
51	Waste Management	6.50%	8.75%	10.88%

(a) The Value Line Investment Survey (various editions as of Mar. 31, 2023).

(b) www.finance.yahoo.com (retrieved Mar. 30, 2023).

(c) www.zacks.com (retrieved Mar. 30, 2023).

**DCF COST OF EQUITY ESTIMATES**

	Company	(a)	(b)	(c)
		Earnings Growth		
		V Line	IBES	Zacks
1	3M Company	13.1%	5.7%	15.1%
2	Abbott Labs.	8.5%	10.3%	7.1%
3	Air Products & Chem.	14.0%	11.3%	14.2%
4	Allstate Corp.	6.5%	0.8%	10.0%
5	Amdocs Ltd.	9.4%	12.9%	12.9%
6	Amgen	8.1%	7.8%	10.6%
7	Archer Daniels Midl'd	15.3%	-0.5%	8.7%
8	Becton, Dickinson	6.5%	7.8%	9.3%
9	Bristol-Myers Squibb	n/a	7.4%	9.1%
10	Brown & Brown	8.8%	14.0%	n/a
11	Brown-Forman 'B'	15.8%	10.1%	n/a
12	Church & Dwight	7.3%	9.1%	8.9%
13	Cisco Systems	11.7%	10.5%	9.7%
14	Coca-Cola	11.1%	9.1%	9.7%
15	Colgate-Palmolive	8.6%	8.7%	8.8%
16	Comcast Corp.	11.7%	9.6%	15.8%
17	Costco Wholesale	11.3%	10.7%	10.0%
18	Danaher Corp.	16.4%	3.7%	12.4%
19	Gen'l Mills	7.2%	9.7%	10.2%
20	Gilead Sciences	15.7%	6.2%	16.0%
21	Hershey Co.	10.8%	11.4%	9.4%
22	Home Depot	11.9%	5.1%	14.1%
23	Hormel Foods	10.2%	6.0%	8.5%
24	Intercontinental Exch.	8.7%	7.5%	7.1%
25	Johnson & Johnson	10.9%	6.9%	8.5%
26	Kimberly-Clark	10.7%	13.3%	13.6%
27	Lilly (Eli)	12.9%	24.3%	22.0%
28	Lockheed Martin	9.6%	12.1%	9.4%
29	Marsh & McLennan	12.0%	10.6%	10.0%
30	McCormick & Co.	6.6%	5.6%	9.0%
31	McDonald's Corp.	11.3%	10.1%	10.4%
32	McKesson Corp.	10.7%	12.5%	11.0%
33	Merck & Co.	11.2%	13.2%	10.7%
34	Microsoft Corp.	16.0%	12.9%	12.7%
35	Mondelez Int'l	9.8%	8.8%	9.5%
36	NewMarket Corp.	3.4%	10.1%	n/a
37	Northrop Grumman	11.0%	4.5%	5.0%
38	Oracle Corp.	11.8%	10.9%	9.8%
39	PepsiCo, Inc.	9.1%	10.2%	10.3%
40	Pfizer, Inc.	6.0%	-4.0%	13.0%
41	Procter & Gamble	8.1%	7.7%	8.7%
42	Progressive Corp.	6.8%	28.9%	24.2%
43	Republic Services	14.0%	10.5%	10.6%
44	Sherwin-Williams	8.1%	10.2%	11.4%
45	Smucker (J.M.)	6.7%	6.5%	6.7%
46	Texas Instruments	7.3%	12.8%	12.2%
47	Thermo Fisher Sci.	11.3%	8.0%	12.8%
48	Travelers Cos.	9.6%	10.9%	12.8%
49	Verizon Communic.	9.4%	7.1%	11.1%
50	Walmart Inc.	9.1%	6.7%	7.1%
51	Waste Management	8.3%	10.6%	12.7%
	<b>Average (b)</b>	<b>10.9%</b>	<b>10.4%</b>	<b>10.9%</b>

(a) Sum of dividend yield (p. 1) and respective growth rate (p. 2).

(b) Excludes highlighted figures.

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES       )  
AND CHARGES FOR ELECTRIC SERVICE       )  
IN THE STATE OF IDAHO AND FOR          )  
ASSOCIATED REGULATORY ACCOUNTING      )  
TREATMENT.                               )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

BRIAN R. BUCKHAM

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Brian Buckham. My business address  
5 is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as Senior Vice President and Chief  
7 Financial Officer ("CFO").

8           Q.     Please describe your educational background.

9           A.     I received a Bachelor of Science in Mining  
10 Engineering from the University of Idaho, a Master of  
11 Business Administration from Gonzaga University, and a  
12 Juris Doctor from the University of Idaho College of Law.

13          Q.     Please describe your work experience with  
14 Idaho Power.

15          A.     I was hired in 2010 as an attorney in Idaho  
16 Power's Legal Department, where I focused predominately on  
17 securities compliance and external reporting, capital  
18 markets transactions, corporate governance, and commercial  
19 transactions, among other areas. In 2016, I was appointed  
20 as IDACORP's and Idaho Power's Vice President & General  
21 Counsel, and in 2017 as Senior Vice President & General  
22 Counsel, where in both roles I was responsible for  
23 leadership of the legal, corporate governance, compliance,  
24 risk management, and physical and cyber security functions  
25 at IDACORP and Idaho Power. In 2022, I was appointed as

1 IDACORP's Senior Vice President and Chief Financial  
2 Officer, where I oversee the companies' finance,  
3 accounting, investor relations, treasury, tax, Sarbanes-  
4 Oxley compliance, internal audit, compliance, risk  
5 management, and physical and cyber security functions.

6 Q. What are your duties as Senior Vice President  
7 and Chief Financial Officer of Idaho Power as they relate  
8 to this proceeding?

9 A. I oversee the direct financial planning,  
10 procurement, and investment of funds for Idaho Power, as  
11 well as supervise corporate liquidity management. I also  
12 have oversight and responsibility for our financial  
13 reporting, both internal and external, and our investor  
14 relations function, and for our capital markets  
15 transactions and associated relationships with stakeholders  
16 in that forum.

17 My duties and responsibilities include various  
18 aspects of all the Company's capital markets transactions,  
19 treasury management, and other financial matters. With  
20 respect to long-term financings, sale of bonds, and sale of  
21 equity, my duties include development of financial plans  
22 with senior officers, meeting with representatives of  
23 current and prospective investment banking firms that  
24 underwrite Idaho Power securities, discussions with credit  
25 rating agencies, assisting in preparation of financial



1 material (including registration statements and  
2 prospectuses filed with the U.S. Securities and Exchange  
3 Commission), representing the Company in meetings with  
4 investment banking firms, reviewing information relative to  
5 the Company's financings, meeting with current and  
6 prospective debt and equity investors, meeting with  
7 investment analysts, and recommending disposition of net  
8 proceeds. With respect to short-term financing, these  
9 duties and responsibilities include negotiation of credit  
10 facilities and term loans with commercial banks and  
11 overseeing the purchase and sale of commercial paper, and  
12 establishing and maintaining the relationships that help  
13 facilitate those transactions.

14 Q. Do your responsibilities include communicating  
15 with members of the financial community?

16 A. Yes. I am in regular contact with individuals  
17 representing investment and commercial banking firms,  
18 credit rating agencies, insurance companies, institutional  
19 investment firms, pension funds, infrastructure funds, and  
20 other organizations interested in publicly traded  
21 securities, who follow IDACORP and Idaho Power. Along with  
22 the Company's Vice President, Chief Accounting Officer and  
23 Treasurer and the Company's Investor Relations and Treasury  
24 Director, my responsibilities include keeping these  
25 representatives of the financial community informed of the

1 Company's financial condition, arranging and participating  
2 in meetings with these individuals and IDACORP's and Idaho  
3 Power's other senior executive management, and visiting  
4 with financial representatives in their respective offices  
5 or virtually. Some of these members of the investment  
6 community have followed the electric utility industry for  
7 an extended period of time and have a great deal of  
8 expertise in the specific financial risks and prospects of  
9 utilities.

10 Through my contact with the financial community and  
11 review of investment banking analytical reports and  
12 publications issued by these firms and the rating agencies,  
13 I keep informed on trends, interest rates, financing costs,  
14 security ratings, and other financial developments in the  
15 public utility industry.

16 Q. Are you a member of any professional societies  
17 or associations?

18 A. Yes. I am a current member of the Idaho State  
19 Bar, the Oregon State Bar, the Arizona State Bar  
20 (inactive), and the Governing Council of the Business &  
21 Corporate Law Section of the Idaho State Bar, in addition  
22 to serving on various non-profit boards. Further, I was  
23 previously an adjunct professor of law at the University of  
24 Idaho College of Law, where I taught the securities  
25 regulation course.

1 I also attend numerous conferences and seminars of  
2 these and other utility business, law, and finance  
3 professional groups, such as the Edison Electric Institute  
4 and Western Energy Institute, and an investor-owned utility  
5 CFO forum, on a regular basis. Through participation in  
6 these groups and events, I gain additional information and  
7 insights into the financial developments affecting IDACORP  
8 and Idaho Power, as well as the electric utility industry.

9 Q. What is the purpose of your testimony in this  
10 proceeding?

11 A. I am sponsoring testimony discussing financial  
12 risk factors generally and risk factors unique to Idaho  
13 Power that justify a return on equity ("ROE") figure  
14 supported in the Direct Testimony of Company Witness Mr.  
15 Adrien McKenzie as the minimum acceptable ROE for Idaho  
16 Power, the use of a forecasted year end 2023 capital  
17 structure, the embedded cost of long-term debt, and the  
18 resultant overall cost of capital used to compute the  
19 Company's revenue requirement.

20 Q. What Exhibits are you sponsoring?

21 A. I am sponsoring Exhibit Nos. 19-21.

22 **I. COST OF EQUITY POINT ESTIMATE**

23 Q. What ROE is the Company requesting in this  
24 proceeding?

25 A. The Company requests 10.4 percent as the point

1 estimate to be used for the cost of equity.

2 Q. Does that point estimate align with the  
3 recommendations made by the Company's outside expert  
4 regarding the Company's cost of capital?

5 A. No, it is lower. As the Company evaluated its  
6 request and the broader economic conditions, the Company  
7 decided to apply an ROE that is lower than the 10.6 percent  
8 point estimate provided by our outside expert. My  
9 recommendation is on the lower end of the range suggested  
10 by Mr. McKenzie. The Company believes this recommendation  
11 is the minimum required ROE necessary to not weaken the  
12 Company's ability to attract capital at favorable and  
13 customer-beneficial rates in the currently uncertain and  
14 volatile financial markets.

15 Q. How did you arrive at your recommendation?

16 A. While I believe the discussion of risk factors  
17 later in my testimony justifies an ROE in excess of 10.4  
18 percent, as supported by Mr. McKenzie, I have taken into  
19 account the economic impact of historically high inflation  
20 on our customers and selected a rate below the midpoint of  
21 the recommended range, while at the same time recognizing  
22 that high inflation also biases toward a higher ROE. As  
23 discussed in the Direct Testimony of Company Witness Ms.  
24 Lisa Grow, Idaho Power has adopted a conservative approach  
25 in this rate filing, utilizing several factors to mitigate

1 the overall rate impact on customers of its request. In  
2 light of this conservative approach, the Company is  
3 requesting a minimum level of ROE at 10.4 percent.

4 Q. Did you consider other recent decisions in  
5 Idaho-jurisdiction electric utility general rate cases  
6 ("GRC")?

7 A. Yes. However, I note that most of the recent  
8 electric utility GRC have been settled through negotiated  
9 settlement agreements, which may not fully reflect the  
10 breadth of issues that a regulator might consider when  
11 making an ROE determination. The two most recent electric  
12 utility cases that were reviewed in regard to this filing  
13 were Avista Corporation's ("Avista") GRC, which was settled  
14 in August 2021, and the PacifiCorp (dba Rocky Mountain  
15 Power) GRC, which was settled in December 2021. In both  
16 cases settlement agreements were reached. More recently,  
17 Intermountain Gas Company, a subsidiary of MDU Resources,  
18 entered into a settlement in its natural gas retail rate  
19 case in Idaho, but the proceedings in that case have not  
20 concluded.

21 In the Avista case, the Commission's final order  
22 approved a 9.4 percent ROE, as proposed in the settlement  
23 agreement. Notably, the Commission's order cites testimony  
24 stating, "the parties reached a compromise among differing  
25 points of view, with concessions made by all Parties." To

1 that end, the Company believes the stated ROE is not  
2 indicative of the result from a fully contested case. Order  
3 No. 35156, Case No. AVU-E-21-01.

4 In the PacifiCorp case, the settlement agreement and  
5 the Commission's final order approving the settlement were  
6 silent as to PacifiCorp's authorized ROE. Order No. 35277,  
7 Case No. PAC-E-21-07. Regardless, PacifiCorp is a much  
8 larger, multi-jurisdictional utility with a higher credit  
9 rating and ownership by a substantial utility holding  
10 company, which would justify an authorized ROE lower for  
11 PacifiCorp than for Idaho Power. Intermountain Gas Company  
12 is similarly situated structurally to PacifiCorp, and a  
13 distributor of natural gas rather than electric service.

14 Q. Have financial market conditions changed since  
15 these rate cases were filed?

16 A. Yes. Interest rates have gone up in the last  
17 21 months, since the date Avista's case referenced above  
18 was filed, with the 10-year United States ("US") Treasury  
19 rate increasing over 200 percent over that period, from  
20 less than 1.2 percent to around 3.7 percent as of May 22,  
21 2023 (source: Yahoo Finance). As interest rates increase,  
22 investors expect a higher ROE given the higher risk  
23 compared to their alternative investment in debt  
24 instruments. When the interest rate was at 1.2 percent, a  
25 9.4 percent to 9.6 percent ROE may have been reasonable,

1 but in today's market the ROE needs to be higher to  
2 appropriately reflect the increase in debt cost and  
3 prevailing interest rates, given investors' available  
4 options and expectations. The number of basis points should  
5 increase even further in light of volatile market  
6 conditions, and other factors I discuss in this testimony.  
7 Indeed, typical money market deposit account rates  
8 currently exceed even the 10-year Treasury rate from 21  
9 months ago, meaning investors have existing nearly risk-  
10 free options with relatively high interest rates, thus  
11 driving up required ROEs to attract investment.

12           Moreover, in my conversations with current and  
13 prospective investors and with equity analysts, the topic  
14 of authorized ROEs is frequently raised. Based on those  
15 conversations, it is my impression that an ROE of the level  
16 the Company has requested in this case, assuming it also  
17 includes recovery of prudent expenditures and a return on  
18 and of investment, would be sufficient to meet the  
19 expectations of those investors and thus maintain IDACORP's  
20 reasonable access to equity capital. The authorized ROE is  
21 one of the primary factors participants in the equity  
22 capital markets will review when assessing the adequacy of  
23 the outcome of a general rate case for purposes of making  
24 an investment decision, and an authorized ROE lower than  
25 Idaho Power's request could increase the Company's cost of



1 equity issuances. With IDACORP anticipating an equity  
2 issuance in 2024, or possibly sooner, an authorized ROE  
3 that meets investor expectations will benefit customers  
4 through greater value in issued equity financing. Mr.  
5 McKenzie addresses this important intersection of utility  
6 regulation and the investment markets in his testimony.

7 Q. Why is Idaho Power's requested 10.4 percent  
8 ROE justified in this case?

9 A. Notable changes in the economy, particularly  
10 inflation levels not seen since the 1980s, market  
11 volatility and uncertainty, and the interest rate increases  
12 noted above, have taken place in the past few years, and  
13 exacerbated recently. In his testimony, Mr. McKenzie also  
14 discusses these changes and their implications on capital  
15 costs and ROE.

16 Q. What other risks impact your selection of a  
17 10.4 percent ROE?

18 A. Over the last few years, the utility risk  
19 landscape has been shifting dramatically, increasing  
20 several risks that the Company must address. I highlight in  
21 the next section of my testimony several of these  
22 heightened risks, including power supply costs, liquidity  
23 challenges, wildfires, cybersecurity, and physical  
24 security. I will also discuss other specific risks Idaho  
25 Power continues to face.

1 Idaho Power must remain prepared to respond to  
2 unforeseen events that may materialize in the future, some  
3 of which are outlined in my discussion below. Recent  
4 economic challenges and financial market disruption and  
5 uncertainty highlight the importance of maintaining Idaho  
6 Power's financial strength in attracting the capital needed  
7 to ensure reliable service to customers at a lower cost,  
8 and to weather continued volatile and uncertain economic  
9 conditions and circumstances.

10 Q. You mentioned the impact of interest rate  
11 increases. How do interest rates affect the required ROE?

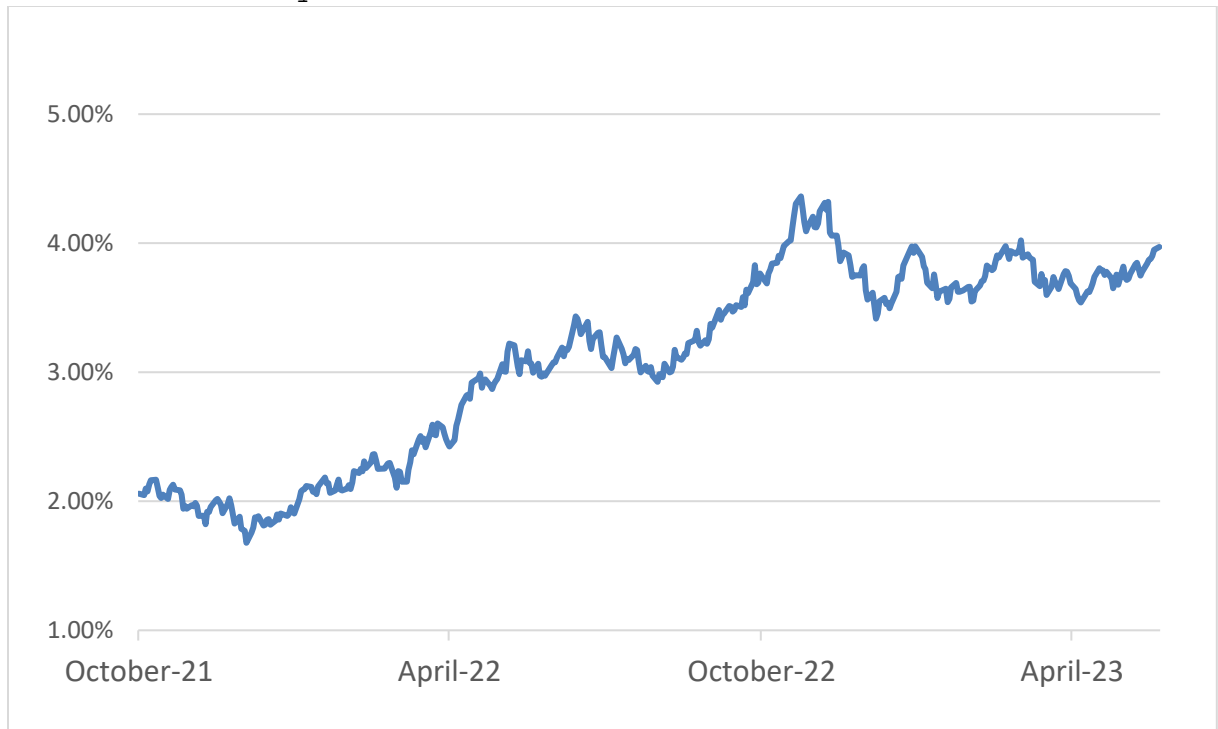
12 A. As Idaho Power competes with other investments  
13 (both stocks and bonds) in the capital markets, to attract  
14 capital at reasonable costs the Company must provide a  
15 return that adequately compensates its investors relative  
16 to the risk of other investments. With rising interest  
17 rates, investors can obtain relatively higher returns on  
18 debt instruments while retaining a much lower risk profile  
19 relative to stocks. To compete as an investment, utilities  
20 must then provide the opportunity for a higher return  
21 commensurate with their higher relative risk level.

22 Q. Can you quantify the recent increases in  
23 interest rates?

24 A. Certainly. As seen in the chart below (based  
25 on data from Yahoo Finance as of May 22, 2023), 30-year US

1 Treasury bond yields have risen from around 1.8 percent  
2 near the start of 2022 to as high as 4.36 percent in late  
3 2022, and have recently been between 3.6 to 4.0 percent, a  
4 100 percent increase over that period.

5 **FIGURE 1**  
6 30-Year Treasury Bond



7  
8 Q. How do higher levels of inflation impact ROE?

9 A. As noted in Mr. McKenzie's testimony, an  
10 investor's required return is intended to compensate the  
11 investor for the loss of purchasing power due to rising  
12 prices. An investor adds an inflation premium to the real  
13 rate of return (pure risk-free rate plus risk premium) to  
14 determine the investor's nominal required return. As a  
15 result, higher inflation expectations lead to an increase  
16 in the cost of equity capital. The expectations for the

1 required return, and thus the cost of equity capital,  
2 increase during inflationary periods when there is  
3 regulatory lag in the recovery of those increasing costs,  
4 which occurs where a historic test year is applied in the  
5 ratemaking process.

## 6 **II. RISK FACTORS**

7 Q. Could you briefly outline the risks  
8 confronting the Company that form the basis for your  
9 recommendation of a 10.4 percent ROE as the minimum  
10 acceptable authorized return?

11 A. Yes. I will summarize them here and discuss  
12 each in greater detail later in my testimony. I believe  
13 that, at a minimum, a 10.4 percent ROE is required to  
14 properly account for the risks confronting Idaho Power for  
15 the following reasons:

16 (1) The general decline in the Company's credit  
17 quality, in conjunction with the growing need for  
18 access to debt and equity capital to fund the  
19 Company's growing capital expenditures in  
20 response to recent and expected future economic  
21 growth in its service territory. The Company  
22 forecasts capital expenditures of approximately  
23 \$3.1 billion from 2023 to 2027 to reliably serve  
24 customer needs.

- 1           (2)   Energy market volatility and liquidity  
2                challenges.
- 3           (3)   Large and growing Public Utility Regulatory  
4                Policies Act of 1978 ("PURPA") project and Power  
5                Purchase Agreement ("PPA") expenditures, and more  
6                recently, energy storage agreement expenditures.
- 7           (4)   Risks related to wildfires from a financial,  
8                reliability, insurability, and operational  
9                standpoint.
- 10          (5)   The renewal of federal licenses for the Company's  
11                hydroelectric projects, primarily the Hells  
12                Canyon Complex, which provides 36 percent of the  
13                Company's total generating nameplate capacity,  
14                and particularly the costs associated with the  
15                relicensing of that project.
- 16          (6)   Increased risks related to power reliability, as  
17                well as execution risk associated with  
18                infrastructure projects intended to maintain  
19                reliability.
- 20          (7)   Environmental risks and uncertainties related to  
21                new or proposed legislation and requirements and  
22                impacts on the Company's operations.
- 23          (8)   The increasing risks of cyber and physical  
24                security attacks on Idaho Power's and other  
25                utilities' infrastructure.

1           (9) The impacts of climate change on the Company,  
2           including the perceived risk in the financial  
3           community associated with the variability of the  
4           Company's hydroelectric generating base,  
5           variances in sales, impacts on operations,  
6           reputational concerns, application of investment  
7           policies, and other factors associated with  
8           changes in the climate.

9           (10) The Company's small size in terms of market  
10          capitalization and concentrated geographic and  
11          associated regulatory risk (i.e., 95 percent of  
12          the Company's business is in Idaho).

13          (11) The financial impact of a lag in the recovery of  
14          costs associated with higher capital  
15          expenditures, including the higher costs of  
16          financing those capital expenditures.

17          (12) Heightened scrutiny by equity investors and  
18          analysts of authorized ROEs and regulatory  
19          outcomes, and the disproportionate impact it has  
20          on the success of equity financing, particularly  
21          as the Company approaches the need for equity  
22          issuances.

23                I address several of those risks below in my  
24   testimony.

25                Q.       Are there other risks, less specific to Idaho

1 Power, that also impact your recommendation?

2           A.       Yes. There are general financial risks such as  
3 increased volatility in the financial markets and what I  
4 view as a heightened sensitivity to risk exposure. Other  
5 risks are industry-wide, such as unknown costs relative to  
6 carbon emissions, a need for infrastructure improvements,  
7 and increased capital investment, as well as inflationary  
8 pressures that increase costs of both operating expenses  
9 and capital outlays. Interest rate uncertainty fuels the  
10 fear that future borrowing costs could rise dramatically.  
11 Recently, the Federal Reserve has been attempting to  
12 control inflation by raising interest rates, which creates  
13 expectations for continued rising debt costs in the near  
14 future. These factors combine to make a challenging  
15 environment in which the Company must compete with others  
16 in the electric utility industry, as well as all other  
17 industries, for both resources and capital, to serve the  
18 needs of its customers. While I do not intend to elaborate  
19 further on more general risks, they are factors worthy of  
20 note that point to increased risks for the Company.

21           Many of the risks associated with the Company, and  
22 that factor into its equity and debt valuations, are  
23 included in the Annual Report on Form 10-K that the Company  
24 files with the US Securities and Exchange Commission, under  
25 the heading "Risk Factors." For the Form 10-K filed in



1 February 2023, that section of the document was  
2 approximately 13 pages in length.<sup>1</sup>

3 ***Credit Ratings and Capital Market Expectations***

4 Q. What is the status of Idaho Power's credit  
5 ratings?

6 A. Idaho Power's credit ratings as of May 31,  
7 2023, are as follows:

8 **TABLE 1**

9 Idaho Power Credit Ratings as of May 31, 2023

	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>
Corporate Credit Rating	BBB	Baa 1
Senior Secured Debt	A-	A2
Senior Unsecured Debt	BBB	Baa 1
Commercial Paper	A-2	P-2
Rating Outlook	Stable	Stable

10  
11 Q. Have there been any recent changes in the  
12 Company's credit ratings?

13 A. Yes. In July 2022, Moody's long-term issuer  
14 rating for Idaho Power was downgraded from A3 to Baa1. In  
15 addition, Moody's ratings for First Mortgage Bonds and  
16 Senior Secured Debt were downgraded to A2 from A1. Also, in  
17 February 2023, S&P downgraded its liquidity assessment of  
18 the Company from "strong" to "adequate." The downgrades  
19 occurred despite the expectation by the rating agencies

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<sup>1</sup> The Company's 10-K is available at:  
<https://d18rn0p25nwr6d.cloudfront.net/CIK-0000049648/e858bcab-7dd5-4c28-b5ba-56d347339652.pdf>

1 that the Company planned to file this rate case and that by  
2 2024 the Company expected to have an increase in cash flow  
3 from collections from customers.

4 Q. What is the Company's assessment of the impact  
5 of these downgrades?

6 A. Following the recent Moody's credit ratings  
7 changes, the Company's credit ratings remained investment  
8 grade. However, Moody's new rates move the Company closer  
9 to being below investment grade, referred to as "junk bond"  
10 status.

11 The Company's first opportunity to test the bond  
12 market after the 2022 downgrade was in December 2022. While  
13 Idaho Power was able to issue some long-term debt, buyer  
14 interest in the transaction was less than we anticipated,  
15 the buyers were limited, and we were not able to issue the  
16 volume of debt that we had originally intended to issue. We  
17 believe that fixed-income investors that had not been  
18 actively following the Company previous to our marketing of  
19 the debt instruments likely were concerned when they  
20 noticed the recent downgrade. This softened demand likely  
21 led to a higher cost of debt associated with these  
22 instruments than would have occurred with a backdrop of a  
23 more stable credit rating outcome.

24 Further ratings downgrades would cause additional  
25 harm to the risk perception of the Company in the debt

1 markets. If, for example, Idaho Power's credit ratings were  
2 to fall below investment grade, which would be below Baa3  
3 for Moody's and below BBB- for S&P, Idaho Power's cost of  
4 borrowing would increase substantially. A change below  
5 investment grade will also trigger significant increases in  
6 collateral-related deposits as well as significant cost  
7 increases for the Company's credit facility, which will  
8 increase costs to customers. That downgrade would also  
9 negatively impact IDACORP's stock price, decreasing the  
10 value the Company would receive for issuances in the equity  
11 markets.

12           A downgrade in the short-term debt rating could make  
13 it difficult for the Company to issue commercial paper  
14 under reasonable terms, if at all, which is the instrument  
15 Idaho Power relied upon recently during volatile power and  
16 fuel markets for its liquidity and to meet margin  
17 requirements. Additionally in tight markets such as a  
18 recession, liquidity for companies that are below  
19 investment grade becomes extremely limited, resulting in  
20 lack of cash on reasonable terms to finance the business,  
21 which could result in the inability of the Company to fund  
22 needed capital projects to reliably serve customers.

23           Q. How did Moody's describe the reasons for its  
24 downgrade?

1           A.       In July 2022, Moody's noted financial metrics  
2 and need for more timely rate relief as reasons:

3           Idaho Power Company's (IPC) credit profile  
4 reflects lower financial metrics over the  
5 last several years that are no longer  
6 supportive of an A3 rating, the major driver  
7 for the utility's recent downgrade to Baal.  
8 These metrics include a ratio of cash flow  
9 from operations before changes in working  
10 capital (CFO pre-WC) to debt of between 12%  
11 and 13% over the last two years. We expect  
12 the ratio to be around 13% over the medium-  
13 term, which is weak for its new Baal rating.

14  
15 and

16           ... without the benefit of more incremental  
17 and timelier rate relief through riders or  
18 cost tracking mechanisms, more frequent  
19 base rate increases and lower imputed debt  
20 from pension obligations, IPC's credit  
21 metrics will not improve materially and the  
22 utility will have limited financial cushion  
23 at its current rating level to manage  
24 unforeseen events.

25  
26           Q.       How did S&P characterize its February 2023  
27 change?

28           A.       S&P cited Idaho Power's reliability and  
29 economic growth-driven capital spending needs as reflecting  
30 its liquidity downgrade, as it perceived "elevated capital  
31 spending that will result in modest weakening of the  
32 Company's liquidity throughout the forecast period."

33           Q.       Do you believe that the current credit ratings  
34 of Idaho Power are adequate?

1           A.       Stronger credit ratings would be beneficial,  
2 but Idaho Power is still able to raise capital in today's  
3 markets with its current ratings. However, new debt/bond  
4 issues are at a higher cost than if Idaho Power's credit  
5 ratings were higher (i.e., the higher the credit rating,  
6 the lower the debt financing cost). Stronger credit ratings  
7 also result in more liquidity in all market conditions.

8           Q.       How else can credit ratings impact the  
9 Company?

10          A.       Idaho Power maintains margin agreements  
11 relating to its wholesale commodity contracts that allow  
12 performance assurance collateral to be requested of and/or  
13 posted with certain counterparties. If Idaho Power  
14 experiences a reduction in its credit rating on its  
15 unsecured debt to below investment grade, Idaho Power could  
16 be subject to requests by its wholesale counterparties to  
17 post additional performance assurance collateral. Likewise,  
18 counterparties to derivative instruments and other forward  
19 contracts could request immediate payment or demand  
20 immediate ongoing full daily collateralization on  
21 derivative instruments and contracts in net liability  
22 positions. For example, on March 31, 2023, the amount of  
23 collateral that could be requested by counterparties upon a  
24 downgrade to below investment grade was \$44.6 million. The

1 costs to finance the cash needed to meet these margin  
2 requirements would increase costs to customers.

3 Q. What factors could lead to a credit rating  
4 upgrade or downgrade?

5 A. Per Moody's in July 2022, factors that could  
6 lead to an upgrade include:

7 The rating of IPC could be upgraded if key  
8 credit metrics improve such that the CFO  
9 pre-WC to debt ratio increases to 16% or  
10 above on a sustained basis. An upgrade could  
11 also occur if the utility's regulatory  
12 construct improves materially, including  
13 authorization of trackers and rider  
14 mechanisms that would result in faster cost  
15 recovery, reducing regulatory lag.

16  
17 Factors that could lead to a downgrade include:

18 IPC's rating could be downgraded if  
19 financial metrics weaken further including  
20 a CFO pre-WC to debt ratio of 13% or below  
21 on a sustained basis. The rating could also  
22 come under pressure if the utility were to  
23 experience a decline in the credit  
24 supportiveness of its regulator including  
25 either higher cost recovery risks or lower  
26 returns.

27  
28 Per S&P in May 2022, factors that could lead to an upgrade  
29 include:

30 We could raise ratings if the company's  
31 business risk profile strengthened through  
32 a more robust management of regulatory  
33 relationships and improved operating  
34 efficiency, combined with stronger cash  
35 flow measures, including FFO [funds from  
36 operations] to debt consistently exceeding  
37 20%.

38  
39 Factors that could lead to a downgrade include:

1           We could lower ratings if business risk  
2           increased because of unsupported recovery  
3           of operating expenses, including higher-  
4           than-average reliance on purchased power or  
5           unsupported capital investments through the  
6           regulatory process or if the company  
7           materially expanded its nonregulated  
8           segments, which are currently negligible.  
9           We could also lower ratings if financial  
10          measures consistently underperformed our  
11          base case forecast, leading to an FFO-to-  
12          debt measure that is consistently less than  
13          14%.  
14

15           Q.     Are there any other considerations mentioned  
16          by the rating agencies that could point to future downgrade  
17          risks?

18           A.     Yes. Moody's pointed to regulatory lag on  
19          material investments that, in its view, overshadows  
20          regulatory mechanisms that are in place in Idaho.  
21          Specifically, Moody's stated in July 2022 that:

22                   ... the utility's financial profile has  
23                   historically lagged peers due to certain  
24                   regulatory constructs, such as flow-  
25                   through tax accounting and long-lived  
26                   depreciation due to its hydro asset base.  
27                   Since Idaho lacks the suite of investment  
28                   and operating cost recovery mechanisms seen  
29                   in other states, Idaho Power's cash flow  
30                   growth is primarily dependent on general  
31                   rate case filings, which it has not  
32                   benefited from for several years.  
33

34                   IPC's last general rate increase was in 2011  
35                   and the company carries approximately \$709  
36                   million in regulatory assets on its balance  
37                   sheet, net of regulatory liabilities, as of  
38                   31 March 2022. Some of the most sizable  
39                   unrecovered asset balances are associated  
40                   with Idaho Power's Hells Canyon Complex



1 hydro-fueled generation facility, the  
2 relicensing of which has been repeatedly  
3 delayed in a lengthy permitting and  
4 approval process since originally filed in  
5 2003. The lack of rate cases and delayed  
6 cash recovery of these investments has  
7 eroded the timeliness of rate relief for  
8 the company.

9  
10 Q. What are Idaho Power's expected near-term  
11 capital needs?

12 A. Over the five-year period from 2023-2027,  
13 Idaho Power anticipates spending between \$2.95 and \$3.2  
14 billion, and approximately \$1.5 billion in 2023-2024, on  
15 new property, plant, and equipment to serve customers. For  
16 comparison, Idaho Power's annual capital expenditures have  
17 averaged about \$325 million over the five-year period from  
18 2018-2022. This significant increase in capital  
19 expenditures will increase the Company's need for debt and  
20 equity financing.

21 Q. Do you believe the relief requested in this  
22 case will serve to stabilize or improve the Company's  
23 credit ratings going forward?

24 A. I believe it will stabilize the current credit  
25 ratings but not improve them, particularly with the decline  
26 in Idaho Power's debt-to-equity ratio from 55 percent in  
27 2022 to what the Company expects to be 51 percent by the  
28 end of 2023. The credit rating agencies have built their  
29 models and assumptions, in part, based on forecasts Idaho

1 Power has discussed with them over the past few years.  
2 Those forecasts have contemplated the rate relief requested  
3 in this case. In addition, this case requests additional  
4 return of and return on rate base that has been placed into  
5 service since the last general rate case, and that  
6 substantial investment has carried regulatory lag from a  
7 cash flow perspective over several years. Finally, the  
8 credit rating agencies will view as positive the Company's  
9 requests in this case to begin to address needed cash  
10 collections related to regulatory deferrals, such as those  
11 related to wildfire mitigation and pension expenses, though  
12 those collections have also been assumptions included in  
13 their modeling.

14 Q. Aside from credit ratings, have equity  
15 analysts changed their ratings on IDACORP recently, and for  
16 what reasons?

17 A. Yes. IDACORP's equity ratings by two of its  
18 equity analysts declined relatively recently. Mizuho  
19 Securities USA LLC downgraded IDACORP from a "Buy" to a  
20 "Neutral" rating on April 4, 2023, generally citing risks  
21 associated with higher capital expenditures and the impact  
22 on financial results, along with regulatory uncertainty.  
23 BofA Securities downgraded IDACORP from a "Buy" to a  
24 "Neutral" rating on November 7, 2022, citing regulatory  
25 uncertainty, growing O&M, and broad inflationary pressures

1 and their impact on small- and mid-capitalization  
2 utilities, and a growing trepidation toward smaller  
3 companies due to heightened risks.

4 ***Energy Market Volatility and Liquidity Challenges***

5 Q. How have recent events in the energy markets  
6 impacted the Company?

7 A. Higher and more volatile prices in the  
8 electricity and natural gas markets have created additional  
9 risks for the Company in two particular ways. First, by  
10 increasing power supply costs. The power cost adjustment  
11 mechanism ("PCA") partially mitigates the effects of energy  
12 market price volatility on financial results, but the  
13 volatility levels can result in the Company absorbing  
14 significant amounts of power supply costs. For example, for  
15 the Company's April 2022-March 2023 PCA year, total actual  
16 power supply costs were \$721.8 million, compared to base  
17 power supply costs of \$305.7 million. After  
18 jurisdictionalization, the PCA mechanism's 95 percent/5  
19 percent sharing applied to most of the variance resulted in  
20 \$14.6 million of increased power supply costs being  
21 absorbed by the Company. While this GRC will establish new  
22 base power supply costs that will help mitigate some of  
23 this impact, continued volatility will likely continue to  
24 negatively impact the Company, and thus the return expected  
25 by investors.

1           Second, the higher prices and volatility of power  
2   and fuel impact the Company's liquidity. While the PCA  
3   mechanism mitigates in-part the potential adverse earnings  
4   impacts to Idaho Power of fluctuations in power supply  
5   costs, collection from customers of most of the difference  
6   between actual power supply costs compared with those  
7   included in retail rates is deferred to a subsequent  
8   period, which can affect Idaho Power's operating cash flow  
9   and liquidity until those costs are recovered from  
10   customers. In the Company's recent PCA filing, the total  
11   power supply costs that the Company had paid pending future  
12   recovery from customers was \$190 million, which was a  
13   significant strain on operating cash flows. For the first  
14   quarter of 2023, Idaho Power's operating cash flows were  
15   negative \$93 million, reflective of Idaho Power absorbing  
16   the cash flow impact of adverse lag in the PCA mechanism.  
17   This negative cash flow was particularly alarming.

18           Further, wholesale commodity contracts often require  
19   performance assurance collateral be posted with  
20   counterparties. During recent energy market price spikes,  
21   the Company was required to post very large amounts of cash  
22   collateral, significantly straining its available  
23   liquidity. To give an order of magnitude, as of March 31,  
24   2023, Idaho Power had posted \$63 million of cash

1 performance assurance collateral related to its energy  
2 market contracts.

3 ***PURPA and PPA Expenditures and Associated Credit and Equity***  
4 ***Impacts***

5 Q. What is the significance of PURPA and PPA  
6 expenditures?

7 A. The Company has significant amounts of  
8 financial commitments related to PURPA facilities and other  
9 PPAs. Idaho Power has entered into a number of PPAs and  
10 PURPA contracts since 2010, the last full year before the  
11 Company's last GRC. In Idaho Power's Annual Report on Form  
12 10-K, it cites contractual obligations associated with  
13 these contracts of over \$4.2 billion. Additional contracts  
14 signed in 2023 and awaiting Commission approval push that  
15 total to nearly \$4.9 billion.

16 The base rate regulatory treatment of PURPA  
17 qualifying facility ("QF") contracts provides for a one-  
18 for-one recovery of dollars expended, while PPA recovery is  
19 generally subject to the PCA mechanism's 95/5 sharing  
20 provision. Neither provides for any return to compensate  
21 the Company for its long-term purchase obligation under the  
22 applicable contract, despite it being a debt-like  
23 obligation and long-term capital commitment. The Company  
24 is, in effect, buying and selling energy (pursuant to a  
25 legal mandate in the case of QFs) without any compensation

1 for providing this service. The mere dollar-for-dollar  
2 recovery of QF expenditures and the significant size of the  
3 obligation, with no return for the use of the Company's  
4 general and administrative resources, balance sheet, and  
5 liquidity in managing QF programs and PPAs, is viewed as a  
6 long-term contractual and debt-like obligation, and thus a  
7 risk, by the rating agencies. The rating agencies are not  
8 making a judgment related to the appropriateness of QF or  
9 PPA-based energy purchase programs, but merely pointing out  
10 the cost of the financial risk(s) arising from a QF or PPA  
11 transaction, and that this risk should be reflected in a  
12 higher ROE to recognize the impact of the Company's QF and  
13 PPA contracts.

14 Q. Do the rating agencies recognize the financial  
15 costs of QF and PPA transactions beyond the contract price?

16 A. Yes. Like other electric utilities, when the  
17 Company adds to its rate base, it must use some portion of  
18 shareholder equity to fund the investment. The Company must  
19 maintain its proportion of equity to debt above a certain  
20 level as it continues this investment process. If it does  
21 not, the debt level increases and the Company will face the  
22 threat of a ratings downgrade. Conversely, when the Company  
23 enters into a QF or PPA contract for purchased power, an  
24 obligation is generally not reflected in the Company's  
25 financial statements; however, the rating agencies add to

1 the financial statement an imputed debt for the QF or PPA  
2 contract, resulting in an increase in total debt and a need  
3 to increase equity in order to maintain credit quality.

4 Unless an equity component is provided to offset the  
5 debt-like obligation of long-term purchased power  
6 contracts, the Company faces off-balance sheet financial  
7 risk that threatens a reduction in credit ratings. For  
8 financial commitments that are not presented on the balance  
9 sheet, rating agency analysts impute the debt and interest  
10 equivalents on the financial statements of the Company to  
11 achieve a more accurate picture of the risk associated with  
12 the investment and the Company's related commitment. The  
13 added equity needed to offset this imputed debt and  
14 interest represents the effect that long-term purchased  
15 power commitments have on the cost of capital. An increase  
16 in the long-term obligation of a utility related to its  
17 capacity and energy resources will have to be backed by an  
18 appropriate amount of equity in the eyes of the ratings  
19 agencies.

20 In reviewing its evaluation of the credit  
21 implications of QF-related expenditures, in November of  
22 2013, as stated below, S&P noted that it viewed such  
23 agreements as creating "fixed debt-like financial  
24 obligations" that must be considered in evaluating a  
25 utility's credit risks.



1 We view long-term purchased power  
2 agreements (PPA) as creating fixed, debt-  
3 like financial obligations that represent  
4 substitutes for debt-financed capital  
5 investments in generation capacity. By  
6 adjusting financial measures to incorporate  
7 PPA fixed obligations, we achieve greater  
8 comparability of utilities that finance and  
9 build generation capacity and those that  
10 purchase capacity to satisfy new load. PPAs  
11 do benefit utilities by shifting various  
12 risks to the electricity generators, such  
13 as construction risk and most of the  
14 operating risk. The principal risk borne by  
15 a utility that relies on PPAs is recovering  
16 the costs of the financial obligation in  
17 rates.

18  
19 ...Risk factors based on regulatory or  
20 legislative cost recovery typically range  
21 between 0% and 50%, but can be as high as  
22 100%. A 100% risk factor would signify that  
23 substantially all risk related to  
24 contractual obligations rests on the  
25 company, with no regulatory or legislative  
26 support. A 0% risk factor indicates that  
27 the burden of the contractual payments  
28 rests solely with ratepayers,  
29  
30

31 Q. How material are QF- and PPA-related  
32 expenditures?

33 A. As of the end of 2022, Idaho Power had 133  
34 signed cogeneration/small power production ("CSPP")-related  
35 contracts with QFs representing 1,212 megawatts ("MW") of  
36 capacity, as well as 596 MW of non-QF PPAs. 129 QF projects  
37 with a nameplate capacity of 1,137 MW were online at the  
38 end of 2022. In 2022, the Company incurred approximately  
39 \$189 million of expense related to QF projects and \$45

1 million related to PPA projects. As of December 31, 2022,  
2 the Company is obligated to pay approximately \$4.2 billion  
3 to QF and PPA developers over the remaining life of these  
4 contracts. To provide context on how significant the \$4.2  
5 billion liability is to Idaho Power, the Company's total  
6 projected long-term debt obligation at year-end 2022 is  
7 only \$2.2 billion. The QF and PPA obligations are over 160  
8 percent of the debt financing for all assets the Company  
9 owns to serve customers.

10 Q. Are QF and PPA expenses increasing?

11 A. Yes. Idaho Power has been engaged in resource  
12 procurement activities that the Company expects will result  
13 in several new, large PPAs and Battery Storage Agreements  
14 ("BSA") to meet future resource needs. Currently, Idaho  
15 Power has 340 MW of signed solar PPAs and 150 MW of BSAs in  
16 development, with an additional substantial resource  
17 procurement in the competitive bidding process. The 150-MW  
18 BSA signed in April 2023, for example, contributes an  
19 additional \$440 million on top of the total contracted  
20 obligation noted above. The substantial and increasing  
21 obligations of PURPA QF and PPA agreements create a  
22 material risk factor for Idaho Power and increase costs to  
23 customers.

24 //

25 //

1     **Wildfire Risks, Insurability, and Insurance Costs**

2             Q.     Please describe the increased risks associated  
3 with wildfires.

4             A.     Since the 1980s, wildfire activity in the  
5 United States in terms of acres burned has more than  
6 tripled and, according to the National Interagency Fire  
7 Center, western states account for upwards of 95 percent  
8 of the acres burned in recent years. While Idaho Power has  
9 not experienced catastrophic wildfires within its service  
10 area at the same level experienced in other western  
11 states, such as California and Oregon, millions of acres  
12 of rangeland and southern Idaho forests have burned in the  
13 last 30 years.

14            A variety of factors have contributed to more  
15 destructive wildfires, including climate change, increased  
16 human encroachment in wildland areas, historical land  
17 management practices, and changes in wildland and forest  
18 health, among other factors.

19            Specific to Idaho Power, wildfires have the  
20 potential to damage or destroy the Company's facilities,  
21 impact personnel, and cause significant harm to Idaho  
22 Power's customers and the communities in which the Company  
23 serves. Company Witness Mr. Mitch Colburn provides a more  
24 detailed discussion of wildfire risk in his testimony.

1           Q.       Have Idaho Power's overall insurance premium  
2 costs increased in recent years?

3           A.       Yes. While Idaho Power undertakes significant  
4 efforts to manage the cost of insurance and obtain the  
5 greatest insurance value possible for its customers, the  
6 Company is to some degree a price-taker in the insurance  
7 market. In that regard, despite annual assessment of its  
8 insurance portfolio to identify the best value and the  
9 retention of an experienced insurance broker, the Company  
10 is subject to price increases as insurers raise premiums  
11 due to losses, either pertaining to Idaho Power or to  
12 insurers' overall insured base.

13           As noted in the memo from Idaho Power's insurance  
14 broker that was provided with the Company's 2021 wildfire  
15 mitigation cost deferral Application in Case No. IPC-E-21-  
16 02 (and included as Exhibit No. 19 to my testimony), much  
17 of the increases in premiums is attributable to the  
18 frequency and magnitude of Western-state wildfires in  
19 recent years, as well as insurance providers' perceptions  
20 of Idaho Power's specific wildfire risk. The sizeable  
21 increase in Idaho Power's premiums became particularly  
22 prominent in 2021 due in part to a new "wildfire load"  
23 charge of approximately \$1 million that is being added  
24 annually to electric utilities, such as Idaho Power, that

1 insurers have determined operate in high-risk zones for  
2 wildfire.

3 To help manage the costs of insurance, Idaho Power  
4 has taken actions such as marketing of its programs as  
5 needed, formation of a captive insurance program to access  
6 the reinsurance market, reviewing and adjusting of self-  
7 insured retentions, meeting regularly with insurers to  
8 provide details on risk-mitigation practices, and regularly  
9 assessing the adequacy of overall coverage. While these  
10 efforts have resulted in benefits, costs of insurance for  
11 the Company, and for the industry as a whole, have  
12 increased notably in recent years.

13 Q. Does Idaho Power anticipate these premium  
14 increases will continue?

15 A. Because insurance markets continue to be  
16 volatile, premium increases are difficult to forecast.  
17 Idaho Power anticipates that, notwithstanding its efforts  
18 to negotiate favorable rates and coverage, premiums for  
19 insurance will continue to increase for the foreseeable  
20 future. This trend has been echoed by Idaho Power's third-  
21 party insurance broker, who has explained that insurance  
22 premiums will continue to increase due to prior losses  
23 incurred by insurance providers and projected increased  
24 risks of losses by insurers from wildfires.

1           Q.       Aside from insurance premium increases, which  
2   are representative of third-party assessments of Idaho  
3   Power's wildfire risk, does wildfire risk impact the cost  
4   of capital?

5           A.       Yes, it does. In recent years, credit rating  
6   agencies have inquired about Idaho Power's wildfire risk  
7   and the efforts it undertakes to mitigate the risk.  
8   Investment analysts and current and prospective debt and  
9   equity investors also frequently inquire about wildfire  
10  risk and mitigation efforts. This was elevated by the  
11  Pacific Gas & Electric bankruptcy that resulted in large  
12  part from wildfire liability associated with numerous  
13  California wildfires ignited by the utility.

14               Credit rating agencies, analysts, and investors have  
15  inquired about operating practices, financial exposure,  
16  insurance coverage, and other topics relevant to wildfire  
17  liability, and the exposure the Company has to wildfires  
18  factors. They then incorporate this information into their  
19  decision about whether to purchase debt and equity  
20  securities and in credit ratings, and thus ultimately the  
21  cost of capital, in much the same way that exposure  
22  influences insurance premiums.

23   ***Hydroelectric Facility Relicensing Risks and Costs***

24           Q.       What risks are associated with the Company's  
25  relicensing efforts for its hydroelectric facilities?

1           A.       Relicensing of the Company's hydroelectric  
2 facilities will create additional obligations. It involves  
3 large capital expenditures, increased operating costs, and  
4 reduced hydropower generation, all of which can negatively  
5 affect Idaho Power's results of operations and financial  
6 condition. For the last several years, Idaho Power has been  
7 engaged in an effort to renew its federal license for its  
8 largest hydropower generation source, the Hells Canyon  
9 Complex ("HCC"). Idaho Power is also in the process of  
10 relicensing the American Falls hydroelectric facility.

11           Relicensing and ongoing permitting requirements  
12 include an extensive public review process that involves  
13 numerous natural resource issues and environmental  
14 conditions. For instance, the existence of endangered and  
15 threatened species in the watershed may result in major  
16 operational changes to the region's hydropower projects,  
17 which may be reflected in hydropower licenses, including  
18 for the HCC and the American Falls facilities.

19           In addition, new interpretations of existing laws  
20 and regulations could be adopted or become applicable to  
21 hydropower facilities, which could further increase  
22 required expenditures for endangered species protection and  
23 other environmental compliance obligations and reduce the  
24 amount of hydropower generation available to meet Idaho  
25 Power's generation requirements. Idaho Power cannot predict



1 the requirements that might be imposed during the  
2 relicensing and permitting process, or the financial or  
3 operational impact of those requirements.

4 Q. Are there other hydroelectric relicensing-  
5 based financial risks considered by the investment  
6 community?

7 A. Yes. For any particular generating facility,  
8 the worst possible outcome would be the loss of the license  
9 to a competing party. Along with the uncertainty as to the  
10 eventual receipt of licenses and the costs involved in  
11 preparing for the license applications, costs of  
12 protection, mitigation and enhancement ("PM&E") related to  
13 these projects are also difficult to quantify. The  
14 potential financial magnitude of these PM&E costs and their  
15 effect on the Company's low-cost hydro generation resources  
16 threaten the financial stability of a company the size of  
17 Idaho Power and the ultimate rates it must charge its  
18 customers. These amounts will vary among facilities;  
19 however, in all cases, they can be significant due to lost  
20 generation capacity, generation at a higher cost, and the  
21 decreased ability of the Company to time and control water  
22 releases. If the Company cannot generate when it is most  
23 advantageous for the system, then some of the economic  
24 value of the generation will be lost even if the amount of  
25 total generation does not change.

1           Q.       What will occur when the Company receives a  
2 new license for the Hells Canyon facilities?

3           A.       The amounts in construction work in progress  
4 ("CWIP"), net of the accrued balance in the regulatory  
5 liability account for pre-collected amounts received  
6 relative to the allowance for funds used during  
7 construction ("AFUDC"), will be transferred to plant in  
8 service and the accumulation of AFUDC will cease and the  
9 amortization of the relicensing costs will start. The  
10 result will be an increase in rate base with earnings of  
11 the Company declining substantially until this additional  
12 amount is included in rate base and reflected in rates,  
13 since there will be no ongoing contribution to earnings  
14 from AFUDC. This is a notable risk to the Company's  
15 financial condition. Because this is a relicense of an  
16 existing hydro facility, there will be no increase (and  
17 potentially a decrease due to operational changes) in the  
18 generation of power and thus no increase in sales revenues.

19           An investor's perspective of the risk, upon receipt  
20 of the license, includes the following: (1) the Company's  
21 earnings will immediately decrease (no continuing AFUDC and  
22 an increase in amortization expense of the relicensing  
23 costs), (2) the Company's plant in-service will increase  
24 (transfer from CWIP), and (3) no additional sales revenues  
25 (same plant but new license) will result. If the completion

1 of relicensing is not aligned perfectly with the allowance  
2 of new effective rates that recognize the transfer of  
3 previously deferred relicensing costs into rate base, the  
4 Company will be financially harmed. For the period of time  
5 the new rate base is under review by the Commission, the  
6 Company will earn no return on over \$200 million of net  
7 investment. This potential regulatory lag, combined with  
8 investors' potential expectation that there could be some  
9 amount of cost disallowance, is a significant risk factor  
10 based upon the size of the investment the Company has made  
11 in relicensing the HCC.

12 Q. What is Idaho Power's current HCC relicensing  
13 cost in CWIP?

14 A. Relicensing costs of \$432 million for the HCC  
15 were included in CWIP as of March 31, 2023. As of March 31,  
16 2023, Idaho Power's regulatory liability for collected  
17 AFUDC relating to the HCC was \$213 million.

18 Q. What other risks does the relicensing process  
19 create?

20 A. As Idaho Power's largest single generating  
21 resource, continued operation of the HCC and failure to  
22 renew a federal license for HCC could have a dramatic  
23 operational impact. Further, imposition of onerous  
24 conditions in the relicensing and permitting processes  
25 could result in Idaho Power incurring significant

1 additional capital expenditures, increase operating costs  
2 (including power purchase costs), and reduce hydropower  
3 generation, which could negatively affect the financial  
4 condition of the Company and the prices its customers pay  
5 for electricity.

6 ***Reliability Risk and Execution Risk on Infrastructure***

7 Q. What issues with reliability are creating  
8 additional risk?

9 A. The transition to intermittent renewable  
10 energy resources in the region, transmission constraints,  
11 retirement of baseload fossil fuel plants, aging  
12 infrastructure, demand growth, weather conditions and  
13 wildfires, and other factors have all impacted the  
14 Company's ability to reliably provide energy. As noted in  
15 Ms. Grow's testimony, the Company is making a concerted  
16 effort to maintain reliability using a variety of programs.  
17 However, the aforementioned items do subject the Company to  
18 greater reliability risks than existed in the past.

19 Q. Besides the risk of not being able to deliver  
20 energy, what other risks does reliability entail?

21 A. Idaho Power could be subject to regulatory  
22 penalties, reputational harm, legal claims, and operational  
23 changes if it violates mandatory reliability and security  
24 requirements. The obligation to provide reliable service  
25 also entails a significant commitment of capital, both for

1 operating and maintenance expenses and for capital  
2 improvements. As I noted previously, Idaho Power is in a  
3 stage of significant capital investment, constructing the  
4 resources needed to reliably serve customers. The capital  
5 needed to maintain reliability introduces two elements of  
6 risk: the ability of the Company to attract that required  
7 capital, and the recovery of the investments on a deferred  
8 basis and subject to the uncertainty of the regulatory  
9 process.

10           There are also significant efforts at the national  
11 level to reshape energy policy, and that can put upward  
12 pressure on that spending and the associated need to  
13 attract capital. New federal energy policies are evolving  
14 and could introduce new spending requirements to meet  
15 reliability standards and regulatory requirements.

16           Q.     Are there other risks associated with Idaho  
17 Power's build-out of infrastructure to address reliability?

18           A.     Yes. There are several considerable risks.  
19 These risks include, as examples:

- 20           •     the ability to timely obtain labor or materials  
21           at reasonable costs;
- 22           •     defaults and delays by suppliers and contractors,  
23           including delays for specialty equipment that require  
24           significant lead times;
- 25           •     increases in price and limitations on

1       availability of commodities, materials, and equipment;  
2       •     imposition of tariffs on commodities, materials,  
3       and equipment sourced by foreign providers;  
4       •     equipment, engineering, and design failures;  
5       •     credit quality of counterparties and suppliers  
6       and their ability to meet financial and operational  
7       commitments;  
8       •     unexpected environmental and geological problems;  
9       •     the effects of adverse weather conditions;  
10      •     catastrophic events, natural disasters,  
11      epidemics, pandemics and other public health or  
12      disruptive events that could result in supply chain  
13      disruptions, as well as permitting and construction  
14      delays;  
15      •     availability of financing;  
16      •     the ability to obtain approval from local, state,  
17      or federal regulatory and governmental bodies and to  
18      comply with permits and land use rights, and  
19      environmental constraints; and  
20      •     delays and costs associated with disputes and  
21      litigation with third parties.

22   The occurrence of any of these risks could cause Idaho  
23   Power to operate at reduced capacity levels, increase

1 expenses, incur penalties, and adversely affect Idaho  
2 Power's financial condition.

3 ***Environmental Issues and Risks***

4 Q. Please describe the Company's increasing risks  
5 related to environmental issues.

6 A. Idaho Power's operations are subject to  
7 numerous federal, state, and local environmental statutes,  
8 rules, and regulations relating to climate change, air and  
9 water quality, natural resources, endangered species and  
10 wildlife, renewable energy, and health and safety.  
11 Compliance with environmental regulations can significantly  
12 increase capital spending, operating costs, and plant  
13 availability and can negatively affect the affordability of  
14 Idaho Power's services for customers.

15 Q. What are the costs associated with  
16 environmental compliance?

17 A. Idaho Power's current estimated compliance  
18 expenditures for the three-year period from 2023 to 2025  
19 are \$156 million of capital expenditures and \$99 million of  
20 operating expenses, based on current environmental laws and  
21 regulations. Idaho Power anticipates that finalization,  
22 implementation, or modification of federal and state  
23 rulemakings and other proceedings could result in  
24 substantial changes in operating and compliance costs.  
25 Idaho Power is unable to estimate the changes in costs that



1 could result, given the uncertainty associated with  
2 existing and potential future regulations, but Idaho Power  
3 expects the expenditures will remain substantial  
4 regardless.

5 Q. What other impacts could environmental  
6 compliance requirements have?

7 A. In some cases, the costs to obtain permits and  
8 ensure facilities are in compliance may be prohibitively  
9 expensive. In other instances, the permitting process might  
10 substantially delay the Company's ability to acquire  
11 resources in accordance with its resource planning process.  
12 Furthermore, Idaho Power may not be able to obtain or  
13 maintain all environmental regulatory approvals necessary  
14 for operation of its existing infrastructure or  
15 construction of new infrastructure.

16 Q. What would be the impact of prohibitively  
17 expensive compliance costs or inability to acquire  
18 regulatory approval to operate facilities?

19 A. If new regulations render generating  
20 facilities uneconomical or impossible to maintain or  
21 operate, Idaho Power would need to identify alternative  
22 resources for power, potentially in the form of new  
23 generation and transmission facilities, market power  
24 purchases, demand-side management programs, or a  
25 combination of these and other methods.

1           Q.       What impact do lengthy permitting processes  
2     have on the ability to operate facilities and the Company's  
3     financial condition?

4           A.       Idaho Power's resource procurement and  
5     planning process, its Integrated Resource Plan ("IRP"),  
6     assumes the ability of the Company to timely plan and  
7     procure the necessary resources to serve load. Lengthy  
8     permitting processes impact the Company's ability to  
9     execute on its lowest-cost, least-risk resource portfolios.

10          For example, the Boardman to Hemingway ("B2H")  
11     transmission project was first identified in the preferred  
12     portfolio of the Company's 2009 IRP, with an estimated in-  
13     service date of 2015. Since that time, B2H has remained in  
14     subsequent IRP preferred portfolios, and the Company has  
15     continued to work to obtain the permits and approvals  
16     necessary for construction of B2H, but the process has  
17     significantly delayed construction and commercial operation  
18     of the project. As of March 31, 2023, the Company has \$58  
19     million in CWIP for future recovery. Similar to the HCC  
20     relicensing, the prolonged B2H permitting process  
21     negatively impacts liquidity and recovery of the costs is  
22     subject to regulatory lag.

23     ***Physical Security and Cyber Security Risks***

24          Q.       What risks do physical security and  
25     cybersecurity pose?

1           A.     Idaho Power operates in an industry that  
2     requires the continuous use and operation of sophisticated  
3     information technology and increasingly complex operational  
4     technology systems and network infrastructure. In addition  
5     to those cyber assets, Idaho Power's generation and  
6     transmission facilities and its grid operations are  
7     potential targets for terrorist acts and threats, acts of  
8     war, social unrest, cyber and physical security attacks,  
9     and other disruptive activities of individuals or groups,  
10    including by nation states or nation state-sponsored  
11    groups.

12           Q.     Have there been recent examples of such  
13    attacks?

14           A.     Yes. There have been recent cyber and physical  
15    attacks within the energy industry on infrastructure such  
16    as electric substations and fuel pipelines, with notable  
17    reports in the media of electric industry infrastructure  
18    specifically being targeted for and impacted by physical  
19    attacks more recently. Unfortunately, there will be  
20    additional attacks in the future. Idaho Power and its  
21    vendors have been subject to, and will likely continue to  
22    be subject to, continuous attempts to gain unauthorized  
23    access to systems and confidential information, and efforts  
24    to disrupt operations.

1           Q.       Besides attempts to damage utility  
2 infrastructure, are there other cybersecurity risks?

3           A.       Yes. In the normal course of business, Idaho  
4 Power or its vendors collect and store sensitive and  
5 confidential customer and employee information and  
6 proprietary information of Idaho Power. Idaho Power's  
7 technology systems are dependent upon connectivity to the  
8 internet and third-party vendors to host, maintain, modify,  
9 and update its systems, which may experience significant  
10 system failures or cyberattacks that could compromise the  
11 security of Idaho Power's assets and information. All  
12 information technology systems are vulnerable to  
13 disability, unauthorized access, unintentional defects,  
14 user error, errors in system changes, and cybersecurity  
15 incidents.

16           Idaho Power is in the process of pursuing complex  
17 business system upgrades, and these significant changes  
18 increase the risk of system interruption. Any data security  
19 breaches, such as misappropriation, misuse, leakage,  
20 falsification, or accidental release or loss of information  
21 maintained in Idaho Power's information technology systems  
22 or on third-party systems, including customer or employee  
23 data, could result in violations of privacy and other laws  
24 and associated litigation and liability for damages, fines,  
25 and penalties; financial loss to Idaho Power or to its

1 customers; customer dissatisfaction or diminished customer  
2 confidence; and damage to Idaho Power's reputation, all of  
3 which could materially affect Idaho Power's financial  
4 condition and results of operations.

5         No security measures can completely shield Idaho  
6 Power's systems, infrastructure, and data from  
7 vulnerabilities to cyberattacks, human error, intrusions,  
8 or other events that could result in their failure or  
9 reduced functionality, and ultimately the potential loss of  
10 sensitive information or the loss of Idaho Power's ability  
11 to fulfill critical business functions and provide reliable  
12 electric power to customers. Despite the steps Idaho Power  
13 may take to detect, mitigate, or eliminate threats and  
14 respond to security incidents, the techniques used by those  
15 who seek to obtain unauthorized access, and possibly  
16 disable or sabotage systems or abscond with information and  
17 data, change frequently and Idaho Power may not be able to  
18 protect against all such actions.

19         Although Idaho Power continues to make investments  
20 in its cyber and physical security programs, including  
21 personnel, technologies, and training of personnel, there  
22 can be no assurance that these systems or their expected  
23 functionality will be implemented, maintained, or expanded  
24 effectively; nor can security measures completely eliminate  
25 the possibility of a cyber or physical security breach or

1 incident. Further, the implementation of security  
2 guidelines and measures has resulted in, and Idaho Power  
3 expects to continue to result in, increased costs.

4 ***Climate Change Risks***

5 Q. Are changes in weather conditions and climate  
6 concerns creating increased risk for the Company?

7 A. Yes, in a number of ways, including the  
8 following:

- 9 • Due to regulations and associated costs  
10 originating from climate change concerns, Idaho Power  
11 is retiring fossil fuel generating units that have  
12 provided reliable and affordable generation and  
13 replacing it with intermittent resources and utility-  
14 scale batteries that fit within the confines of  
15 federal regulation and infrastructure development  
16 risks. This transition creates reliability issues, as  
17 discussed above, and additional uncertainty regarding  
18 resource costs and impacts on wholesale energy  
19 markets, particularly as other utilities make the same  
20 transition away from fossil fuel generating plants and  
21 baseload energy sources. If new greenhouse gas ("GHG")  
22 emissions reduction rules were to become effective,  
23 they could result in significant additional compliance  
24 costs that could negatively impact Idaho Power's  
25 future financial position, results of operations, and

1 cash flows if such costs are not timely recovered  
2 through regulated rates. Moreover, the possibility  
3 exists that stricter laws, regulations, or enforcement  
4 policies could significantly increase compliance costs  
5 and the cost of any remediation that may become  
6 necessary.

7 • The price of power in the wholesale energy  
8 markets tends to be higher during periods of high  
9 regional demand that often occur with weather  
10 extremes, which may cause Idaho Power to purchase  
11 power in the wholesale market during peak price  
12 periods, increasing power supply costs. The PCA helps  
13 mitigate the effects of energy market price  
14 volatility, but the volatility levels can result in  
15 the Company absorbing significant amounts of power  
16 supply costs. As described above, the Company's April  
17 2022-March 2023 PCA year, total actual power supply  
18 costs were \$721.8 million, compared to base power  
19 supply costs of \$305.7 million, and a large part of  
20 this variance resulted from high market prices.

21 • The Company's hydroelectric generating base  
22 depends on water conditions in the Snake River Basin.  
23 Warmer temperatures and changes in precipitation  
24 levels and sustained drought conditions can adversely  
25 affect the amount of energy generated by its



1 hydroelectric generation facilities. Low water  
2 conditions in the Snake River Basin, as well as in  
3 other areas, can increase wholesale market prices due  
4 to a lack of hydroelectric generation in the region  
5 and a reliance on more costly energy sources. This can  
6 result in power supply cost variances that are  
7 absorbed by the Company, as noted previously in my  
8 testimony.

9 • The increased frequency and severity of storms,  
10 lightning, high winds, icing events, droughts, heat  
11 waves, fires, floods, snow loading, and other extreme  
12 weather events can damage transmission, distribution,  
13 and generation facilities, causing service  
14 interruptions and extended or mass outages, which  
15 increases costs and impairs Idaho Power's ability to  
16 meet customer energy demand.

17 • The costs of repairing and replacing  
18 infrastructure or any costs related to Idaho Power's  
19 liability for personal injury, loss of life, and  
20 property damage from utility equipment that fails,  
21 including as a result of significant weather and  
22 weather-related events and fires, is not covered in  
23 full by insurance.

24 • Customers' energy use could increase or decrease  
25 based on variable weather conditions, impacting the

1 predictability of revenues and earnings.

2 • Stakeholder actions and increased regulatory  
3 activity related to climate change and reducing GHG  
4 emissions, could negatively impact the Company in  
5 capital markets transactions. Idaho Power has seen a  
6 rise in certain stakeholders, including investors and  
7 lenders, placing increasing importance on the impact  
8 and social cost associated with climate change. GHG  
9 emissions, including, most significantly carbon  
10 dioxide, could be further restricted in the future in  
11 response to stakeholder expectations with respect to  
12 environmental and climate change issues. The  
13 increasing focus on climate change and associated  
14 stricter regulatory and legal requirements may result  
15 in Idaho Power facing adverse reputational risks  
16 associated with certain of its operations that produce  
17 GHG emissions or that mine coal. If Idaho Power is  
18 unable to satisfy the increasing climate-related  
19 expectations of certain stakeholders, IDACORP and  
20 Idaho Power may suffer reputational harm. This could  
21 cause IDACORP's stock price to decrease or cause  
22 certain investors and financial institutions not to  
23 purchase the companies' debt securities or otherwise  
24 provide the companies with capital or credit on  
25 favorable terms, which may cause IDACORP's and Idaho

1           Power's cost of capital to increase.

2       ***Company Size and Geographic Concentration***

3           Q.       Does IDACORP's size have an impact on  
4 investors' perceived level of risk?

5           A.       Yes, IDACORP's relatively small market  
6 capitalization compared to its peers is a factor that makes  
7 IDACORP riskier than the average electric utility holding  
8 company. IDACORP's \$5.7 billion market capitalization is  
9 much smaller than the \$22.8 billion average market cap of  
10 the electric utilities used by Mr. McKenzie to estimate the  
11 range of acceptable ROEs. There is well-documented evidence  
12 that investors in smaller companies expect higher rates of  
13 return than larger companies but also face higher risk.  
14 Idaho Power does not have a corporate parent with a large  
15 balance sheet and strong credit ratings to rely on during  
16 times of financial stress given the fact that Idaho Power  
17 is the primary subsidiary of IDACORP.

18           Also, the Company faces a concentrated regulatory  
19 risk compared to many of its peers because 95 percent of  
20 its retail revenues come from one jurisdiction. Both equity  
21 analysts and the credit agencies consistently identify  
22 regulatory risk as one of the chief risk factors for the  
23 Company. This risk from lack of diversification, combined  
24 with the relatively small size, gravitates toward a higher  
25 required return from investors compared to many of Idaho

1 Power's peers.

2 ***Growth and Regulatory Lag***

3 Q. What will prevent the Company from earning  
4 its authorized or allowed ROE, absent approval of this rate  
5 request?

6 A. In light of the substantial infrastructure  
7 development Idaho Power is undertaking, and will be  
8 undertaking for the foreseeable future, in my opinion, the  
9 reliance on historical test year information is a primary  
10 reason the Company may have difficulty earning its  
11 authorized or allowed ROE going forward. Idaho Power is in  
12 a position of applying to recover its costs on a historical  
13 basis when its costs are constantly increasing on a  
14 prospective basis. As a result, there is and will continue  
15 to be a consistent recovery lag.

16 Q. What effect does growth have on the use of  
17 historical data?

18 A. Growth inherently worsens the effects.  
19 Separate from rising operation & maintenance costs that  
20 must accommodate that growth, the allowed rate of return is  
21 applied to a rate base from a prior historical period, and  
22 thus new plant additions suffer some period of 0 percent  
23 return awaiting eventual rate base treatment.

1                                   **III.    CAPITAL STRUCTURE**

2                   Q.       Would you please describe Exhibit No. 21?

3                   A.       Exhibit No. 21 details the forecasted year-end  
4 2023 capital structure for long-term debt and common equity  
5 prepared under my direction, the resulting recommended  
6 overall rate of return, and the calculation of the  
7 Company's weighted average cost of long-term debt.

8                   Q.       The capital structure presented on Exhibit No.  
9 21 incorporates changes to the Company's financial  
10 reporting of its capital structure. Could you please  
11 discuss the rationale for the variance?

12                  A.       For financial reporting purposes, the American  
13 Falls Bond Guarantee is included in the long-term debt  
14 portion of the capital structure. For ratemaking purposes,  
15 it is excluded as the interest costs associated with the  
16 American Falls debt securities are treated as operation and  
17 maintenance expenses.

18                  Q.       What is the rationale for proposing a capital  
19 structure of 51 percent equity and 49 percent debt?

20                  A.       This is the projected actual capital structure  
21 as of the end of 2023. Idaho Power believes a higher equity  
22 proportion than the typical 50/50 split is needed to help  
23 support the Company's credit ratings, particularly with the  
24 significant QF and PPA debt-like obligations I referred to  
25 above, which are not included in the debt component of the

1 ratio. The equity portion of the projected capital  
2 structure is lower than the 55 percent year-end equity  
3 average over the past six years because of new debt  
4 issuances in 2023 to support increased capital spending.

5 Q. Has the higher equity ratio over the past six  
6 years help the Company's credit rating?

7 A. Yes. The Company began increasing the equity  
8 ratio immediately following the last GRC. In fact, the  
9 year-end 2012 equity ratio was 53 percent and it grew from  
10 that level to 55 percent at year-end 2022. The increased  
11 equity ratio has had a significant positive impact to the  
12 Company's credit ratings, partially offsetting some of the  
13 lower ratios the rating agencies use for calculating  
14 applicable ratings.

15 Another factor to consider in the capital structure  
16 is the amount of imputed debt due to QF and PPA contractual  
17 obligations the rating agencies consider when evaluating  
18 the creditworthiness of the Company, as I have discussed  
19 previously in my testimony. Although neither Moody's nor  
20 S&P currently publish a specific amount of imputed debt for  
21 Idaho Power, S&P published a white paper detailing how they  
22 calculate imputed debt for PPAs.<sup>2</sup> Using that methodology, a  
23 conservative estimate would be almost \$600 million of

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<sup>2</sup> *Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements.* Attached as Exhibit No. 20.

1 imputed debt, which is not reflected in the Company's  
2 financial reporting of debt and is not included in the  
3 Company's cost of capital exhibit. After incorporating even  
4 that conservative imputation of debt, the ratio biases more  
5 heavily to debt.

6 Q. What is the Company's proposed cost of debt?

7 A. As shown on page 2 of Exhibit No. 21, which  
8 details the calculation of the cost of debt used in the  
9 estimated year-end 2023 capital structure, the Company's  
10 proposed cost of debt is 4.895 percent.

11 Q. What was the Company's cost of debt in its GRC  
12 filed in 2011?

13 A. In that case, the Company filed a cost of debt  
14 of 5.728 percent.

15 Q. Has there been any significant refinancing  
16 since the last GRC?

17 A. Yes. Idaho Power has taken advantage of the  
18 low interest rate environment since the last GRC to lower  
19 the overall cost of debt by approximately 83 basis points.  
20 At the same time, Idaho Power was able to lengthen its  
21 weighted average maturity on the debt portfolio from 15.3  
22 years at the end of 2011 to 19.3 years at the end of 2023.  
23 The Company's efforts over the past decade provide a  
24 significant savings to customers.



1           Q.       What method did the Company use for  
2 calculating its cost of debt in this case?

3           A.       Idaho Power applied a debt calculation method  
4 to fully consider the effect of discounts, premiums, and  
5 expense of issue on the annual cost of each bond, adopting  
6 the bond yield to maturity method.

7           Q.       Please explain the cost of debt calculation on  
8 page 2 of Exhibit No. 21.

9           A.       The calculation takes the settlement date,  
10 maturity date, coupon rate, and net proceeds at the  
11 issuance date for each debt issue to produce a bond yield  
12 to maturity. The bond yield was then multiplied by the  
13 principal amount outstanding for each debt issue, resulting  
14 in an annualized cost of each debt issuance in column 12.  
15 The total in column 12 for all the debt issuances produces  
16 a total annual effective cost of debt in line 32. This  
17 total was divided by the total in column 6, line 32 to  
18 produce the weighted average cost for all long-term debt in  
19 column 11, line 32. This method is appropriate because the  
20 expense of issuance associated with a bond is essentially  
21 prepaid interest, and the net proceeds, not the principal  
22 amount of the bond, are all that is available to be  
23 invested in property, plant, and equipment (rate base).  
24           Q.       Does the Company use variable rate securities  
25 in its long-term capitalization?

1           A.       No. The Company retired its only variable rate  
2 security, the Port of Morrow (Boardman) Pollution Control  
3 Revenue Bonds, in 2022 upon the demolition of the Boardman  
4 plant and its pollution control equipment, and previously  
5 repaid in full its variable-rate term loan entered into in  
6 March 2022.

7                               **IV.    OVERALL COST OF CAPITAL**

8           Q.       What is the overall cost of capital for Idaho  
9 Power?

10          A.       As shown on page 1 of Exhibit No. 21, using  
11 the Company's projected year-end 2023 capital structure,  
12 the Company's cost of debt as presented in my testimony,  
13 and incorporating the recommended 10.4 percent cost of  
14 equity, the resulting overall cost of capital for Idaho  
15 Power is 7.702 percent. This is an appropriate rate of  
16 return to be utilized by the Commission when deriving the  
17 Company's revenue requirement.

18          Q.       How does that compare to the cost of capital  
19 approved in Idaho Power's 2011 GRC request?

20          A.       It represents a decrease. The overall cost of  
21 capital for Idaho Power approved in the prior GRC was 7.86  
22 percent.

23          Q.       Does this conclude your direct testimony in  
24 this case?

25          A.       Yes, it does.

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**DECLARATION OF BRIAN BUCKHAM**

I, Brian Buckham, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Brian Buckham. I am employed by  
Idaho Power Company as Senior Vice President and Chief  
Financial Officer.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony and Exhibit Nos. 19 through 21  
in this matter.

3. To the best of my knowledge, my pre-filed  
direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
Brian R. Buckham

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BUCKHAM, DI  
TESTIMONY**

**EXHIBIT NO. 19**



**Greg Miller**

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www.marsh.com

Jeff Pleimann  
Insurance & Risk Administrator  
Idaho Power  
1221 West Idaho St.  
Boise, ID 83702

December 21st, 2020

**Subject:** Wildfire / Excess Liability and Property Premiums

Dear Jeff,

This letter summarizes information regarding insurance premiums paid by Idaho Power for coverage for liability related to wildfire currently, as well as information on what Idaho Power should expect to pay in the future assuming maintenance of existing levels of coverage.

## **ALLOCATION OF CURRENT PREMIUMS TO WILDFIRES**

Coverage for Idaho Power's liability for wildfire is provided within your excess liability insurance tower, with three separate insurers. Generally, insurers are reluctant to attribute how much of a policy is related to a specific risk. With regard to wildfire risk, however, it is understood that a significant portion of Idaho Power's excess liability policies are related to wildfires. Additionally, the latest excess liability policy was purchased expressly to cover Idaho Power's exposure to wildfire-related risk. As a result, the full premium in this layer is due to wildfire liability risk, since Idaho Power would not have purchased this layer but for the desire for additional protection for wildfire-related risk.

## **FUTURE PREMIUM INCREASE EXPECTATIONS**

The mutual insurance company that provides Idaho Power's primary excess liability policy, has advised all policyholders that they should expect excess liability premiums for 2021 to increase, on average, at least 15% over 2020 levels. In addition, they have advised that utilities in wildfire prone areas will be charged a "wildfire load" in addition to their base premium. The load varies depending on the relative exposure. For Idaho Power, we have been informed that the load will be up to \$1 million beginning in 2021, with the potential to increase annually thereafter.

The insurance company that provides Idaho Power's second layer of excess liability coverage has not formally advised policyholders of anticipated increases for 2021. For most renewals in 2020 from the insurance company, the premiums are increasing between 10 and 15%. We anticipate the same range will apply in 2021 for most utilities, including Idaho Power.

Page 2  
December 21st, 2020  
Jeff Pleimann  
Idacorp

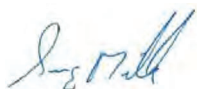
For the third layer of excess liability coverage, this is placed in the commercial market and is therefore subject to general market conditions. For 2020, the commercial market for excess liability for electric utilities has seen rate increases generally falling between 20% and 50%. We anticipate Idaho Power will be at the higher end of this range.

For 2022 and beyond, we anticipate the liability insurance market to temper and annual rate of premium growth should decrease in magnitude after the significant recent and near-term adjustments; however we do not have significant clarity to future market conditions and future increases could continue to be notable. Our expectation is subject to change based on wildfire losses in the western U.S.

With regard to insurance premiums in general, losses from natural disasters, including wildfires (whether natural or human-caused), and the various causes of losses across numerous forms of coverage, are a concern to underwriters and have contributed to the general hardening of the insurance market and associated sizeable increases in premiums.

Please let me know if you have any questions.

Sincerely,



Greg Miller  
Managing Director

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BUCKHAM, DI  
TESTIMONY**

**EXHIBIT NO. 20**



May 7, 2007

**Criteria | Corporates | Utilities:**

# Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements

**Primary Credit Analyst:**

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PPAs Treated As Leases

Evaluating The Effect Of PPAs

# Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements

For many years, Standard & Poor's Ratings Services has viewed power supply agreements (PPA) in the U.S. utility sector as creating fixed, debt-like, financial obligations that represent substitutes for debt-financed capital investments in generation capacity. In a sense, a utility that has entered into a PPA has contracted with a supplier to make the financial investment on its behalf. Consequently, PPA fixed obligations, in the form of capacity payments, merit inclusion in a utility's financial metrics as though they are part of a utility's permanent capital structure and are incorporated in our assessment of a utility's creditworthiness.

We adjust utilities' financial metrics, incorporating PPA fixed obligations, so that we can compare companies that finance and build generation capacity and those that purchase capacity to satisfy customer needs. The analytical goal of our financial adjustments for PPAs is to reflect fixed obligations in a way that depicts the credit exposure that is added by PPAs. That said, PPAs also benefit utilities that enter into contracts with suppliers because PPAs will typically shift various risks to the suppliers, such as construction risk and most of the operating risk. PPAs can also provide utilities with asset diversity that might not have been achievable through self-build. The principal risk borne by a utility that relies on PPAs is the recovery of the financial obligation in rates.

## The Mechanics Of PPA Debt Imputation

A starting point for calculating the debt to be imputed for PPA-related fixed obligations can be found among the "commitments and contingencies" in the notes to a utility's financial statements. We calculate a net present value (NPV) of the stream of the outstanding contracts' capacity payments reported in the financial statements as the foundation of our financial adjustments.

The notes to the financial statements enumerate capacity payments for the five years succeeding the annual report and a "thereafter" period. While we have access to proprietary forecasts that show the detail underlying the costs that are amalgamated beyond the five-year horizon, others, for purposes of calculating an NPV, can divide the amount reported as "thereafter" by the average of the capacity payments in the preceding five years to derive an approximate tenor of the amounts combined as the sum of the obligations beyond the fifth year.

In calculating debt equivalents, we also include new contracts that will commence during the forecast period. Such contracts aren't reflected in the notes to the financial statements, but relevant information regarding these contracts are provided to us on a confidential basis. If a contract has been executed but the energy will not flow until some later period, we won't impute debt for that contract until the year that energy deliveries begin under the contract if the contract represents incremental capacity. However, to the extent that the contract will simply replace an expiring contract, we will impute debt as though the future contract is a continuation of the existing contract.

We calculate the NPV of capacity payments using a discount rate equivalent to the company's average cost of debt, net of securitization debt. Once we arrive at the NPV, we apply a risk factor, as is discussed below, to reflect the benefits of regulatory or legislative cost recovery mechanisms.

Balance sheet debt is increased by the risk-factor-adjusted NPV of the stream of capacity payments. We derive an adjusted debt-to-capitalization ratio by adding the adjusted NPV to both the numerator and the denominator of that ratio.

We calculate an implied interest expense for the imputed debt by multiplying the same utility average cost of debt used as the discount rate in the NPV calculation by the amount of imputed debt. The adjusted FFO-to-interest expense ratio is calculated by adding the implied interest expense to both the numerator and denominator of the equation. We also add implied depreciation to the equation's numerator. We calculate the adjusted FFO-to-total-debt ratio by adding imputed debt to the equation's denominator and an implied depreciation expense to its numerator.

Our adjusted cash flow credit metrics include a depreciation expense adjustment to FFO. This adjustment represents a vehicle for capturing the ownership-like attributes of the contracted asset and tempers the effects of imputation on the cash flow ratios. We derive the depreciation expense adjustment by multiplying the relevant year's capacity payment obligation by the risk factor and then subtracting the implied PPA-related interest expense for that year from the product of the risk factor times the scheduled capacity payment.

## **Risk Factors**

The NPVs that Standard & Poor's calculates to adjust reported financial metrics to capture PPA capacity payments are multiplied by risk factors. These risk factors typically range between 0% to 50%, but can be as high as 100%. Risk factors are inversely related to the strength and availability of regulatory or legislative vehicles for the recovery of the capacity costs associated with power supply arrangements. The strongest recovery mechanisms translate into the smallest risk factors. A 100% risk factor would signify that all risk related to contractual obligations rests on the company with no mitigating regulatory or legislative support.

For example, an unregulated energy company that has entered into a tolling arrangement with a third-party supplier would be assigned a 100% risk factor. Conversely, a 0% risk factor indicates that the burden of the contractual payments rests solely with ratepayers. This type of arrangement is frequently found among regulated utilities that act as conduits for the delivery of a third party's electricity and essentially deliver power, collect charges, and remit revenues to the suppliers. These utilities have typically been directed to sell all their generation assets, are barred from developing new generation assets, and the power supplied to their customers is sourced through a state auction or third parties, leaving the utilities to act as intermediaries between retail customers and the electricity suppliers.

Intermediate degrees of recovery risk are presented by a number of regulatory and legislative mechanisms. For example, some regulators use a utility's rate case to establish base rates that provide for the recovery of the fixed costs created by PPAs. Although we see this type of mechanism as generally supportive of credit quality, the fact remains that the utility will need to litigate the right to recover costs and the prudence of PPA capacity payments in successive rate cases to ensure ongoing recovery of its fixed costs. For such a PPA, we employ a 50% risk factor. In cases where a regulator has established a power cost adjustment mechanism that recovers all prudent PPA costs, we employ a risk factor of 25% because the recovery hurdle is lower than it is for a utility that must litigate time and again its right to recover costs.

We recognize that there are certain jurisdictions that have true-up mechanisms that are more favorable and frequent than the review of base rates, but still don't amount to pure pass-through mechanisms. Some of these mechanisms

are triggered when certain financial thresholds are met or after prescribed periods of time have passed. In these instances, in calculating adjusted ratios, we will employ a risk factor between the revised 25% risk factors for utilities with power cost adjustment mechanisms and 50%.

Finally, we view legislatively created cost recovery mechanisms as longer lasting and more resilient to change than regulatory cost recovery vehicles. Consequently, such mechanisms lead to risk factors between 0% and 15%, depending on the legislative provisions for cost recovery and the supply function borne by the utility. Legislative guarantees of complete and timely recovery of costs are particularly important to achieving the lowest risk factors.

## Illustration Of The PPA Adjustment Methodology

The calculations of the debt equivalents, implied interest expense, depreciation expense, and adjusted financial metrics, using risk factors, are illustrated in the following example:

Example Of Power-Purchase Agreement Adjustment							
(\$000s)	Assumption	Year 1	Year 2	Year 3	Year 4	Year 5	Thereafter
Cash from operations	2,000,000						
Funds from operations	1,500,000						
Interest expense	444,000						
<b>Directly issued debt</b>							
Short-term debt	600,000						
Long-term due within one year	300,000						
Long-term debt	6,500,000						
Shareholder's Equity	6,000,000						
Fixed capacity commitments	600,000	600,000	600,000	600,000	600,000	600,000	4,200,000*
<b>NPV of fixed capacity commitments</b>							
Using a 6.0% discount rate	5,030,306						
Application of an assumed 25% risk factor	1,257,577						
Implied interest expense¶	75,455						
Implied depreciation expense	74,545						
<b>Unadjusted ratios</b>							
FFO to interest (x)	4.4						
FFO to total Debt (%)	20.0						
Debt to capitalization (%)	55.0						
<b>Ratios adjusted for debt imputation</b>							
FFO to interest (x)§	4.0						
FFO to total debt (%)**	18.0						
Debt to capitalization (%)¶¶	59.0						

\*Thereafter approximate years: 7. ¶ The current year's implied interest is subtracted from the product of the risk factor multiplied by the current year's capacity payment. §Adds implied interest to the numerator and denominator and adds implied depreciation to FFO. \*\*Adds implied depreciation expense to FFO and implied debt to reported debt. ¶¶Adds implied debt to both the numerator and the denominator. FFO--Funds from operations. NPV--Net present value.

## Short-Term Contracts

Standard & Poor's has abandoned its historical practice of not imputing debt for contracts with terms of three years or less. However, we understand that there are some utilities that use short-term PPAs of approximately one year or less as gap fillers pending the construction of new capacity. To the extent that such short-term supply arrangements represent a nominal percentage of demand and serve the purposes described above, we will neither impute debt for such contracts nor provide evergreen treatment to such contracts.

## Evergreen Treatment

The NPV of the fixed obligations associated with a portfolio of short-term or intermediate-term contracts can lead to distortions in a utility's financial profile relative to the NPV of the fixed obligations of a utility with a portfolio of PPAs that is made up of longer-term commitments. Where there is the potential for such distortions, rating committees will consider evergreen treatment of existing PPA obligations as a scenario for inclusion in the rating analysis. Evergreen treatment extends the tenor of short- and intermediate-term contracts to reflect the long-term obligation of electric utilities to meet their customers' demand for electricity.

While we have concluded that there is a limited pool of utilities whose portfolios of existing and projected PPAs don't meaningfully correspond to long-term load serving obligations, we will nevertheless apply evergreen treatment in those cases where the portfolio of existing and projected PPAs is inconsistent with long-term load-serving obligations. A blanket application of evergreen treatment is not warranted.

To provide evergreen treatment, Standard & Poor's starts by looking at the tenor of outstanding PPAs. Others can look to the "commitments and contingencies" in the notes to a utility's financial statements to derive an approximate tenor of the contracts. If we conclude that the duration of PPAs is short relative to our targeted tenor, we would then add capacity payments until the targeted tenor is achieved. Based on our analysis of several companies, we have determined that the evergreen extension of the tenor of existing contracts and anticipated contracts should extend contracts to a common length of about 12 years.

The price for the capacity that we add will be derived from new peaker entry economics. We use empirical data to establish the cost of developing new peaking capacity and reflect regional differences in our analysis. The cost of new capacity is translated into a dollars per kilowatt-year (kW-year) figure using a weighted average cost of capital for the utility and a proxy capital recovery period.

## Analytical Treatment Of Contracts With All-In Energy Prices

The pricing for some PPA contracts is stated as a single, all-in energy price. Standard & Poor's considers an implied capacity price that funds the recovery of the supplier's capital investment to be subsumed within the all-in energy price. Consequently, we use a proxy capacity charge, stated in \$/kW, to calculate an implied capacity payment associated with the PPA. The \$/kW figure is multiplied by the number of kilowatts under contract. In cases of resources such as wind power that exhibit very low capacity factors, we will adjust the kilowatts under contract to reflect the anticipated capacity factor that the resource is expected to achieve.

We derive the proxy cost of capacity using empirical data evidencing the cost of developing new peaking capacity.

We will reflect regional differences in our analysis. The cost of new capacity is translated into a \$/kW figure using a weighted average cost of capital and a proxy capital recovery period. This number will be updated from time to time to reflect prevailing costs for the development and financing of the marginal unit, a combustion turbine.

## Transmission Arrangements

In recent years, some utilities have entered into long-term transmission contracts in lieu of building generation. In some cases, these contracts provide access to specific power plants, while other transmission arrangements provide access to competitive wholesale electricity markets. We have concluded that these types of transmission arrangements represent extensions of the power plants to which they are connected or the markets that they serve. Irrespective of whether these transmission lines are integral to the delivery of power from a specific plant or are conduits to wholesale markets, we view these arrangements as exhibiting very strong parallels to PPAs as a substitute for investment in power plants. Consequently, we will impute debt for the fixed costs associated with long-term transmission contracts.

## PPAs Treated As Leases

Several utilities have reported that their accountants dictate that certain PPAs need to be treated as leases for accounting purposes due to the tenor of the PPA or the residual value of the asset upon the PPA's expiration. We have consistently taken the position that companies should identify those capacity charges that are subject to operating lease treatment in the financial statements so that we can accord PPA treatment to those obligations, in lieu of lease treatment. That is, PPAs that receive operating lease treatment for accounting purposes won't be subject to a 100% risk factor for analytical purposes as though they were leases. Rather, the NPV of the stream of capacity payments associated with these PPAs will be reduced by the risk factor that is applied to the utility's other PPA commitments. PPAs that are treated as capital leases for accounting purposes will not receive PPA treatment because capital lease treatment indicates that the plant under contract economically "belongs" to the utility.

## Evaluating The Effect Of PPAs

Though history is on the side of full cost recovery, PPAs nevertheless add financial obligations that heighten financial risk. Yet, we apply risk factors that reduce debt imputation to recognize that utilities that rely on PPAs transfer significant risks to ratepayers and suppliers.

### **Additional Contacts:**

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**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BUCKHAM, DI**  
**TESTIMONY**

**EXHIBIT NO. 21**

# IDAHO POWER COMPANY

## PRO FORMA COST OF CAPITAL SUMMARIZED December 31, 2023 Capitalization (000's)

	(1)	(2)	(3)	(4)	(5)
Line No		<u>Capitalization Structure</u> <u>Amount</u>	<u>Percent</u>	<u>Embedded</u> <u>Cost</u>	<u>Weighted</u> <u>Cost</u>
1 Long-term Debt		2,601,100	49.0%	4.895%	2.399%
2 Common Equity		<u>2,707,000</u>	<u>51.0%</u>	10.400% *	<u>5.304%</u>
3 Total Capitalization		<u><u>\$5,308,100</u></u>	<u><u>100.000%</u></u>		<u><u>7.702%</u></u>

### Note:

\* Requested Rate of Return

**IDAHO POWER COMPANY**  
**PRO FORMA COST OF LONG-TERM DEBT**  
As of 12/31/2023  
(000's)

Line No.	(1) Class and Series	(2) Coupon Rate	(3) Settlement Date	(4) Maturity Date	(5) Principal Amount Issued	(6) Principal Amount Outstanding	(7) Price	(8) Discount/ (Premium)	(9) Issuance Costs	(10) Net Proceeds	(11) Yield To Maturity	(12) Effective Cost
<b>First Mortgage Bonds:</b>												
1	6.00% Series due 2032	6.00%	11/15/2002	11/15/2032	100,000	100,000	98.706	1,294.0	441.2	98,264.8	6.127%	6,127.1
2	5.5% Series due 2033	5.50%	5/13/2003	4/1/2033	70,000	70,000	99.198	561.4	3,810.2	65,628.4	5.949%	4,164.3
3	5.5% Series due 2034	5.50%	3/26/2004	3/15/2034	50,000	50,000	98.483	758.5	149.4	49,092.1	5.626%	2,813.0
4	5.875% Series due 2034	5.875%	8/16/2004	8/15/2034	55,000	55,000	97.890	1,160.5	173.3	53,666.2	6.051%	3,328.2
5	5.30% Series due 2035	5.30%	8/26/2005	8/15/2035	60,000	60,000	98.569	858.6	3,399.7	55,741.7	5.802%	3,481.3
6	6.30% Series due 2037	6.30%	6/22/2007	6/15/2037	140,000	140,000	99.051	1,328.6	450.0	138,221.4	6.396%	8,953.9
7	6.25% Series due 2037	6.25%	10/18/2007	10/15/2037	100,000	100,000	98.982	1,018.0	477.5	98,504.5	6.362%	6,362.3
8	4.85% Series due 2040	4.85%	8/30/2010	8/15/2040	100,000	100,000	99.080	920.0	534.9	98,545.1	4.943%	4,943.4
9	4.30% Series due 2042	4.30%	4/13/2012	4/1/2042	75,000	75,000	99.184	612.0	1,397.8	72,990.2	4.463%	3,347.2
10	4.00% Series due 2043	4.00%	4/8/2013	4/1/2043	75,000	75,000	98.991	756.8	179.2	74,064.0	4.072%	3,054.3
11	3.65% Series due 2045	3.65%	3/6/2015	3/1/2045	250,000	250,000	98.564	3,590.0	19,137.5	227,272.5	4.185%	10,462.3
12	4.05% Series due 2046	4.05%	3/10/2016	3/1/2046	120,000	120,000	98.992	1,209.6	14,689.4	104,101.0	4.898%	5,877.1
13	4.20% Series due 2048	4.20%	3/16/2018	3/1/2048	220,000	220,000	98.880	2,464.0	5,532.0	212,004.0	4.420%	9,723.8
14	4.20% Series due 2048	4.20%	4/3/2020	3/1/2048	230,000	230,000	113.013	-29,929.9	621.1	259,308.8	3.482%	8,009.4
15	1.90% Series due 2030	1.90%	6/22/2020	7/15/2030	80,000	80,000	98.940	848.0	3,925.3	75,226.7	2.577%	2,061.4
16	4.99% Series due 2032	4.99%	12/22/2022	12/22/2032	23,000	23,000	99.500	115.0	85.0	22,800.0	5.102%	1,173.5
17	5.06% Series due 2042	5.06%	12/22/2022	12/22/2042	25,000	25,000	99.500	125.0	93.0	24,782.0	5.130%	1,282.6
18	5.06% Series due 2043	5.06%	3/8/2023	3/8/2043	60,000	60,000	99.500	300.0	222.0	59,478.0	5.130%	3,078.0
19	5.20% Series due 2053	5.20%	3/8/2023	3/8/2053	62,000	62,000	99.500	310.0	229.0	61,461.0	5.258%	3,259.9
20	5.50% Series due 2053	5.50%	3/14/2023	3/15/2053	400,000	400,000	98.182	7,272.0	1,480.0	391,248.0	5.652%	22,609.0
21	5.60% Series due 2053	5.60%	10/16/2023	10/15/2053	140,000	140,000	99.000	1,400.0	520.0	138,080.0	5.696%	7,974.2
22												
23	Total First Mortgage Bonds				<u>2,435,000</u>	<u>2,435,000</u>		<u>(3,027.9)</u>	<u>57,547.5</u>	<u>2,380,480.4</u>	<u>5.014%</u>	<u>122,086.2</u>
24												
25	<b>Pollution Control Revenue Bonds:</b>											
26	Humboldt 1.45% Series 2003, due 2024	1.45%	8/21/2019	12/1/2024	49,800	49,800	99.200	398.4	4,352.9	45,048.7	3.442%	1,714.1
27	Sweetwater 1.70% Series 2006, due 2026	1.70%	8/21/2019	7/15/2026	116,300	116,300	99.200	930.4	8,612.9	106,756.7	3.027%	3,519.8
28												
29	Total Pollution Control Revenue Bonds				<u>166,100</u>	<u>166,100</u>		<u>1,329</u>	<u>12,966</u>	<u>151,805</u>	<u>3.151%</u>	<u>5,234</u>
30												
31												
32	TOTAL DEBT CAPITAL				<u>2,601,100</u>	<u>2,601,100</u>		<u>(1,699)</u>	<u>70,513</u>	<u>2,532,286</u>	<u>4.895%</u>	<u>127,320</u>

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION    )  
OF IDAHO POWER COMPANY FOR        )  
AUTHORITY TO INCREASE ITS RATES    ) CASE NO. IPC-E-23-11  
AND CHARGES FOR ELECTRIC SERVICE    )  
IN THE STATE OF IDAHO AND FOR       )  
ASSOCIATED REGULATORY ACCOUNTING   )  
TREATMENT.                            )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

PAULA JEPPSEN

1           Q.           Please state your name, business address, and  
2 present occupation.

3           A.           My name is Paula Jeppsen, and my business  
4 address is 1221 West Idaho Street, Boise, Idaho. I am  
5 employed by Idaho Power Company ("Idaho Power" or  
6 "Company") as the Forecasting and Planning Director within  
7 the Finance department.

8           Q.           Please describe your educational background.

9           A.           I graduated in 1999 from Boise State  
10 University, receiving a Bachelor of Arts degree in Finance.  
11 In 2010, I earned a Master of Business Administration  
12 degree from Colorado State University. In 2021, I attended  
13 the Energy Executive Course through the University of  
14 Idaho.

15          Q.           Please describe your work experience with  
16 Idaho Power.

17          A.           In 2007, I was hired as a Financial Analyst in  
18 the Finance department. In 2010, I was promoted to Finance  
19 Team Leader. My primary responsibilities included leading a  
20 team of financial analysts, supporting and facilitating  
21 budgeting, advising on proper accounting treatment, and  
22 preparing and reviewing financial analyses. In 2016, I was  
23 promoted to Business Unit Finance Director; in 2019, my  
24 duties were broadened, and my title was changed to  
25 Financial Accounting and Reporting Director. In these

1 roles, I provided oversight and direction to the Business  
2 Unit Finance Support teams, Property Accounting department,  
3 Financial Accounting and Reporting department, and  
4 Financial Planning and Analysis department. In 2022 my role  
5 changed slightly, and my title changed to Forecasting and  
6 Planning Director. In this role I continued to be  
7 responsible for overseeing the Business Unit Finance  
8 Support teams and Financial Planning and Analysis  
9 department. I also added oversight of the Load Research and  
10 Forecasting team when I moved into this role.

11 Q. What is the purpose of your testimony in this  
12 proceeding?

13 A. The purpose of my testimony is two-fold.  
14 First, I will present the Company's historical actual  
15 audited financial information for the 12-month period ended  
16 December 31, 2022. Second, my testimony will discuss the  
17 quantification of certain adjustments to operating expenses  
18 and rate base consistent with previous Idaho Public  
19 Utilities Commission ("Commission") directives regarding  
20 regulatory treatment that result in an adjusted historical  
21 actual 12-month period ended December 2022 ("2022 Base").  
22 Finally, I will discuss the quantification of certain  
23 adjustments to operating expenses and rate base associated  
24 with the Boardman Power Plant ("Boardman"), the Jim Bridger  
25 Power Plant ("Bridger"), the North Valmy Generating Station

1 ("Valmy) and Idaho Power's Wildfire Mitigation Plan  
2 ("WMP").

3 Q. Please describe the manner in which the 2022  
4 financial data is presented.

5 A. Actual 2022 financial data is presented using  
6 the account names from the Commission-approved Uniform  
7 System of Accounts ("USA"). This data has been fully  
8 audited and was filed with the U.S. Securities and Exchange  
9 Commission and the Federal Energy Regulatory Commission  
10 ("FERC") in the Company's Form 10-K and FERC Form 1,  
11 respectively. The components of the 2022 financial data  
12 include the following items: (1) other operating revenues;  
13 (2) other revenues and expenses;(3) operation and  
14 maintenance ("O&M") expenses;(4) property insurance  
15 expenses;(5) regulatory commission expenses;(6)  
16 depreciation and amortization expense;(7) electric  
17 plant/regulatory assets - amortizations, adjustments,  
18 gains, and losses;(8) regulatory debits and credits;(9)  
19 taxes other than income taxes;(10) Idaho Energy Resources  
20 Company's ("IERCo") statement of income and rate base  
21 components;(11) allowance for funds used during  
22 construction ("AFUDC") related to the Hells Canyon  
23 relicensing;(12) electric plant in service and related  
24 items;(13) materials and supplies;(14) other deferred  
25 programs;(15) Plant Held for Future Use;(16) accumulated



1 deferred income taxes; (17) customer advances for  
2 construction; and (18) certain deductions from O&M  
3 expenses.

4 Q. Please describe the rationale for quantifying  
5 adjustments to the 2022 actual financial data ("2022  
6 Actuals").

7 A. Several of the adjustments to 2022 Actuals  
8 that I have quantified are in conformance with prior  
9 Commission orders and thus have become, in the opinion of  
10 the Company, standard regulatory adjustments. The  
11 adjustments that are not the result of prior orders are the  
12 adjustments to Plant Held for Future Use, adjustments to  
13 remove Bridger coal-related expenses, Valmy expenses,  
14 Transmission of Electricity by Others ("Third Party  
15 Transmission") expenses that are included in normalized net  
16 power supply expenses ("NPSE"), Oregon COVID-related  
17 expenses, regulatory expenses and intervenor funding, an  
18 adjustment to include WMP-related expenses that were  
19 deferred in 2022 and a few other minor adjustments to O&M  
20 expenses. I will discuss the rationale for these  
21 adjustments later in my testimony.

22 The Company has made adjustments to remove expenses as  
23 previously directed by the Commission. These adjustments  
24 include the removal of certain general advertising  
25 expenses, specific memberships and contributions, certain

1 management expenses, and other exclusions that, although  
2 justified for business purposes, may be viewed as more  
3 appropriately funded by shareholders than customers and are  
4 therefore not recoverable through the Company's rates.

5 The following have also been removed from 2022  
6 Actuals: (1) all 2022 incentive compensation; (2) the  
7 financial impacts of both the Idaho and Oregon Energy  
8 Efficiency Rider revenues and expenses; (3) Bridger coal-  
9 related expenses; (4) Valmy expenses; (5) Boardman, Bridger  
10 coal-related and Valmy plant, depreciation expense and  
11 accumulated depreciation; (6) Third Party Transmission  
12 actual 2022 expense that is included in normalized NPSE,  
13 and, finally, (7) certain Oregon COVID-related expenses,  
14 regulatory expenses, and intervenor funding amounts.

15 Q. How has the Company treated prepayments in  
16 this case?

17 A. Prepayments have been removed in their  
18 entirety, consistent with previous Commission orders. This  
19 adjustment is reflected in Company Witness Ms. Kelley Noe's  
20 Exhibit No. 34.

21 Q. Please describe the Company's proposed  
22 adjustment to Plant Held for Future Use.

23 A. The Company is proposing Plant Held for Future  
24 Use as of December 31, 2022, be included in rate base but  
25 adjusted to remove structures and specific properties for

1    which the future use is uncertain (e.g., subject to being  
2    divided for partial use or removed due to the possible  
3    change in need for the property). The rationale for  
4    inclusion of Plant Held for Future Use and the adjustments  
5    will be discussed in more detail later in my testimony.

6           Q.           Are you sponsoring exhibits that contain the  
7    2022 Actuals and 2022 adjustments by the components you  
8    have just identified?

9           A.           Yes. I am sponsoring Exhibit Nos. 22 through  
10   24 which detail 2022 Actuals and the 2022 adjustments by  
11   component categories. The additional adjustments to get  
12   from the 2022 Base to the 2023 Test Year, which are also  
13   contained in my exhibits, are addressed in the Direct  
14   Testimony of Company Witness Mr. Matthew Larkin.

15          Q.           Please describe Exhibit No. 22.

16          A.           Exhibit No. 22 is a compilation of the  
17   Company's supporting schedules for the adjusted historical  
18   actual data for the 12-month period ended December 31,  
19   2022.

20          Q.           Please describe pages 1 through 13 of Exhibit  
21   No. 22.

22          A.           Page 1 of Exhibit No. 22 reflects the detail  
23   for Other Operating Revenues, Accounts 451, 454, and 456.  
24   Page 2 reflects the detail of Other Revenues and Expenses,  
25   Accounts 415 and 416. Pages 3 through 6 reflect the O&M

1 expenses by USA account. Page 7 reflects the detail of  
2 Property Insurance Expense, Account 924. Page 8 reflects  
3 the detail of Regulatory Commission Expenses, Account 928.  
4 Page 9 includes Depreciation and Amortization Expense,  
5 Accounts 403 and 404. Page 10, Electric Plant/Regulatory  
6 Assets - Amortizations, Adjustments, Gains, and Losses,  
7 Account 406, presents the Asset Exchange acquisition  
8 adjustment amortization. Page 11 reflects Regulatory Debits  
9 and Credits, Accounts 407.3 and 407.4, respectively. Page  
10 12 shows the detail of Taxes Other Than Income Taxes.

11 Q. Please explain the adjustment you have made  
12 on page 1 of Exhibit No. 22, Other Operating Revenues, to  
13 arrive at the 2022 Base.

14 A. The adjustment on line 21, column 4 to the  
15 2022 Actuals removes the impact of the Energy Efficiency  
16 Rider revenues as directed in Commission Order No. 30189.

17 Q. Please describe the adjustments quantified  
18 on Pages 3 through 6 of Exhibit No. 22, O&M expenses.

19 A. Pages 3 through 6 include the standard  
20 regulatory adjustments that I will discuss in more detail  
21 later in my testimony. Pages 3 through 6 also include  
22 adjustments related to Bridger, Valmy, Third Party  
23 Transmission expenses, Oregon COVID-related expenses,  
24 Oregon regulatory expenses and Oregon intervenor funding,  
25 WMP-related expenses, and a couple of other minor

1 adjustments to O&M expenses. I will discuss each of these  
2 adjustments individually.

3 Q. Please describe the Company-proposed  
4 adjustment to O&M expenses related to Bridger.

5 A. On June 1, 2022, the Commission authorized  
6 the Company to establish a balancing account, with the  
7 necessary regulatory accounting, to track the incremental  
8 costs and benefits associated with the Company's cessation  
9 of coal-fired operations at Bridger as part of the Bridger  
10 coal-related levelized revenue requirement mechanism.<sup>1</sup> In  
11 this case the Company proposes to include as part of the  
12 Bridger coal-related levelized revenue requirement, all  
13 coal-related non-fuel O&M expenses, as compared to the  
14 previous methodology that included only the variances  
15 between actual coal-related non-fuel O&M expenses and coal-  
16 related non-fuel O&M expenses included in 2011 base rates  
17 as part of the mechanism.

18 The Company's update to the Bridger related levelized  
19 revenue requirement reflects cost recovery at current  
20 levels, with the exception of collection related to  
21 previously deferred revenue requirement amounts. It also  
22 allows for the presentment of Bridger coal-related non-fuel

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<sup>1</sup> *In the Matter of Idaho Power Company's Application for Authority to Increase Its Rates for Electric Service to Recover Costs Associated with the Jim Bridger Power Plant*, Case No. IPC-E-21-17 Order No. 35423(June 1, 2022).

1 O&M expenses to align with the presentment of Bridger coal-  
2 related plant-related investments in the Bridger levelized  
3 revenue requirement. To avoid double counting Bridger coal-  
4 related non-fuel O&M expenses, an adjustment was made to  
5 remove actual 2022 Bridger O&M ("Bridger O&M Adjustment").  
6 The Bridger coal-related levelized revenue requirement  
7 mechanism will be discussed more fully in Mr. Larkin's  
8 testimony.

9 Q. How was the Bridger O&M Adjustment  
10 calculated?

11 A. The Bridger O&M Adjustment, a reduction of  
12 \$30,338,732, consists of the removal of 2022 actual O&M  
13 totaling \$30,474,476, partially offset by \$135,744 related  
14 to a negative entry recorded in 2022 to Account 557.007.  
15 The 2022 reduction to actual O&M was calculated using the  
16 sum of non-fuel O&M charged to Bridger-related accounts in  
17 2022 including 500.001, 502.001, 506.001, 507.001, 510.001,  
18 512.001, 513.001, 514.001, and 557.007. Table 1 below  
19 presents the amounts charged to each account:

1 **TABLE 1**  
2 2022 Bridger O&M Accounts

Table 1 2022 Bridger O&M Accounts		O&M \$s
500.001	\$	231,676
502.001		6,046,168
506.001		7,284,754
507.001		229,461
510.001		12,403
512.001		6,756,285
513.001		2,177,957
514.001		9,322,817
Subtotal		32,061,521
Idaho Allocation Factor		95.05%
Subtotal Idaho Bridger Allocated		30,474,476
557.007		(135,744)
Total Bridger O&M Adjustment	\$	30,338,732

3  
4 The Idaho jurisdictional allocation was computed using  
5 the allocation factors approved in the Company's last  
6 general rate case.<sup>2</sup> The subtotal, including the allocated  
7 2022 Bridger O&M expense, results in a reduction of  
8 \$30,474,476. These adjustments are included on page 3,  
9 lines 1 through 14, column 5. The negative amount of  
10 \$135,744 was added back to zero out the 557.007 account.  
11 This adjustment is on page 4, line 12, column 5. The  
12 557.007 account is specific to Idaho, so the jurisdictional  
13 allocation factor was not applied to this account.

<sup>2</sup> In the Matter of the Application of Idaho Power Company for Authority to Increase Its Rates and Charges for Electric Service in Idaho, Case No. IPC-E-11-08, Order No. 32426 (Dec. 30, 2011).



1           Q.           Please describe the Company's proposed  
2 adjustment to O&M expenses related to Valmy.

3           A.           On May 31, 2017, the Commission authorized the  
4 Company to establish a balancing account, with the  
5 necessary regulatory accounting, to track the incremental  
6 costs and benefits associated with the accelerated Valmy  
7 end-of-life as part of the Valmy levelized revenue  
8 requirement mechanism.<sup>3</sup> In this case, like the proposed  
9 change to the Bridger coal-related levelized revenue  
10 requirement, the Company proposes to include as part of the  
11 Valmy levelized revenue requirement all non-fuel in O&M  
12 expenses, as compared to the previous methodology, that  
13 included only the variances between actual non-fuel O&M  
14 expenses and the non-fuel O&M expense included in 2011 base  
15 rates as part of the mechanism. This modification does not  
16 reflect an increase in overall collection, but rather an  
17 update to the base from which variances are tracked. It  
18 also allows for the presentment of Valmy non-fuel O&M  
19 expenses to align with the presentment of Valmy plant-  
20 related investments in the Valmy levelized revenue  
21 requirement. To avoid double counting non-fuel O&M  
22 expenses, an adjustment was made to remove actual 2022

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<sup>3</sup> *In the Matter of the Application of Idaho Power Company for Authority to Increase Its Rates for Electric Service to Recover Costs Associated with the North Valmy Plant*, Case No. IPC-E-16-24 Order No. 33771 (May 31, 2017).

1 Valmy O&M ("Valmy O&M Adjustment").

2 Q. How was the Valmy O&M Adjustment calculated?

3 A. The Valmy O&M Adjustment, a reduction of  
4 \$10,614,592, was calculated using the sum of O&M charged to  
5 Valmy-related accounts in 2022 including 500.003, 502.003,  
6 505.003, 506.003, 511.003, 512.003, 513.003, and 514.003.

7 Table 2 below presents the amounts charged to each account:

8 **TABLE 2**

9 2022 Valmy O&M Accounts

Table 2 2022 Valmy O&M Accounts		O&M \$s
500.003	\$	531,405
502.003		3,250,319
505.003		1,128,466
506.003		1,301,526
511.003		2,540,009
512.003		2,017,796
513.003		128,562
514.003		269,294
2022 Total Valmy O&M		11,167,377
Idaho Allocation Factor		95.05%
Total Valmy O&M Adjustment	\$	10,614,592

10

11 The Idaho jurisdictional allocation was  
12 computed using the allocation factors approved in the  
13 Company's last general rate case. The Idaho jurisdictional  
14 allocated 2022 Valmy O&M expense results in a reduction to  
15 O&M of \$10,614,592, which is included on page 3, lines 1  
16 through 14, column 5.

1           Q.           Please describe the adjustment related to  
2 Third Party Transmission expense, Account 565.

3           A.           The test year third Party Transmission expense  
4 is included in normalized NPSE that is more fully discussed  
5 in the Direct Testimony of Company Witness Ms. Jessica  
6 Brady. Therefore, an adjustment was made to remove actual  
7 2022 Third Party Transmission expenses of \$11,322,964 from  
8 O&M. This adjustment is shown on page 5, line 6, column 5,  
9 Account 565.

10          Q.           Please describe the adjustment related to the  
11 WMP-related expenses.

12          A.           On June 17, 2021, the Commission authorized  
13 Idaho Power to defer its Idaho-jurisdictional incremental  
14 O&M expenses, incremental insurance expenses, and  
15 depreciation expenses for its capital expenditures related  
16 to its WMP for recovery in a future rate proceeding.<sup>4</sup>  
17 Incremental O&M and insurance expenses are measured from a  
18 2019 base. In 2022, Idaho Power deferred \$21,003,203 of  
19 Idaho jurisdictional WMP-related expenses. In this case,  
20 the Company proposes to continue to defer certain  
21 incremental WMP-related expenses. This request is discussed

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<sup>4</sup> *In the Matter of Idaho Power Company's Application for an Accounting Order Authorizing the Deferral of Incremental Wildfire Mitigation and Insurance Costs*, Case No. IPC-E-21-02, Order No. 35077 (June 17, 2021); *In the Matter of Idaho Power Company's Application for Review of the Company's Current Wildfire Mitigation Plan and Authorization to Defer Newly Identified Incremental Wildfire Mitigation Costs*, Case No. IPC-E-22-27, Order No. 35717 (Mar. 23, 2023).

1 more fully in Mr. Tatum's testimony.

2 To set a new 2022 base year that will be used to track  
3 incremental WMP-related expenses going forward, an  
4 adjustment was made to add the amounts deferred in 2022 to  
5 O&M, thus resetting 2022 actual WMP-related O&M to what it  
6 would have been absent the deferrals ("WMP O&M  
7 Adjustment").

8 Q. How was the WMP O&M Adjustment calculated?

9 A. The WMP O&M Adjustment, an increase of  
10 \$20,229,304, was calculated by identifying the amounts by  
11 O&M account that were deferred in 2022, with certain  
12 adjustments for labor, depreciation, and amortization  
13 expense to avoid double counting of test year amounts.  
14 Table 3 below presents the amounts adjusted to each account  
15 in detail:

16 //

1     **TABLE 3**  
2     2022 WMP O&M Accounts

Table 3 2022				
WMP O&M Accounts	2022 Deferral	Adjustments		Net Adjustment to 2022 O&M
571.000	\$ 930,096	\$ (124,562)	.)	\$ 805,534
580.000	3,922			3,922
583.000	105,035			105,035
584.000	4,282			4,282
593.000	13,204,749	(502,437)	.)	12,702,312
594.000	18,123			18,123
596.000	3,043			3,043
924.000	1,277,597			1,277,597
925.000	5,309,456			5,309,456
403.290	141,418	(141,418)	.)	(0)
404.290	5,482	(5,482)	.)	(0)
	<u>\$ 21,003,203</u>	<u>\$ (773,899)</u>		<u>\$ 20,229,304</u>

1.) Remove 2022 actual labor included in O&M labor forecast.

2.) Remove depreciation & amortization expense included in depreciation & amortization expense forecast.

3           The Idaho-jurisdictional WMP O&M Adjustment results in  
4   an increase to O&M of \$20,229,304, which is included on  
5   page 5, lines 13, 18, 21, 22, 32, 33, and 35, column 5 and  
6   page 6, lines 20 and 21, column 5.

7           Q.           Please describe the adjustment for Oregon  
8   COVID-related expenses.

9           A.           There are two adjustments for Oregon COVID-  
10   related expenses. The first adjustment removes \$354,610 of

1 amortization expense recorded to Account 904.002 in 2022  
2 for the deferred incremental costs and savings through  
3 December 31, 2021, related to the COVID-19 Arrearage  
4 Management Program that is being collected in Oregon rates  
5 pursuant to Public Utility Commission of Oregon ("OPUC")  
6 Order No. 22-192. The second adjustment is related to a  
7 reserve recorded in 2021 for COVID-19 Arrearage Management  
8 Program costs. After the OPUC authorized collection of the  
9 deferred 2021 COVID-19 Arrearage Management Program costs  
10 on May 31, 2022, the reserve was reversed, resulting in a  
11 negative \$552,743 being recorded to Account 904.003. Idaho  
12 Power made an adjustment to add this amount back,  
13 effectively zeroing out the recording of the reserve in  
14 2021 and the reversal of the reserve in 2022. The net of  
15 these two adjustments is \$198,133 which can be seen on page  
16 6, line 4, column 5, Account 904.

17 Q. Please describe the adjustments for Oregon  
18 regulatory expenses and intervenor funding.

19 A. An adjustment was made to remove \$28,878 in  
20 amortization expense for deferred Oregon annual regulatory  
21 expenses and \$36,197 in amortization expense for the Oregon  
22 Citizens' Utility Board ("CUB") intervenor funding being  
23 collected in Oregon rates pursuant to OPUC Order Nos. 21-  
24 166 and 22-192. These amounts were recorded to Account  
25 928.303 in 2022. The total adjustment is \$65,075, which can

1 be seen on page 6, line 27, column 5, Account 928.

2 Q. Were there any other adjustments to O&M on  
3 page 3 through 6 of Exhibit No. 22?

4 A. Yes. In addition to the standard regulatory  
5 adjustments there were two other adjustments to O&M. The  
6 first was a \$124,942 adjustment to Account 537 Hydraulic  
7 Expenses related to an Idaho Department of Fish and Game  
8 invoice that was under accrued at year-end 2022. This  
9 adjustment is included on page 3, line 18, column 5,  
10 Account 537. The second was a \$9,801 adjustment to Account  
11 536 Water Leases to correct for an error that occurred at  
12 the beginning of 2022. This adjustment zeroes out this  
13 account as there were no water leases in 2022 and none  
14 expected in 2023. This adjustment can be seen on page 3,  
15 line 17, column 5, Account 536.

16 Q. Please describe the adjustment quantified on  
17 page 7 of Exhibit No. 22, Property Insurance.

18 A. The amount included on line 6 of page 7  
19 represents the adjustment to Account 924 for deferred WMP-  
20 related property insurance as seen in Table 3 above.

21 Q. Please describe the adjustment quantified on  
22 page 8 of Exhibit No. 22, Regulatory Commission Expenses.

23 A. The amount included on line 14 of page 8  
24 represents the adjustment to Account 928.303 for Oregon  
25 annual regulatory expenses and Oregon CUB intervenor

1 funding described in this testimony above.

2 Q. Please describe the adjustments quantified on  
3 page 9 of Exhibit No. 22, Depreciation and Amortization  
4 Expense.

5 A. The amount on line 2, column 4 of page 9  
6 removes Bridger coal-related and Valmy depreciation  
7 expense. The adjustment for 2022 Bridger coal-related  
8 electric plant depreciation expense is \$5,100,316. The  
9 adjustment for 2022 Valmy electric plant depreciation  
10 expense is \$19,484,573. The sum of these two adjustments is  
11 a \$24,584,889 reduction to depreciation expense.

12 Q. Please describe the adjustments quantified on  
13 page 11 of Exhibit No. 22, Regulatory Debits and Credits.

14 A. On June 25, 2020, the Commission authorized  
15 the Company to record expenses associated with cloud  
16 computing arrangements to a regulatory asset. Further, the  
17 Commission directed that amortization begins when the asset  
18 is placed in service and becomes used and useful.<sup>5</sup> Idaho  
19 Power has recorded a regulatory asset for the Idaho-only  
20 portion of prepaid licensing costs for the Zycus  
21 procurement tool cloud computing agreement. The amount on  
22 line 3, column 4 of page 11 reduces cloud computing  
23 amortization by \$173,640 to only the amount associated with

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<sup>5</sup> *In the Matter of Idaho Power Company's Application for an Accounting Order for Costs Associated with Cloud Computing Arrangements*, Case No. IPC-E-20-11, Order No. 34707, pg. 3 (June 25, 2020).



1 the Zycus procurement tool that is currently used and  
2 useful which is \$201,265.

3 Q. Please describe the adjustments quantified on  
4 page 12 of Exhibit No. 22, Taxes Other Than Income Taxes,  
5 to arrive at the adjusted 2022 Base.

6 A. The amounts included on lines 1, 2, 20 and 21  
7 of page 12, column 4 in Exhibit No. 22 are eliminated by  
8 the state and federal payroll loading reversal on line 25,  
9 column 4. These amounts represent federal unemployment,  
10 Social Security, and state unemployment taxes,  
11 respectively. The state and federal payroll loading  
12 reversal effectively removes these amounts from Taxes Other  
13 Than Income Taxes and spreads them over all accounts that  
14 receive labor charges. Therefore, the adjustments in column  
15 4, page 12 eliminate these expenses in their entirety in  
16 order to demonstrate that these amounts are not double  
17 counted when determining the Company's revenue requirement.  
18 The amounts included on lines 8 and 9 of Exhibit No. 22  
19 represent the removal of property taxes related to Bridger  
20 and Valmy, respectively.

21 Q. Please describe pages 13 and 14 of Exhibit No.  
22 22.

23 A. Page 13 of Exhibit No. 22 reflects the net  
24 earnings of IERCo that are added to operating income for  
25 ratemaking purposes and page 14 reflects AFUDC related to

1 the Hells Canyon relicensing that is currently being  
2 collected from customers.

3 Q. How does the Company treat IERCo's earnings  
4 and investment for ratemaking purposes?

5 A. The primary purpose of IERCo is to mine the  
6 coal that fuels the Bridger plant in Wyoming. Consistent  
7 with prior Commission orders, the Company treats IERCo's  
8 coal operations as a part of its utility operations and,  
9 accordingly, adds the current year IERCo earnings to  
10 electric operating income and the investment in IERCo to  
11 the net electric rate base. Accordingly, the interest  
12 expense net of tax (line 13, page 13 of Exhibit No. 22) on  
13 notes payable to Idaho Power has been added back to IERCo's  
14 Net Income from Operations. Additionally, the notes payable  
15 (column 3, page 23 of Exhibit No. 22) to Idaho Power have  
16 been added to IERCo's rate base in determining the  
17 Company's net investment in IERCo to be included in total  
18 system rate base.

19 Q. Please describe the adjustments to IERCo's net  
20 earnings and rate base in this proceeding.

21 A. Adjustments were made to increase IERCo's rate  
22 base for notes payable to Idaho Power in the amount of  
23 \$5,101,864 (column 3, line 14, page 23 of Exhibit No. 22)  
24 and the associated interest expense adjustment net of  
25 income tax of \$77,939 (column 3, line 13, page 13 of

1 Exhibit No. 22) in order for IERCo's rate base and earnings  
2 to reflect only the cash required to fund IERCo operations  
3 for the year 2022. If IERCo were to use these funds to make  
4 a distribution of earnings to the Company, or if the  
5 Company were to actually fold IERCo into its own  
6 operations, the result would be the same as presented  
7 herein.

8 Q. Please describe the data contained on pages 15  
9 through 23 of Exhibit No. 22

10 A. Pages 15 through 23 of Exhibit No. 22 reflect  
11 the development of all components applicable to the  
12 combined system rate base of the Company for 2022 as  
13 directed by Mr. Larkin. Page 15 reflects the balance by  
14 month and the thirteen-month average of Electric Plant in  
15 Service, Account 101. Page 16 reflects the balance by month  
16 and the thirteen-month average of Accumulated Provision for  
17 Depreciation, Account 108. Page 17 reflects the balance by  
18 month and the thirteen-month average of Accumulated  
19 Provision for Amortization, Account 111. Page 18 reflects  
20 the balance by month and the thirteen-month average of  
21 Materials and Supplies, Accounts 154 and 163. Page 19 of  
22 Exhibit No. 22 reflects the balance of the Company's Other  
23 Deferred Programs. For these programs, the Company has  
24 included the December 31, 2022, ending balance in rate  
25 base, consistent with previous orders. Page 20 reflects the

1 year-end balance of Plant Held for Future Use, Account 105.  
2 Page 21 reflects the balance at the end of 2022 and the  
3 average balance for Accumulated Deferred Income Taxes,  
4 Accounts 190, 282, and 283. Page 22 reflects the balance by  
5 month and the thirteen-month average balance of Customer  
6 Advances for Construction, Account 252. Page 23 reflects  
7 the balance by month and thirteen-month average of the rate  
8 base components for IERCo, consistent with prior Commission  
9 orders.

10 Q. Please describe the adjustment on page 15 of  
11 Exhibit No. 22.

12 A. The adjustment in column 4, page 15 is to  
13 remove the Electric Plant in Service associated with  
14 Bridger coal-related plant and Valmy plant using the  
15 respective average plant balance of the thirteen-month  
16 period between December 2021 and December 2022.  
17 Additionally, Idaho Power removed Electric Plant in Service  
18 for Boardman using the average of the thirteen-month period  
19 between December 2021 and December 2022. The only remaining  
20 Boardman asset in Idaho Power's Electric Plant in Service  
21 accounts as of December 31, 2022, is land. There is no  
22 associated depreciation expense or accumulated depreciation  
23 because land does not depreciate.

24 On February 15, 2012, the Commission authorized the  
25 Company's request to establish regulatory accounting, a

1 cost recovery plan, and a balancing account to track the  
2 costs and benefits associated with the early shut-down of  
3 Boardman.<sup>6</sup> Boardman ceased operations on October 15, 2020,  
4 and the Company is currently in the process of  
5 decommissioning the plant.

6 Using the thirteen-month average of the period between  
7 December 2021 and December 2022, the adjustment for Bridger  
8 coal-related Electric Plant in Service results in a  
9 reduction of \$479,890,777 to total Electric Plant in  
10 Service. Using the same period average for Valmy plant, the  
11 adjustment results in a reduction of \$257,496,723 to total  
12 Electric Plant in Service. The Boardman adjustment results  
13 in a reduction in Electric Plant in Service of \$106,610  
14 associated with land owned in fee. The sum of the thirteen-  
15 month average adjustments to Total Electric Plant in  
16 Service, \$737,494,110 is presented on line 14, Column 4,  
17 page 15.

18 Q. Please describe the adjustment on page 16,  
19 Accumulated Provision for Depreciation of Exhibit No. 22.

20 A. The adjustment in column 4, page 16 is to  
21 remove the accumulated depreciation related to Bridger  
22 coal-related plant and Valmy plant, using a thirteen-month  
23 average of December 2021 through December 2022. The

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<sup>6</sup> *In the Matter of Idaho Power Company's Request for Acceptance of Its Regulatory Plan Regarding the Early Shutdown of the Boardman Power Plant*, Case No. IPC-E-11-18, Order No. 32457 (Feb. 15, 2012).

1 adjustment to accumulated depreciation attributable to  
2 Bridger coal-related plant results in a reduction of  
3 \$281,445,851. The adjustment to accumulated depreciation  
4 related to Valmy plant results in a reduction of  
5 \$202,576,957. The sum of the thirteen-month average  
6 adjustments to Total Accumulated Depreciation, a reduction  
7 of \$484,022,808 is presented on row 14, column 4, page 16.

8 Q. Please describe the adjustment on page 18,  
9 Materials and Supplies of Exhibit No. 22.

10 A. The adjustment in column 4, page 18 of  
11 \$967,717 is to remove the Boardman inventory balance, using  
12 a thirteen-month average of December 2021 through December  
13 2022.

14 Q. Please describe in more detail Other Deferred  
15 Programs on page 19 of Exhibit No. 22.

16 A. Previous Commission-approved programs included  
17 on page 19 of Exhibit No. 22 are the American Falls bond  
18 refinancing costs (Commission Order No. 25880), the Idaho  
19 Siemens Long-Term Program ("LTP") (Order No. 33420), Cloud  
20 Computing (Order No. 34707), and Wildfire Mitigation (Order  
21 No. 35077). The American Falls bond refinancing is being  
22 amortized over the life of the American Falls bond and will  
23 be fully amortized in 2025.

24 Also included on Exhibit No. 22 is the CUB 2021-2025  
25 Fund Grant (OPUC Order No. 20-493), the Oregon Siemens LTP

1 (OPUC Order No. 15-387), the Statement of Financial  
2 Accounting Standards 87 capitalized pension costs (OPUC  
3 Order No. 10-064), Oregon regulatory liabilities associated  
4 with Reconnect Fees for Remote Meters (OPUC ADV 16-09) and  
5 the Jim Bridger Plant End-of-Life Depreciation (OPUC Order  
6 No. 12-296).

7 Q. Please describe in more detail Plant Held for  
8 Future Use, Account 105, on page 20 of Exhibit No. 22.

9 A. Consistent with treatment approved in the 2011  
10 Idaho general rate case, Case No. IPC-E-11-08, the Company  
11 has included portions of Plant Held for Future Use in rate  
12 base. Idaho Code § 61-502A allows the Commission to set  
13 rates for utilities that include a rate of return on  
14 property held for future use if the Commission makes an  
15 explicit finding that such a return is in the public  
16 interest. In preparing this case, the Company performed a  
17 review and identified those parcels of land included in  
18 Account 105, Plant Held for Future Use, that are  
19 anticipated to be used in their entirety for operating  
20 property in the future. As a result of this review, the  
21 year-end 2022 Actuals balance of \$7,129,775 (page 20,  
22 column 3, line 34) has been reduced by \$501,610 (page 20,  
23 column 4, line 34) by those properties or facilities for  
24 which the use is uncertain, may be split, or for structures  
25 that will be razed prior to the start of construction to

1 arrive at an adjusted 2022 Base of \$6,628,165 (page 20,  
2 column 5, line 34).

3 Q. Please describe Exhibit No. 23.

4 A. Exhibit No. 23 reflects the detailed support  
5 of deductions from the O&M expenses of the Company for  
6 general advertising expenses, certain memberships and  
7 contributions, certain senior management expenses, and  
8 miscellaneous other expenses. This screening process is  
9 consistent with previous Idaho general rate case filings.

10 Q. Please describe in more detail pages 2 through  
11 9 of Exhibit No. 23.

12 A. The Company has put processes in place to  
13 review and screen its accounting records to identify  
14 memberships and contributions in an effort to properly  
15 identify, account for, and share the costs of each. All  
16 contributions, and either 33 percent or 100 percent of  
17 certain memberships, have been removed. This screening  
18 process is consistent with previous Idaho general rate case  
19 filings.

20 Additionally, officer expenses have been reviewed and  
21 adjusted by (1) removing 100 percent of all charges to the  
22 Arid Club and Oregon jurisdiction direct charges, (2)  
23 removing one-third of Edison Electric Institute expenses,  
24 and (3) allocating the balance of expense account charges  
25 of officers between Idaho Power and IDACORP on the basis of



1 how their payroll is charged. Six officers had no further  
2 allocation based on payroll because they either incurred no  
3 expenses, their management responsibilities are solely  
4 incurred on behalf of Idaho Power, or their expenses are  
5 reviewed monthly for proper allocation between IDACORP and  
6 Idaho Power, thus not requiring further allocation.

7 Lastly, the Company has reviewed all expense account  
8 charges to O&M in an effort to identify and exclude charges  
9 from regulatory recovery based on prior concerns expressed  
10 in other filings based on the nature of the business  
11 establishment. While many of these expense account charges  
12 are legitimate business expenses, out of an abundance of  
13 caution, they were removed.

14 Q. Please describe Exhibit No. 24.

15 A. Exhibit No. 24 was developed to identify and  
16 include or exclude specific rate base, revenue, and expense  
17 adjustments which have not been provided for elsewhere.  
18 These and/or similar adjustments have been made in previous  
19 general rate cases.

20 Q. Please describe the adjustments you have  
21 included in Exhibit No. 24.

22 A. Lines 1 through 3 reflect the Electric Plant  
23 Acquisition Adjustment associated with the exchange of  
24 certain transmission assets with PacifiCorp approved by  
25 Commission Order No. 33313.

1           Line 4 reflects the unamortized portion of the  
2 regulatory asset associated with the Cloud Computing Zycus  
3 procurement tool authorized by Commission Order No. 34707.

4           Line 5 reflects the unamortized portion of certain  
5 deferred Wildfire Mitigation expenses approved by  
6 Commission Order No. 35077 for which the Company will  
7 request amortization in this case.

8           Lines 6 and 7 reflect the unamortized portions of the  
9 Idaho and Oregon Siemens LTPs, respectively (Commission  
10 Order No. 33420 and OPUC Order No. 15-387).

11          Line 8 reflects increases due to forecasted pension  
12 expense amortization that is discussed in Company Witness  
13 Mr. Timothy Tatum's testimony.

14          Lines 9, 10, 11 and 12 remove the income statement  
15 impact of the Idaho and Oregon Energy Efficiency Riders  
16 accounting affecting Other Electric Revenues, Account 456,  
17 and Customer Assistance Expenses, Account 908, in  
18 accordance with Commission Order No. 30189. While the  
19 purpose of these entries is to demonstrate that the Energy  
20 Efficiency Rider revenues and expenses have been excluded  
21 from the revenue requirement, leaving these amounts in the  
22 income statement would have had no impact to the revenue  
23 requirement because they are a net zero adjustment.

24          Line 13 shows the Idaho Energy Efficiency Rider funded  
25 labor to be included in O&M.

1           Lines 14 through 17 reflect one year of amortization  
2   for the Cloud Computing, Wildfire Mitigation, Idaho Siemens  
3   LTP and Oregon Siemens LTP regulatory assets described in  
4   this testimony above.

5           Line 18 removes all 2022 incentives included in  
6   Administrative and General Salaries, Account 920. 2023 Test  
7   Year incentive expense for which the Company seeks recovery  
8   is addressed in Mr. Larkin's testimony.

9           Line 19 shows one year of amortization for the Asset  
10   Exchange Acquisition Adjustment described above.

11          Lines 20 through 50 include the 2023 projected Idaho  
12   intervenor funding amortization.

13          Lines 51 and 52 remove the 2022 amortization of Oregon  
14   CUB intervenor funding and Oregon annual regulatory  
15   expenses that are being recovered in Oregon rates.

16          Q.           Are all the data and associated adjustments  
17   made to your exhibits and supporting schedules calculated  
18   on a total system basis?

19          A.           Yes, except for the Bridger, Valmy, and WMP  
20   adjustments to O&M that are presented on an Idaho-allocated  
21   basis.

22          Q.           Does this conclude your direct testimony in  
23   this case?

24          A.           Yes, it does.

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**DECLARATION OF PAULA JEPPSEN**

I, Paula Jeppsen, declare under penalty of perjury  
under the laws of the state of Idaho:


1. My name is Paula Jeppsen. I am employed by  
Idaho Power Company as Forecasting and Planning Director.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony and Exhibit Nos. 22 through 24  
in this matter.

3. To the best of my knowledge, my pre-filed  
direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

  
Signed: \_\_\_\_\_  
PAULA JEPPSEN

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**JEPPSEN, DI  
TESTIMONY**

**EXHIBIT NO. 22**

IDAHO POWER COMPANY  
OTHER OPERATING REVENUES  
For Twelve Months Ended December 31, 2023

(1) Line No	(2) Description	(3) 2022 Actuals	(4) 2022 Adjustments	(5) 2022 Base	(6) 2022 Base	(7) Forecast Methodology Other	(8) Forecast Adjustment	Ref No	(9) 2023 Unadjusted Test Year	(10) Annualizing	(11) 2023 Test Year
1	Miscellaneous service revenues (451).....	\$ 4,936,204	\$ -	\$ 4,936,204		\$ 1,271,884	\$ 1,271,884		\$ 6,208,088	\$ -	\$ 6,208,088
	Rent from electric property (454):										
2	Substation equipment.....	3,215,758	-	3,215,758	YES	-	-		3,215,758	-	3,215,758
3	Transformer & distribution rentals.....	17,330	-	17,330	YES	-	-		17,330	-	17,330
4	Station and line rentals.....	-	-	-	YES	-	-		-	-	-
5	Cogeneration and small power production.....	1,832,348	-	1,832,348		60,186	60,186		1,892,534	-	1,892,534
6	Real estate rents.....	257,813	-	257,813	YES	-	-		257,813	-	257,813
7	Dark fiber rents.....	400,000	-	400,000		(400,000)	(400,000)		-	-	-
8	Joint pole attachments.....	1,634,179	-	1,634,179	YES	-	-		1,634,179	-	1,634,179
9	Facilities charges.....	10,470,031	-	10,470,031		(189,692)	(189,692)		10,280,339	-	10,280,339
10	Overnight park rents.....	814,189	-	814,189	YES	-	-		814,189	-	814,189
11	Water District payments.....	185,425	-	185,425		(101,177)	(101,177)		84,248	-	84,248
12	Miscellaneous.....	-	-	-		-	-		-	-	-
13	Total rent from electric property.....	18,827,073	-	18,827,073		(630,683)	(630,683)		18,196,390	-	18,196,390
	Other electric revenue (456):										
14	Network Service .....	11,130,006	-	11,130,006		743,001	743,001		11,873,007	-	11,873,007
15	Point - to - Point and other services.....	49,667,827	-	49,667,827		(1,334,489)	(1,334,489)		48,333,338	-	48,333,338
16	Photovoltaic.....	-	-	-	YES	-	-		-	-	-
17	Antelope.....	-	-	-	YES	-	-		-	-	-
18	Conservation recovery - Oregon.....	-	-	-	YES	-	-		-	-	-
19	Sierra Pacific Power Company sales.....	51,764	-	51,764	YES	-	-		51,764	-	51,764
20	Stand-by service .....	759,997	-	759,997	YES	-	-		759,997	-	759,997
21	Energy efficiency rider .....	33,197,113	(33,197,113)	-	YES	-	-		-	-	-
22	Miscellaneous.....	1,663	-	1,663	YES	-	-		1,663	-	1,663
23	Total other electric revenue.....	94,808,370	(33,197,113)	61,611,257		(591,488)	(591,488)		61,019,769	-	61,019,769
24	Total other operating revenues.....	\$ 118,571,647	\$ (33,197,113)	\$ 85,374,534		\$ 49,713	\$ 49,713	A	\$ 85,424,247	\$ -	\$ 85,424,247

IDAHO POWER COMPANY  
OTHER REVENUES AND EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Program	2022	2022	2022	Forecast Methodology		Forecast	Ref	Unadjusted	Annualizing	2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Test Year		Test Year
					Base						
Other Revenues (Acct 415):											
1	Power Solutions.....	\$ (11,623)	\$ -	\$ (11,623)		\$ 30,623	\$ 30,623		\$ 19,000	\$ -	\$ 19,000
2	Hydro Services.....	3,803	-	3,803	YES	-	-		3,803	-	3,803
3	Water Management Services.....	641	-	641	YES	-	-		641	-	641
4	Qualified Reporting Entity Svcs.....	6,600	-	6,600	YES	-	-		6,600	-	6,600
5	Operating Agreements.....	3,295,495	-	3,295,495	YES	-	-		3,295,495	-	3,295,495
6	Joint Use (Pole) - Idaho.....	606,267	-	606,267	YES	-	-		606,267	-	606,267
7	Joint Use (Pole) - Oregon.....	10,632	-	10,632	YES	-	-		10,632	-	10,632
8	Total.....	<u>\$ 3,911,815</u>	<u>\$ -</u>	<u>\$ 3,911,815</u>		<u>\$ 30,623</u>	<u>\$ 30,623</u>	<b>B</b>	<u>\$ 3,942,438</u>	<u>\$ -</u>	<u>\$ 3,942,438</u>
Other Expenses (Acct 416):											
9	Power Solutions.....	\$ 49,615	\$ -	\$ 49,615	YES	\$ -	\$ -		\$ 49,615	\$ -	\$ 49,615
10	Hydro Services.....	11,599	-	11,599	YES	-	-		11,599	-	11,599
11	Water Management Services.....	10,097	-	10,097	YES	-	-		10,097	-	10,097
12	Qualified Reporting Entity Svcs.....	1,804	-	1,804	YES	-	-		1,804	-	1,804
13	Operating Agreements.....	3,295,495	-	3,295,495	YES	-	-		3,295,495	-	3,295,495
14	Joint Use - Idaho.....	1,333,265	-	1,333,265	YES	-	-		1,333,265	-	1,333,265
15	Joint Use - Oregon.....	-	-	-	YES	-	-		-	-	-
16	Total.....	<u>\$ 4,701,875</u>	<u>\$ -</u>	<u>\$ 4,701,875</u>		<u>\$ -</u>	<u>\$ -</u>	<b>C</b>	<u>\$ 4,701,875</u>	<u>\$ -</u>	<u>\$ 4,701,875</u>

IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)
LINE	FERC					Forecast Methodology						
NO	ACCOUNT	DESCRIPTION	2022	2022	2022	2022	Other	Forecast	Ref	2023		2023
	NUMBER		Actuals	Adjustments	Base	Base		Adjustment	No	Unadjusted	Annualizing	Test Year
		Power production expenses:										
		Steam power generation -										
		Operation -										
1	500	Oper and supv engineering.....	\$ 632,248	\$ (725,308)	\$ (93,060)		\$ 10,451	\$ 10,451		\$ (82,609)	\$ 6,114	\$ (76,495)
2	501	Fuel .....	-	-	-		-	-		-	-	-
3	502	Steam expenses.....	9,298,487	(8,836,311)	462,176		-	-		462,176	-	462,176
4	505	Electric expenses.....	1,128,466	(1,072,607)	55,859		-	-		55,859	-	55,859
5	506	Misc steam power expenses.....	8,586,280	(8,161,259)	425,021		13	13		425,034	7	425,041
6	507	Rents.....	229,461	(218,103)	11,358		-	-		11,358	-	11,358
7		Total operation.....	19,874,943	(19,013,588)	861,355		10,463	10,463		871,818	6,121	877,940
		Maintenance -										
8	510	Main supv and engineering.....	(238,936)	(11,789)	(250,724)		-	-		(250,724)	-	(250,724)
9	511	Main of structures.....	2,540,010	(2,414,279)	125,730		-	-		125,730	-	125,730
10	512	Main of boiler plant.....	8,774,081	(8,339,764)	434,317		-	-		434,317	-	434,317
11	513	Main of electric plant.....	2,306,519	(2,192,346)	114,173		-	-		114,173	-	114,173
12	514	Main of misc steam plant.....	9,592,111	(9,117,301)	474,809		-	-		474,809	-	474,809
13		Total maintenance.....	22,973,785	(22,075,479)	898,305		-	-		898,305	-	898,305
14		Total steam power generation.....	42,848,728	(41,089,067)	1,759,660		10,463	10,463		1,770,124	6,121	1,776,245
		Hydraulic power generation -										
		Operation -										
15	535	Oper supv and engineering.....	5,758,397	-	5,758,397		455,619	455,619		6,214,017	262,711	6,476,728
16	536	Water for power/Cloud seeding.....	6,637,301	-	6,637,301		(210,258)	(210,258)		6,427,044	54,646	6,481,690
17	536	Water leases.....	(9,801)	9,801	-		-	-		-	-	-
18	537	Hydraulic expenses.....	18,433,658	124,562	18,558,220		1,237,383	1,237,383		19,795,603	394,497	20,190,100
19	538	Electric expenses.....	1,959,732	-	1,959,732		180,701	180,701		2,140,433	95,472	2,235,905
20	539	Misc hydro pwr gen exp.....	5,131,195	(227)	5,130,968		386,324	386,324		5,517,292	213,191	5,730,483
21	540	Rents.....	303,402	-	303,402		-	-		303,402	-	303,402
22		Total operation.....	38,213,885	134,136	38,348,022		2,049,769	2,049,769		40,397,791	1,020,517	41,418,308
		Maintenance -										
23	541	Main supv and engineering.....	110,982	-	110,982		9,442	9,442		120,425	5,514	125,939
24	542	Main of structures.....	932,291	-	932,291		64,830	64,830		997,121	36,545	1,033,666
25	543	Main of res,dams,waterwys.....	454,092	-	454,092		38,359	38,359		492,451	16,036	508,487
26	544	Main of electric plant.....	2,611,843	-	2,611,843		198,915	198,915		2,810,758	111,584	2,922,342
27	545	Main of misc hydro plant.....	3,919,209	(108)	3,919,101		252,325	252,325		4,171,425	138,826	4,310,252
28		Total maintenance.....	8,028,417	(108)	8,028,309		563,871	563,871		8,592,180	308,505	8,900,685
29		Total hydraulic power generation.....	46,242,302	134,028	46,376,331		2,613,640	2,613,640		48,989,970	1,329,023	50,318,993
		Other power generation -										
		Operation -										
30	546	Oper supv and engineering.....	627,106	-	627,106		55,260	55,260		682,366	32,326	714,692
31	547.000	Fuel - Salmon diesel.....	10,499	-	10,499		-	-		10,499	-	10,499
32	547	Fuel .....	-	-	-		-	-		-	-	-
33	548	Generation expenses.....	4,902,489	-	4,902,489		343,492	343,492		5,245,982	198,160	5,444,142
34	549	Misc other pwr gen exp.....	9,124	-	9,124		43,934	43,934		53,058	22,895	75,953
35	550	Rents.....	-	-	-		-	-		-	-	-
36		Total operation.....	5,549,218	-	5,549,218		442,687	442,687		5,991,905	253,381	6,245,286



IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)
LINE	FERC		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
NO	ACCOUNT	DESCRIPTION	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
	NUMBER					Base				Test Year		Test Year
		Other power generation - (continued)										
		Maintenance -										
1	551	Main supv and engineering.....	\$ -	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	\$ -
2	552	Main of structures.....	159,030	-	159,030		5,316	5,316		164,346	2,832	167,178
3	553	Main of gen and elec plt.....	927,810	-	927,810		6,648	6,648		934,458	3,674	938,131
4	554	Main misc oth pwr gen plt.....	6,730,628	-	6,730,628		(3,372,657)	(3,372,657)		3,357,971	29,364	3,387,334
5		Total maintenance.....	7,817,467	-	7,817,467		(3,360,693)	(3,360,693)		4,456,775	35,869	4,492,643
6		Total other power generation.....	13,366,686	-	13,366,686		(2,918,006)	(2,918,006)		10,448,680	289,250	10,737,929
		Other power supply expenses -										
7	555.050	Purchased power - transmission losses.....	-	-	-		-	-		-	-	-
8	555	Purchased power.....	-	-	-		-	-		-	-	-
9	556	System cont and load disp.....	-	-	-		-	-		-	-	-
10	557	Other expenses - other power production.....	6,279,434	-	6,279,434		473,536	473,536		6,752,969	277,021	7,029,990
11	557	Other expenses - PCA, EPC and PCAM.....	-	-	-		-	-		-	-	-
12	557	Other expenses - Bridger GAAP Adj.....	(135,744)	135,744	-		-	-		-	-	-
13		Total other power supply expenses .....	6,143,689	135,744	6,279,434		473,536	473,536		6,752,969	277,021	7,029,990
14		Total power production expenses.....	108,601,405	(40,819,295)	67,782,110		179,632	179,632		67,961,743	1,901,415	69,863,157

IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)
LINE	FERC					Forecast Methodology			Ref	2023		
NO	ACCOUNT	DESCRIPTION	2022	2022	2022	2022	Other	Forecast	No	Unadjusted	Annualizing	2023
	NUMBER		Actuals	Adjustments	Base	Base		Adjustment		Test Year		Test Year
Transmission expenses:												
Operation -												
1	560	Oper supv and engineering.....	\$ 3,193,933	\$ (6)	\$ 3,193,927		\$ 251,886	\$ 251,886		\$ 3,445,814	\$ 147,211	\$ 3,593,025
2	561	Load dispatching.....	5,375,576	-	5,375,576		454,303	454,303		5,829,880	187,405	6,017,285
3	562	Station expenses.....	2,788,678	(1,453)	2,787,225		214,444	214,444		3,001,669	120,418	3,122,087
4	563	Overhead line expenses.....	1,121,678	-	1,121,678		57,232	57,232		1,178,910	26,779	1,205,690
5	564	Underground line expenses.....	-	-	-		-	-		-	-	-
6	565	Trans of elec by others.....	11,322,964	(11,322,964)	(0)		-	-		(0)	-	(0)
7	566	Misc trans expenses.....	8	-	8		0	0		8	-	8
8	567	Rents.....	4,855,402	-	4,855,402		-	-		4,855,402	-	4,855,402
9		Total operation.....	28,658,239	(11,324,423)	17,333,816		977,866	977,866		18,311,682	481,814	18,793,496
Maintenance -												
10	568	Main supv and engineering.....	206,814	-	206,814		9,586	9,586		216,400	5,608	222,008
11	569	Main of structures.....	1,907,634	-	1,907,634		151,682	151,682		2,059,316	88,601	2,147,917
12	570	Main of station equip.....	2,611,391	(489)	2,610,902		297,615	297,615		2,908,517	144,194	3,052,711
13	571	Main of overhead lines.....	2,274,243	805,534	3,079,777		116,824	116,824		3,196,601	55,564	3,252,166
14	573	Main of misc trans plant.....	5,113	-	5,113		442	442		5,555	226	5,781
15	575	Admin-EIM.....	686,880	-	686,880		-	-		686,880	-	686,880
16		Total maintenance.....	7,692,075	805,045	8,497,120		576,149	576,149		9,073,269	294,193	9,367,462
17		Total transmission expenses.....	36,350,314	(10,519,378)	25,830,936		1,554,015	1,554,015		27,384,951	776,007	28,160,958
Distribution expenses:												
Operation -												
18	580	Oper supv and engineering.....	5,911,141	3,912	5,915,054		326,853	326,853		6,241,907	186,671	6,428,578
19	581	Load dispatching.....	5,170,071	-	5,170,071		488,757	488,757		5,658,828	285,943	5,944,770
20	582	Station expenses.....	1,862,473	(7)	1,862,466		114,459	114,459		1,976,925	60,977	2,037,902
21	583	Overhead line expenses.....	5,421,238	104,989	5,526,227		477,721	477,721		6,003,948	214,267	6,218,215
22	584	Underground line expenses.....	4,717,552	4,282	4,721,834		167,229	167,229		4,889,062	82,237	4,971,299
23	585	St light and sgml sys exp.....	44,756	-	44,756		2,724	2,724		47,479	1,309	48,788
24	586	Meter expenses.....	5,719,569	(73)	5,719,496		535,125	535,125		6,254,621	256,699	6,511,320
25	587	Customer install expenses.....	1,095,297	-	1,095,297		88,874	88,874		1,184,170	45,823	1,229,993
26	588	Misc distribution exp.....	4,687,904	(1,010)	4,686,894		323,082	323,082		5,009,975	181,825	5,191,800
27	589	Rents.....	741,341	-	741,341		-	-		741,341	-	741,341
28		Total operation.....	35,371,341	112,093	35,483,435		2,524,822	2,524,822		38,008,257	1,315,749	39,324,006
Maintenance -												
29	590	Main supv and engineering.....	11,968	-	11,968		997	997		12,965	583	13,548
30	591	Main of structures.....	-	-	-		-	-		-	-	-
31	592	Main of station equip.....	4,120,742	(351)	4,120,391		328,264	328,264		4,448,655	167,728	4,616,383
32	593	Main of overhead lines.....	21,931,803	12,695,311	34,627,115		684,800	684,800		35,311,914	330,675	35,642,590
33	594	Main of underground lines.....	751,577	18,123	769,700		45,008	45,008		814,708	22,649	837,357
34	595	Main of line transformers.....	94,087	-	94,087		2,717	2,717		96,804	1,557	98,361
35	596	Main of st light-sgml sys.....	204,924	3,043	207,967		16,003	16,003		223,970	7,856	231,826
36	597	Main of meters.....	862,000	-	862,000		77,162	77,162		939,163	42,167	981,330
37	598	Main of misc dist plant.....	123,765	-	123,765		10,116	10,116		133,880	5,037	138,917
38		Total maintenance.....	28,100,867	12,716,126	40,816,993		1,165,066	1,165,066		41,982,059	578,252	42,560,311
39		Total distribution expenses.....	63,472,208	12,828,219	76,300,428		3,689,888	3,689,888		79,990,316	1,894,002	81,884,317

IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)
LINE	FERC					Forecast Methodology			Ref	2023		
NO	ACCOUNT	DESCRIPTION	2022	2022	2022	2022	Other	Forecast	No	Unadjusted	Annualizing	2023
	NUMBER		Actuals	Adjustments	Base	Base		Adjustment		Test Year		Test Year
Customer accounts expenses:												
Operation -												
1	901	Supervision.....	\$ 845,854	\$ -	\$ 845,854		\$ 75,609	\$ 75,609		\$ 921,463	\$ 44,217	\$ 965,680
2	902	Meter reading expenses.....	1,819,788	-	1,819,788		142,617	142,617		1,962,406	79,111	2,041,516
3	903	Cust records - collect exp.....	15,041,848	-	15,041,848		997,289	997,289		16,039,137	569,230	16,608,368
4	904	Uncollectible accounts.....	3,069,311	198,133	3,267,444		2,514,638	2,514,638		5,782,082	-	5,782,082
5	905	Misc customer accts exp.....	(3,031)	-	(3,031)		-	-		(3,031)	-	(3,031)
6		Total customer accounts expenses.....	20,773,771	198,133	20,971,903		3,730,154	3,730,154		24,702,057	692,558	25,394,615
Customer service and informational expenses:												
Operation -												
7	907	Supervision.....	1,009,780	(15,995)	993,785		87,883	87,883		1,081,669	51,408	1,133,077
8	908	Customer assistance exp.....	7,286,059	(835)	7,285,224		4,110,142	4,110,142		11,395,366	291,521	11,686,886
9	908	Energy efficiency rider - Idaho.....	31,673,550	(31,673,550)	-		-	-		-	-	-
10	908	Energy efficiency rider - Oregon.....	1,523,563	(1,523,563)	-		-	-		-	-	-
11	909	Info and instruct adv exp.....	295,103	-	295,103		10	10		295,112	-	295,112
12	910	Misc cust svc and inf exp.....	746,645	(3,166)	743,479		33,938	33,938		777,417	19,452	796,869
13	912	Demo and selling exp.....	-	-	-		-	-		-	-	-
14		Total customer service and informational expenses .....	42,534,700	(33,217,109)	9,317,591		4,231,973	4,231,973		13,549,564	362,381	13,911,945
Administrative and general expenses:												
Operation -												
15	920	Admin and gen salaries.....	69,192,001	-	69,192,001		6,557,156	6,557,156		75,749,157	3,836,202	79,585,359
16	920	Incentive.....	26,598,671	(26,598,671)	-		10,040,205	10,040,205		10,040,205	-	10,040,205
17	921	Office supplies and exp.....	15,137,531	(28,774)	15,108,757		50,701	50,701		15,159,457	15,816	15,175,273
18	922	Admin exp transf - cr.....	(35,131,943)	-	(35,131,943)		(3,326,773)	(3,326,773)		(38,458,716)	(1,946,297)	(40,405,013)
19	923	Outside services employed.....	8,733,229	-	8,733,229		5	5		8,733,233	-	8,733,233
20	924	Property insurance.....	3,925,608	1,277,597	5,203,205		40,547	40,547		5,243,752	98,991	5,342,742
21	925	Injuries and damages.....	6,544,597	5,309,456	11,854,054		14,295	14,295		11,868,349	8,363	11,876,713
22	926	Emp pensions and benefits.....	36,409,743	(16,837)	36,392,906		3,281,778	3,281,778		39,674,684	1,919,922	41,594,606
23	926.OR	Emp pensions and benefits - Oregon.....	880,053	-	880,053		-	-		880,053	-	880,053
24	926.204	Emp pensions and benefits - Idaho.....	17,153,713	-	17,153,713		18,028,665	18,028,665		35,182,378	-	35,182,378
25	926.205	Emp pensions and benefits - FERC.....	-	-	-		-	-		-	-	-
26	927	Franchise requirements.....	-	-	-		-	-		-	-	-
27	928	Reg commission expenses.....	6,545,806	(65,075)	6,480,731		296,576	296,576		6,777,307	-	6,777,307
28	929	Duplicate charges - cr.....	-	-	-		-	-		-	-	-
29	930.1	General advertising exp.....	491,473	(491,473)	-		-	-		-	-	-
30	930.2	Misc general expenses.....	4,378,924	(365,067)	4,013,857		20,958	20,958		4,034,815	12,261	4,047,076
31	931	Rents.....	-	-	-		-	-		-	-	-
32		Total operation.....	160,859,406	(20,978,844)	139,880,562		35,004,113	35,004,113		174,884,675	3,945,258	178,829,933
Maintenance -												
33	935	Main of general plant.....	7,877,237	(826)	7,876,411		132,761	132,761		8,009,172	65,032	8,074,204
34		Total maintenance.....	7,877,237	(826)	7,876,411		132,761	132,761		8,009,172	65,032	8,074,204
35		Total administrative and general expenses.....	168,736,643	(20,979,670)	147,756,973		35,136,874	35,136,874		182,893,847	4,010,290	186,904,137
36		Total electric operation and maintenance expenses.....	\$ 440,469,041	\$ (92,509,099)	\$ 347,959,942		\$ 48,522,536	\$ 48,522,536	D	\$ 396,482,478	\$ 9,636,652	\$ 406,119,130

IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
PROPERTY INSURANCE - ACCOUNT 924  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	2023
					Base				Test Year		Test Year
Production - steam:											
1	Bridger plant.....	\$ 333,083	\$ -	\$ 333,083	YES	\$ -	\$ -		\$ 333,083	\$ -	\$ 333,083
2	Boardman plant.....	19,354	-	19,354	YES	-	-		19,354	-	19,354
3	Valmy plant.....	<u>60,158</u>	<u>-</u>	<u>60,158</u>	YES	<u>-</u>	<u>-</u>		<u>60,158</u>	<u>-</u>	<u>60,158</u>
4	Total production - steam.....	412,595	-	412,595		-	-		412,595	-	412,595
All risk:											
5	Blanket fidelity bond.....	62,870	-	62,870	YES	-	-		62,870	-	62,870
6	Property "all risk".....	2,933,239	1,277,597	4,210,836		-	-		4,210,836	75,269	4,286,105
7	Other miscellaneous.....	<u>67,077</u>	<u>-</u>	<u>67,077</u>	YES	<u>-</u>	<u>-</u>		<u>67,077</u>	<u>-</u>	<u>67,077</u>
8	Total all risk.....	<u>3,063,186</u>	<u>1,277,597</u>	<u>4,340,783</u>		<u>-</u>	<u>-</u>		<u>4,340,783</u>	<u>75,269</u>	<u>4,416,052</u>
9	Total property insurance.....	<u>\$ 3,475,781</u>	<u>\$ 1,277,597</u>	<u>\$ 4,753,378</u>		<u>\$ -</u>	<u>\$ -</u>	<b>D</b>	<u>\$ 4,753,378</u>	<u>\$ 75,269</u>	<u>\$ 4,828,647</u>

IDAHO POWER COMPANY  
OPERATION AND MAINTENANCE EXPENSES  
REGULATORY COMMISSION EXPENSES - ACCOUNT 928  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
	FERC administrative assessments and securities (928.101)										
1	Capacity.....	\$ 2,826,830	\$ -	\$ 2,826,830	YES		\$ -		\$ 2,826,830	\$ -	\$ 2,826,830
2	Generation.....	963,911	-	963,911	YES		-		963,911	-	963,911
3	Ferc Order #472 - Sales for resale.....	963,867	-	963,867	YES		-		963,867	-	963,867
4	Miscellaneous Other.....	109,055	-	109,055	YES		-		109,055	-	109,055
5	Total (928.101).....	4,863,663	-	4,863,663		-	-		4,863,663	-	4,863,663
6	FERC - Rate Case (928.102).....	-	-	-		-	-		-	-	-
7	FERC - Oregon Hydro (928.104).....	271,717	-	271,717	YES		-		271,717	-	271,717
8	Total FERC expense.....	5,135,380	-	5,135,380		-	-		5,135,380	-	5,135,380
	Idaho Public Utilities Commission expense:										
9	Rate case (928.202).....	-	-	-		-	-		-	-	-
10	Other (928.203).....	36,197	-	36,197		296,576	296,576		332,773	-	332,773
11	Total IPUC expense.....	36,197	-	36,197		296,576	296,576		332,773	-	332,773
	Oregon Public Utility Commission expense:										
12	Filing Fees (928.301).....	-	-	-		-	-		-	-	-
13	Rate case (928.302).....	-	-	-		-	-		-	-	-
14	Other (928.303).....	1,374,230	(65,075)	1,309,155	YES		-		1,309,155	-	1,309,155
15	Total OPUC expense.....	1,374,230	(65,075)	1,309,155		-	-		1,309,155	-	1,309,155
	Nevada Public Service Commission expense:										
16	Other (928.403).....	-	-	-		-	-		-	-	-
17	Total NPSC expense.....	-	-	-		-	-		-	-	-
18	Total regulatory commission expenses.....	\$ 6,545,806	\$ (65,075)	\$ 6,480,731		\$ 296,576	\$ 296,576	D	\$ 6,777,307	\$ -	\$ 6,777,307

IDAHO POWER COMPANY  
DEPRECIATION AND AMORTIZATION EXPENSE  
For Twelve Months Ended December 31, 2023

(1) Line No	(2) Description	(3) 2022 Actuals	(4) 2022 Adjustments	(5) 2022 Base	(6) Forecast 2022 Base	(7) Forecast Methodology Other	(8) Forecast Adjustment	Ref No	(9) 2023 Unadjusted Test Year	(10) Annualizing	(11) 2023 Test Year
Accounts 403 and 404:											
1	Amortization expense.....	\$ 5,266,930 1.)	\$ -	\$ 5,266,930		\$ 618,646	\$ 618,646		\$ 5,885,576	\$ 95,740	\$ 5,981,316
2	Depreciation expense.....	<u>163,581,418 2.)</u>	<u>(24,584,889)</u>	<u>138,996,530</u>		<u>9,845,191</u>	<u>9,845,191</u>		<u>148,841,721</u>	<u>8,884,245</u>	<u>157,725,966</u>
3	Total.....	<u>\$ 168,848,348</u>	<u>\$ (24,584,889)</u>	<u>\$ 144,263,460</u>		<u>\$ 10,463,837</u>	<u>\$ 10,463,837</u>	<b>E</b>	<u>\$ 154,727,297</u>	<u>\$ 8,979,985</u>	<u>\$ 163,707,282</u>

IDAHO POWER COMPANY  
ELECTRIC PLANT/REGULATORY ASSETS - AMORT., ADJUST., GAINS & LOSSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)
Line		Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	Unadjusted	Annualizing	2023
No			Actuals	Adjustments	Base	2022	Other	Adjustment	No	Test Year		Test Year
1	406	Amortization of Electric Plant Acquisition Adjustment - Asset Exchange (IPUC Order No. 33313, OPUC Order No. 15-184, FERC Order No. 20150617-3060).....	\$ 15,018	\$ -	\$ 15,018	YES	\$ -	\$ -		\$ 15,018	\$ -	\$ 15,018
2		Total.....	<u>\$ 15,018</u>	<u>\$ -</u>	<u>\$ 15,018</u>		<u>\$ -</u>	<u>\$ -</u>	F	<u>\$ 15,018</u>	<u>\$ -</u>	<u>\$ 15,018</u>

IDAHO POWER COMPANY  
REGULATORY DEBITS AND CREDITS  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
Regulatory Debits/Credits (Acct 407.3/407.4):											
Idaho											
1	Siemens LTP Amort - Idaho.....	\$ 643,866	\$ -	\$ 643,866	YES	\$ -	\$ -		\$ 643,866	\$ -	\$ 643,866
2	Siemens LTP Amort - Idaho Deferred RB.....	\$ 431,488	\$ -	\$ 431,488	YES	\$ -	\$ -		\$ 431,488	\$ -	\$ 431,488
3	Cloud computing.....	\$ 374,905	\$ (173,640)	\$ 201,265	YES	\$ -	\$ -		\$ 201,265	\$ -	\$ 201,265
4	Wildfire Mitigation.....	\$ -	\$ -	\$ -		\$ 1,865,167	\$ 1,865,167		\$ 1,865,167	\$ -	\$ 1,865,167
5	Subtotal Idaho.....	\$ 1,450,259	\$ (173,640)	\$ 1,276,619		\$ 1,865,167	\$ 1,865,167		\$ 3,141,786	\$ -	\$ 3,141,786
Oregon											
6	Deferred Pension - Oregon.....	\$ 219,697	\$ -	\$ 219,697	YES	\$ -	\$ -		\$ 219,697	\$ -	\$ 219,697
7	Siemens LTP Amort - Oregon.....	\$ 39,316	\$ -	\$ 39,316	YES	\$ -	\$ -		\$ 39,316	\$ -	\$ 39,316
8	Siemens LTP Amort - Oregon Deferred RB.....	\$ 44,046	\$ -	\$ 44,046	YES	\$ -	\$ -		\$ 44,046	\$ -	\$ 44,046
9	Subtotal Oregon.....	\$ 303,059	\$ -	\$ 303,059	YES	\$ -	\$ -		\$ 303,059	\$ -	\$ 303,059
10	Total.....	\$ 1,753,318	\$ (173,640)	\$ 1,579,678		\$ 1,865,167	\$ 1,865,167	G	\$ 3,444,845	\$ -	\$ 3,444,845



IDAHO POWER COMPANY  
TAXES OTHER THAN INCOME TAXES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6) Forecast Methodology		(7)	(8)	(9)	(10)	(11)
Line No	Description	2022 Actuals	2022 Adjustments	2022 Base	2022 Base	Other	Forecast Adjustment	Ref No	2023 Unadjusted Test Year	Annualizing	2023 Test Year
	Federal taxes:										
1	Unemployment.....	\$ 94,333	\$ (94,333)	\$ -	YES	\$ -	\$ -		\$ -	\$ -	\$ -
2	Social Security .....	18,219,357	(18,219,357)	-	YES	-	-		-	-	-
3	Total federal taxes.....	18,313,691	(18,313,691)	-		-	-		-	-	-
	State, county and local taxes:										
	Real and personal property:										
4	Idaho.....	16,447,825	-	16,447,825		2,709,059	2,709,059		19,156,884	482,288	19,639,172
5	Oregon.....	5,007,521	-	5,007,521		585,570	585,570		5,593,091	-	5,593,091
6	Montana.....	473,595	-	473,595		46,111	46,111		519,706	-	519,706
7	Washington.....	4,069	-	4,069		(109)	(109)		3,960	-	3,960
8	Wyoming.....	1,391,819	(1,282,348)	109,471		1,204	1,204		110,675	15,946	126,621
9	Nevada.....	321,605	(314,445)	7,160		(1,824)	(1,824)		5,336	-	5,336
10	Shoshone-Bannock.....	91,431	-	91,431		5,851	5,851		97,282	-	97,282
11	Total real and personal property.....	23,737,866	(1,596,793)	22,141,073		3,345,862	3,345,862		25,486,935	498,234	25,985,169
12	Kilowatt-hour tax - Idaho.....	1,162,897	-	1,162,897		1,055,305	1,055,305		2,218,202	-	2,218,202
	Licenses:										
13	Wyoming.....	4,090	-	4,090	YES	-	-		4,090	-	4,090
14	Shoshone-Bannock.....	150	-	150	YES	-	-		150	-	150
15	Total licenses.....	4,240	-	4,240		-	-		4,240	-	4,240
	Regulatory commission:										
16	Idaho.....	2,616,251	-	2,616,251	YES	-	-		2,616,251	-	2,616,251
17	Oregon.....	290,260	-	290,260		95,251	95,251		385,511	-	385,511
18	Total regulatory commission.....	2,906,511	-	2,906,511		95,251	95,251		3,001,762	-	3,001,762
	Franchise:										
19	Oregon total franchise.....	890,161	-	890,161		62,839	62,839		953,000	-	953,000
	Unemployment:										
20	Idaho.....	199,146	(199,146)	-	YES	-	-		-	-	-
21	Oregon.....	45,401	(45,401)	-	YES	-	-		-	-	-
22	Total unemployment.....	244,547	(244,547)	-		-	-		-	-	-
23	Total state, county and local taxes.....	28,946,224	(1,841,340)	27,104,883		4,559,257	4,559,257		31,664,140	498,234	32,162,374
24	Total other taxes.....	47,259,914	(20,155,031)	27,104,883		4,559,257	4,559,257		31,664,140	498,234	32,162,374
25	Less: State & Fed P/R Loading Reversal.....	(18,558,238)	18,558,238	-		-	-		-	-	-
26	Net other taxes.....	\$ 28,701,676	\$ (1,596,793)	\$ 27,104,883		\$ 4,559,257	\$ 4,559,257	H	\$ 31,664,140	\$ 498,234	\$ 32,162,374

IDAHO POWER COMPANY  
STATEMENT OF INCOME  
FOR IDAHO ENERGY RESOURCES COMPANY  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
Income:											
1	Bridger Coal Company - joint venture.....	\$10,211,212	\$ -	\$ 10,211,212		\$ (7,211,212)	\$ (7,211,212)		\$ 3,000,000	\$ -	\$ 3,000,000
2	Bridger Coal Company - overriding royalties.....	247,311	-	247,311		(14,817)	(14,817)		232,494	-	232,494
3	Interest and dividend income.....	3,248	-	3,248		(3,248)	(3,248)		-	-	-
4	Taxes Other than Income Taxes.....	-	-	-		-	-		-	-	-
5	Total income.....	10,461,771	-	10,461,771		(7,229,277)	(7,229,277)		3,232,494	-	3,232,494
Expenses:											
6	Operation expense.....	247,311	-	247,311		(14,817)	(14,817)		232,494	-	232,494
7	Income taxes.....	1,330,515	-	1,330,515		(841,104)	(841,104)		489,411	-	489,411
8	Provision for deferred income taxes.....	-	-	-		-	-		-	-	-
9	Intercompany interest expense.....	101,905	-	101,905		567,568	567,568		669,473	-	669,473
10	Interest expense.....	-	-	-		-	-		-	-	-
11	Total expenses.....	1,679,731	-	1,679,731		(288,353)	(288,353)		1,391,378	-	1,391,378
12	Net income from operations.....	8,782,040	-	8,782,040		(6,940,924)	(6,940,924)		1,841,116	-	1,841,116
13	Add: Interest expense from notes payable to parent (Net of Tax).....	77,939	-	77,939		450,945	450,945		528,884	-	528,884
14	Net income (earnings to Idaho Power Company).....	<u>\$ 8,859,979</u>	<u>\$ -</u>	<u>\$ 8,859,979</u>		<u>\$ (6,489,979)</u>	<u>\$ (6,489,979)</u>	I	<u>\$ 2,370,000</u>	<u>\$ -</u>	<u>\$ 2,370,000</u>

IDAHO POWER COMPANY  
ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) RELATED TO HELLS CANYON RELICENSING COLLECTED FROM CUSTOMERS  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No	Description	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
1	AFUDC related to Hells Canyon relicensing collected.....	\$ 6,815,472		\$ 6,815,472	YES	\$ -	\$ -		\$ 6,815,472	\$ -	\$ 6,815,472
2	Total AFUDC related to Hells Canyon Relicensing Collected.....	<u>6,815,472</u>	<u>-</u>	<u>6,815,472</u>		<u>-</u>	<u>-</u>	J	<u>6,815,472</u>	<u>-</u>	<u>6,815,472</u>

IDAHO POWER COMPANY  
ELECTRIC PLANT IN SERVICE (Excluding ARO Entries)  
For The Thirteen Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line No	Month	2022 Actuals	2022 Adjustments	2022 Base	Forecast Methodology		Forecast Adjustment	Ref No	2023 Unadjusted Test Year	Annualizing	2023 Test Year
					2022 Base	Other					
1	December, 2021.....	\$ 6,482,321,388	\$ (734,727,907)	\$ 5,747,593,482		\$ 314,837,327	\$ 314,837,327		\$ 6,062,430,809	\$ -	\$ 6,062,430,809
2	January, 2022.....	6,491,936,129	(735,611,485)	5,756,324,644		312,179,468	312,179,468		6,068,504,113	-	6,068,504,113
3	February.....	6,504,930,241	(735,561,109)	5,769,369,131		312,714,759	312,714,759		6,082,083,890	-	6,082,083,890
4	March.....	6,540,209,581	(735,792,019)	5,804,417,562		305,764,751	305,764,751		6,110,182,313	-	6,110,182,313
5	April.....	6,551,240,968	(736,164,064)	5,815,076,904		310,534,335	310,534,335		6,125,611,239	-	6,125,611,239
6	May.....	6,571,566,813	(737,340,034)	5,834,226,779		311,925,031	311,925,031		6,146,151,809	-	6,146,151,809
7	June.....	6,654,009,072	(737,630,520)	5,916,378,552		287,963,459	287,963,459		6,204,342,012	-	6,204,342,012
8	July.....	6,652,494,874	(739,045,575)	5,913,449,300		397,088,528	397,088,528		6,310,537,828	-	6,310,537,828
9	August.....	6,668,313,271	(739,117,974)	5,929,195,297		414,237,100	414,237,100		6,343,432,397	-	6,343,432,397
10	September.....	6,708,499,049	(739,254,042)	5,969,245,007		405,616,489	405,616,489		6,374,861,496	-	6,374,861,496
11	October.....	6,712,869,047	(739,384,738)	5,973,484,308		477,790,493	477,790,493		6,451,274,802	-	6,451,274,802
12	November.....	6,730,682,438	(738,680,228)	5,992,002,210		479,755,721	479,755,721		6,471,757,931	-	6,471,757,931
13	December.....	6,801,544,542	(739,113,733)	6,062,430,809		490,306,909	490,306,909		6,552,737,718	-	6,552,737,718
14	Average.....	<u>\$ 6,620,816,724</u>	<u>\$ (737,494,110)</u>	<u>\$ 5,883,322,614</u>		<u>\$ 370,824,182</u>	<u>\$ 370,824,182</u>	K	<u>\$ 6,254,146,797</u>	<u>\$ -</u>	<u>\$ 6,254,146,797</u>

IDAHO POWER COMPANY  
ACCUMULATED PROVISION FOR DEPRECIATION (Excluding ARO Entries)  
For The Thirteen Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Month	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
1	December, 2021.....	\$ 2,429,210,499	\$ (442,763,625)	\$ 1,986,446,874		\$ 69,821,495	\$ 69,821,495		\$ 2,056,268,369	\$ -	\$ 2,056,268,369
2	January, 2022.....	2,440,296,309	(445,400,489)	1,994,895,820		67,474,788	67,474,788		2,062,370,608	-	2,062,370,608
3	February.....	2,451,056,338	(448,022,265)	2,003,034,072		67,428,582	67,428,582		2,070,462,655	-	2,070,462,655
4	March.....	2,456,151,466	(450,637,944)	2,005,513,522		67,710,802	67,710,802		2,073,224,324	-	2,073,224,324
5	April.....	2,467,251,838	(453,262,972)	2,013,988,866		65,681,174	65,681,174		2,079,670,040	-	2,079,670,040
6	May.....	2,470,981,025	(455,720,952)	2,015,260,073		70,904,786	70,904,786		2,086,164,859	-	2,086,164,859
7	June.....	2,519,553,447	(499,093,335)	2,020,460,112		51,478,083	51,478,083		2,071,938,195	-	2,071,938,195
8	July.....	2,530,068,705	(503,801,575)	2,026,267,130		52,617,855	52,617,855		2,078,884,985	-	2,078,884,985
9	August.....	2,536,953,490	(508,746,243)	2,028,207,247		58,732,949	58,732,949		2,086,940,196	-	2,086,940,196
10	September.....	2,550,267,830	(513,755,725)	2,036,512,105		53,392,441	53,392,441		2,089,904,546	-	2,089,904,546
11	October.....	2,563,961,938	(518,619,342)	2,045,342,596		52,252,303	52,252,303		2,097,594,900	-	2,097,594,900
12	November.....	2,575,189,654	(523,684,763)	2,051,504,890		52,638,408	52,638,408		2,104,143,298	-	2,104,143,298
13	December.....	2,585,055,649	(528,787,280)	2,056,268,369		42,146,361	42,146,361		2,098,414,730	-	2,098,414,730
14	Average.....	<u>\$ 2,505,846,014</u>	<u>\$ (484,022,808)</u>	<u>\$ 2,021,823,206</u>		<u>\$ 59,406,156</u>	<u>\$ 59,406,156</u>	L	<u>\$ 2,081,229,362</u>	<u>\$ -</u>	<u>\$ 2,081,229,362</u>

IDAHO POWER COMPANY  
ACCUMULATED PROVISION FOR AMORTIZATION (Excluding ARO Entries)  
OF ELECTRIC UTILITY PLANT  
For The Thirteen Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Month	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Normalizing	Test Year
					Base				Test Year		Test Year
1	December, 2021.....	\$ 39,195,698	\$ -	\$ 39,195,698		\$ 133,443	\$ 133,443		\$ 39,329,141	\$ -	\$ 39,329,141
2	January, 2022.....	39,539,156	-	39,539,156		266,799	266,799		39,805,955	-	39,805,955
3	February.....	39,932,735	-	39,932,735		353,826	353,826		40,286,561	-	40,286,561
4	March.....	40,250,549	-	40,250,549		518,643	518,643		40,769,192	-	40,769,192
5	April.....	40,255,052	-	40,255,052		797,459	797,459		41,052,512	-	41,052,512
6	May.....	40,551,163	-	40,551,163		874,968	874,968		41,426,131	-	41,426,131
7	June.....	40,903,109	-	40,903,109		1,011,003	1,011,003		41,914,112	-	41,914,112
8	July.....	41,314,481	-	41,314,481		957,143	957,143		42,271,624	-	42,271,624
9	August.....	41,773,810	-	41,773,810		990,683	990,683		42,764,493	-	42,764,493
10	September.....	42,233,979	-	42,233,979		1,024,920	1,024,920		43,258,899	-	43,258,899
11	October.....	38,724,789	-	38,724,789		4,647,280	4,647,280		43,372,069	-	43,372,069
12	November.....	38,933,163	-	38,933,163		4,934,313	4,934,313		43,867,476	-	43,867,476
13	December.....	39,329,141	-	39,329,141		4,831,972	4,831,972		44,161,114	-	44,161,114
14	Average.....	<u>\$ 40,225,910</u>	<u>\$ -</u>	<u>\$ 40,225,910</u>		<u>\$ 1,641,727</u>	<u>\$ 1,641,727</u>	<b>M</b>	<u>\$ 41,867,637</u>	<u>\$ -</u>	<u>\$ 41,867,637</u>

IDAHO POWER COMPANY  
MATERIALS AND SUPPLIES  
For The Thirteen Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)	(13)	(14)
Line No	Description - Account 154 & 163	2022 Actuals	2022 Adjustments	2022 Base	2022 Base	Forecast Methodology		Forecast Adjustment	Ref No	Unadjusted Test Year	Normalizing	Annualizing	Known and Measurable	2023 Test Year
						3 Period CAGR	Other							
1	December, 2021	\$ 77,551,656	\$ (967,717)	\$ 76,583,939	\$ -	\$ 9,542,885	\$ -	\$ 9,542,885		\$ 86,126,824	\$ -	\$ -	\$ -	\$ 86,126,824
2	January, 2022	77,145,002	(967,717)	76,177,285	-	9,481,028	-	9,481,028		85,658,313	-	-	-	85,658,313
3	February	79,201,267	(967,717)	78,233,550	-	9,742,347	-	9,742,347		87,975,897	-	-	-	87,975,897
4	March	80,202,921	(967,717)	79,235,204	-	9,951,432	-	9,951,432		89,186,636	-	-	-	89,186,636
5	April	79,260,605	(967,717)	78,292,888	-	9,843,058	-	9,843,058		88,135,946	-	-	-	88,135,946
6	May	80,563,116	(967,717)	79,595,399	-	10,000,244	-	10,000,244		89,595,643	-	-	-	89,595,643
7	June	78,715,131	(967,717)	77,747,414	-	9,842,988	-	9,842,988		87,590,402	-	-	-	87,590,402
8	July	78,765,724	(967,717)	77,798,007	-	9,870,834	-	9,870,834		87,668,840	-	-	-	87,668,840
9	August	81,908,238	(967,717)	80,940,521	-	10,237,728	-	10,237,728		91,178,249	-	-	-	91,178,249
10	September	82,698,968	(967,717)	81,731,251	-	10,361,718	-	10,361,718		92,092,968	-	-	-	92,092,968
11	October	83,983,658	(967,717)	83,015,941	-	10,556,157	-	10,556,157		93,572,099	-	-	-	93,572,099
12	November	85,846,436	(967,717)	84,878,719	-	10,794,269	-	10,794,269		95,672,988	-	-	-	95,672,988
13	December	92,460,894	(967,717)	91,493,177	-	11,664,349	-	11,664,349		103,157,526	-	-	-	103,157,526
14	Average	\$ 81,407,970	\$ (967,717)	\$ 80,440,254	\$ -	\$ 10,145,311	\$ -	\$ 10,145,311	N	\$ 90,585,564	\$ -	\$ -	\$ -	\$ 90,585,564

IDAHO POWER COMPANY  
OTHER DEFERRED PROGRAMS  
At December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
Idaho Public Utilities Commission:											
Account 186											
1	American Falls Bond Refinancing - (IPUC Order 25880).....	\$ 135,528	\$ -	\$ 135,528		\$ (62,551)	(62,551)		\$ 72,977	\$ -	\$ 72,977
Account 182											
2	Siemens LTP Rate Base - (IPUC Order 33420).....	12,851,571	-	12,851,571		(643,866)	(643,866)		12,207,705	-	12,207,705
3	Siemens LTP Deferred Rate Base - (IPUC Order 33420).....	8,612,494	-	8,612,494		(431,488)	(431,488)		8,181,006	-	8,181,006
4	Cloud Computing - (IPUC Order 34707).....	1,616,918	(409,326)	1,207,592		(201,265)	(201,265)		1,006,327	-	1,006,327
5	Wildfire Mitigation - (IPUC Order 35077).....	27,078,227	(14,022,056)	13,056,171	YES		-		13,056,171	-	13,056,171
Oregon Public Utilities Commission:											
Account 182											
6	CUB Fund Grant - (OPUC Order 21-166, 22-192).....	37,154	-	37,154		(37,154)	(37,154)		-	-	-
7	Siemens LTP Rate Base - (OPUC Order 15-387).....	511,105	-	511,105		(39,316)	(39,316)		471,789	-	471,789
8	Siemens LTP Deferred Rate Base - (OPUC Order 15-387).....	138,550	-	138,550		(44,046)	(44,046)		94,504	-	94,504
9	SFAS 87 Capitalized Pension - (OPUC Order 10-064).....	7,000,878	-	7,000,878		(219,697)	(219,697)		6,781,181	-	6,781,181
Account 254											
10	Reconnect Fees (Remote Meters) - (OPUC ADV 16-09).....	(14,711)	-	(14,711)	YES	-	-		(14,711)	-	(14,711)
11	Jim Bridger Plant End-of-Life Depreciation - (OPUC Order 12-296).....	(3,285,386)	-	(3,285,386)	YES	-	-		(3,285,386)	-	(3,285,386)
12	Total.....	<u>\$ 54,682,328</u>	<u>\$ (14,431,382)</u>	<u>\$ 40,250,946</u>		<u>\$ (1,679,383)</u>	<u>\$ (1,679,383)</u>	O	<u>\$ 38,571,563</u>	<u>\$ -</u>	<u>\$ 38,571,563</u>



IDAHO POWER COMPANY  
PLANT HELD FOR FUTURE USE  
At December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Line No	Description	2022 Actuals	2022 Adjustments	2022 Base	Forecast Methodology		Forecast Adjustment	Ref No	2023 Unadjusted Test Year	Annualizing	2023 Test Year
					2022 Base	Other					
Power Production:											
1	American Falls Power Plant.....	\$ 104,155	\$ (104,155)	\$ -	YES	\$ -	\$ -		\$ -	\$ -	\$ -
2	Total Power Production.....	104,155	(104,155)	-		-	-		-	-	-
Distribution:											
3	Amity Substation.....	153,751	-	153,751	YES	-	-		153,751	-	153,751
4	Beacon Light Substation.....	204,511	(204,511)	-	YES	-	-		-	-	-
5	Dist. Lines, Blaine, ID.....	443,545	-	443,545	YES	-	-		443,545	-	443,545
6	Dist. Lines, Canyon, ID.....	25,581	-	25,581	YES	-	-		25,581	-	25,581
7	Farmway Station.....	934,174	-	934,174	YES	-	-		934,174	-	934,174
8	Filer Substation.....	27,813	-	27,813	YES	-	-		27,813	-	27,813
9	Highland Substation.....	64,224	-	64,224	YES	-	-		64,224	-	64,224
10	Jump Substation.....	67,722	(67,722)	-	YES	-	-		-	-	-
11	Lakeshore Substation.....	188,565	-	188,565	YES	-	-		188,565	-	188,565
	McDermott Substation.....	1,330,604	-	1,330,604	YES	-	-		1,330,604	-	1,330,604
12	Melba Substation.....	29,321	-	29,321	YES	-	-		29,321	-	29,321
13	Notch Butte Substation.....	15,665	-	15,665	YES	-	-		15,665	-	15,665
14	Pillar Falls Substation.....	209,434	-	209,434	YES	-	-		209,434	-	209,434
15	State Substation.....	117,597	-	117,597	YES	-	-		117,597	-	117,597
16	Ustick Substation.....	19,670	(19,670)	-	YES	-	-		-	-	-
17	Wagner Substation.....	91,452	-	91,452	YES	-	-		91,452	-	91,452
18	Ward Substation.....	243,933	-	243,933	YES	-	-		243,933	-	243,933
19	Greenleaf Substation.....	-	-	-		250,000	250,000		250,000	-	250,000
20	Northside Substation.....	-	-	-		1,372,140	1,372,140		1,372,140	-	1,372,140
21	Total Distribution.....	4,167,562	(291,903)	3,875,659		1,622,140	1,622,140		5,497,799	-	5,497,799
Transmission:											
22	Boise Bench Transmission Station.....	179,904	-	179,904	YES	-	-		179,904	-	179,904
23	Donnelly McCall Transmission Land R/W.....	68,592	-	68,592	YES	-	-		68,592	-	68,592
24	Dry Creek Transmission Station.....	26,671	-	26,671	YES	-	-		26,671	-	26,671
25	Line #853 500KV.....	332,748	-	332,748	YES	-	-		332,748	-	332,748
26	Line #854 500KV.....	308,066	-	308,066	YES	-	-		308,066	-	308,066
27	Long Valley Transmission Station.....	22,377	(22,377)	-	YES	-	-		-	-	-
28	Mayfield Transmission Station.....	220,052	-	220,052	YES	-	-		220,052	-	220,052
29	Midpoint Transmission Station.....	851,271	(73,257)	778,014	YES	-	-		778,014	-	778,014
30	Palette Junction Substation.....	748,482	-	748,482	YES	-	-		748,482	-	748,482
31	Sage Transmission Station.....	89,977	-	89,977	YES	-	-		89,977	-	89,977
32	Shellrock Transmission Station.....	9,918	(9,918)	-	YES	-	-		-	-	-
33	Total Transmission.....	2,858,058	(105,552)	2,752,506		-	-		2,752,506	-	2,752,506
34	Total Plant Held for Future Use .....	\$ 7,129,775	\$ (501,610)	\$ 6,628,165		\$ 1,622,140	\$ 1,622,140	P	\$ 8,250,305	\$ -	\$ 8,250,305

**IDAHO POWER COMPANY  
2023 RATE CASE  
DEFERRED INCOME TAX BALANCES**

	Balance Dec 31, 2022	2023 Change	Balance Dec 31, 2023	Average 2022-2023
<b><u>ACCOUNT 190 - ACCUM DEF INC TAXES:</u></b>				
004003-CONSTRUCTION ADVANCES	2,563,899	(1,514,441)	1,049,458	1,806,678
005010-POSTEMPLOYMENT BENEFITS	396,050	23,244	419,294	407,672
005026-USBR AMERICAN FALLS O&M COSTS	28,489	(8,996)	19,492	23,991
005033-NON VEBA PENSION AND BENEFITS	(804,568)	(56,450)	(861,018)	(832,793)
005047-OTHER EMPLOYEE'S LT DEFERRED COMP	90,889	149,356	240,245	165,567
005053-STOCK BASED COMPENSATION	3,184,240	810,433	3,994,673	3,589,457
005064-BRIDGER REVENUE DEFERRAL	1,114,435	(57,435)	1,057,000	1,085,717
005073-OR RECONNECT FEES ADV	3,262	525	3,787	3,524
005531-RATE CASE DISALLOWANCES AMORTIZATION	963,150	(76,267)	886,883	925,016
008001-VEBA POST-RETIREMENT BENEFITS	12,042,335	800,015	12,842,350	12,442,343
008013-ANNUALIZED BOOK DEPRECIATION	0	596,171	596,171	298,086
<b>TOTAL 190</b>	<b>19,582,181</b>	<b>666,153</b>	<b>20,248,333</b>	<b>19,915,258</b>
<b><u>ACCOUNT 282 - ACCUM DEF INC TAXES - OTHER PROPERTY:</u></b>				
LIBERALIZED DEPR - ELECTRIC PLANT	(404,092,568)	16,604,189	(387,488,379)	(395,790,474)
<b>TOTAL 282</b>	<b>(404,092,568)</b>	<b>16,604,189</b>	<b>(387,488,379)</b>	<b>(395,790,474)</b>
<b><u>ACCOUNT 283 - ACCUM DEF INC TAXES - OTHER:</u></b>				
004501-ROYALTY INCOME	(247,446)	63,658	(183,788)	(215,617)
005008-GAIN/LOSS ON REACQUIRED DEBT	(212,169)	70,330	(141,839)	(177,004)
005045-WILDFIRE MITIGATION 35077 DEFERRAL	(5,940,336)	480,094	(5,460,242)	(5,700,289)
005057-INTERVENOR FUNDING ORDERS	(88,723)	(1,148)	(89,871)	(89,297)
008081-SIEMENS LTP CONTRACT	(127,703)	(17,214)	(144,916)	(136,310)
008083-SIEMENS OR DRB INTEREST RESERVE	49,647	7,161	56,808	53,228
<b>TOTAL 283</b>	<b>(6,566,729)</b>	<b>602,881</b>	<b>(5,963,848)</b>	<b>(6,265,289)</b>
<b>TOTAL DEFERRED TAX BALANCES</b>	<b>(391,077,117)</b>	<b>17,873,223</b>	<b>(373,203,894)</b>	<b>(382,140,505)</b>

Deferred Tax Expense without ITC - 410 / 411	(17,873,223)
ITC Deferred Tax Expense - 411.4	25,014,178
Total Deferred Tax Expense	<u>7,140,954</u>

IDAHO POWER COMPANY  
CUSTOMER ADVANCES FOR CONSTRUCTION  
For The Thirteen Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)
Line	Month	2022	2022	2022	Forecast Methodology		Forecast	Ref	2023		2023
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	Annualizing	Test Year
					Base				Test Year		Test Year
1	December, 2021.....	\$ 8,350,901	\$ -	\$ 8,350,901		\$ (591,838)	\$ (591,838)		\$ 7,759,063	\$ -	\$ 7,759,063
2	January, 2022.....	8,592,890	-	8,592,890		(987,155)	(987,155)		7,605,735	-	7,605,735
3	February.....	8,538,803	-	8,538,803		(898,797)	(898,797)		7,640,006	-	7,640,006
4	March.....	10,213,241	-	10,213,241		(2,483,500)	(2,483,500)		7,729,741	-	7,729,741
5	April.....	10,679,989	-	10,679,989		(3,239,939)	(3,239,939)		7,440,050	-	7,440,050
6	May.....	11,148,661	-	11,148,661		(3,995,622)	(3,995,622)		7,153,039	-	7,153,039
7	June.....	11,932,802	-	11,932,802		(5,269,772)	(5,269,772)		6,663,030	-	6,663,030
8	July.....	14,999,118	-	14,999,118		(7,501,216)	(7,501,216)		7,497,902	-	7,497,902
9	August.....	15,495,033	-	15,495,033		(8,135,695)	(8,135,695)		7,359,338	-	7,359,338
10	September.....	16,087,930	-	16,087,930		(9,104,261)	(9,104,261)		6,983,669	-	6,983,669
11	October.....	18,048,874	-	18,048,874		(10,742,365)	(10,742,365)		7,306,509	-	7,306,509
12	November.....	17,611,152	-	17,611,152		(10,027,295)	(10,027,295)		7,583,857	-	7,583,857
13	December.....	19,112,288	-	19,112,288		(11,088,683)	(11,088,683)		8,023,605	-	8,023,605
14	Average.....	<u>\$ 13,139,360</u>	<u>\$ -</u>	<u>\$ 13,139,360</u>		<u>\$ (5,697,395)</u>	<u>\$ (5,697,395) Q</u>		<u>\$ 7,441,965</u>	<u>\$ -</u>	<u>\$ 7,441,965</u>

IDAHO POWER COMPANY  
IERCo - SUBSIDIARY RATE BASE COMPONENTS  
For The Thirteen Months Ended December 31, 2023

Line No	Month	(1) 2022		2023		(2) 2022 Advance Coal Royalties		2023 Advance Coal Royalties		(3) 2022 Notes Receivable from Subsidiary		2023 Notes Receivable from Subsidiary		Ref No	(4) 2022		2023	
		Investment	Change	Investment		Royalties	Change	Royalties		Change		Change			Total	Change	Total	
1	December, 2021.....	\$ 27,909,477	\$ (13,217,958)	\$ 14,691,519		\$ 961,328	\$ (247,311)	\$ 714,017		\$ 6,169,545	\$ 8,333,213	\$ 14,502,758			\$ 35,040,351	\$ (5,132,056)	\$ 29,908,294	
2	January, 2022.....	28,761,648	(13,873,414)	14,888,234		940,660	(246,017)	694,643		5,869,705	6,542,689	12,412,394			35,572,013	(7,576,742)	27,995,271	
3	February.....	29,321,846	(14,303,661)	15,018,185		920,340	(245,072)	675,268		1,869,799	9,529,108	11,398,907			32,111,986	(5,019,626)	27,092,360	
4	March.....	29,868,676	(14,709,423)	15,159,253		895,180	(239,286)	655,894		769,870	11,170,222	11,940,093			31,533,727	(3,778,487)	27,755,239	
5	April.....	23,299,816	(8,034,515)	15,265,301		873,183	(236,664)	636,519		6,294,076	9,477,055	15,771,131			30,467,075	1,205,877	31,672,951	
6	May.....	23,705,051	(8,347,313)	15,357,738		852,741	(235,596)	617,145		1,996,857	14,682,645	16,679,502			26,554,648	6,099,737	32,654,384	
7	June.....	24,274,225	(8,804,613)	15,469,612		832,823	(235,053)	597,770		2,476,672	15,300,115	17,776,787			27,583,719	6,260,449	33,844,169	
8	July.....	25,078,116	(9,414,845)	15,663,271		813,730	(235,335)	578,396		2,280,171	14,226,231	16,506,402			28,172,018	4,576,051	32,748,069	
9	August.....	25,941,338	(10,082,906)	15,858,432		794,481	(235,460)	559,021		584,225	17,092,958	17,677,183			27,320,045	6,774,592	34,094,636	
10	September.....	27,468,901	(11,448,670)	16,020,231		772,589	(232,942)	539,647		(1,674,522)	18,212,397	16,537,875			26,566,968	6,530,785	33,097,753	
11	October.....	13,288,889	2,918,075	16,206,964		748,223	(227,951)	520,272		11,622,230	4,736,156	16,358,387			25,659,343	7,426,280	33,085,623	
12	November.....	14,024,236	2,356,277	16,380,513		733,392	(232,494)	500,898		13,562,845	1,840,634	15,403,478			28,320,472	3,964,417	32,284,889	
13	December.....	14,691,519	1,841,115	16,532,634		714,017	(232,494)	481,523		14,502,758	69,301	14,572,059			29,908,294	1,677,922	31,586,217	
14	Average.....	<u>\$ 23,664,134</u>	<u>\$ (8,086,296)</u>	<u>\$ 15,577,837</u>		<u>\$ 834,822</u>	<u>\$ (237,052)</u>	<u>\$ 597,770</u>		<u>\$ 5,101,864</u>	<u>\$ 10,093,286</u>	<u>\$ 15,195,150</u>	R		<u>\$ 29,600,820</u>	<u>\$ 1,769,938</u>	<u>\$ 31,370,758</u>	

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**JEPPSEN, DI**  
**TESTIMONY**

**EXHIBIT NO. 23**

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
GENERAL ADVERTISING EXPENSE (ACCOUNT 930.1)  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Line	Description	2022	2022	2022	Forecast Methodology		Forecast	Ref	Unadjusted	
No		Actuals	Adjustments	Base	2022	Other	Adjustment	No	Test Year	Annualizing
					Base				Test Year	Test Year
1	General Advertising Expense.....	\$ 491,473	\$ (491,473)	\$ -		\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
MEMBERSHIPS AND CONTRIBUTIONS  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Line	Acct	Organization	Contributions	Actual	Memberships	2022	2022	2022	Forecast	Forecast	Forecast	Unadjusted	Annualizing	2023
No	No		100%	33.33%	100%	Actuals	Adjustments	Base	2022	Other	Adjustment	Ref	Test Year	Test Year
									Base			No		
1	537	Oregon Department of Agriculture.....		\$ 41		\$ 41	\$ (41)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
2	537	Southern Idaho Water Quality Coalition.....		333		333	(333)	-	YES	-	-		-	-
3	539	American Concrete Institute.....		37		37	(37)	-	YES	-	-		-	-
4	539	American Society of Civil Engineers.....		24		24	(24)	-	YES	-	-		-	-
5	539	North American Weather Modification Council.....		166		166	(166)	-	YES	-	-		-	-
6	545	Greater Pine Valley Rangeland Fire Protection Association.....		25		25	(25)	-	YES	-	-		-	-
7	545	Weiser River Rangeland Fire Protection Association.....		83		83	(83)	-	YES	-	-		-	-
8	562	Utilities Technology Council.....		1,446		1,446	(1,446)	-	YES	-	-		-	-
9	570	Utilities Technology Council.....		482		482	(482)	-	YES	-	-		-	-
10	588	The Electrical Apparatus Service Association.....		683		683	(683)	-	YES	-	-		-	-
11	592	Utilities Technology Council.....		344		344	(344)	-	YES	-	-		-	-
12	593	Donation.....	7,000			7,000	(7,000)	-	YES	-	-		-	-
13	907	Chartwell.....		15,995		15,995	(15,995)	-	YES	-	-		-	-
14	908	Donation.....	(488)			(488)		-	YES	-	-		-	-
15	908	Forth.....		833		833	(833)	-	YES	-	-		-	-
16	908	Kiwanis Club Capital City.....		240		240	(240)	-	YES	-	-		-	-
17	908	Rotary Club Boise Metro.....		250		250	(250)	-	YES	-	-		-	-
18	910	Chartwell.....		3,166		3,166	(3,166)	-	YES	-	-		-	-
19	921	American Welding Society.....		85		85	(85)	-	YES	-	-		-	-
20	921	Americas' SAP Users' Group.....		945		945	(945)	-	YES	-	-		-	-
21	921	Arid Club.....			300	300	(300)	-	YES	-	-		-	-
22	921	Chamber of Commerce Pocatello.....		1,000		1,000	(1,000)	-	YES	-	-		-	-
23	921	Chamber of Commerce Boise Metro.....		650		650	(650)	-	YES	-	-		-	-
24	921	Crane Creek.....			2,100	2,100	(2,100)	-	YES	-	-		-	-
25	921	DirectEmployers Association.....		5,000		5,000	(5,000)	-	YES	-	-		-	-
26	921	Donation.....	500			500	(500)	-	YES	-	-		-	-
27	921	Hillcrest Country Club.....			600	600	(600)	-	YES	-	-		-	-
28	921	Idaho Business for Education.....		1,667		1,667	(1,667)	-	YES	-	-		-	-
29	921	Industrial Asset Management Council.....		583		583	(583)	-	YES	-	-		-	-
30	921	Lions Club Twin Falls.....		133		133	(133)	-	YES	-	-		-	-
31	921	Lions Twin Falls.....		42		42	(42)	-	YES	-	-		-	-
32	921	National Association of Property Tax Representatives - Transportation Energy Communications.....			50	50	(50)	-	YES	-	-		-	-
33	921	Northwest Public Power Association.....		504		504	(504)	-	YES	-	-		-	-
34	921	Risk Management Society.....		255		255	(255)	-	YES	-	-		-	-
35	921	Rotary Blue Lakes.....		68		68	(68)	-	YES	-	-		-	-
36	921	Rotary Club Blue Lakes.....		206		206	(206)	-	YES	-	-		-	-
37	921	Rotary Club Gooding.....		184		184	(184)	-	YES	-	-		-	-
38	921	Rotary Club Jerome.....		225		225	(225)	-	YES	-	-		-	-
39	921	Rotary Club Ketchum.....		177		177	(177)	-	YES	-	-		-	-
40	921	Rotary Club Nampa.....		367		367	(367)	-	YES	-	-		-	-
41	921	Rotary Club Twin Falls.....		73		73	(73)	-	YES	-	-		-	-
42	921	Urban Land Institute.....		164		164	(164)	-	YES	-	-		-	-
43	921	Western Energy Institute.....		533		533	(533)	-	YES	-	-		-	-
44	921	Western States Association of Tax Representatives.....			50	50	(50)	-	YES	-	-		-	-
45	930	Associated Taxpayers of Idaho.....			24,000	24,000	(24,000)	-	YES	-	-		-	-
46	930	Association of Idaho Cities.....		833		833	(833)	-	YES	-	-		-	-
47	930	Avian Power Line Interaction Committee.....		833		833	(833)	-	YES	-	-		-	-
48	930	Bannock Development.....		2,667		2,667	(2,667)	-	YES	-	-		-	-
49	930	Boise Valley Economic Partnership.....		5,833		5,833	(5,833)	-	YES	-	-		-	-
50	930	BusinessPlus.....		1,667		1,667	(1,667)	-	YES	-	-		-	-
51	930	Cambridge Commercial Club.....		13		13	(13)	-	YES	-	-		-	-
52	930	Centre for Energy Advancement through Technological Innovation.....		19,717		19,717	(19,717)	-	YES	-	-		-	-
53	930	Chamber of Commerce Baker City.....		359		359	(359)	-	YES	-	-		-	-
54	930	Chamber of Commerce Blackfoot.....		-		-	-	-	YES	-	-		-	-
55	930	Chamber of Commerce Boise Metro.....		9,521		9,521	(9,521)	-	YES	-	-		-	-
56	930	Chamber of Commerce Buhl.....		208		208	(208)	-	YES	-	-		-	-
57	930	Chamber of Commerce Caldwell.....		644		644	(644)	-	YES	-	-		-	-
58	930	Chamber of Commerce Donnelly.....		17		17	(17)	-	YES	-	-		-	-
59	930	Chamber of Commerce Eagle.....		158		158	(158)	-	YES	-	-		-	-
60	930	Chamber of Commerce Emmett.....		167		167	(167)	-	YES	-	-		-	-
61	930	Chamber of Commerce Fruitland.....		167		167	(167)	-	YES	-	-		-	-

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
MEMBERSHIPS AND CONTRIBUTIONS  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Line No	Acct No	Organization	Contributions 100%	Actual 33.33%	Memberships 100%	2022 Actuals	2022 Adjustments	2022 Base	Forecast 2022 Base	Forecast Methodology Other	Forecast Adjustment	Ref No	Unadjusted 2023 Test Year	2023 Annualizing Test Year
62	930	Chamber of Commerce Garden City.....		83		83	(83)	-	YES	-	-	-	-	-
63	930	Chamber of Commerce Garden Valley.....		33		33	(33)	-	YES	-	-	-	-	-
64	930	Chamber of Commerce Gooding.....		48		48	(48)	-	YES	-	-	-	-	-
65	930	Chamber of Commerce Hagerman.....		65		65	(65)	-	YES	-	-	-	-	-
66	930	Chamber of Commerce Halfway.....		27		27	(27)	-	YES	-	-	-	-	-
67	930	Chamber of Commerce Heyburn.....		128		128	(128)	-	YES	-	-	-	-	-
68	930	Chamber of Commerce Horseshoe Bend.....		67		67	(67)	-	YES	-	-	-	-	-
69	930	Chamber of Commerce Jerome.....		200		200	(200)	-	YES	-	-	-	-	-
70	930	Chamber of Commerce Kuna.....		333		333	(333)	-	YES	-	-	-	-	-
71	930	Chamber of Commerce Meridian.....		333		333	(333)	-	YES	-	-	-	-	-
72	930	Chamber of Commerce Mountain Home.....		183		183	(183)	-	YES	-	-	-	-	-
73	930	Chamber of Commerce Nampa.....		1,483		1,483	(1,483)	-	YES	-	-	-	-	-
74	930	Chamber of Commerce Nyssa.....		50		50	(50)	-	YES	-	-	-	-	-
75	930	Chamber of Commerce Ontario.....		105		105	(105)	-	YES	-	-	-	-	-
76	930	Chamber of Commerce Payette.....		92		92	(92)	-	YES	-	-	-	-	-
77	930	Chamber of Commerce Pocatello.....		781		781	(781)	-	YES	-	-	-	-	-
78	930	Chamber of Commerce Riggins.....		42		42	(42)	-	YES	-	-	-	-	-
79	930	Chamber of Commerce Star.....		33		33	(33)	-	YES	-	-	-	-	-
80	930	Chamber of Commerce Twin Falls.....		780		780	(780)	-	YES	-	-	-	-	-
81	930	Chamber of Commerce Weiser.....		100		100	(100)	-	YES	-	-	-	-	-
82	930	Chartwell.....		18,329		18,329	(18,329)	-	YES	-	-	-	-	-
83	930	City Club Boise.....		183		183	(183)	-	YES	-	-	-	-	-
84	930	E Source.....		6,409		6,409	(6,409)	-	YES	-	-	-	-	-
85	930	Eastern Oregon Vistor Association.....		500		500	(500)	-	YES	-	-	-	-	-
86	930	Edison Electric Institute.....		193,785		193,785	(193,785)	-	YES	-	-	-	-	-
87	930	Electric Power Research Institute.....		6,667		6,667	(6,667)	-	YES	-	-	-	-	-
88	930	Great Rift Business Development.....		750		750	(750)	-	YES	-	-	-	-	-
89	930	Grid Forward.....		2,500		2,500	(2,500)	-	YES	-	-	-	-	-
90	930	Idaho Association of Counties.....		1,000		1,000	(1,000)	-	YES	-	-	-	-	-
91	930	Idaho Manufacturing Alliance.....		333		333	(333)	-	YES	-	-	-	-	-
92	930	Jerome 20/20.....		1,666		1,666	(1,666)	-	YES	-	-	-	-	-
93	930	National Hydropower Association.....		15,774		15,774	(15,774)	-	YES	-	-	-	-	-
94	930	North American Energy Standards Board.....		2,667		2,667	(2,667)	-	YES	-	-	-	-	-
95	930	Oregon State University Foundation.....		5,000		5,000	(5,000)	-	YES	-	-	-	-	-
96	930	Pacific Northwest Utilities Conference Committee.....		18,058		18,058	(18,058)	-	YES	-	-	-	-	-
97	930	Regional Economic Development Eastern Idaho.....		667		667	(667)	-	YES	-	-	-	-	-
98	930	Rotary Club Twin Falls.....		146		146	(146)	-	YES	-	-	-	-	-
99	930	Snake River Economic Development Alliance.....		1,000		1,000	(1,000)	-	YES	-	-	-	-	-
100	930	Southern Idaho Economic Development.....		1,667		1,667	(1,667)	-	YES	-	-	-	-	-
101	930	Southern Idaho Livestock Hall of Fame.....		100		100	(100)	-	YES	-	-	-	-	-
102	930	Sun Valley Economic Development.....		833		833	(833)	-	YES	-	-	-	-	-
103	930	Western Alliance for Economic Development.....		1,000		1,000	(1,000)	-	YES	-	-	-	-	-
104	930	Western Energy Institute.....		10,335		10,335	(10,335)	-	YES	-	-	-	-	-
105	930	Wyoming Taxpayers Association.....			1,600	1,600	(1,600)	-	YES	-	-	-	-	-
106	935	Utilities Technology Council.....		826		826	(826)	-	YES	-	-	-	-	-
		Total.....	\$ 7,012	\$ 374,974	\$ 28,700	\$ 410,686	\$ (410,686)	\$ -		\$ -	\$ -		\$ -	\$ -



IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
ADJUSTMENT TO MANAGEMENT EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023	
No	Name	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	2023
					Base				Test Year	Test Year
									Annualizing	
1	<b>Ryan Adelman</b>									
2	Total Expenses	\$ 7,461								
3	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
4	Arid Club.....	-								
5	EEL.....	-								
6	Oregon Direct Charges.....	-								
7	Total.....	7,461								
8	Payroll Percentage Allocated to IDACORP.....	0.00%								
9	Net IDACORP Exclusions	-								
10	Other Exclusions:									
11	Arid Club (100% Per IPUC Order 29505).....	-								
12	Oregon - Direct Allocation (100%).....	-								
13	EEL (1/3 Per IPUC Order 29505).....	-								
14	Total Exclusions	\$ -	\$ -	\$ -	YES	\$ -	\$ -		\$ -	\$ -
15	<b>Brian Buckham</b>									
16	Total Expenses	\$ 22,621								
17	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
18	Arid Club.....	-								
19	EEL.....	(3,367)								
20	Oregon Direct Charges.....	-								
21	Total.....	19,254								
22	Payroll Percentage Allocated to IDACORP.....	1.00%								
23	Net IDACORP Exclusions	193								
24	Other Exclusions:									
25	Arid Club (100% Per IPUC Order 29505).....	-								
26	Oregon - Direct Allocation (100%).....	-								
27	EEL (1/3 Per IPUC Order 29505).....	1,124								
28	Total Exclusions	\$ 1,317	\$ (1,317)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
29	<b>Mitch Colburn</b>									
30	Total Expenses	\$ 3,055								
31	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
32	Arid Club.....	-								
33	EEL.....	(49)								
34	Oregon Direct Charges.....	-								
35	Total.....	3,006								
36	Payroll Percentage Allocated to IDACORP.....	0.00%								
37	Net IDACORP Exclusions	-								
38	Other Exclusions:									
39	Arid Club (100% Per IPUC Order 29505).....	-								
40	Oregon - Direct Allocation (100%).....	-								
41	EEL (1/3 Per IPUC Order 29505).....	16								
42	Total Exclusions	\$ 16	\$ (16)	\$ -	YES	\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
ADJUSTMENT TO MANAGEMENT EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023	
No	Name	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	2023
					Base				Test Year	Test Year
									Annualizing	
43	<b>Sarah Griffin</b>									
44	Total Expenses	\$ 2,515								
45	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
46	Arid Club.....	-								
47	EEL.....	(272)								
48	Oregon Direct Charges.....	-								
49	Total.....	2,243								
50	Payroll Percentage Allocated to IDACORP.....	0.62%								
51	Net IDACORP Exclusions	14								
52	Other Exclusions:									
53	Arid Club (100% Per IPUC Order 29505).....	-								
54	Oregon - Direct Allocation (100%).....	-								
55	EEL (1/3 Per IPUC Order 29505).....	90								
56	Total Exclusions	\$ 104	\$ (104)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
57	<b>Lisa Grow</b>									
58	Total Expenses	\$ 33,568								
59	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
60	Arid Club.....	(84)								
61	EEL.....	(5,872)								
62	Oregon Direct Charges.....	-								
63	Total.....	27,612								
64	Payroll Percentage Allocated to IDACORP.....	1.00%								
65	Net IDACORP Exclusions	276								
66	Other Exclusions:									
67	Arid Club (100% Per IPUC Order 29505).....	84								
68	Oregon - Direct Allocation (100%).....	-								
69	EEL (1/3 Per IPUC Order 29505).....	1,959								
70	Total Exclusions	\$ 2,319	\$ (2,319)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
71	<b>Bo Hanchey</b>									
72	Total Expenses	\$ 6,503								
73	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
74	Arid Club.....	-								
75	EEL.....	-								
76	Oregon Direct Charges.....	-								
77	Total.....	6,503								
78	Payroll Percentage Allocated to IDACORP.....	0.00%								
79	Net IDACORP Exclusions	-								
80	Other Exclusions:									
81	Arid Club (100% Per IPUC Order 29505).....	-								
82	Oregon - Direct Allocation (100%).....	-								
83	EEL (1/3 Per IPUC Order 29505).....	-								
84	Total Exclusions	\$ -	\$ -	\$ -	YES	\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
ADJUSTMENT TO MANAGEMENT EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023	
No	Name	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	2023
					Base				Test Year	Test Year
									Annualizing	
85	<b>Patrick Harrington</b>									
86	Total Expenses	\$ 20,908								
87	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
88	Arid Club.....	-								
89	EEL.....	(4,046)								
90	Oregon Direct Charges.....	-								
91	Total.....	16,862								
92	Payroll Percentage Allocated to IDACORP.....	0.95%								
93	Net IDACORP Exclusions	160								
94	Other Exclusions:									
95	Arid Club (100% Per IPUC Order 29505).....	1,385								
96	Oregon - Direct Allocation (100%).....	-								
97	EEL (1/3 Per IPUC Order 29505).....	1,350								
98	Total Exclusions	\$ 2,895	\$ (2,895)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
99	<b>Jason Huszar</b>									
100	Total Expenses	\$ 1,450								
101	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
102	Arid Club.....	-								
103	EEL.....	-								
104	Oregon Direct Charges.....	-								
105	Total.....	1,450								
106	Payroll Percentage Allocated to IDACORP.....	0.00%								
107	Net IDACORP Exclusions	-								
108	Other Exclusions:									
109	Arid Club (100% Per IPUC Order 29505).....	-								
110	Oregon - Direct Allocation (100%).....	-								
111	EEL (1/3 Per IPUC Order 29505).....	-								
112	Total Exclusions	\$ -	\$ -	\$ -	YES	\$ -	\$ -		\$ -	\$ -
113	<b>Steve Keen</b>									
114	Total Expenses	\$ 1,461								
115	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
116	Arid Club.....	-								
117	EEL.....	-								
118	Oregon Direct Charges.....	-								
119	Total.....	1,461								
120	Payroll Percentage Allocated to IDACORP.....	1.35%								
121	Net IDACORP Exclusions	20								
122	Other Exclusions:									
123	Arid Club (100% Per IPUC Order 29505).....	-								
124	Oregon - Direct Allocation (100%).....	-								
125	EEL (1/3 Per IPUC Order 29505).....	-								
126	Total Exclusions	\$ 20	\$ (20)	\$ -	YES	\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
ADJUSTMENT TO MANAGEMENT EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023	
No	Name	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	2023
					Base				Test Year	Test Year
									Annualizing	
127	<b>Debra Leithauser</b>									
128	Total Expenses	\$ 1,283								
129	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
130	Arid Club.....	-								
131	EEL.....	-								
132	Oregon Direct Charges.....	-								
133	Total.....	1,283								
134	Payroll Percentage Allocated to IDACORP.....	1.00%								
135	Net IDACORP Exclusions	13								
136	Other Exclusions:									
137	Arid Club (100% Per IPUC Order 29505).....	-								
138	Oregon - Direct Allocation (100%).....	-								
139	EEL (1/3 Per IPUC Order 29505).....	-								
140	Total Exclusions	\$ 13	\$ (13)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
141	<b>Jeff Malmen</b>									
142	Total Expenses	\$ 8,363								
143	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
144	Arid Club.....	-								
145	EEL.....	-								
146	Oregon Direct Charges.....	-								
147	Total.....	8,363								
148	Payroll Percentage Allocated to IDACORP.....	25.00%								
149	Net IDACORP Exclusions	2,091								
150	Other Exclusions:									
151	Arid Club (100% Per IPUC Order 29505).....	-								
152	Oregon - Direct Allocation (100%).....	-								
153	EEL (1/3 Per IPUC Order 29505).....	-								
154	Total Exclusions	\$ 2,091	\$ (2,091)	\$ -	YES	\$ -	\$ -		\$ -	\$ -
155	<b>Ken Petersen</b>									
156	Total Expenses	\$ 443								
157	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
158	Arid Club.....	-								
159	EEL.....	-								
160	Oregon Direct Charges.....	-								
161	Total.....	443								
162	Payroll Percentage Allocated to IDACORP.....	0.13%								
163	Net IDACORP Exclusions	1								
164	Other Exclusions:									
165	Arid Club (100% Per IPUC Order 29505).....	-								
166	Oregon - Direct Allocation (100%).....	-								
167	EEL (1/3 Per IPUC Order 29505).....	-								
168	Total Exclusions	\$ 1	\$ (1)	\$ -	YES	\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
ADJUSTMENT TO MANAGEMENT EXPENSES  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		2022	2022	2022	Forecast Methodology		Forecast	Ref	2023	
No	Name	Actuals	Adjustments	Base	2022	Other	Adjustment	No	Unadjusted	2023
					Base				Test Year	Test Year
									Annualizing	
169	<b>Adam Richins</b>									
170	Total Expenses	\$ 22,450								
171	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
172	Arid Club.....	-								
173	EEL.....	-								
174	Oregon Direct Charges.....	-								
175	Total.....	22,450								
176	Payroll Percentage Allocated to IDACORP.....	0.00%								
177	Net IDACORP Exclusions	-								
178	Other Exclusions:									
179	Arid Club (100% Per IPUC Order 29505).....	-								
180	Oregon - Direct Allocation (100%).....	-								
181	EEL (1/3 Per IPUC Order 29505).....	-								
182	Total Exclusions	\$ -	\$ -	\$ -	YES	\$ -	\$ -		\$ -	\$ -
183	<b>Tim Tatum</b>									
184	Total Expenses	\$ 6,230								
185	IDACORP Exclusions Requiring Special Treatment (Listed Below):									
186	Arid Club.....	-								
187	EEL.....	-								
188	Oregon Direct Charges.....	-								
189	Total.....	6,230								
190	Payroll Percentage Allocated to IDACORP.....	0.00%								
191	Net IDACORP Exclusions	-								
192	Other Exclusions:									
193	Arid Club (100% Per IPUC Order 29505).....	-								
194	Oregon - Direct Allocation (100%).....	-								
195	EEL (1/3 Per IPUC Order 29505).....	-								
196	Total Exclusions	\$ -	\$ -	\$ -	YES	\$ -	\$ -		\$ -	\$ -
197	Total Reduction to Officer's Expenses	\$ 8,775	\$ (8,775)	\$ -		\$ -	\$ -		\$ -	\$ -

IDAHO POWER COMPANY  
DEDUCTIONS FROM OPERATION AND MAINTENANCE EXPENSES  
OTHER EXCLUSIONS  
For Twelve Months Ended December 31, 2023

(1)	(2)	(3)	(4)	(5)	(6) (7) Forecast Methodology		(8)		(9)	(10)	(11)
	Account	2022 Actuals	2022 Adjustments	2022 Base	2022 Base	Other	Forecast Adjustmen	Ref No	2023 Unadjusted Test Year	Annualizing	2023 Test Year
1	537	\$ 6	\$ (6)	\$ -	YES	\$ -	\$ -		\$ -	\$ -	\$ -
2	562	7	(7)	-	YES	-	-		-	-	-
3	570	7	(7)	-	YES	-	-		-	-	-
4	582	7	(7)	-	YES	-	-		-	-	-
5	583	46	(46)	-	YES	-	-		-	-	-
6	586	73	(73)	-	YES	-	-		-	-	-
7	588	327	(327)	-	YES	-	-		-	-	-
8	592	7	(7)	-	YES	-	-		-	-	-
9	921	5,897	(5,897)	-	YES	-	-		-	-	-
10	926	16,822	(16,822)	-	YES	-	-		-	-	-
11	Total	<u>\$ 23,199</u>	<u>\$ (23,199)</u>	<u>\$ -</u>		<u>\$ -</u>	<u>\$ -</u>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**JEPPSEN, DI  
TESTIMONY**

**EXHIBIT NO. 24**

Idaho Power Company  
DETAIL OF ADDITIONAL RATE BASE, REVENUE AND EXPENSE ADJUSTMENTS  
FOR THE YEARS 2022 AND 2023

(1) Line No.	(2) Description	(3) Account No.	(4) 2022			(7) 2023		
			Ratebase	Revenue	Expense	Ratebase	Revenue	Expense
1	Asset Exchange Acquisition Adjustment (IPUC Order No. 33313, OPUC Order No. 15-184, FERC Order No. 20150617-3060).....	114	\$	750,893		\$	750,893	
2	Asset Exchange Acquisition Adjustment Accumulated Amortization.....	115	\$	(107,628)		\$	(122,646)	
3	Net Asset Exchange Acquisition Adjustment.....		\$	643,265		\$	628,247	
4	Cloud Computing - (IPUC Order 34707).....	182	\$	1,207,592		\$	1,006,327	
5	Wildfire Mitigation - (IPUC Order 35077).....	182	\$	13,056,171		\$	13,056,171	
6	Siemens LTP Deferred Rate Base - (IPUC Order 33420).....	182	\$	8,612,494		\$	8,181,006	
7	Siemens LTP Deferred Rate Base - (OPUC Order 15-387).....	182	\$	138,550		\$	94,504	
8	Pension Expense Amortization (IPUC Order No. 32426).....	926						\$ 18,028,665
9	Energy Efficiency Rider (IPUC Order No. 30189).....	456		\$ (31,673,550)	\$ (31,673,550)			
10	Energy Efficiency Rider (IPUC Order No. 30189).....	908						
11	Energy Efficiency Rider (Oregon).....	456		\$ (1,523,563)	\$ (1,523,563)			
12	Energy Efficiency Rider (Oregon).....	908						
13	Energy Efficiency Rider Labor - Idaho.....	908						\$ 3,474,555
14	Cloud Computing - (IPUC Order 34707).....	407			\$ 201,265			\$ 201,265
15	Wildfire Mitigation - (IPUC Order 35077).....	407			\$ -			\$ 1,865,167
16	Siemens LTP Deferred Rate Base Amortization - Idaho.....	407			\$ 431,488			\$ 431,488
17	Siemens LTP Deferred Rate Base Amortization - Oregon.....	407			\$ 44,046			\$ 44,046
18	2022 Incentive.....	920			\$ (26,598,871)			
19	Asset Exchange Acquisition Adjustment Amortization (IPUC Order No. 33313, OPUC Order No. 15-184, FERC Order No. 20150617-3060).....	406			\$ 15,018			\$ 15,018
20	Intervenor Funding CAPAI (IPUC Order No. 32788).....	928						\$ 3,574
21	Intervenor Funding Sierra Club (IPUC Ord No 33872).....	928						\$ 16,267
22	Intervenor Funding CAP (IPUC Order 33908).....	928						\$ 1,089
23	Intervenor Funding ICL (IPUC Order 32697).....	928						\$ 6,583
24	Intervenor Funding CAPAI (IPUC Order 32245).....	928						\$ 2,428
25	Intervenor Funding ICL (IPUC Order 32245).....	928						\$ 4,901
26	Intervenor Funding NW Energy (IPUC Order 32505).....	928						\$ 809
27	Intervenor Funding ICEA (IPUC Order 32846).....	928						\$ 11,191
28	Intervenor Funding ICL (IPUC Order 32846).....	928						\$ 13,287
29	Intervenor Funding ICL (IPUC Order 32505, 32537).....	928						\$ 7,742
30	Intervenor Funding ICL (IPUC Order 32426).....	928						\$ 16,482
31	Intervenor Funding CAPAI (IPUC Order 32426).....	928						\$ 14,943
32	Intervenor Funding IIPA (IPUC Order 32426).....	928						\$ 14,943
33	Intervenor Funding SRA (IPUC Order 32956).....	928						\$ 18,709
34	Intervenor Funding IIPA (IPUC Order 33357).....	928						\$ 14,152
35	Intervenor Funding SRA (IPUC Order 33357).....	928						\$ 4,190
36	Intervenor Funding REC (IPUC Order 33357).....	928						\$ 6,616
37	Intervenor Funding ICL (IPUC Order 33357).....	928						\$ 6,871
38	Intervenor Funding ICEA (IPUC Order 34046).....	928						\$ 11,969
39	Intervenor Funding Sierra Club (IPUC Order 34046).....	928						\$ 11,969
40	Intervenor Funding SRA (IPUC Order 34046).....	928						\$ 7,617
41	Intervenor Funding IIPA (IPUC Order 34046).....	928						\$ 11,969
42	Intervenor Funding ICL (IPUC Order 34546).....	928						\$ 11,631
43	Intervenor Funding ICEA (IPUC Order 34546).....	928						\$ 19,032
44	Intervenor Funding IIPA (IPUC Order 34546).....	928						\$ 5,287
45	Intervenor Funding Idaho Sierra Club (IPUC Order 34546).....	928						\$ 6,344
46	Intervenor Funding ICL (IPUC Order 34608).....	928						\$ 6,745
47	Intervenor Funding ICEA (IPUC Order 34608).....	928						\$ 8,431
48	Intervenor Funding Idaho Sierra Club (IPUC Order 34608).....	928						\$ 7,248
49	Intervenor Funding IIPA (IPUC Order 34608).....	928						\$ 19,730
50	Intervenor Funding Idaho Sierra Club (IPUC Order 34892).....	928						\$ 3,825
51	OR CUB Funding OPUC Order 21-166_22-192.....	928			\$ (36,197)			
52	OR Annual Reg Expense OPUC Order 21-166_22-192.....	928			\$ (28,878)			



BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION     )  
OF IDAHO POWER COMPANY FOR            ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES       )  
AND CHARGES FOR ELECTRIC SERVICE       )  
IN THE STATE OF IDAHO AND FOR          )  
ASSOCIATED REGULATORY ACCOUNTING      )  
TREATMENT.                               )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

MATTHEW T. LARKIN

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Matthew T. Larkin. My business  
5 address is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as the Revenue Requirement Senior  
7 Manager in the Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     I received a Bachelor of Business  
10 Administration degree in Finance from the University of  
11 Oregon in 2007. In 2008, I earned a Master of Business  
12 Administration degree from the University of Oregon. I have  
13 also attended electric utility ratemaking courses,  
14 including the *Electric Rates Advanced Course*, offered by  
15 the Edison Electric Institute, and *Estimation of*  
16 *Electricity Marginal Costs and Application to Pricing*,  
17 presented by National Economic Research Associates, Inc.

18          Q.     Please describe your work experience with  
19 Idaho Power.

20          A.     I began my employment with Idaho Power as a  
21 Regulatory Analyst in January 2009. As a Regulatory  
22 Analyst, I provided support for the Company's regulatory  
23 activities, including compliance reporting, financial  
24 analysis, and the development of revenue forecasts for  
25 regulatory filings.

1 In January 2014, I was promoted to Senior Regulatory  
2 Analyst where my responsibilities expanded to include the  
3 development of complex cost-related studies and the  
4 analysis of strategic regulatory issues.

5 Since becoming the Revenue Requirement Senior  
6 Manager in March 2016, I have overseen the Company's  
7 regulatory activities related to revenue requirement, such  
8 as power supply expense modeling, jurisdictional separation  
9 studies, and Idaho Power's Open Access Transmission Tariff  
10 formula rate.

11 **I. OVERVIEW**

12 Q. What is the purpose of your testimony in this  
13 proceeding?

14 A. The purpose of my testimony is to present the  
15 forecast methodologies that were applied to the Company's  
16 2022 financial data to arrive at the 2023 forecasted  
17 financial levels. Further, my testimony will describe the  
18 instructions that I provided to Company Witnesses Ms.  
19 Jessica G. Brady, Ms. Kelley Noe, and Ms. Paula Jeppsen  
20 with regard to the normalizing, annualizing, and other  
21 regulatory adjustments required to arrive at the 2023 test  
22 year revenue requirement.

23 Q. How is your testimony organized?

24 A. My testimony begins with an overview of  
25 direction I received from Vice President of Regulatory

1     Affairs Mr. Timothy E. Tatum regarding the development of  
2     the Company's 2023 Test Year ("2023 Test Year" or "Test  
3     Year"). I then detail two specific adjustments to the  
4     Company's 2023 Test Year regarding the recovery of costs  
5     related to Idaho Power's defined benefit pension plan and  
6     the recovery of non-fuel coal-related costs. Next, I  
7     discuss the broader methodologies utilized by the Company  
8     to forecast the remainder of the test year components. My  
9     testimony concludes with a summary of the direction I gave  
10    to other Company witnesses in developing the 2023 Test  
11    Year, and a quantification of the Company's requested Idaho  
12    jurisdictional revenue requirement.

13           Q.     Did you consult with Mr. Tatum, Vice President  
14    of Regulatory Affairs, regarding the development of the  
15    2023 Test Year?

16           A.     Yes.   The 2023 Test Year development  
17    methodology presented in my testimony is a direct result of  
18    numerous discussions with Mr. Tatum.

19           Q.     Did Mr. Tatum provide you with any specific  
20    instructions or guidance regarding the development of the  
21    test year presented in this proceeding?

22           A.     Yes.   Mr. Tatum instructed me to develop a  
23    2023 Test Year based on 2022 actual financial data in a  
24    manner similar to that presented to the Idaho Public  
25    Utilities Commission ("Commission") in the Company's last

1 general rate case, IPC-E-11-08 ("2011 Rate Case").  
2 However, Mr. Tatum instructed me to deviate from the  
3 methodology used in the 2011 Rate Case in a number of  
4 specific areas.

5 First, Mr. Tatum instructed me to set the recovery  
6 of 2023 Test Year pension expense at approximately \$35  
7 million, an increase above the level currently reflected in  
8 rates of \$17 million. Second, Mr. Tatum directed me to  
9 maintain the North Valmy Power Plant ("Valmy") and the Jim  
10 Bridger Power Plant ("Bridger") non-fuel coal-related cost  
11 recovery at current levels, with the exception of  
12 collection related to previously deferred revenue  
13 requirement amounts. Third, Mr. Tatum directed me to update  
14 base net power supply expenses ("NPSE") to be included in  
15 base rates and tracked through the Power Cost Adjustment  
16 ("PCA") on a going forward basis. Fourth, Mr. Tatum  
17 instructed me to hold non-labor operations and maintenance  
18 ("O&M") expense at 2022 levels with specific adjustments  
19 for known and measurable changes. Fifth, Mr. Tatum  
20 instructed me to hold test year levels of wildfire  
21 mitigation costs to 2022 actual costs, and include  
22 amortization into rates of previously deferred wildfire  
23 mitigation costs, excluding deferred vegetation management  
24 costs, over a seven-year amortization period.

1 Prior to discussing the broader methodology utilized  
2 to develop the 2023 Test Year, I will first address the  
3 Company's methodologies related to pension and non-fuel  
4 coal-related costs at Bridger and Valmy.

5 **II. PENSION COST RECOVERY**

6 Q. Please provide an overview of the regulatory  
7 treatment for the Company's defined benefit pension plan  
8 expense in Idaho rate proceedings.

9 A. In Order No. 30333 issued in 2007, the  
10 Commission authorized Idaho Power to account for its  
11 defined benefit pension expense on a cash basis and to  
12 defer and account for accrued Statement of Financial  
13 Accounting Standards ("SFAS") 87 / Accounting Standards  
14 Codification ("ASC") 715 pension expense as a regulatory  
15 asset. Then in 2010, the Commission determined in Order No.  
16 31003 that the previously authorized regulatory asset could  
17 be considered a balancing account to track, on a cumulative  
18 basis, the difference between the cash amounts contributed  
19 to the pension plan and the amounts included in rates.  
20 Additionally, the Commission determined that recovery of  
21 deferred cash contributions and ASC 715 expense and the  
22 associated amortization period were to be evaluated during  
23 a revenue requirement proceeding.

24 Q. Do customers benefit under the current  
25 regulatory treatment for pension expense?

1           A.       Yes. The balancing account established by  
2   Order No. 31003 provides for a greater level of cost  
3   tracking that assures customers pay no more than the actual  
4   cost as well as providing a better opportunity to match  
5   costs with revenues. The balancing account is also an  
6   effective tool to mitigate financial market volatility as  
7   well as discount rate volatility. The balancing account  
8   results in the Company addressing both market and discount  
9   rate volatility while the customer impact of the volatility  
10  is mitigated. The balancing account also provides the  
11  Commission with the opportunity to determine an appropriate  
12  amortization period for rate recovery.

13           Q.       What is the Company's current annual level of  
14  pension expense recovery?

15           A.       In Order No. 32248 issued in 2011 in Case No.  
16  IPC-E-11-04, the Commission authorized recovery of  
17  \$17,153,713 per year.

18           Q.       Aside from the current level of base rate  
19  recovery, have there been any other reductions to the  
20  balancing account?

21           A.       Yes. Due to the Company's revenue sharing  
22  mechanism,<sup>1</sup> from 2011 to 2014 the pension balancing account

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<sup>1</sup> Case No. IPC-E-09-30, Order No. 30978. This ADITC/Revenue Sharing mechanism was subsequently extended, and percentages, thresholds, and accounting were modified by the Commission in Order Nos. 32424, 33149, and 34071.

1 was reduced by approximately \$68 million, as earnings above  
2 a 10.5 percent return on equity were used to offset future  
3 rate increases associated with pension deferrals.

4 Q. What is the current balance in the pension  
5 balancing account?

6 A. As of December 31, 2022, the balance was \$221  
7 million.

8 Q. What is the Company's requested level of  
9 pension expense recovery in the 2023 Test Year?

10 A. At Mr. Tatum's direction, the Company is  
11 requesting \$35 million of pension amortization, reflecting  
12 an approximate increase of \$18 million compared to the  
13 amount currently in rates.

14 Q. Is there a risk to customers of over-recovery  
15 if assumptions regarding pension costs or funding levels  
16 change?

17 A. No. The existing balancing account methodology  
18 ensures that customers never pay more than actual pension  
19 costs. If future contributions are less than \$35 million  
20 the balance in the account will be reduced sooner. If  
21 contributions continue to be higher than the recovery of  
22 \$35 million, the pension balancing account will grow but  
23 will not impact customers without future rate approvals, as  
24 has been illustrated over the period since Idaho Power's  
25 last general rate case.



1                   **III. NON-FUEL COAL-RELATED COST RECOVERY**

2                   Q.       How are non-fuel coal-related costs generally  
3 recovered in rates?

4                   A.       On May 31, 2017, the Commission authorized the  
5 Company in Order No. 33771 to establish a balancing  
6 account, with the necessary regulatory accounting, to track  
7 the incremental costs and benefits associated with the  
8 accelerated Valmy end-of-life as part of the Valmy  
9 levelized revenue requirement mechanism.<sup>2</sup> Similarly, on June  
10 1, 2022, the Commission authorized the Company in Order No.  
11 35423 to establish a balancing account, with the necessary  
12 regulatory accounting, to track the incremental costs and  
13 benefits associated with the Company's cessation of coal-  
14 fired operations at Bridger as part of the Bridger coal-  
15 related levelized revenue requirement mechanism.<sup>3</sup> The  
16 recovery of these amounts is embedded in the Company's  
17 currently-approved base rates.

18                  Q.       What direction did you receive from Mr. Tatum  
19 with regard to the inclusion of non-fuel coal-related costs  
20 in the 2023 Test Year?

21                  A.       Mr. Tatum directed me to maintain the Valmy  
22 and Bridger non-fuel coal-related cost recovery at current

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<sup>2</sup> Case No. IPC-E-16-24, Order No. 33771.

<sup>3</sup> Case No. IPC-E-21-17, Order No. 35423.

1 levels, with the exception of collection related to  
2 previously deferred revenue requirement amounts.

3 Q. How did the Company achieve this directive?

4 A. This directive was achieved as reflected in  
5 Ms. Jeppsen's testimony and exhibits, through the removal  
6 of these costs from 2022 actuals. As discussed by Ms.  
7 Jeppsen, actual non-fuel coal-related costs at Bridger and  
8 Valmy were adjusted out of actual costs in all pertinent  
9 cost categories, including non-fuel O&M, electric plant-in-  
10 service, and property taxes.

11 Q. How is Idaho Power accounting for the existing  
12 cost recovery through these coal mechanisms in its  
13 presentment of the 2023 Test Year?

14 A. With regard to revenues, the Company's  
15 existing base rates already reflect the amount of current  
16 recovery of these levelized amounts, therefore the 2023  
17 Test Year retail revenues calculated by Ms. Brady and  
18 provided to Ms. Noe reflect revenues the Company is  
19 currently receiving related to these levelized revenue  
20 requirements. With regard to costs, Idaho Power has  
21 quantified the current level of authorized cost recovery  
22 for both the Bridger coal-related and Valmy levelized  
23 revenue requirement mechanisms. Because coal-related  
24 Bridger and Valmy costs were removed from actual 2022  
25 financials by Ms. Jeppsen, the Company has added the

1 currently authorized Idaho jurisdictional recovery levels  
2 to the 2023 Test Year revenue requirement, as detailed in  
3 the jurisdictional separation study ("JSS") prepared by Ms.  
4 Noe. As described in the Direct Testimony of Mr. Tatum,  
5 these amounts also include the total incremental annual  
6 Bridger-related cost recovery associated with previously  
7 deferred revenue requirement amounts.

#### 8 **IV. TEST YEAR METHODS**

9 Q. Will you briefly summarize how the Company  
10 developed its 2023 Test Year?

11 A. Yes. The development of the 2023 Test Year  
12 began with 2022 actual financial data ("2022 Actuals").  
13 2022 Actuals were compiled and adjusted by Ms. Jeppsen to  
14 reflect standard ratemaking adjustments and to arrive at  
15 2022 adjusted actual financial information ("2022 Base").  
16 The 2022 Base was then adjusted to reach 2023 forecasted  
17 financial levels ("2023 Unadjusted Test Year"). Finally,  
18 annualizing adjustments were made to the 2023 Unadjusted  
19 Test Year to reach the Company's 2023 Test Year.

20 Q. Which forecast methodologies were used to  
21 adjust the 2022 Base to the 2023 Unadjusted Test Year?

22 A. There were two primary methods developed and  
23 applied to the 2022 Base Year to forecast the 2023  
24 Unadjusted Test Year. First, the Company used the unchanged  
25 2022 Base Year financial data when the Company believed

1 that certain amounts would continue to remain at 2022  
2 levels or if account balances were relatively small.  
3 Alternatively, "Other Adjustments" were applied based upon  
4 known or probable factors for 2023 that relate to a  
5 particular account. Examples of these factors include, but  
6 are not limited to, new billing and volume contract terms,  
7 discontinued services, anticipated levels of economic  
8 activity, and existing regulatory commission orders.

9 Q. Have you prepared exhibits that list all  
10 accounts and identify the specific method used to forecast  
11 the 2023 Unadjusted Test Year?

12 A. Yes. I directed the preparation of Exhibit No.  
13 25 to present a summarized list of all accounts to which  
14 the two previously discussed methods were applied. Each  
15 methodology is described in more detail within the Forecast  
16 Methodology Manual, provided as Exhibit No. 26, which was  
17 also prepared at my direction. To develop the Forecast  
18 Methodology Manual, the Company performed a review of each  
19 group of accounts included within the test year. Based upon  
20 specific knowledge and analysis of each account grouping,  
21 the Company either used 2022 Actuals or applied an Other  
22 Adjustment methodology to that account to represent an  
23 appropriate level of anticipated spending.

1           Q.     Have the data and the associated adjustments  
2     made to your exhibits and supporting schedules been  
3     calculated on a total system basis?

4           A.     Yes. Ms. Noe will address the determination of  
5     the Idaho jurisdictional test year values in her testimony.

6           Q.     What are the major areas or groupings of  
7     financial accounts addressed by the methodologies included  
8     in the Forecast Methodology Manual (Exhibit No. 26)?

9           A.     The major areas or groupings of financial  
10    accounts addressed in Exhibit No. 26 include Other  
11    Operating Revenues (Accounts 451, 454, and 456), Operation  
12    and Maintenance Expenses (Accounts 500 through 935),  
13    Depreciation and Amortization Expense (Accounts 403 and  
14    404), and Electric Plant in Service (Account 101). A  
15    detailed discussion of the individual accounts and methods  
16    used is provided in Exhibit No. 26.

17          Q.     Which methodology was used to forecast 2023  
18    Other Operating Revenues (Accounts 447, 451, 454, and 456)?

19          A.     Consistent with Mr. Tatum's directive, Surplus  
20    Sales Revenues (Account 447) were included in the Company's  
21    quantification of base NPSE as further detailed in Ms.  
22    Brady's testimony. The remaining Other Operating Revenues  
23    (Accounts 451, 454, and 456) were kept at year-end 2022  
24    Actuals, with the exception of six items: 1) miscellaneous  
25    service revenues, 2) cogeneration and small power

1 production, 3) revenues from dark fiber rents, 4) payments  
2 to water districts, 5) facilities charges, and 6) third-  
3 party transmission revenues.

4 Account 451 contains Miscellaneous Service Revenues,  
5 and was forecast based on proposed changes to Schedule 66  
6 (the Miscellaneous Charges tariff that governs these  
7 offerings) that are further discussed in the Direct  
8 Testimony of Company Witness Mr. Riley Maloney.  
9 Cogeneration and small power production revenues were  
10 determined by applying a five-year compound average growth  
11 rate ("CAGR"), as the Company believes this method reflects  
12 a reasonable expectation for the 2023 timeframe. Revenues  
13 from dark fiber rents will cease in February 2023,  
14 therefore they were removed as a forecast adjustment.  
15 Payments from water districts were calculated based on a  
16 five-year average, as these payments fluctuate based on  
17 demand for water and availability. Expected facilities  
18 charge revenues were based on the Company's proposed  
19 facilities charge rate filed in this case applied to  
20 expected applicable investment in the 2023 Test Year, as  
21 further addressed by Mr. Maloney. Network services and  
22 other long-term firm and point-to-point transmission  
23 revenues were projected based on information more  
24 reflective of current circumstances and an anticipated Open  
25 Access Transmission Tariff rate update in October 2023.

1           Q.       Which methodology was used to forecast 2023  
2 O&M Expenses (Accounts 500 through 935)?

3           A.       Based on the instructions I received from Mr.  
4 Tatum, the general process to determine 2023 Test Year O&M  
5 began with the separation of the majority of O&M components  
6 into two elements: labor and non-labor. Each element was  
7 then forecast separately and allocated to the individual  
8 Federal Energy Regulatory Commission ("FERC") accounts.

9           Based upon the instructions I received from Mr.  
10 Tatum, there were several O&M accounts that were determined  
11 separately from this process. First, the base NPSE accounts  
12 tracked through the PCA were updated by Ms. Brady primarily  
13 utilizing the AURORA model. The PCA expense accounts  
14 include Fuel Expense (Accounts 501 and 547), Water for  
15 Power Expense (Account 536.003), Purchased Power Expense  
16 (Account 555), and Transmission of Electricity by Others  
17 (Account 565).

18           The Idaho Energy Efficiency Rider Expense (Account  
19 908) was removed in its entirety from the 2023 Test Year,  
20 while the labor component was added back to this account,  
21 as discussed in the Direct Testimony of Mr. Tatum.

22           Incentive Expense (included in Account 920) was  
23 forecasted for 2023 to include only the normalized  
24 incentive components that are attributable to Customer  
25 Satisfaction and Reliability, consistent with the method

1 approved in Case No. IPC-E-08-10 ("2008 Rate Case"), Order  
2 No. 30722, and filed in the Company's 2011 Rate Case.  
3 Incentive expense represents the "at-risk" portion of  
4 employees' total compensation package.

5 Pension Expense (Account 926) for the Idaho  
6 jurisdiction was increased to reflect \$35 million in annual  
7 collection, as discussed previously in my testimony.

8 Regulatory Commission Expenses (Account 928) were  
9 adjusted to include known changes in amortizations for  
10 recovery of Commission-ordered intervenor funding.

11 Q. What methodology was used to forecast 2023 O&M  
12 labor expense?

13 A. The 2023 labor expense was forecasted by  
14 applying historical monthly labor cost relationships to the  
15 first two calendar months of 2023 actual labor costs. More  
16 specifically, the 2023 O&M labor forecast was developed by  
17 first calculating the three-year historical average of  
18 February year-to-date actual O&M labor costs as a  
19 percentage of the total year actual O&M labor costs. The  
20 resulting percentage was determined to be 16.0 percent.  
21 This percentage was then applied to the actual February  
22 2023 year-to-date O&M labor to estimate the total 2023 O&M  
23 labor costs. The February amount was first reduced by  
24 pension expense and incentive expense. The resulting 2023  
25 labor projection of \$188.8 million was then allocated to



1 the applicable FERC accounts based on 2022 actual labor  
2 charges to those same accounts.

3 This method is similar to that utilized by  
4 Commission Staff ("Staff") in the 2008 Rate Case to  
5 validate the Company's labor forecast as additional actual  
6 labor cost data became available throughout the test  
7 period, and mirrors the Company's filed approach in the  
8 2011 Rate Case. A more detailed discussion of the labor-  
9 related O&M adjustment is provided in Exhibit No. 26, pages  
10 5 and 6.

11 Q. Did Idaho Power make any adjustments to  
12 expected labor costs related to the Energy Efficiency Rider  
13 ("Rider")?

14 A. Yes. As described in the Direct Testimony of  
15 Mr. Tatum, in this case Idaho Power is proposing to  
16 transfer approximately \$3.5 million in Rider-funded labor  
17 costs into base rates. As discussed later in my testimony,  
18 the movement of these labor costs from the Rider to base  
19 rate recovery is one of two rate neutral transfer  
20 adjustments the Company is proposing in this case.

21 Q. What methodology was used to forecast 2023  
22 non-labor O&M expenses?

23 A. 2023 non-labor O&M expenses, excluding the  
24 accounts mentioned above, were projected to be equal to the  
25 2022 actual expense level with adjustments only for

1 relatively large known changes. At my direction, the O&M  
2 expenses were reviewed by subject matter experts to  
3 identify and adjust those areas, based on specific  
4 knowledge, where expense levels are expected to be  
5 materially different than those included in the 2022 Base.  
6 The review identified specific increases or decreases to  
7 the 2022 non-labor actual levels in the following  
8 categories:

- 9 • Idaho Fish and Game's Projected Hatchery Expense
- 10 Increases
- 11 • Fleet Adjustment
- 12 • Water for Power Adjustment
- 13 • Langley and Bennett Mountain Plant Maintenance
- 14 • Western Resource Adequacy Program ("WRAP")<sup>4</sup> Costs
- 15 • Uncollectible / Bad Debt Expense
- 16 • Solar Payback Calculator

17 Actual 2022 non-labor O&M, excluding these items  
18 listed for known changes, equaled \$157.6 million.

19 Following the adjustments for significant known changes,  
20 non-labor O&M is projected to increase by \$339,424, to  
21 \$157.9 million. This reflects a non-labor O&M amount for  
22 the 2023 Test Year that has increased by less than 0.25  
23 percent. A more detailed discussion of the non-labor O&M

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<sup>4</sup> The WRAP and its associated benefits are currently the subject of an open case before the Commission (Case No. IPC-E-23-08).

1 adjustments is provided in Exhibit No. 26, pages 6 through  
2 16.

3 Q. Is there any specific regulatory accounting  
4 treatment that the Company is seeking related to the list  
5 of known and measurable adjustments you just identified?

6 A. Yes. The Company requests specific regulatory  
7 accounting authority related to the known and measurable  
8 adjustment item "Langley and Bennett Mountain Plant  
9 Maintenance." As can be seen on pages 7 and 8 of Exhibit  
10 No. 26, Langley and Bennett Mountain Plant Maintenance –  
11 Account 554 was decreased from the 2022 Base by \$3,423,030.  
12 For this non-labor component, this account was projected to  
13 be equal to the 5-year average. The 2022 base included  
14 cyclical plant maintenance related to Langley and Bennett  
15 Mountain major overhaul and inspections that do not occur  
16 on an annual basis.

17 Consistent with the accounting authority previously  
18 granted in Order No. 32426,<sup>5</sup> the Company requests the  
19 Commission authorize the deferral and amortization of  
20 annual differences between actual costs and the annual  
21 recovery amount authorized in this case to allow for a

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<sup>5</sup> Order No. 32426 issued in Case No. IPC-E-11-08 approved a settlement stipulation containing the following ¶ 6(b) Amortization provision: "The Signing Parties agree to a deferral of \$299,546 in expenses associated with the Bennett Mountain combustor inspection with a four-year period beginning on the date that the Company's new base rates become effective."

1 proper matching of cost and revenue for this periodic cost.  
2 The Company further recommends this treatment be allowed  
3 until new rates become effective in a future general rate  
4 case or are otherwise modified by the Commission.

5 Q. What accounting will the Company use to track  
6 the annual differences between actual costs and the annual  
7 authorized recovery amount?

8 A. Idaho Power will defer the difference between  
9 actual costs and the annual recovery amount to Account  
10 182.3 Other Regulatory Assets with an offsetting entry to  
11 Account 554 Maintenance of Miscellaneous Other Power  
12 Generation Plant.

13 Q. What methodology was used to forecast 2023  
14 Depreciation and Amortization Expense (Accounts 403 and  
15 404)?

16 A. The 2023 depreciation expense, amortization  
17 expense, and related reserve accounts were calculated based  
18 on the monthly estimated 2023 plant balances. Depreciation  
19 rates authorized by Commission Order No. 35272 were used  
20 for the entire 2023 Test Year. The determination of the  
21 Depreciation and Amortization Expense adjustments is  
22 detailed in Exhibit No. 26, pages 16 and 17.

23 Q. Which methodology was used to forecast 2023  
24 Electric Plant in Service (Account 101)?

1           A.       Electric Plant in Service ("EPIS") is a  
2   function of multiple components, including actual year-end  
3   2022 EPIS and construction work in progress ("CWIP")  
4   balances, estimated 2023 spending, expected 2023 closings  
5   of CWIP, and estimated retirements. Therefore, it was  
6   necessary to use several methodologies to develop the 2023  
7   Unadjusted Test Year EPIS balances, which are detailed in  
8   Exhibit No. 26, pages 21 through 22.

9           To project 2023 construction expenditures and 2023  
10   closings of CWIP to EPIS, at Mr. Tatum's instruction, the  
11   Company first bifurcated into two separate and distinct  
12   parts, those projects in excess of \$8 million and those  
13   under \$8 million.

14          Projects in excess of \$8 million were reviewed by  
15   the individual project managers, who estimated the costs to  
16   complete and the in-service date of each project. The  
17   investment in projects under \$8 million (excluding  
18   vehicles) closing to EPIS as a group, were forecast based  
19   on the five-year average of the percent of similar-sized  
20   projects to the previous year's CWIP balance multiplied by  
21   the year-end 2022 CWIP balance.

22          Q.       Which methodology was used to forecast AFUDC  
23   associated with Hells Canyon relicensing CWIP?

24          A.       While AFUDC continues to increase relating to  
25   the Hells Canyon relicensing efforts, the Company is

1 requesting recovery of the same amount (\$6,815,472)  
2 previously included in the 2011 Rate Case and subsequently  
3 approved in Order No. 32426. This adjustment is explained  
4 in greater detail in Exhibit No. 26, page 20.

5 **V. ADDITIONAL ADJUSTMENTS**

6 Q. In Ms. Jeppsen's testimony, she describes the  
7 various adjustments that were made to 2022 Actuals to  
8 arrive at the 2022 Base Year. Do these same adjustments  
9 need to be made in 2023?

10 A. No. These adjustments are standard ratemaking  
11 adjustments based on prior Commission orders and are  
12 adjustments to charges included in the 2022 Actuals. By  
13 removing them from 2022 Actuals prior to applying the  
14 various methodologies to arrive at the Company's proposed  
15 2023 Unadjusted Test Year, the same adjustments are already  
16 accounted for.

17 Q. What were your instructions to Ms. Brady with  
18 regard to the determination of the test year retail sales  
19 revenues?

20 A. I instructed Ms. Brady to determine the 2023  
21 Test Year retail sales revenues using the same methodology  
22 approved by the Commission in the 2008 Rate Case, Order No.  
23 30722, and applied in the Company's 2011 Rate Case. That  
24 is, my instructions were to develop the test year retail  
25 sales revenues based upon forecasted billing determinants

1 under normal weather and precipitation assumptions. As Ms.  
2 Brady will cover in greater detail in her testimony, the  
3 2023 Test Year billing determinants were developed based on  
4 the Company's energy sales and customer count forecasts  
5 prepared for this case. To derive the demand-related  
6 billing determinants, historical demand-to-energy  
7 relationships were applied to the energy sales forecast.  
8 The forecasted billing determinants were then applied to  
9 the rates in effect at the time of the filing to determine  
10 the 2023 Test Year retail sales revenues.

11 Q. Was the customer, sales, and load forecast  
12 prepared at your direction?

13 A. Yes. The customer, sales, and load forecast  
14 for the 2023 Test Year was prepared at my direction. This  
15 forecast was utilized to determine the billing components  
16 for the 2023 retail sales revenue forecast, as well as the  
17 allocation factors utilized by Ms. Noe and Mr. Goralski as  
18 well.

19 Q. Did you direct Ms. Brady to make any  
20 adjustments to the 2023 retail sales revenues relative to  
21 the methodology utilized in the 2011 Rate Case?

22 A. Yes. Due to the Commission's approval of a  
23 revised special contract for electric service ("Special  
24 Contract") with Micron Technologies ("Micron") on March 9,

1 2022,<sup>6</sup> I directed Ms. Brady to exclude the component of  
2 Micron's retail revenues that will be offset by generation  
3 from the Black Mesa Solar Facility ("Black Mesa").

4 Q. Can you describe the mechanics of Micron's  
5 revised Special Contract and how it pertains to the 2023  
6 retail sales revenue calculation?

7 A. Per the terms of the revised Special Contract,  
8 a portion of Micron's retail sales will be offset by  
9 generation from Black Mesa. Functionally, that means Micron  
10 will pay Idaho Power for 100 percent of the output from  
11 Black Mesa, which will offset the retail energy rates  
12 Micron would otherwise pay. Consequently, the portion of  
13 Micron's sales offset by Black Mesa must be separately  
14 calculated from other retail revenues to ensure these  
15 contract components are appropriately accounted for  
16 throughout the various steps in the rate development  
17 process.

18 Q. Did you have any additional instructions for  
19 Ms. Brady?

20 A. Yes. In addition to the development of 2023  
21 Test Year retail revenues, Ms. Brady is also the Company's  
22 expert with regard to the modeling of base NPSE. As  
23 mentioned earlier in my testimony, Mr. Tatum directed me to  
24 update the PCA expense accounts to expected 2023 normalized

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<sup>6</sup> Case No. IPC-E-22-06, Order Nos. 35482, 35607 and 35735.



1 levels. Consistent with this directive, Ms. Brady updated  
2 base NPSE as provided in Exhibit No. 30 to her testimony.

3 Q. When was base NPSE last updated in customer  
4 rates?

5 A. Idaho Power last updated base NPSE in customer  
6 rates through Order No. 33000 issued in Case No. IPC-E-13-  
7 20, which became effective June 1, 2014 ("2013 NPSE  
8 Update").

9 Q. Did you direct Ms. Brady to make any  
10 methodological changes to the determination of base NPSE  
11 relative to the method utilized in the 2013 NPSE Update?

12 A. Yes. Due to the aforementioned Black Mesa  
13 component of Micron's revised Special Contract, I directed  
14 Ms. Brady to include the generation from the Black Mesa  
15 project in the Company's resource stack, but exclude the  
16 corresponding costs from Account 555, as these costs will  
17 be directly paid for by Micron. Further, due to changes in  
18 conditions since the filing of the 2011 Rate Case, I also  
19 directed Ms. Brady to modify the treatment of Account  
20 447.050, which reflects revenues received due to third-  
21 party transmission wheeling losses. Lastly, given current  
22 and expected changes in the Company's resource stack, I  
23 directed Ms. Brady to include in the 2023 Test Year the  
24 availability of gas-fired generation at Bridger units 1 and  
25 2.

1           Q.       What methodology adjustment was made related  
2 to Account 447.050, revenues from wheeling losses?

3           A.       Account 447.050 reflects financial payments  
4 made to Idaho Power as compensation for the Company  
5 generating electricity to offset transmission losses to  
6 third parties wheeling through Idaho Power's transmission  
7 system. In past determinations of base NPSE, Idaho Power  
8 did not include 447.050 revenues in these quantifications,  
9 nor did it include any costs associated with the additional  
10 generation required to serve third party losses. In the  
11 current case, however, Idaho Power is proposing to include  
12 in its base NPSE determination both the cost of serving  
13 third party losses as well as the offsetting revenues  
14 received through Account 447.050. Therefore, Idaho Power  
15 added 36 average megawatts ("aMW") to its load forecast  
16 utilized for AURORA modeling purposes to account for this  
17 load service requirement, and Ms. Brady determined an  
18 offsetting revenue amount to include in Account 447.050.

19          Q.       Why is Idaho Power proposing to make this  
20 methodological change?

21          A.       Theoretically, the inclusion or exclusion of  
22 Account 447.050 and the corresponding cost to serve third  
23 party losses would ultimately yield the same result; the  
24 exclusion of these components would have no impact on  
25 revenue requirement because they would be entirely removed

1 from the quantification, while the inclusion of these  
2 components would net to zero.

3           Additionally, when the 2013 NPSE Update was  
4 performed, third party wheeling customers had the option to  
5 account for wheeling losses in two ways: 1) financially -  
6 meaning the customer would pay Idaho Power to generate the  
7 additional energy to account for the losses, or 2)  
8 physically - meaning the customer would generate or acquire  
9 additional physical energy to account for the losses  
10 themselves, resulting in no additional payment to Idaho  
11 Power. However, with the advent of the energy imbalance  
12 market ("EIM"), nearly all wheeling customers now settle  
13 their losses financially, meaning they pay Idaho Power to  
14 generate the physical energy to account for wheeling losses  
15 through the Company's system. Because of this, the Company  
16 is proposing to modify the base NPSE methodology to include  
17 both the cost to serve third-party wheeling losses and the  
18 offsetting revenues received by the Company.

19           Q.     Given this change, is the Company proposing  
20 that Account 447.050 would be included in the PCA as well?

21           A.     Yes. Under the Company's proposal, Account  
22 447.050 would become part of base NPSE utilized in PCA  
23 calculations as of the effective date of rates resulting  
24 from this case.

1           Q.       What direction did you give Ms. Brady with  
2   regard to the Company's resource stack?

3           A.       The timing of Idaho Power's 2023 Test Year  
4   corresponds with changes in the Company's resource stack,  
5   resulting in the need for an adjustment to assumed resource  
6   availability. Under current operations, the Jim Bridger  
7   Power Plant consists of four coal-fired units. However, the  
8   Company will cease coal-fired operations at units 1 and 2  
9   at year-end 2023, converting these units to natural gas,  
10   with an expected online date of summer 2024. Because of  
11   this timing, I directed Ms. Brady to model the availability  
12   of two gas units and two coal units at Bridger, which  
13   better aligns with expectations on a going forward basis.

14           Because the Company's requested effective date in  
15   this case is January 1, 2024, and because the PCA will  
16   capture differences between actual NPSE and base NPSE on a  
17   going forward basis until base NPSE are reset in a future  
18   proceeding, Idaho Power believes the modeling of gas-fired  
19   generation at Bridger units 1 and 2 is preferable to the  
20   modeling of four coal-fired units at Bridger, which would  
21   be immediately outdated as of the day rates go into effect.

22           Q.       Are there any additional adjustments that need  
23   to be made to properly determine the 2023 Test Year?

1           A.       Yes. It is necessary for the Company to make  
2 additional annualizing and known and measurable  
3 adjustments.

4           Q.       Which other annualizing adjustments were made  
5 under your direction to the 2023 Test Year?

6           A.       I instructed Ms. Noe to make annualizing  
7 adjustments to certain expense and rate base items to  
8 reflect them as though they have been in existence for the  
9 entire 2023 Test Year; that is, at year-end 2023 levels.  
10 These include operating payroll, depreciation expense and  
11 reserve, and plant placed in service during 2023 in excess  
12 of \$8 million with the associated estimated property taxes  
13 and insurance premiums. Such adjustments are appropriate to  
14 reflect conditions that will be in effect at the time rates  
15 are placed in effect. Ms. Noe provides additional detail  
16 regarding the annualizing adjustments in her testimony.

17          Q.       Has an exhibit been prepared that details each  
18 of the adjustments that were made to move from the 2022  
19 Actuals to the 2023 Test Year?

20          A.       Yes. Ms. Noe's Exhibit No. 34 summarizes the  
21 adjustments that were made to each FERC Account to: 1) move  
22 from the 2022 Actuals to the 2022 Base, 2) move from the  
23 2022 Base to the 2023 Unadjusted Test Year, and 3) move  
24 from the 2023 Unadjusted Test Year to the 2023 Test Year.

1           Q.     How did you direct Ms. Noe to reflect the  
2 costs and revenues associated with Black Mesa and the  
3 Micron Special Contract?

4           A.     Due to the offsetting nature of these costs  
5 and revenues, I directed Ms. Noe to exclude both components  
6 from the Idaho jurisdictional revenue requirement.

7           Q.     Did you direct Ms. Noe to make any additional  
8 adjustments prior to quantifying the Company's requested  
9 revenue requirement in this case?

10          A.     Yes. As previously discussed, in order to  
11 determine an accurate revenue requirement change, Ms. Noe  
12 had to first include the currently authorized recovery for  
13 non-fuel coal-related costs. I directed Ms. Noe to include  
14 the requested Bridger and Valmy levelized revenue  
15 requirements as separate lines in the JSS. Further, as  
16 discussed in Mr. Tatum's testimony, Idaho Power is  
17 proposing to offset the revenue requirement increase  
18 stemming from the battery projects to be installed in 2023  
19 through the acceleration of accumulated deferred investment  
20 tax credits ("ADITC"). I directed Ms. Noe to incorporate  
21 this proposed rate mitigation into the quantification of  
22 the Company's request as well. Lastly, I directed Ms. Noe  
23 to reflect two transfer adjustments in the body of the JSS.

24          Q.     What is meant by transfer adjustment?

1           A.       Two of the Company's proposed updates in this  
2 case will have corresponding offsetting impacts on other  
3 rate mechanisms, thus reducing the net increase to customer  
4 bills. The term "transfer adjustment" is in reference to  
5 the fact that the recovery of these components of revenue  
6 requirement is already reflected in customer rates, and the  
7 Company's request in this case merely reflects the transfer  
8 of this recovery to base rates rather than a true increase  
9 to customer bills.

10           Q.       What comprises the transfer adjustments?

11           A.       The transfer adjustments are comprised of the  
12 aforementioned Rider labor adjustment and an update to PCA-  
13 related items.

14           Q.       Please describe the transfer adjustment  
15 related to the Rider.

16           A.       The Rider labor adjustment is simply the  
17 movement of labor-related costs out of the Rider and into  
18 base rates. As discussed by Mr. Tatum, the Company is  
19 proposing a corresponding reduction in the Rider  
20 percentage, thus resulting in no material impact to  
21 customer bills.

22           Q.       What comprises the PCA-related transfer  
23 adjustment?

24           A.       The PCA transfer adjustment is comprised of  
25 two subcomponents: 1) the reduction to the PCA due to an

1 update to base NPSE, and 2) removal of EIM-related revenue  
2 requirement from PCA recovery.

3 Q. How will the PCA be reduced as a result of the  
4 base NPSE update?

5 A. A primary component of PCA rates contained in  
6 Schedule 55 is the difference between base NPSE and the  
7 forecast of NPSE for the PCA year. Therefore, when base  
8 NPSE are updated— and in this case, increased— the  
9 difference between base NPSE and the forecast established  
10 in the PCA is reduced, necessitating a reduction in  
11 Schedule 55 PCA rates. Consequently, the increase in NPSE  
12 proposed to be included in base rates is mostly offset by a  
13 corresponding reduction in the PCA rate. The only net  
14 impact to customers stems from the difference between full  
15 recovery in base rates of base NPSE, as compared to 95  
16 percent recovery of deviations between base NPSE and  
17 forecast NPSE for certain accounts through the PCA. Ms.  
18 Brady quantifies this component of the PCA transfer  
19 adjustment in her testimony.

20 Q. Please explain the component of the PCA-  
21 related transfer adjustment stemming from EIM costs.

22 A. In accordance with Order No. 33706, which  
23 approved Idaho Power's entrance into the EIM, the Company  
24 currently collects actual EIM-related costs through the PCA  
25 balancing adjustment. Order No. 34100 authorized Idaho



1 Power to recover its actual EIM-related costs on a  
2 backward-looking basis, as benefits in the form of reduced  
3 NPSE also flow through the PCA balancing adjustment via  
4 actual realized NPSE. This method of cost recovery was  
5 intended to capture these costs until they could be  
6 included in the Company's base rates as Idaho Power is  
7 proposing in this case. Therefore, to recognize that the  
8 Company's 2023 Test Year includes EIM-related costs that  
9 are currently collected through the balancing adjustment,  
10 Idaho Power has included a transfer adjustment in its  
11 quantification of the 2023 revenue requirement computation.

12 Q. What is the total amount of the transfer  
13 adjustments reflected in the presentment of the Company's  
14 2023 revenue requirement computation?

15 A. The three transfer adjustments are listed in  
16 the following table on an Idaho jurisdictional basis:

17 **Table 1: Transfer Adjustments by Component**

Component	Amount
Rider Labor Transfer	\$3,474,555
PCA Transfer - EIM	\$2,456,681
PCA Transfer - Base Update	\$170,912,271
<b>Total</b>	<b>\$176,843,507</b>

18  
19 Q. What direction did you provide Ms. Noe with  
20 regard to the inclusion of the transfer adjustments?

21 A. To recognize that these costs are already  
22 reflected in customer rates, I directed Ms. Noe to include

1 these transfer adjustments in 2023 Test Year operating  
2 revenues.

3 Q. According to Ms. Noe's analysis using the 2023  
4 Test Year and incorporating the adjustments she made at  
5 your direction, what is the Company's revenue requirement  
6 on an Idaho jurisdictional basis?

7 A. Using the 2023 Test Year financial  
8 information, Ms. Noe has calculated the Company's revenue  
9 requirement to be \$1,404.3 million on an Idaho  
10 jurisdictional basis. Ms. Noe calculated the Company's  
11 annual revenue deficiency, the amount that the test year  
12 revenue requirement exceeds the test year retail sales  
13 revenue, to be \$111.3 million on an Idaho jurisdictional  
14 basis, which would result in an overall average increase to  
15 customer rates of 8.61 percent.

16 Q. Is it appropriate for the Commission to  
17 determine the Company's Idaho-jurisdictional revenue  
18 requirement to be \$1,404.3 million, its revenue deficiency  
19 to be \$111.3 million, and therefore, approve an overall  
20 8.61 percent increase to customer rates?

21 A. Yes. The \$1,404.3 million figure is a  
22 reasonable determination of the Company's annual Idaho-  
23 jurisdictional revenue requirement. The \$111.3 million  
24 quantification of revenue deficiency is also reasonable.  
25 It is in the best interest of the Company and its customers

1 for the Commission to approve a rate increase to provide an  
2 8.61 percent increase to the Company's Idaho jurisdictional  
3 revenues.

4 Q. Does this conclude your direct testimony in  
5 this case?

6 A. Yes, it does.

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**DECLARATION OF MATTHEW T. LARKIN**

I, Matthew T. Larkin, declare under penalty of perjury under the laws of the state of Idaho:


1. My name is Matthew T. Larkin. I am employed by Idaho Power Company as the Revenue Requirement Senior Manager.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 25 through 26 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
MATTHEW T. LARKIN

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**LARKIN, DI  
TESTIMONY**

**EXHIBIT NO. 25**

IDAHO POWER COMPANY  
Methodology Summary - Larkin Exhibit No. 25  
2023 Idaho Test Year

	- 2022 Base
	- Other Methodology
	- Normalized
	- Removed in its Entirety

LINE NO	Description	(1) FERC ACCOUNT NUMBER	(2) Methodology
<b>Cost of Service Components</b>			
<b>Other Operating Revenues</b>			
1	Miscellaneous Service Revenues	451	Other Methodology
	Rent from Electric Property		
2	Substation equipment	454	2022 Base
3	Transformer & distribution rentals	454	2022 Base
4	Station and line rentals	454	2022 Base
5	Cogeneration and small power production	454	Other Methodology
6	Real estate rents	454	2022 Base
7	Dark fiber rents	454	Removed in its entirety
8	Joint pole attachments	454	2022 Base
9	Facilities charges	454	Other Methodology
10	Overnight park rents	454	2022 Base
11	Water district payments	454	Other Methodology
12	Miscellaneous	454	2022 Base
<b>Other Electric Revenues</b>			
13	Network Service	456	Other Methodology
14	Point-to-Point and other services	456	Other Methodology
15	Photovoltaic	456	2022 Base
16	Antelope	456	2022 Base
17	Conservation recovery - Oregon	456	2022 Base
18	Sierra Pacific Power Company sales	456	2022 Base
19	Stand-by service	456	2022 Base
20	Energy Efficiency Rider	456	Removed in its entirety
21	Miscellaneous	456	2022 Base
<b>Other Revenues and Expenses</b>			
<b>Other Revenues</b>			
22	Power Solutions	415	Other Methodology
23	Hydro Services	415	2022 Base
24	Water Management Services	415	2022 Base
25	Qualified Reporting Entity Svcs	415	2022 Base
26	Operating Agreements	415	2022 Base
27	Joint Use (Pole) - Idaho	415	2022 Base
28	Joint Use (Pole) - Oregon	415	2022 Base
<b>Other Expenses</b>			
29	Power Solutions	416	2022 Base
30	Hydro Services	416	2022 Base
31	Water Management Services	416	2022 Base
32	Qualified Reporting Entity Svcs	416	2022 Base
33	Operating Agreements	416	2022 Base
34	Joint Use (Pole) - Idaho	416	2022 Base
35	Joint Use (Pole) - Oregon	416	2022 Base

**IDAHO POWER COMPANY**  
**Methodology Summary - Larkin Exhibit No. 25**  
**2023 Idaho Test Year**

	- 2022 Base
	- Other Methodology
	- Normalized
	- Removed in its Entirety

LINE NO	Description	(1) FERC ACCOUNT NUMBER	(2) Methodology
	<b>Operations and Maintenance Expenses</b>		
	Power production expenses		
36	Steam power generation(excluding account 501)	500-514	Other Methodology
37	Fuel expense	501	Normalized
38	Hydraulic power generation	535-545	Other Methodology
39	Other power generation(excluding 547.1)	546-554	Other Methodology
40	Fuel expense	547	Normalized
	Other power supply expenses		
41	Purchased power (including 555.050)	555	Normalized
42	System control and load dispatch	556	2022 Base
43	Other expenses	557.000	Other Methodology
44	Other expenses	557.007	2022 Base
45	Other expenses - PCA, EPC and PCAM (excluding 557.050)	557	Removed in its entirety
46	Transmission expenses	560-575	Other Methodology
47	Distribution expenses	580-598	Other Methodology
48	Customer account, service and information expenses (excluding acct 908.1)	901-912	Other Methodology
49	Energy Efficiency Rider expenses	908.1	Removed in its entirety
50	Administrative & general expenses(excluding accts 920.1 and 930.1)	920-935	Other Methodology
51	Incentive	920.1	Removed in its entirety
52	General advertising expenses	930.1	Removed in its entirety
	<b>Depreciation and Amortization Expense</b>		
53	Depreciation	403	Other Methodology
54	Amortization	404	Other Methodology
	<b>Electric Plant/Regulatory Assets - Amort, Adj, Gains &amp; Losses</b>		
55	Amortization of electric plant acquisition adjustment-Asset Exchange	406	2022 Base
	<b>Regulatory Debits and Credits</b>		
56	Siemens LTP amort - Idaho	407.3/407.4	2022 Base
57	Siemens LTP amort - Idaho deferred RB	407.3/407.4	2022 Base
58	Cloud computing	407.3/407.4	2022 Base
59	Wildfire Mitigation	407.3/407.4	Other Methodology
60	Deferred pension - Oregon	407.3/407.4	2022 Base
61	Siemens LTP amort - Oregon	407.3/407.4	2022 Base
62	Siemens LTP amort - Oregon deferred RB	407.3/407.4	2022 Base
	<b>Taxes Other Than Income</b>		
63	Real and personal property	600, 601	Other Methodology
64	Kilowatt-hour tax - Idaho	601.3	Normalized
	Licenses		
65	Wyoming	601	2022 Base
66	Shoshone-Bannock	602	2022 Base
	Regulatory commission		
67	Idaho	601	2022 Base
68	Oregon	601, 602	Other Methodology
69	Franchise tax - Oregon	602	Other Methodology
70	<b>Idaho Energy Resources Statement of Income</b>	418.1/419	Other Methodology
71	<b>Allowance for Funds Used During Construction (AFUDC) Related to Hells Canyon Relicensing</b>	440-444	2022 Base

IDAHO POWER COMPANY  
Methodology Summary - Larkin Exhibit No. 25  
2023 Idaho Test Year

	- 2022 Base
	- Other Methodology
	- Normalized
	- Removed in its Entirety

LINE NO	Description	(1) FERC ACCOUNT NUMBER	(2) Methodology
	<b>Rate Base Components</b>		
	<b>Electric Plant-In-Service</b>		
72	Projects > \$8 million	101	Other Methodology
73	Projects < \$8 million	101	Other Methodology
	<b>Accumulated Reserve for Depreciation and Amortization</b>		
74	Depreciation reserve	108	Other Methodology
75	Amortization reserve	111	Other Methodology
	<b>Materials and Supplies</b>		
76	Plant materials and operating supplies	154	Other Methodology
77	Stores expense undistributed	163	Other Methodology
78	<b>Other Deferred Programs (excluding accts 182.310 and 254)</b>	182/186	Other Methodology
79	Wildfire Mitigation, OR Remote Meters, OR Bridger Depreciation	182.310/254	2022 Base
80	<b>Plant Held for Future Use(excluding Greenleaf and Northside Substations)</b>	105	2022 Base
81	Greenleaf Substation	105	Other Methodology
82	Northside Substation	105	Other Methodology
83	<b>Deferred Income Taxes</b>	190/282/283	Other Methodology
84	<b>Customer Advances For Construction</b>	252	Other Methodology
85	<b>IERCO-Subsidiary Rate Base Components</b>	123.1/186/145	Other Methodology



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**LARKIN, DI  
TESTIMONY**

**EXHIBIT NO. 26**

# Forecast Methodology Manual

**Proprietary**

**2023 Rate Case**



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## INTRODUCTION

The Forecast Methodology Manual is a reference document that provides supporting detail for the methodologies that have been used to set the values contained in Idaho Power Company's ("Idaho Power" or "Company") proposed 2023 test year. These values were provided to Idaho Power witness Ms. Kelley Noe for appropriate application to the Uniform System of Accounts for determination of revenue requirement in the 2023 test year. The manual is organized in three sections and includes:

- **Forecast Methods.** Forecast Methods includes a description of the forecast methodologies used to develop the 2023 unadjusted test year from the 2022 actual financial data.
- **Cost of Service Components.** Cost of Service Components includes a description of the three-digit account number specified in the Uniform System of Accounts adopted by the Idaho Public Utilities Commission ("IPUC" or "Commission") and the Federal Energy Regulatory Commission ("FERC") and the forecast method for each major account or account group.
- **Rate Base Components.** Rate Base Components includes a description of the three-digit account number specified in the Uniform System of Accounts adopted by the Commission and FERC and the forecast method applied for each major account or account group that comprises rate base.



## FORECAST METHODS

Updates to the 2022 actual financial data to Idaho Power's proposed 2023 unadjusted test year were developed using one of the following two forecast methods:

- (1) **2022 Base.** 2022 actual financial data was used when Idaho Power believed that certain amounts would continue to remain at 2022 levels or if account balances relatively very small.
- (2) **Other Adjustments.** Other Adjustments are based on known or probable factors for 2023 that relate to a particular account. Examples of these factors include but are not limited to new billing and volume contract terms, discontinued services, anticipated levels of economic activity, and existing regulatory commission orders.

## COST OF SERVICE COMPONENTS

### Forecast Adjustment A—Other Operating Revenues

Table 4—FERC Accounts 451–456

#### **Description**

Account 451 includes revenues for all miscellaneous services and charges billed to customers that are not specifically provided for in other accounts. Miscellaneous service revenues include continuous service reversion charges (Idaho only), field visit charges, return trip charges, returned check fees, service connection charges, service establishment charges, and application and processing fees collected for new permits, new leases, or requests for easement relinquishments. Account 454 includes rents received for the use by others of land, buildings, and other property devoted to electric operations by Idaho Power such as joint pole attachments, facilities charges, and line and substation rents. Account 456 includes revenues derived from electric operations not includable in other revenue accounts. For example, compensation for minor services provided for others, such as engineering and revenues from transmission of electricity of others over transmission facilities of Idaho Power, including network and point-to-point wheeling.

#### **Forecast Methodology**

Forecast Adjustment A increases Other Operating Revenue (Accounts 451–456) by \$49,713 above the 2022 Base. Accounts 451 through 456 used a combination of the methods for projecting 2023 amounts as described below.

**Account 451—Miscellaneous Service Revenues.** Miscellaneous Service Revenues were projected to increase by \$1,271,884 for 2023 due to proposed changes to Schedule 66 Service Establishment, Connection and Field Visit charges.

**Account 454—Rent from Electric Property.** Rent from Electric Property was projected based on either the 12 months actual ended December 2022 balance, 2017-2022 Period compound average growth rate (“CAGR”), five- year average or a specifically identified change depending on the type of 2022 rental income to be projected as described below:

Substation equipment, transformer and distribution rentals, real estate rents, joint pole attachments, and overnight park rents were forecasted at 12 months actual ended December 2022, as this was the most reasonable expectation for these revenues.

Cogeneration and small power production was determined by applying the 2017-2022 CAGR to 2022 Actual amounts resulting in an increase of 3.28%, as this was determined to be a reasonable expectation for these amounts. Revenues from Dark Fiber Rents will cease February 2023 and have not been included in the test year. Facilities charges were projected to decrease by \$189,692 due to proposed changes to Facilities Charge rates applied to January 2023 Facilities Investment Reports, which contain facilities on the Company’s system subject to the Facilities Charge. Payments from Water Districts were determined by using the five-year historical average based

on the 2018-2022 time period. These payments fluctuate based on demand for water and availability.

**Account 456—Other Electric Revenues.** Other Electric Revenues were projected based on using either the carry-forward of the 2022 Base or the Other Adjustment methodology depending on the type of 2023 revenue to be projected as described below:

Revenues related to the Sierra Pacific Power Company sales, stand-by service, and miscellaneous were projected for 2023 to be the same as the 2022 Base, as this was the most reasonable expectation for these revenues.

The 2023 point-to-point (“PTP”) wheeling revenues were calculated based on nine months of the 2023 equivalent kilowatt-hours (“kWh”) multiplied by the forecasted FERC formula-based transmission rate (effective 10/1/22-9/30/23), and three months of the 2023 equivalent kWh times the forecasted transmission rate (effective 10/1/23-9/30/24). The 2023 equivalent kWh used to calculate the 3rd party non-firm and short-term firm transmission wheeling revenue was based on the average of 2021 and 2022 equivalent kWh. The 3rd party long-term firm PTP wheeling revenue was based on 2022 actual megawatt (“MW”) demand.

The 2023 Network Transmission Customer revenues were calculated based on nine months of the network transmission customers’ average load ratio share times the forecasted FERC formula-based transmission revenue requirement and three months of the network transmission customers’ average load ratio share times the forecasted FERC transmission revenue requirement. The timing for the Transmission Revenue Requirement is the same as the point-to-point wheeling rate described above. The 2023 estimated network customer MW demand used to calculate the Network Transmission Customer revenue was calculated by taking 2022 MW demand and escalating it using a 1.1% annual growth factor.

## Forecast Adjustment B & C—Other Revenues and Other Expenses

Tables 4&5—FERC Accounts 415–416 (excluding 415.002 and 416.002)

### *Description*

Accounts 415 through 416 include, respectively, all revenues derived from the sale of merchandise and jobbing or contract work and all expenses incurred in such activities. For Idaho Power, jobbing and contract work revenues and expenses include activities related to Idaho Power Solutions service agreements, hydro services, water management services, qualified reporting entity services, Joint Ownership and Operating Agreements with PacifiCorp and joint pole use.

### *Forecast Methodology*

Forecast Adjustment B for Other Revenues (Account 415) reflects an increase of \$30,623 from 2022 Base. Forecast Adjustment C for Other Expenses (Account 416) is not adjusted; therefore 2023 forecast remains the same as the 2022 Base.

Account 415 (Other Revenues) and account 416 (Other Expenses) used a combination of the methods for projecting described below:

Account 415. Power Solutions was projected based on 2022 actual amounts, excluding disbursements made to Howard Industries that are not expected to repeat in future years.

Hydro services, water management services, qualified reporting entity services, operating agreements, joint use (pole) – Idaho, and joint use (pole) – Oregon were forecasted at 12 months actual ended December 2022, as this was the most reasonable expectation for these revenues.

Account 416. Power Solutions, hydro services, water management services, qualified reporting entity services, operating agreements, joint use (pole) – Idaho, and joint use (pole) – Oregon were forecasted at 12 months actual ended December 2022, as this was the most reasonable expectation for these revenues.

## Forecast Adjustment D—Operations and Maintenance Expenses (“O&M”)

Table 5—FERC Accounts 500–935

### Overview

Forecast Adjustment D increases Operations and Maintenance Expenses (“O&M”) (Accounts 500–935) by \$48,522,536 above the 2022 Base. Excluded from Adjustment D is any increase in normalized accounts 501-Fuel, 547-Fuel, 555-Purchased Power and 565-Transmission of Electricity by Others.

In developing the 2023 forecast, Idaho Power split O&M historical actuals into two elements (Labor and Non-Labor) and forecasted each element separately and then allocated each separately to the individual FERC accounts. Excluded from this process were the normalized accounts described above, 908.131, 908.132 (Idaho and Oregon Energy Efficiency Riders), 920.001 (Incentive), 926.203, 926.204, 926.303, 926.320 and 926.350 (Pension Expense), and 930.100 (Advertising Expense) as these were handled separately.

### Labor

Idaho Power calculated the projected 2023 O&M labor by first calculating the average three-year historical February year-to-date actual O&M labor costs as a percentage of the total year actual O&M labor costs which was determined to be 16.0%. This percentage was then applied to the actual February 2023 year-to-date O&M labor of \$30,154,755 to estimate the total 2023 O&M labor costs of \$188,779,193 (the February amount was first reduced by 920 incentive expense and 926 pension expense accounts). The 2023 labor projection was then allocated to FERC accounts based on 2022 actual labor charges to those same accounts.

The table below details the 2023 estimated labor amount:

<b>2023 O&amp;M Labor Expenses</b>	<b>Total</b>
February YTD O&M Labor Excluding Incentive & Pension	\$30,154,755
Divided by the Historical February YTD as a Percentage of Total Year Labor	16.0%
2023 O&M Labor Expense Excluding Incentive and Pension	<u>\$188,779,193</u>

### ***Demand-Side Management (“DSM”) Labor- Idaho Only***

Idaho Power calculated the projected 2023 Idaho DSM Rider funded labor to be included in O&M by first calculating the average three-year historical February year-to-date actual DSM labor costs as a percentage of the total year actual DSM labor costs which was determined to be 16.7%. This percentage was then applied to the actual February 2023 year-to-date O&M labor of \$578,654 to estimate the total 2023 DSM labor costs of \$3,474,555. The 2023 labor projection was then directly assigned to FERC account 908.

The table below details the 2023 estimated labor amount:

<b>2023 DSM Labor Expenses</b>	<b>Total</b>
February YTD DSM Labor Excluding Incentive & Pension	\$578,654
Divided by the Historical February YTD as a Percentage of Total Year Labor	16.7%
2023 DSM Labor Expense Excluding Incentive and Pension	<u>\$3,474,555</u>

### ***Non-Labor***

Idaho Power calculated the projected 2023 non-labor O&M expenses by utilizing 2022 non-payroll actual expenses with adjustments for relatively large known changes. Idaho Power reviewed the O&M expenses to identify and adjust those areas, based on specific knowledge, where expense levels are expected to be materially different than those included in the 2022 actuals.

The table below identifies significant specific increases or decreases to the 2022 nonlabor actual:

<b>2023 O&amp;M Non-Labor Expenses</b>	<b>Total</b>	<b>Allocated</b>	<b>Direct Assignment</b>
2022 O&M Non-Labor Actuals	\$157,617,663	\$0	\$157,617,663
2023 Identified Significant Known Adjustments			
Idaho Department of Fish and Game	471,796	—	471,796
Fleet Adjustment	831,379	831,379	—
Water for Power Adjustment	(307,335)	—	(307,335)
Langley and Bennett Mountain Plant Maintenance	(3,423,030)	—	(3,423,030)
Western Resource Adequacy Program	133,975	—	133,975
Uncollectible/Bad-Debt Expense	2,514,638	—	2,514,638
Solar Payback Calculator	118,000	—	118,000
Subtotal 2023 Identified Significant Known Adjustments	339,424	831,379	(491,955)
Total 2023 O&M Non-Payroll Expenses	\$157,957,087	\$831,379	\$157,125,708

The following adjustment to the 2022 Base included in the table above have been allocated to FERC account balances rather than directly assigned:

**Fleet Adjustment**—The 2023 forecast adjustment for O&M accounts associated with fleet expense was developed by adjusting the 2022 fleet expense base for known cost increases. Fleet clearing expense notably increased in 2022 mostly due to significant increases in fuel costs. To estimate the 2023 fleet expense, Idaho Power used January 2023 through March 2023 actual expenses and annualized these costs based on a 3-year average of the proportional cost incurred in January through March. Subsequently, these costs were allocated to individual O&M accounts proportionately based upon actual 2022 O&M fleet expenses.

The following adjustments to the 2022 Base included in the table above have been directly assigned to one or more FERC accounts:

- **Idaho Fish & Game Adjustment**—Account 537 was increased by \$471,796 above 2022 Base due to a 9.9% increase from the Idaho Department of Fish and Game for the cost of hatchery operations. The increase is primarily related to the increase in employee compensation and related labor costs.
- **Water for Power Adjustment**—Account 536 was decreased from the 2022 Base by \$307,335 to reflect the 3-year average. For this non-labor component, this account was projected to be equal to the 3-year average to smooth variations from year to year.
- **Langley and Bennett Mountain Plant Maintenance**—Account 554 was decreased from the 2022 Base by \$3,423,030. For this non-labor component, this account was projected to be equal to the 5-year average. The 2022 base included cyclical plant

maintenance related to Langley and Bennett Mountain major overhaul and inspections that do not occur on an annual basis.

- **Western Resource Adequacy Program**—Account 561 was projected to be equal to the 2022 Base with an increase of \$133,975 related to increased Western Resource Adequacy Program (“WRAP”) participation.
- **Uncollectible/Bad-Debt Expense**—Bad debt expense as a percentage of revenues was evaluated over a 10-year period (2013 – 2022). The 10-year average percentage of bad debt expense compared to revenues was 0.351%. Applying this percentage to 2023 forecasted sales of \$1,641,862,697 results in forecasted 2023 bad debt expense of \$5,770,879. Comparing this amount to actual 2022 bad debt expense of \$3,256,241 results in an adjustment of \$2,514,638 over the 2022 Base.
- **Solar Payback Calculator**—Account 908 was projected to be equal to the 2022 Base with an increase of \$118,000 related to development and maintenance of a Solar Payback Calculator to aid in Idaho Power customers’ decision-making when considering the benefits of a solar installation.

Once O&M labor and non-labor increases or decreases were determined for each FERC account, the results were combined to reflect the total forecast adjustment.

### ***FERC Account Development***

Because Idaho Power does not forecast by individual FERC accounts, the following two methods (Direct Assignment and Allocation) were used to assign both labor and non-labor to the appropriate FERC accounts.

**Direct Assignment Method**—The forecast adjustments listed in the direct assignment column in the non-labor expenses above are charges that would occur in specific accounts and therefore were directly assigned to those accounts listed below.

- Account 536—Water for Power Adjustment
- Account 537—Idaho Fish & Game Adjustment
- Account 554—Langley and Bennett Mountain Plant Maintenance
- Account 561—Western Resource Adequacy Program Adjustment
- Account 904—Uncollectible/Bad Debt Expense
- Account 908—Solar Payback Calculator

**Allocation Method**—This method was used to allocate the forecast amounts when the identification of specific accounts was impossible or when the impact would be to all accounts. The O&M labor forecast was allocated to individual FERC accounts based on the percentage of 2022 actual O&M labor charges incurred within each account to total O&M labor charges

incurred in 2022. The DSM labor forecast was directly assigned to account 908. The O&M non-labor forecast (not directly assigned) was allocated based on 2022 actual non-labor charges included in each FERC account to total O&M non-labor charges incurred in 2022.

### ***Exceptions to the O&M Methodology Described Above***

#### **FERC Accounts 501, 547, 555, 555.050, 557, 565, 908.131, 908.132, 920.001, 926.204, 928.203**

As stated earlier, the following were forecasted separately from the labor and non-labor O&M forecast described above and directly assigned to the FERC accounts they impact:

- **Account 501—Fuel Expense.** This account is forecasted using the AURORAxmp<sup>®</sup> Model.
- **Account 547—Fuel Expense (Excluding 547.000—Salmon Diesel).** This account is forecasted for the test year using the AURORAxmp<sup>®</sup> Model.
- **Account 555—Purchased Power (Including 555.050).** This account is forecasted for the test year using the AURORAxmp<sup>®</sup> Model.
- **Account 557—Other Expense (Excluding 557.000).** The amounts in these accounts have been removed in their entirety from the test year.
- **Account 565—Transmission of Electricity by Others.** This account is forecasted for the test year using the AURORAxmp<sup>®</sup> Model
- **Account 908.131 and 908.132—Idaho and Oregon Energy Efficiency Rider Expenses.** The amounts in these accounts have been removed from the 2022 Base in their entirety per IPUC Order No. 30189. The DSM labor forecast was added back and directly assigned to account 908.
- **Account 920.001—Incentive Expense.** The entire actual 2022 incentive expense of \$26,598,671 was removed from the 2022 Base and replaced with the projected 2023 incentive of \$10,040,205 that includes only elements related to Customer Satisfaction and Reliability. This resulted in a net reduction for incentive expense of \$16,558,466.
- **Accounts 926.204—Pension Expense.** In the Idaho jurisdiction, per IPUC Order No. 32426, Idaho Power is currently recovering \$17,153,713 of its cash contributions to its defined benefit pension plan. Idaho Power's actual 2022 Base pension expense (SFAS 87) was \$30,182,378 (Idaho portion) Therefore, Idaho Power has included in its forecast adjustment an additional \$18,028,665 in pension expense for 2023 to cover its SFAS 87 pension expense and provide \$5,000,000 per year in pension balancing account amortization.



- **Accounts 928.203—Regulatory Commission Expense.** Intervenor Funding was estimated to increase \$296,576 by assuming a one-year amortization period, per the following Orders:
  - IPUC Order No. 32788—CAPAI for \$3,574.
  - IPUC Order No. 33872—Sierra Club for \$16,267.
  - IPUC Order No. 33908—CAP for \$1,089.
  - IPUC Order No. 32697—ICL for \$6,583.
  - IPUC Order Nos. 32245—CAPAI for \$2,428, ICL for \$4,901.
  - IPUC Order No. 32505—NW Energy for \$809.
  - IPUC Order Nos. 32846—ICEA for \$11,191, ICL for \$13,287.
  - IPUC Order No. 32505\_32537—ICL for \$7,742.
  - IPUC Order Nos. 32426—ICL for \$16,482, CAPAI for \$14,944, IIPA for \$14,944.
  - IPUC Order No. 32956—SRA for \$18,709.
  - IPUC Order Nos. 33357—IIPA for \$14,152, SRA for \$4,190, REC for \$6,616, ICL for \$6,871.
  - IPUC Order Nos. 34046—ICEA for \$11,969, Sierra Club for \$11,969, SRA for \$7,617, IIPA for \$11,969.
  - IPUC Order Nos. 34546—ICL for \$11,631, ICEA for \$19,032, IIPA for \$5,287, Idaho Sierra Club for \$6,344.
  - IPUC Order Nos. 34608—ICL for \$6,745, ICEA for \$8,431, Idaho Sierra Club for \$7,248, IIPA for \$19,730.
  - IPUC Order No. 34892—Idaho Sierra Club for \$3,825.

The following O&M discussion has been organized by functional account groups. Within each account group, a general description of the accounts has been provided.

## **Steam Power Generation**

### **FERC Accounts 500–514**

#### **Description**

Accounts 500 through 514 include the labor, materials, and expenses incurred to operate and maintain prime movers, generators, and their auxiliary apparatus, switch gear, and other electric equipment used in steam power generation. Additionally, the labor and expenses incurred in the general supervision and direction of maintenance of steam generation facilities are included in these accounts.

#### **Forecast Methodology**

##### **Accounts 500–514—Excluding Account 501, Fuel Expense.**

*Bridger Power Plant* - Coal-related capital investment, O&M and property taxes associated with the Bridger Power Plant were removed from Idaho Power's 2022 Actuals as these costs are separately captured in the Bridger balancing account mechanism established and approved by IPUC Order No. 35423.

The Bridger annual levelized revenue requirement with a proposed effective date of January 1, 2024, is a \$19,784,734 increase from the annual levelized revenue requirement included in Idaho Power-E-21-17 due to the following factors:

- Change in methodology effective January 1, 2024, to remove Bridger O&M from Idaho Power base rates and incorporate the full O&M amount into the balancing account mechanism as opposed to tracking only the O&M variance from previous base rates in the mechanism.
- Add into the mechanism the difference between the levelized payment calculated and the levelized payment authorized to be collected from customers from June 2022 through December 2023 per Idaho Power-E-21-17, resulting in a forecasted Idaho-level uncollected regulatory asset balance of \$12,553,081 as of Dec 31, 2023, amortized over the life of the mechanism through 2030.

*Valmy Power Plant* - Coal-related capital investment, O&M and property taxes associated with the Valmy Power Plant were removed from Idaho Power's 2022 Actuals as these costs are separately captured in the Valmy balancing account mechanism established and approved and updated through IPUC Order Nos. 34349 and 35494.

The Valmy annual levelized revenue requirement with a proposed effective date of January 1, 2024, is a \$7,059,079 increase from the annual levelized revenue requirement included in Idaho Power-E-22-05 due to the change in methodology effective January 1, 2024, to remove Valmy O&M from Idaho Power base rates and incorporate the full O&M amount into the balancing

account mechanism as opposed to tracking only the O&M variance from previous base rates in the mechanism.

**Account 501—Fuel Expense.** Fuel expense is forecasted for the test year using the AURORAxmp<sup>®</sup> Model.

## ***Hydraulic Power Generation***

### **FERC Accounts 535–545**

#### **Description**

Accounts 535 through 545 include the labor, materials used, and expenses incurred to operate and maintain hydraulic works including structures, reservoirs, dams, waterways, generators, roads and bridges, and expenses directly related to the hydroelectric development outside the generating station, including fish and wildlife and recreational facilities. These accounts also include the labor and expenses incurred in the general supervision and direction of maintenance of hydraulic power generating stations, rents of property of others used, occupied, or operated in connection with hydraulic power generation, including amounts payable to the United States for the occupancy of public lands and reservations for reservoirs, dams, flumes, forebays, penstocks, and power houses.

#### **Forecast Methodology**

**Accounts 535–545—**The projection of accounts 535–545 was developed using both methods described under FERC Account Development above. For labor, these accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. For non-labor, these accounts were projected to be equal to the 2022 Base adjusted by a decrease in account 536 of \$307,335 to reflect the 3-year average to smooth variations from year to year, an increase in account 537 for Idaho Fish & Game’s projected increases of \$471,796, and by each account’s allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

## ***Other Power Generation***

### **FERC Accounts 546–557**

#### **Description**

Accounts 546 through 554 include the operation labor, materials used, and expenses incurred in operating and maintaining prime movers, generators, and electric equipment in other power generating stations. Labor and expenses incurred in the general supervision and direction of maintenance of other power generating stations are also included in these accounts. Account 556 includes labor and expenses incurred in load dispatching activities for system control. System control activities include the production and dispatching of electricity. Account 557 includes production expenses incurred directly in connection with the purchase of electricity which is not specifically provided for in other production expense accounts.

## Forecast Methodology

**Accounts 546–557—Excluding Account 547, Fuel Expense; Account 555, Purchased Power; and Account 557, Other Expense.** The projection of accounts 546–557 was developed using both methods described under FERC Account Development above. For labor, these accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. For non-labor, these accounts were projected to be equal to the 2022 Base and adjusted by a \$3,423,030 decrease (in account 554) for the 2023 Langley and Bennett Mountain Plant Maintenance adjustment and by each account’s allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

**Account 547—Fuel Expense and Account 555—Purchased Power.** Fuel and purchased power were forecasted for the test year using the AURORAxmp<sup>®</sup> Model.

**Account 557, Other Expense (Excluding 557.000—Other Power Production Expense).** These expenses are removed entirely from the test year.

## Transmission Expenses

### FERC Accounts 560–573

#### Description

Accounts 560 through 573 include the operation labor, materials used, and expenses incurred in the system planning, operation, executing the reliability coordination function, monitoring, assessing, and operating the power system and individual transmission facilities in real-time to maintain safe and reliable operation of the transmission system specified. Additional activities include: processing the hourly, daily, weekly, and monthly transmission service requests using an automated system such as an Open Access Same-Time Information System (“OASIS”); billing to transmission owners for system control and dispatching service; and conducting transmission services studies for proposed transmission interconnections and generation interconnection with the transmission system. These accounts include the labor, materials used, and expenses incurred in the operation of transmission substations, switching stations, and transmission lines. The use of transmission facilities owned by others and rents of property used, occupied, or operated in connection with the transmission system are also part of this account. The accounts also include the labor, materials used, and expenses incurred in the maintenance of structures, computer hardware and software, communication equipment, miscellaneous transmission plant, station equipment, and transmission plant serving the transmission function.

## Forecast Methodology

**Accounts 560–573—Excluding Account 565.000, Transmission of Electricity by Others (3<sup>rd</sup>-Party Transmission).** The projection of accounts 560–573 was developed using both methods described under FERC Account Development above. For labor, these accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. For non-labor, these accounts were projected to be equal to the 2022 Base and adjusted by \$133,975 increase (in account 561) for costs associated with participation in the Western Resource Adequacy Program, and by each account’s allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

- **Account 565—Transmission of Electricity by Others.** This account was projected using the AURORAxmp<sup>®</sup> Model.

## ***Distribution Expenses***

### **FERC Accounts 580–598**

#### **Description**

Accounts 580 through 598 include labor, materials used, and expenses incurred in the general supervision and direction of the operation of the distribution system such as station operation, overhead and underground line operation, meter department operation of customer meters and associated equipment, load dispatching operations, work on customer installations, and inspecting premises. Also included in these accounts are the labor, materials used, and expenses incurred in the general supervision and direction of the maintenance of the distribution system, including maintenance of structures, distribution plant, overhead distribution line facilities, underground distribution line facilities, distribution line transformers, meters, and meter testing equipment.

#### **Forecast Methodology**

**Accounts 580–598.** The projection of accounts 580–598 was developed using both methods described under FERC Account Development above. Each of the accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. For non-labor, these accounts were projected to be equal to the 2022 Base adjusted by each account's allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

## ***Customer Accounting and Customer Services and Information Expenses***

### **FERC Accounts 901–905 and 907–912**

#### **Description**

Accounts 901 through 905 include the labor, materials used, and expenses incurred in the general direction and supervision of customer accounting and collecting activities, including reading customer meters, work on customer applications, contracts, orders, credit investigations, billing and accounting, collections, and complaints. These accounts also include the accounting for losses from uncollectible utility revenues. Accounts 907 through 912 include the labor and expenses incurred in customer service and informational activities to encourage safe and efficient use of the utility's service, to encourage conservation of the utility's service, and answer specific inquiries as to proper use of the service and equipment utilizing the service.

#### **Forecast Methodology**

**Accounts 901–905 and 907–912—Excluding Account 908.131 and 908.132, Idaho and Oregon Energy Efficiency Rider.** The projection of accounts 901–905 and 907–912, excluding the Idaho and Oregon Energy Efficiency Rider (energy efficiency expenses), was developed using both methods described under FERC Account Development above. For labor,

these accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. The DSM labor projection was directly assigned to account 908. For non-labor, these accounts were projected to be equal to the 2022 Base and adjusted for an increase in Uncollectible/Bad Debt Expense of \$2,514,638 (in account 904), an increase of \$118,000 for implementation of a Solar Payback Calculator for customers (in account 908), and by each account's allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

**Account 908.131 and 908.132—Idaho and Oregon Energy Efficiency Rider.** The expenses associated with the Idaho and Oregon Energy Efficiency Riders have been excluded from the 2023 test year in their entirety (IPUC Order No. 30189). The DSM labor projection was added back and directly assigned to account 908.

## ***Administration and General Expenses (“A&G”)***

### **FERC Accounts 920–935**

#### **Description**

Accounts 920 through 935 include activities undertaken in connection with the utility's general and administrative operations that are assignable to specific administrative or general departments and are not specifically provided for in other accounts. A&G accounts include: (1) compensation of officers, executives, and other employees of the utility which are properly chargeable to utility operations but not chargeable directly to a particular operating function, (2) office supplies and expenses, (3) fees and expenses of professional consultants and others for general services which are not applicable to a particular operating function, (4) insurance or reserve accruals to protect the utility against losses and damages to owned or leased property used in its utility operations, (5) payments for employee accident, sickness, hospital, and death benefits or insurance, (6) payments to municipal or other governmental authorities, (7) the cost of materials, supplies, and services furnished to such authorities without reimbursement in compliance with franchise, ordinance, or similar requirements, (8) expenses incurred by the utility in connection with formal cases before regulatory commissions or other regulatory bodies, (9) regulatory fees assessed against the utility, (10) commission expenses, (11) payments made to the United States for the administration of the Federal Power Act, (12) materials used and expenses incurred in advertising and related activities, (13) rents properly includable in operating expenses for the property of others used, occupied, or operated in connection with customer accounts, customer service, and informational sales and general and administrative functions of the utility, and (14) operation and maintenance of transportation equipment and the maintenance of utility property which is not chargeable directly to a particular operating function.

#### **Forecast Methodology**

**Accounts 920–935—Excluding Account 920.001, Incentive Expense, 926.203, 926.204, 926.303, 926.320 and 926.350, Pension Expense and part of 928.203, Regulatory Commission Expenses.** The projection of accounts 920–935, excluding incentive, was developed using both methods described under FERC Account Development above. For labor, these accounts received their allocated portion of the total 2023 O&M labor projection based on actual 2022 labor. For non-labor, these accounts were projected to be equal to the 2022 Base. These accounts also

received each account's allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

**Account 920.001—Incentive Expense.** In the 2008 Idaho General Rate case order (IPUC Order No. 30722) the Commission directed Idaho Power to only include a normalized incentive that “is directly related to improving service or reducing costs to customers.” Idaho Power, therefore, included in its projection only the normalized level of incentive attributable to Customer Satisfaction and Reliability. As a result, for the 2023 test year, Idaho Power removed its entire 2022 actual incentive expense of \$26,598,671 from its 2022 Base and replaced that amount with its projected 2023 normalized incentive of \$10,040,205 that includes only those elements related to Customer Satisfaction and Reliability. This resulted in a net reduction for incentive expense of \$16,558,466.

**Accounts 926.203, 926.204, and 926.303—Pension Expense.** For the Oregon jurisdiction the accounts were projected to be equal to 2022 Base of \$880,053.

In the Idaho jurisdiction, per IPUC Order No. 32426, Idaho Power is currently recovering \$17,153,713 of its cash contributions to its defined benefit pension plan. Idaho Power has included in its forecast adjustment an additional \$18,028,665 in expense for 2023.

**Account 928—Regulatory Commission Expenses.** This account was increased for intervenor funding by \$296,576 that was directed in IPUC Order Nos. 32788, 33872, 33908, 32697, 32245, 32505, 32846, 32537, 32426, 32956, 33357, 34046, 34546, 34608, and 34892. Idaho Power has assumed a one-year amortization for intervenor funding. Account 928 also received its allocated portion of the \$831,379 non-direct adjustment to non-labor O&M.

## Forecast Adjustment E—Depreciation and Amortization Expense

Table 6—FERC Accounts 403 and 404

### *Description*

Account 403 includes depreciation expense for all classes of depreciable electric plant in service except such depreciation expense as is chargeable to clearing accounts or to account 416, Costs and Expenses of Merchandising, Jobbing and Contract Work. Account 404 includes amortization charges applicable to amounts included in the electric plant accounts for limited-term franchises, licenses, patent rights, limited-term interest in land, and expenditures on leased property where the service life of the improvements is terminable by action of the lease. The charges to this account are such as to distribute the book cost of each investment as evenly as may be over the period of its benefit to the utility.

### *Forecast Methodology*

Forecast Adjustment E increases Depreciation and Amortization Expense (accounts 403 and 404) by \$10,463,837 above the 2022 Base.

Depreciation and amortization rates were applied to the monthly estimated plant balances (see the Electric Plant in Service discussion in the Rate Base Components section). The depreciation rates updated by IPUC Order No. 35272 were used for the entire 2023 test year. Several FERC plant accounts have sub-accounts, for which the individual sub-account data was used to calculate a composite rate and applied at the major account level.

For plant accounts 392, Transportation Equipment; 396, Power Operated Equipment; and 312, Boiler Plant Equipment, either all or part of the depreciation expense is recorded to other accounts and not account 403.

## **Forecast Adjustment F—Electric Plant/Regulatory Assets—Amortization, Adjustments, Gains and Losses**

Table 6—FERC Accounts 406, 411.6, and 411.7

### ***Description***

Account 406 is debited or credited with amounts includable in operating expenses, pursuant to approval or order of the Commission, for the purpose of providing for the extinguishment of the amount in account 114, Electric Plant Acquisition Adjustments. Accounts 411.6 and 411.7 include, as approved by the Commission, amounts relating to gains and losses from the disposition of future use utility plant, including amounts which were previously recorded in and transferred from account 105, Electric Plant Held for Future Use.

### ***Forecast Methodology***

Forecast Adjustment F is \$0, resulting in the Amortization of Electric Plant Acquisition Adjustments (account 406) and Gains and Losses from Disposition of Utility Plant (account 411.6 and 411.7) remaining the same as the 2022 Base.

Account 406 is projected for 2023 to remain the same as the 2022 Base. Included in this account is the amortization of the Exchange of Certain Transmission Assets with PacifiCorp (approved by IPUC Order No. 33313, OPUC Order No. 15-184 and FERC Order No. 20150617-3060) acquisition adjustment of account 114 over 50 years at \$15,018 per year. The amount in account 114 will be fully amortized in October 2065.

Accounts 411.6 and 411.7 do not have a forecast since there is no plan to sell utility plant in 2023.

## **Forecast Adjustment G—Regulatory Debits and Credits**

Table 8—FERC Account 407.3

### ***Description***

Account 407.3 is debited, when appropriate, with the amounts credited to account 254, Other Regulatory Liabilities, to record regulatory liabilities imposed on the utility by the



ratemaking actions of regulatory agencies. This account is also debited, when appropriate, with the amounts credited to account 182.3, Other Regulatory Assets, concurrent with the recovery of such amounts in rates.

## ***Forecast Methodology***

Forecast Adjustment G increases Regulatory Debits (account 407.3) by \$1,865,167 above the 2022 Base.

Idaho Power has recorded a regulatory asset in account 182.310 for deferred incremental wildfire mitigation expenses as authorized by IPUC Order No. 35077. Idaho Power is forecasting amortization of \$13,056,171 of expenses deferred as of December 31, 2022, over 7 years.

## **Forecast Adjustment H—Taxes Other than Income Taxes**

Table 7—FERC Account 600-602

### ***Description***

Accounts 600, 601 and 602 includes those taxes other than income taxes which relate to utility operating income. This account is maintained to allow ready identification of the various classes of taxes relating to utility operation, plant leased to others, and other operating income.

### ***Forecast Methodology***

Forecast Adjustment H increases Taxes Other Than Income (Accounts 600-602) by \$4,559,257 above the 2022 Base.

The 2023 forecast methodology for Taxes Other Than Income Taxes was based on a combination of known adjustments arising from specifics of the particular account activity and a carry forward of the 2022 Base amounts.

### **Real and Personal Property Taxes**

The methodology used to project Idaho property taxes for the 2023 test year is estimating Idaho Power's 2023 ad valorem value and levy. For the ad valorem value methodology, tax is based on the assessed value of the property. For the tax levy methodology, the state's historical levy data and local government budget policy is used to estimate levies. For all other states the 3-year CAGR was used.

### **Idaho kWh Taxes**

Test year 2023 kWh taxes were projected based on normalized hydro conditions and normalized consumption.

### **Regulatory Commission Fees**

The 2023 Idaho regulatory fee was forecast by using the 2022 actual payment as an estimate. The Oregon regulatory fee consists of two fees, Oregon PUC fee and Oregon Department of

Energy fee. For the 2023 test year, the Oregon PUC fee was the actual 2023 fee and for the Oregon Department of Energy fee, the 2023 estimate was based upon the prior year's tax rate applied to the actual Oregon gross operating revenue.

## **Licenses**

The 2023 Wyoming and Shoshone–Bannock licenses fee was estimated using the prior year's actual amount.

## **Franchises**

The Oregon franchise tax is based upon a rate (established by each city) multiplied by the electric revenue within the city. The test year taxes were established using forecasted Oregon revenue compared to 2022. That percent of change was applied to each city's gross revenue and the appropriate tax rate was applied.

# **Forecast Adjustment I—Idaho Energy Resources Co. (“IERCO”) Cost of Service Components**

Net Income Summary—FERC Accounts 418.1 and 419

## ***Description***

Account 418.1 includes the utility's equity in the earnings or losses of subsidiary companies for the year. Account 419 includes interest revenues on securities, loans, notes, advances, special deposits, tax refunds, all other interest-bearing assets, and dividends on stocks of other companies, whether the securities on which the interest and dividends are received are carried as investments or included in sinking or other special fund accounts.

## ***Forecast Methodology***

Forecast Adjustment I decreases Idaho Energy Resources Co. (“IERCO”) Cost of Service Components (Accounts 418.1 and 419) by \$6,489,979 below the 2022 actual amount of \$8,859,979 for a projected 2023 net income of \$2,370,000. The estimate incorporates PacificCorp's projected activity for the Bridger Coal Company (“BCC”) mine and a \$3,000,000 earnings margin calculated utilizing the most recent long-term forecast to estimate IERCO rate base and the Weighted Average Cost of Capital as approved in the 2011 Idaho General Rate Case.

Idaho Power owns 100% of IERCO, which has a one-third joint venture interest in BCC, a mine that supplies coal to the Jim Bridger plant. PacificCorp, Inc. owns the remaining two-thirds interest and is the mine's operating partner. As a one-third owner in BCC, IERCO is entitled to 33% of the BCC net income and cash flows.

IERCO overriding royalties are determined by the location and lease under which BCC is mining. The three leases are with BLM, Union Pacific Railroad, and State of Wyoming, and each lease pays at a different rate. The overriding royalty was granted to BCC from IERCO, who in turn received them from Idaho Power as advance royalties in the past. Coal royalty payments

have no impact on IERCO's net income as revenue is recognized when paid by BCC, and expense recognized when remitted to Idaho Power.

Income taxes are calculated at the federal tax rate of 21% as Wyoming has no state income tax. Taxes are accrued and paid during the calendar year.

As discussed in the Rate Base Components section that follows, IERCO maintains an intercompany note with Idaho Power that accrues interest monthly at Idaho Power's short-term borrowing rate, which is projected to be 0.45% per month (Annual Rate 5.39%) in 2023. For purposes of the Cost of Service Component of IERCO, the intercompany interest expense net of income tax is added back to increase IERCO's net income.

## **Forecast Adjustment J—Allowance for Funds Used During Construction (“AFUDC”) Related to Hells Canyon Relicensing**

Revenue Requirement Summary—FERC Accounts 107

### ***Description***

Account 107 (Construction Work in Progress) includes the total of the balances of work orders for electric plant in process of construction. Work orders shall be cleared from this account as soon as practicable after completion of the job. Expenditures on research, development, and demonstration projects for construction of utility facilities are to be included in a separate subdivision in this account. Also included in this account is an Allowance for Funds Used During Construction (“AFUDC”). AFUDC includes the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used, not to exceed, without prior approval of the Commission. The rates shall be determined annually.

### ***Forecast Methodology***

Forecast Adjustment J is \$0, resulting in the AFUDC related to Hells Canyon Relicensing (Account 107) remaining the same as the 2022 Base.

Idaho Power began incurring Hells Canyon relicensing costs in 1999. These relicensing efforts are financed from internally generated funds and from outside sources including short-term debt, long-term debt and new equity. Idaho Power accrues and capitalizes these financing costs to account 107 as AFUDC during the construction phase of the project. AFUDC is calculated monthly using a rate determined by a FERC formula. In the 2011, Idaho General Rate Case Order (IPUC Order No. 32426), Idaho Power requested and was granted the inclusion of the AFUDC related to Hells Canyon Relicensing in the revenue requirement.

While AFUDC continues to increase relating to the Hells Canyon Relicensing efforts, Idaho Power is requesting recovery of the same amount (\$6,815,472) previously included the 2011 General Rate Case and subsequently approved in IPUC Order No. 32426.

## RATE BASE COMPONENTS

### Forecast Adjustment K—Electric Plant in Service

Table 1—FERC Account 101

#### **Description**

This account includes the original cost of electric plant that is included in accounts 301 to 399 (referred to herein as plant accounts). It is described as being owned and used by the utility in its electric utility operations and having an expectation of life in service of more than one year from date of installation, including such property owned by the utility but held by nominees. The cost of additions to and improvements of property leased from others, which are includable in this account, are recorded in subdivisions separate and distinct from those relating to owned property.

#### **Forecast Methodology**

Forecast Adjustment K increases Electric Plant In Service (Account 101) by \$370,824,182 above the 2022 Base. Electric Plant In Service has been presented using a thirteen-month average.

The methodologies used for plant additions and retirements are described below.

#### **Plant Additions to Electric Plant In Service**

Projected 2023 plant additions to Electric Plant In Service were developed based on actual project closings as a percentage of Construction Work in Process (“CWIP”) projects as of year-end 2022 plus the expected 2023 capital expenditures. These capital projects were segregated into pools of greater than and less than \$8 million. Capital projects greater than \$8 million were considered to be known and measurable. For capital projects less than \$8 million, an historical methodology was developed. Once both pools were determined, the results were then combined and allocated to FERC plant accounts 301 through 399 using a five-year historical average.

#### **Projected 2023 Plant Additions**

**Capital Projects Greater than \$8 Million.** Large capital projects with total costs in excess of \$8 million were determined to be known and measurable adjustments for the 2023 unadjusted test year. Actual capital expenditures in CWIP as of year-end 2022, plus expected 2023 capital expenditures were used in determining the amount that would close to plant by year-end 2023. Allowance for Funds Used During Construction (“AFUDC”) was accrued on the CWIP balances prior to their projected close. In addition, these projects’ capital account balances, projected expenditures, and the timing of closes to plant were reviewed by business unit managers familiar with the projects.

The total amounts for the plant additions in the pool of over \$8 million in capital expenditures were assigned CWIP project types based on the nature of each individual project.

**Capital Projects Less Than \$8 Million.** Anticipated 2023 plant closings were set equal to the five-year historical average of the percent of similar-sized projects to the previous year's CWIP balance times the 2022-year end CWIP balance.

The total amounts for the plant additions in the pool of under \$8 million in capital expenditures were then allocated to the CWIP project types based on a five-year historical average.

### **Allocation to FERC Plant Account**

The above CWIP project type pools were combined for final allocation to FERC plant accounts. For this allocation, actual final closings from CWIP account 107 into Electric Plant In Service, account 101 were analyzed for the five-year period 2018 through 2022. Final closing amounts were used to allocate closings to plant accounts rather than preclose amounts. Final closings represent the "as built" property units after construction and individual work orders have been completed and reconciled, whereas pre-closes are based on work order estimates and may not be reflective of the final closing plant account distribution. For each CWIP project type, the percentage allocation to FERC plant accounts 301 through 399 was determined using the ratio from the five-year historical plant account closings for that CWIP project type.

### ***Retirements from Electric Plant In Service***

Retirements were analyzed for the previous five-year period 2018 through 2022. Retirements by FERC plant account were determined and compared to the final closings by FERC plant account for the same period. Retirements by FERC plant account were estimated by calculating the historical percentage of retirements to additions for the five-year period.

The following FERC plant accounts have known retirement dates based on vintage layers and were not estimated:

- Account 302— Franchises and consents
- Account 303— Miscellaneous intangible plant
- Account 391— Office furniture and equipment
- Account 393—Stores equipment
- Account 394— Tools, shop, and garage equipment
- Account 395—Laboratory equipment
- Account 397—Communication equipment
- Account 398—Miscellaneous equipment

## Forecast Adjustments L & M—Accumulated Provision for Depreciation and Amortization

Table 2—FERC Accounts 108 and 111

### ***Description***

Account 108 is credited for amounts charged to account 403, Depreciation Expense, or to clearing accounts for current depreciation expense for electric plant in service. At the time of retirement of depreciable electric utility plant, this account is charged with the book cost of the property retired and cost of removal and then credited with the salvage value and any other amounts recovered such as insurance. When retired, costs of removal and salvage are originally entered in retirement work orders, the net total of such work orders may be included in a separate subaccount hereunder. Upon completion of the work order, the proper distribution to subdivisions of this account shall be made for general ledger and balance sheet purposes as a single composite provision for depreciation. For purposes of analysis, however, each utility shall maintain subsidiary records in which this account is segregated according to the functional classification of electric plant in service. Account 111 is credited with amounts charged to account 404, Amortization of Limited-Term Electric Plant, for the current amortization of limited-term electric plant investments.

### ***Forecast Methodology***

Forecast Adjustments L & M increase Accumulated Provision for Depreciation and Amortization (Accounts 108 and 111) by \$59,406,156 and \$1,641,727 respectively, above the 2022 Base. The accumulated provision for depreciation and amortization has been presented using a thirteen-month average. The 2023 forecast was developed by first determining the 2022 monthly balances and then building upon that to determine the 2023 thirteen-month account balances.

The process began with the year-end 2022 accumulated depreciation and amortization account balances which were rolled forward monthly using the estimated 2023 depreciation and amortization expense accruals, retirements, salvage, and removal costs. See account 403 and 404 in the Cost of Service Components section for discussion with respect to the depreciation and amortization accrual calculation and Electric Plant In Service, account 101 in the Rate Base Components section for discussion of the method of determining retirements. The previous five-year (2018–2022) average salvage, removal costs, and retirements were then calculated by functional area (Steam Production, Hydraulic Production, Other Production, Transmission Plant, Distribution Plant and General Plant). The salvage and removal averages as a percentage of the retirement average were used to estimate monthly salvage and removal costs, allocated to FERC plant accounts utilizing the respective ratio to estimated retirements.

## Forecast Adjustment N—Materials and Supplies

Table 3—FERC Accounts 154 and 163

### **Description**

Account 154 includes the cost of materials purchased primarily for use in the utility business for construction, operation, and maintenance purposes. Materials and supplies issued are credited hereto and charged to the appropriate construction, operating expense, or other account on the basis of a unit price determined by the method of inventory accounting. Account 163 includes the cost of supervision, labor, and expenses incurred in the operation of general storerooms, including purchasing, storage, handling, and distribution of materials and supplies. This account is cleared by adding to the cost of materials and supplies issued a suitable loading charge which distributes the expense equitably over stores issues. The balance in the account at the close of the year shall not exceed the amount of stores expenses reasonably attributable to the inventory of materials and supplies.

### **Forecast Methodology**

Forecast Adjustment N reflects a \$10,145,311 increase in Materials and Supplies (accounts 154 and 163) above the 2022 Base after removing Boardman inventory balances of (\$967,717).

Idaho Power continues to see increases in inventory values. Therefore, a Compound Annual Growth Rate (CAGR) forecast methodology was used. A three-year CAGR of 12.78% and 6.83% was calculated on the thirteen-month average balances of accounts 154 and 163, respectively, excluding Boardman inventory balances. The CAGRs were applied to the thirteen months ending December 2022 to develop the 2023 forecast adjustment.

## Forecast Adjustment O—Other Deferred Programs

Table 3—FERC Accounts 182.3 and 186

### **Description**

This account includes the amounts of regulatory assets not includable in other accounts resulting from the ratemaking actions of regulatory agencies.

### **Forecast Methodology**

Forecast Adjustment O decreases Other Deferred Programs (Accounts 182.3 and 186) by \$1,679,383 below the 2022 Base.

**Accounts 186.722 and 186.770—American Falls Bond Refinancing, IPUC Order No. 25880.** These deferred costs are financing costs related to American Falls Bond issuances. The total monthly amortization of these two bonds is \$5,212 per month or \$62,551 per year. Idaho Power has reduced the 2022 Base for one year of additional amortization for \$62,551, resulting in a total deferral of \$72,977.

**Account 182.310—Wildfire Mitigation, IPUC Order No. 35077.** This account includes the unamortized balance of the Idaho-only portion of incremental wildfire mitigation costs associated with Idaho Power’s Wildfire Mitigation Plan. Included in the 2022 Base and test year deferral is \$13,056,171 associated with the Idaho-only portion of deferred costs for incremental insurance and other wildfire mitigation costs.

**Account 182.315—Cloud Computing, IPUC Order No. 34707.** This account includes the unamortized balance of the Idaho-only portion of prepaid licensing costs associated with cloud computing arrangements meeting the requirements of IPUC Order No. 34707. Included in the 2022 Base is \$1,207,592 associated with the Idaho-only portion of prepaid licensing costs for the Zycus procurement tool cloud computing agreement. Idaho Power has included a reduction to its 2022 Base of \$201,265 for one year of additional amortization, bringing the test year deferral balance associated with Zycus to \$1,006,327.

**Accounts 182.410 and 182.411— Siemens Long-Term Program Contract, IPUC Order Nos. 33391 and 33420.** Idaho Power entered into a long-term program contract under which Siemens Energy agrees to maintain the Company’s three gas plants. A deferral was set up to account for the sale of the spare parts inventory, initialization fees and associated deferred income taxes. The spare parts inventory currently owned by the Company included two components: 1) assets that were included in the prior test year and are earning a return and 2) assets that have not been included in a test year and are not earning a return. Two regulatory asset accounts were established, one labeled “Rate Based” that includes the initial spare parts currently included in rate base and one labeled “Deferred Rate Base” that includes the initial spare parts that are not currently included in rate base, plus the initialization fees and associated tax expense. The deferral will be amortized over the remaining life of each asset in accordance with IPUC Order Nos. 33391 and 33420. The 2022 Base was reduced by \$1,075,354 for one year of additional amortization, resulting in a total deferral of \$20,388,711.

**Account 182.385—Citizens Utility Board (“CUB”) 2022 Funding Grant, OPUC Order No. 22-015, 22-192.** Idaho Power was ordered in Docket UM 2126 to fund \$33,000 annually to CUB pursuant to the terms of the Intervenor Funding Agreement by and among Idaho Power and CUB and approved by the OPUC in Order no. 20-493. Idaho Power has assumed a one-year amortization period for recovery of these costs through the Power Cost Adjustment Mechanism (“PCAM”, Oregon Tariff Schedule 56). This reduced the deferral by the 2022 Base of \$37,154 including accrued interest, resulting in a total deferral balance of \$0.

**Account 182.339—SFAS 87 Capitalized Pension Costs, OPUC Order No. 10-064.** The 2022 Base was reduced by \$219,697 for one year of additional amortization, resulting in a total deferral of \$6,781,181.

**Accounts 182.412 and 182.413— Siemens Long-term Program Contract, OPUC Order Nos. 15-387 and 15-388.** As part of the long-term program contract with Siemens discussed above, the Company established two Oregon jurisdictional regulatory assets, one labeled “Rate Based” that includes the initial spare parts currently included in rate base and one labeled “Deferred Rate Base” that includes the initial spare parts that were not currently included in rate base, the initialization fees and associated tax expense. The deferral will be amortized over the remaining life of each asset in accordance with OPUC Order Nos. 15-387 and 15-388. The 2022 Base was



reduced by \$83,362 for one additional year of amortization, resulting in a total deferral of \$566,293.

## Forecast Adjustment P—Plant Held for Future Use

Table 3—FERC Account 105

### ***Description***

This account includes the original cost of electric plant owned and held for future use in electric service under a definite plan for such use and includes property acquired but never used by the utility in electric service but held for such service in the future under a definite plan, and property previously used by the utility in service, but retired from such service and held pending its reuse in the future, under a definite plan, in electric service.

### ***Forecast Methodology***

Forecast Adjustment P increases Plant Held for Future Use (Account 105) by \$1,622,140 above the 2022 Base

Idaho Power developed its 2022 Base by removing from the 2022 actual Plant Held for Future Use those properties that it either plans to sell, will be possibly split and partially sold, structures or improvements that will be removed prior to construction and properties for which the use is uncertain.

In addition, Idaho Power included in its forecast adjustment \$1,622,140 for the acquisition of two additional parcels of land that will be acquired by year-end 2023. These include land purchases for the Greenleaf and Northside substations.

## Forecast Adjustment Q—Customer Advances for Construction (“CAC”)

Table 3—FERC Account 252

### ***Description***

Account 252 includes advances by customers for construction which are to be partially or wholly refunded. When a customer is refunded the entire amount to which he or she is entitled according to the agreement or rule under which the advance was made, any remaining balance is credited to the appropriate plant account.

### ***Forecast Methodology***

Forecast Adjustment Q decreases the Customer Advances for Construction (Account 252) 2022 Base by \$5,697,395, based on an estimated thirteen-month average balance.

Idaho Power forecast Account 252 using a 5-year (2018-2022) average methodology to determine the estimated balances for unusual conditions, substation allowances, and transmission network upgrades. The tax gross-up portion was excluded from the substation allowances' estimate. For unusual conditions the balance was estimated based on average refund amounts. Please see the analysis in the table below:

<b>2023 Forecast of Customer Advances</b>	<b>Total</b>
2018-2022 5-year Average Unusual Conditions Refunds	\$4,765,091
2018-2022 5-year Average Substation Allowances (Excluding Tax Gross-up)	1,877,865
2018-2022 5-year Average Transmission Network Upgrades	1,380,649
<b>12/31/23 Forecast for Unusual Conditions Refunds, Substation Allowances, &amp; Network Upgrades (Excluding Tax Gross-up)</b>	<b>\$8,023,605<sup>1</sup></b>

<sup>1</sup> This amount represents the estimated year-end balance. Idaho Power has estimated the thirteen-month balance of \$7,441,965 based on the shape of the 2022 actual thirteen-month average balance.

## Forecast Adjustment R—Idaho Energy Resources Co. (“IERCO”) Rate Base

Table 3—FERC Accounts 123.1, 186, and 145

### Description

Account 123.1 includes the cost of investments in securities issued or assumed by subsidiary companies and investment advances to such companies, including interest accrued thereon when such interest is not subject to current settlement plus the equity in undistributed earnings or losses of such subsidiary companies since acquisition. This account is credited with any dividends declared by such subsidiaries. This account is maintained in such a manner as to show separately for each subsidiary: (1) the cost of such investments in the securities of the subsidiary at the time of acquisition, (2) the amount of equity in the subsidiary's undistributed net earnings or net losses since acquisition, and (3) advances or loans to such subsidiary. Account 145 represents notes receivable from associated companies. Account 186 includes all debits not elsewhere provided for, such as miscellaneous work in progress, and unusual or extraordinary expenses, not included in other accounts, which are in process or amortization and items the proper final disposition of which is uncertain.

### Forecast Methodology

Forecast Adjustment R increases Idaho Energy Resources Co. (“IERCO”) projected 2023 Rate Base (Accounts 123.1, 186 and 145) by \$1,769,938 above the 2022 actual thirteen-month average balance of \$29,600,820 to \$ 31,370,758.

Idaho Power's projected 2023 investment in IERCO is based on actual activity for 2022 at the BCC mine that supplies coal to the Jim Bridger thermal plant. As a one-third owner in BCC, IERCO is entitled to 33% of the BCC net income and cash flows.

- **Account 123.1—Investment in IERCO.** The 2023 thirteen-month average investment in IERCO balance is projected to decrease \$8,086,296 from the 2022 actual thirteen-month average balance of \$23,664,134. IERCO's investment in BCC is accounted for using the equity method. BCC income, IERCO income, and IERCO capital contributions to BCC increase the investment balance, while BCC dividend distributions to IERCO reduce the investment balance. The \$8.1 million decrease is primarily due to dividends being paid in 2022. No dividend assumptions are made during the forecast test year. Instead, any extra cash remaining after paying operating expenses and capital investment are returned to Idaho Power via the intercompany note (see below for discussion of Account 145 – IERCo Intercompany Note).
- **Account 145—Notes Payable To/Receivable from Subsidiary.** The 2023 thirteen-month average balance is projected to increase \$10,093,286 from the 2022 actual thirteen-month average balance of \$5,101,864. The IERCO intercompany note is the funding mechanism whereby IERCO not only receives distributions from and makes capital contributions to BCC, but also pays income taxes and dividends to Idaho Power. The intercompany note activity is based on the projected 2023 BCC operating and capital budgets. In 2022, the note payable increased due to funding the dividend payment. Interest on the intercompany note is based on Idaho Power's short-term borrowing rates and accrues monthly. The average interest rate used is 0.45% per month (Annual Rate 5.39%).
- **Account 186—Prepaid Coal Royalties.** The 2023 thirteen-month average balance is projected to decrease \$237,052 from the 2022 actual thirteen-month average balance of \$834,822. BCC overriding coal royalties are determined by the location and lease under which BCC is mining. The overriding royalty was granted to BCC from IERCO, who in turn received them from Idaho Power as advance royalties in the past. Although coal royalty payments have no impact on IERCO's net income because revenue is recognized when paid by BCC and expense recognized when remitted back to Idaho Power, the payment flow serves to reduce the account 186 balance.

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

JESSICA G. BRADY

1           Q.     Please state your name, business address, and  
2     present position with Idaho Power Company ("Idaho Power" or  
3     "Company").

4           A.     My name is Jessica G. Brady. My business  
5     address is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6     employed by Idaho Power as a Regulatory Analyst in the  
7     Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     In May 2016, I received a Bachelor of Science  
10    degree in Economics and a Bachelor of Arts degree in  
11    Spanish from the University of Idaho. I have also attended  
12    "The Basics: Practical Regulatory Training for the Electric  
13    Industry," an electric utility ratemaking course offered  
14    through New Mexico State University's Center for Public  
15    Utilities, and "Electric Utility Fundamentals & Insights,"  
16    an electric utility course offered through the Western  
17    Energy Institute.

18          Q.     Please describe your work experience with  
19    Idaho Power.

20          A.     In September 2021, I accepted my current  
21    position at Idaho Power as a Regulatory Analyst in the  
22    Regulatory Affairs Department. As a Regulatory Analyst, I  
23    am responsible for running the AURORA model ("AURORA") to  
24    calculate net power supply expenses ("NPSE") for ratemaking  
25    purposes, as well as the determination of the marginal cost

1 of energy used in the Company's marginal cost analyses. My  
2 duties also include providing analytical support for other  
3 regulatory activities within the Regulatory Affairs  
4 Department.

5 Q. What is the purpose of your testimony in this  
6 matter?

7 A. The purpose of my testimony is to discuss the  
8 derivation of the Company's 2023 retail revenue forecast  
9 used for the 2023 test year, detail the proposed energy-  
10 related test year billing components, present the  
11 quantification of 2023 normalized or "base level" net power  
12 supply expenses ("2023 Base Level NPSE") and inform the  
13 Commission of the necessary reduction to the rates  
14 contained in Schedule 55, Power Cost Adjustment ("PCA")  
15 resulting from the proposed 2023 Base Level NPSE update.

16 I. 2023 TEST YEAR RETAIL REVENUE DERIVATION

17 Q. What methodology was used to determine test  
18 year retail revenues?

19 A. Generally speaking, the Company's retail  
20 revenue forecast is derived by applying current base rates  
21 to forecasted test year billing components. These billing  
22 components are derived by applying historical relationships  
23 to the Company's customer and kilowatt-hour ("kWh") sales  
24 forecast.

1           Q.       Was the 2023 test year retail sales revenue  
2     forecast developed using the same methodology applied in  
3     the Company's last general rate case, Case No. IPC-E-11-08  
4     ("2011 Rate Case")?

5           A.       Yes. The 2023 test year retail sales revenue  
6     forecast was developed using the same methodology applied  
7     in the 2011 Rate Case.

8           Q.       Please describe the customer and kWh sales  
9     forecast that serves as the basis for the 2023 test year  
10    retail revenue forecast.

11          A.       The 2023 test year customer and kWh sales  
12    forecast consists of class customer counts and total kWh  
13    sales estimates for each month of the test period. It is  
14    prepared by the Company's Load Research and Forecasting  
15    Department and is further described in workpapers filed by  
16    Company Witness Mr. Matthew Larkin.

17          Q.       How were the 2023 test year kWh sales further  
18    segmented into the class-specific energy-related billing  
19    components?

20          A.       The first step in deriving energy-related  
21    billing components for the test year is to develop factors  
22    based on the most current complete calendar year of  
23    available historical data, which in this case is 2022.  
24    These historical factors represent the percentage of total  
25    kWh billed in each tier level of a class's rate structure.





1 **Table 2**  
 2 Historical Weighting Factors

Table 2 Historical Weighting Factors	
Usage Tier	June 2022 Schedule 1 Weighting Factors
Summer, 0-800 kWh	30%
Summer, 801-2000 kWh	7%
Summer, Over 2000 kWh	1%
Non-Summer, 0-800 kWh	48%
Non-Summer, 801-2000 kWh	12%
Non-Summer, Over 2000 kWh	2%
Total Schedule 1	100%

3  
 4 This process is used to develop historical factors  
 5 for all rate classes with tiered structures. Once a  
 6 complete set of monthly factors has been developed for each  
 7 applicable rate class, they are applied to monthly forecast  
 8 kWh totals to derive the energy-related billing component  
 9 forecast that aligns with each class's current rate  
 10 structure. Continuing with the illustration of Schedule 1  
 11 customers, Table 3 demonstrates the final step in  
 12 determining test year energy-related billing components.

13 //

14 //

15

16

17

1 **Table 3**  
 2 Billing Component Forecast

Table 3 Billing Component Forecast		
Usage Tier	Historical June Weighting Factor	June 2023 Schedule 1 Billing Component Forecast (kWh)
Summer, 0-800 kWh	30%	108,107,252
Summer, 801-2000 kWh	7%	27,007,499
Summer, Over 2000 kWh	1%	3,330,895
Non-Summer, 0-800 kWh	48%	172,201,397
Non-Summer, 801-2000 kWh	12%	43,571,175
Non-Summer, Over 2000 kWh	2%	6,519,763
Total	100%	360,737,981

3 Q. How are demand-related billing components derived  
 4 based on the kWh sales forecast?

5 A. The demand-related billing components consist  
 6 of billing demand and basic load capacity ("BLC") by month  
 7 for each rate class. Both billing demand and BLC totals are  
 8 forecasted by applying four-year average load factors to  
 9 each month in the kWh sales forecast. Historical data from  
 10 the most currently available four calendar years is used to  
 11 derive an average load factor by month for each rate class.  
 12 These average factors are then applied to monthly kWh sales  
 13 figures to determine total forecasted billing demand and  
 14 BLC by class for each month of the test period. Once  
 15 monthly totals have been developed, they are divided into

1 the appropriate tiered rate structure (if applicable)  
2 utilizing historical factors in the same manner as kWh  
3 charges.

4 Q. How are customer-related billing components  
5 derived based on the customer count forecast?

6 A. The primary customer-related billing component  
7 in the retail revenue forecast is the service charge.  
8 Because the customer forecast reflects the expected number  
9 of customers under active Utility Service Agreements  
10 ("USAs") at the end of each forecast month, forecast values  
11 must be converted to reflect the expected number of service  
12 charges received throughout the corresponding month. To  
13 convert the USA forecast to an expected service charge  
14 count, historical factors are developed reflecting the  
15 relationship between the number of USAs at the end of each  
16 historical month and the number of service charges received  
17 during the corresponding month. These factors are then  
18 applied to the monthly customer forecast to develop a  
19 forecast of expected service charges by rate class for each  
20 month of the test year.

21 Q. How are test year retail revenues calculated  
22 once the billing component forecast has been derived?

23 A. Once the billing components have been  
24 forecasted by rate class, the most currently approved base

1 rates are applied to the test year values to derive monthly  
2 revenue estimates for each rate class.

3 Q. Have you prepared any exhibits that detail the  
4 calculations that were made to determine the Company's 2023  
5 test year retail revenues?

6 A. Yes. Exhibit No. 27 provides a summary of  
7 forecasted 2023 test year retail revenues, and Exhibit No.  
8 28 details the calculations that were made to determine  
9 these revenues. Input data used in the forecast  
10 calculations can be found in my workpapers. As can be seen  
11 on page 3 of Exhibit No. 27, the Company's 2023 Idaho  
12 jurisdictional retail sales revenues are forecast to be  
13 \$1.12 billion.

14 Q. How is the portion of Micron Technology's  
15 ("Micron") forecast kWh sales that will be met by Black  
16 Mesa Solar treated in the 2023 test year retail revenues?

17 A. As described in the Direct Testimony of Mr.  
18 Matthew Larkin, as part of the new Special Contract with  
19 Micron, Black Mesa Solar's generation will be paid for  
20 completely by Micron. To account for this, the revenue from  
21 the portion of Micron's load that will be met by Black Mesa  
22 Solar is not included in the 2023 retail revenue forecast.  
23 The treatment of the revenue associated with the portion of  
24 Micron's load met by Black Mesa Solar is discussed further  
25 in the Direct Testimony of Mr. Paul Goralski.

1     **II.     2023 ENERGY-RELATED BILLING COMPONENTS - PROPOSED RATE**

2                                     **STRUCTURE**

3             Q.       Please describe the energy-related billing  
4 components under the Company's proposed rate structure  
5 ("proposed billing components").

6             A.       As described in the Direct Testimony of Ms.  
7 Connie Aschenbrenner, the Company's proposed rate structure  
8 includes modifying the months considered to be "summer" and  
9 "non-summer", as well as the time-of-use periods for  
10 certain time variant rate classes. The proposed billing  
11 components represent the total forecast kWh billed in each  
12 tier within each rate class, under the new proposed rate  
13 structure.

14            Q.       How were the proposed billing components  
15 calculated?

16            A.       The proposed billing components were  
17 calculated using the same methodology as the billing  
18 components calculated for the derivation of the 2023 test  
19 year retail revenues. However, instead of using 2022  
20 billing data to derive historical factors, 2022 kWh usage  
21 data, divided into tiers based on the proposed rate  
22 structure for each rate class, was used.

23            Q.       How was the 2022 kWh usage data collected and  
24 divided into the proposed tiers?

1           A.       The process for collecting 2022 kWh usage data  
2 is described in workpapers filed by Mr. Larkin.

3           Q.       Have you prepared an exhibit that details the  
4 Company's 2023 proposed billing determinants?

5           A.       Yes. Exhibit No. 29 provides a summary of the  
6 2023 proposed billing determinants.

7                   **III.   2023 BASE NET POWER SUPPLY EXPENSES**

8           Q.       How is this section of your testimony  
9 organized?

10          A.       First, I provide an overview of the  
11 Commission-approved method for quantifying base level NPSE.  
12 Next, I describe the update to base level NPSE that  
13 occurred in 2013 ("2013 Base Level NPSE"). Lastly, I  
14 describe the quantification of the Company's 2023 Base  
15 Level NPSE.

16          Q.       How has the Commission historically reviewed  
17 and approved Idaho Power's quantification of normal base  
18 NPSE?

19          A.       Due to the high variability of power supply  
20 expenses, the Commission has historically approved a  
21 normalized power supply expense value for setting base  
22 rates. The Company has utilized the AURORA model to provide  
23 the Commission with a snapshot of "normal" expectations for  
24 base NPSE for a given test year.

1           Q.       Please define the term "base NPSE" as the  
2 Company and Commission have used the term historically.

3           A.       The Company and Commission have historically  
4 defined the term "base NPSE" as the sum of fuel expenses  
5 (Federal Energy Regulatory Commission ["FERC"] Accounts 501  
6 and 547) and purchased power expenses (FERC Account 555),  
7 including purchases from qualifying facilities under the  
8 Public Utility Regulatory Policies Act of 1978 ("PURPA")  
9 and power purchase agreements ("PPA"), minus surplus sales  
10 revenues (FERC Account 447). The AURORA model is used to  
11 quantify base NPSE components related to fuel and surplus  
12 sales, while PURPA and PPA expenses are quantified outside  
13 of AURORA; however, energy from these projects is modeled  
14 as must-take in the AURORA simulation.

15          Q.       Does the Company include any other categories  
16 of expense or revenue in the base level NPSE used for PCA  
17 computations?

18          A.       Yes. In addition to the expense and revenue  
19 categories described above, the base level NPSE included in  
20 the Company's PCA computations also includes financial  
21 payments made by Idaho Power to offset transmission losses  
22 associated with market purchases (FERC Account 555), third-  
23 party transmission expense required to bring market  
24 purchases to the Company's border (FERC Account 565), water

1 for power expense (FERC Account 536), and demand response  
2 ("DR") incentives (FERC Account 555).

3 Q. Is the Company proposing to include any new  
4 categories of expense or revenue in the base level NPSE  
5 used for PCA computations?

6 A. Yes. At the direction of Mr. Larkin, I have  
7 included an additional component, FERC Account 447.050,  
8 transmission loss revenue, in the 2023 Base Level NPSE.  
9 According to the FERC's Uniform System of Accounts, these  
10 amounts are recorded to Account 447.

11 Q. What does the transmission loss revenue  
12 component of Account 447 represent?

13 A. As further discussed in Mr. Larkin's  
14 testimony, transmission loss revenue in FERC Account 447  
15 reflects revenues received by Idaho Power from third  
16 parties to compensate the Company for physically generating  
17 electricity to offset losses associated with wheeling  
18 energy through Idaho Power's transmission system.

19 Q. How does the Company arrive at a "normalized"  
20 look at base NPSE for ratemaking purposes?

21 A. In order to "normalize" base NPSE, the Company  
22 uses AURORA to model various water conditions using current  
23 loads and current resources. At this time, 37 water  
24 conditions have been evaluated to develop an average or  
25 normalized NPSE. This general methodology was adopted by



1 the Commission in 1981 and has been used in general rate  
2 proceedings ever since.

3 Q. What is the currently approved base level  
4 NPSE amount?

5 A. The currently approved 2013 Base Level NPSE  
6 is \$305,684,869. It is comprised of the following  
7 components:

8 **Table 4**  
9 2013 Base Level NPSE

<b>Table 4 2013 Base Level NPSE</b>	
<b>95% Accounts (with 95% recovery in PCA)</b>	
Account 501, fuel (coal)	\$108,503,180
Account 536, water for power	\$2,380,597
Account 547, fuel (gas)	\$33,367,563
Account 555, purchased power (non-PURPA)	\$62,606,593
Account 565, third-party transmission	\$5,455,955
Account 447, surplus sales	(\$51,735,153)
Net 95% Accounts	\$160,578,735
<b>100% Accounts (with 100% recovery in PCA)</b>	
Account 555, purchased power (PURPA)	\$133,853,869
Account 555, purchased power (demand response)	\$11,252,265
Total	\$305,684,869

10  
11 Q. When was the currently approved base level  
12 NPSE established and approved by the Commission?

13 A. The 2013 Base Level NPSE was established on  
14 March 21, 2014, by Order No. 33000 issued in Case No. IPC-  
15 E-13-20.

1           Q.       Since the establishment of the 2013 Base Level  
2 NPSE, has the Company made any modifications to the AURORA  
3 model that was used to develop the 2023 Base Level NPSE?

4           A.       Yes. In order to quantify the 2023 Base Level  
5 NPSE, the Company utilized a new AURORA version and  
6 database, which reflects updated inputs for the entire  
7 Western Electricity Coordinating Counsel ("WECC")  
8 footprint. This database was also used in the development  
9 of the Company's 2021 Integrated Resource Plan ("IRP"),  
10 which was acknowledged by the Commission on November 18,  
11 2022, in Order No. 35603 issued in Case No. IPC-E-21-43.  
12 The Company also updated the database to include resource  
13 changes, current fuel prices, heat rates, forced outage  
14 rates, maintenance schedules, and plant capacities.

15          Q.       Were any adjustments made to the resources  
16 included in the 2023 AURORA Model?

17          A.       Yes. Idaho Power updated expected generation  
18 from PURPA projects based on current or expected contracts.  
19 Additionally, the 2023 AURORA model includes the removal of  
20 two resources, Boardman Coal and North Valmy Unit 1, and  
21 the addition of six resources. The six resources are listed  
22 below.

1    **New Resources included in the 2023 AURORA Model**

- 2       1. Bridger Gas  
3       2. Jackpot Solar PPA  
4       3. Black Mesa Solar PPA  
5       4. Black Mesa Battery  
6       5. 80-Megawatt ("MW") Grid Battery  
7       6. Demand Response

8           Q.       Please describe the Bridger Gas resource,  
9   including how it was modeled for the development of the  
10 2023 Base Level NPSE.

11          A.       The Company's 2021 IRP Action Plan includes  
12 the conversion of Bridger units 1 and 2 from coal to  
13 natural gas by summer 2024. As discussed further in Mr.  
14 Larkin's testimony, I was directed to model Bridger units 1  
15 and 2 as natural gas units online for the entire 2023 test  
16 year in order to more closely align 2023 Base Level NPSE  
17 with the time period in which rates will take effect.

18          Q.       How were Jackpot Solar and Black Mesa Solar  
19 modeled for the development of the 2023 Base Level NPSE?

20          A.       Jackpot Solar, which came online December  
21 2022, is a 120-MW alternating current solar photovoltaic  
22 generation facility. It is a 20-year PPA with Jackpot  
23 Holdings, LLC.

24          Black Mesa Solar is a 40-MW alternating current  
25 solar photovoltaic facility that is scheduled to come  
26 online June 2023. As described previously in my testimony,  
27 and further detailed in Mr. Larkin's testimony, Black Mesa  
28 Solar is a PPA that was negotiated in conjunction with a

1 new Special Contract with Micron Technology. The Micron  
2 Special Contract states that Idaho Power will procure  
3 renewable resources to assist Micron in meeting a portion  
4 of its annual energy requirements with energy generated by  
5 those resources. While Black Mesa Solar will be connected  
6 to the Company's system and will not serve Micron directly,  
7 Micron will pay for 100 percent of the output through its  
8 Special Contract. As a result, the cost of the PPA is  
9 excluded from the 2023 Base Level NPSE.

10           The Company modeled both Jackpot Solar and Black  
11 Mesa Solar's generation in AURORA by applying the projects'  
12 forecast hourly shape to the monthly forecasted generation  
13 amounts. In addition, Black Mesa Solar was modeled as an  
14 annualized online resource for the entire test year, in  
15 line with the Company's typical practice for resources  
16 expected to come online during the test year.

17           Q.     How were the two new battery resources modeled  
18 for the development of the 2023 Base Level NPSE?

19           A.     The two new battery resources include a 40-MW  
20 battery at Black Mesa Solar and an 80-MW grid battery. The  
21 Black Mesa Battery is scheduled to come online September  
22 2023 and the 80-MW grid battery is scheduled to come online  
23 June 2023. Similar to Bridger Gas and Black Mesa Solar,  
24 both batteries were modeled as annualized online resources  
25 for the entire test year.

1           The 80-MW grid battery is modeled to be charged from  
2   the entire grid, while the Black Mesa Battery is modeled to  
3   only be charged from Black Mesa Solar.

4           Q.     How was demand response modeled for the  
5   development of the 2023 Base Level NPSE?

6           A.     Demand response was modeled according to the  
7   parameters of its three programs: A/C Cool Credit, Flex  
8   Peak Program, and Irrigation Peak Rewards. Based on actual  
9   2022 participation, Idaho Power assumed the programs would  
10   provide a total of 320 MW of peak capacity from June 1 -  
11   September 15.

12          Q.     Have there been any changes to the way PURPA  
13   is modeled compared to the way it was modeled in the 2013  
14   Base Level NPSE?

15          A.     Yes. In the 2013 normalized NPSE  
16   determinations, the Company segmented PURPA generation into  
17   two categories, "PURPA Wind" and all "other PURPA". PURPA  
18   Wind was modeled by applying the 2012 hourly actual  
19   historical PURPA Wind generation shape to the monthly  
20   forecasted generation amounts. All other PURPA resources  
21   were modeled on a monthly basis.

22          For the 2023 Base Level NPSE, the Company segmented  
23   PURPA into three categories, "PURPA Wind", "PURPA Solar",  
24   and all "other PURPA". PURPA Wind was modeled by applying a  
25   5-year average (2018 - 2022) hourly actual generation shape

1 to the total nameplate capacity of the combined PURPA wind  
2 projects. PURPA Solar was modeled by applying the 2022  
3 actual hourly shape to the total monthly forecasted  
4 generation amounts. All other PURPA resources were modeled  
5 on a monthly basis, as hourly fluctuations do not occur to  
6 as great an extent for those resource types. The Company  
7 views the modification to be an improvement that more  
8 accurately reflects the variable nature of solar into the  
9 hourly dispatch modeling in AURORA.

10 Q. What other AURORA inputs were modified for the  
11 development of the 2023 Base Level NPSE?

12 A. The Company included annualized forecast  
13 generation from its Oregon Community Solar Program, which  
14 is scheduled to come online November 2023. In addition, the  
15 Company included 11 MW of distribution-connected battery  
16 storage.

17 Q. Have you prepared an exhibit that presents the  
18 normalization of variable power supply expenses consistent  
19 with the changes you have described in your testimony?

20 A. Yes. Exhibit No. 30 shows the results  
21 containing the 37-year average variable power supply  
22 generation sources and expenses.

23 Q. Please summarize the sources and disposition  
24 of energy shown on Exhibit No. 30.

1           A.       Hydro generation supplies 8.3 million  
2 megawatt-hours ("MWh"), approximately 47 percent (8.3  
3 million MWh / 17.8 million MWh = 47 percent) of the  
4 generation mix. Thermal generation supplies 4.1 million MWh  
5 (Bridger Coal 1.8, Bridger Gas 0.1, Valmy 0.2, Langley  
6 Gulch 1.7, Danskin 0.2, Bennett Mountain 0.1),  
7 approximately 23 percent (4.1 million MWh / 17.8 million  
8 MWh = 23 percent) of the generation mix. Purchases of power  
9 are made up of short-term and long-term market purchases,  
10 as well as PURPA generation. Short-term market purchases  
11 supply 1.4 million MWh, approximately 8 percent of the  
12 generation mix. Long-term market purchases, or PPAs, supply  
13 0.96 million MWh, approximately 5 percent of the generation  
14 mix. PURPA purchases reflect normalized and annualized  
15 generation levels and account for 3.0 million MWh,  
16 approximately 17 percent of the generation mix. Total  
17 purchases amount to 5.3 million MWh (1.4 million MWh + 0.96  
18 million MWh + 3.0 million MWh = 5.3 million MWh) or  
19 approximately 30 percent of the generation mix. Of the  
20 17.8 million MWh generated by the system, 17.0 million MWh  
21 are utilized for system loads while 0.8 million MWh are  
22 sold as surplus sales.

23           Q.       Please summarize the expenses associated with  
24 each resource shown on Exhibit No. 30.

1           A.       Hydro generation has no assumed fuel expense.  
2   Coal expenses of \$65.5 million are comprised of Bridger at  
3   \$57.1 million and Valmy at \$8.4 million. Gas expenses of  
4   \$119.7 million are comprised of Langley Gulch at \$78.7  
5   million, Bridger Gas at \$6.1 million, Danskin at \$13.8  
6   million, and Bennett Mountain at \$6.8 million. The fixed  
7   capacity charge for gas transportation for all of the gas  
8   plants is \$14.3 million. Purchased power expenses  
9   (*including transmission losses, excluding PURPA*) amount to  
10  \$99.5 million, and surplus sales revenue (*including*  
11  *transmission losses*) is (\$29.0) million. Transmission  
12  losses will be discussed in more detail later in my  
13  testimony.

14           Q.       How have natural gas prices changed between  
15  the time of quantification of the 2013 Base Level NPSE and  
16  the 2023 Base Level NPSE quantification?

17           A.       For the 2013 Base Level NPSE, natural gas  
18  prices were assumed to be \$3.62 per million British thermal  
19  units ("MMBtu") for Henry Hub and \$3.68 per MMBtu for  
20  natural gas delivered to the Company's plants. For the 2023  
21  Base Level NPSE, they are forecasted to be \$3.36 per MMBtu  
22  for Henry Hub, \$4.28 per MMBtu for natural gas delivered to  
23  Bridger, and \$4.70 per MMBtu for natural gas delivered to  
24  Langley, Bennett Mountain, and Danskin.



1           Q.       In general, how has base level NPSE and  
2 generation changed from 2013 to 2023?

3           A.       As described earlier in my testimony, since  
4 2013 there have been several changes to Idaho Power's  
5 resource mix. These changes were incorporated into the 2023  
6 AURORA model and are reflected in the calculated 2023 Base  
7 Level NPSE.

8           Due to the decrease in coal capacity from the  
9 removal of Boardman and North Valmy Unit 1, as well as the  
10 conversion of Bridger units 1 and 2 to natural gas,  
11 expenses related to coal generation have decreased 40  
12 percent from 2013. In addition, due to the increased  
13 reliance on natural gas generation and increase in natural  
14 gas price, expenses related to natural gas generation have  
15 increased 259 percent.

16           Next, Non-PUPRA purchased power expense has  
17 increased 59 percent since 2013. This is a result of the  
18 addition of the Jackpot Solar PPA, as well as the increase  
19 in AURORA calculated market purchase volumes and market  
20 prices. PURPA expense has increased 60 percent since 2013  
21 as a result of increased PURPA generation and updated PURPA  
22 contract values.

23           Lastly, surplus sales revenue has decreased 44  
24 percent from 2013. As a result of the increase in system  
25 load, decrease in coal capacity, and increase in natural

1 gas prices, there are fewer opportunities to make economic  
2 off-system sales in the 2023 test year.

3 Q. How are transmission losses on market  
4 purchases (FERC Account 555) accounted for within the  
5 Company's calculation of 2023 Base NPSE?

6 A. Within the AURORA model, transmission losses  
7 are incorporated into the market price paid by the  
8 purchasing entity. In other words, the purchase price on  
9 all short-term market purchases is grossed up to account  
10 for transmission losses. As a result, the non-PURPA  
11 purchased power expenses of \$99.5 million included in FERC  
12 Account 555 include both purchased power and transmission  
13 losses on purchased power.

14 Q. Does the Company propose to update the base  
15 level NPSE accounts that are not calculated by AURORA, or  
16 partially calculated by AURORA, as part of this request?

17 A. Yes. The Company's proposal reflects 2023  
18 test year amounts for the below FERC Accounts.

447.050	Transmission Loss Revenue
565	Third-Party Transmission Expense
536.003	Water for Power
555	Demand Response

19  
20 Q. How did the Company determine the 2023 Base  
21 Level amount for FERC Account 447.050, Transmission Loss  
22 Revenue?

1           A.       FERC Account 447.050, Transmission Loss  
2 Revenue, was forecasted by multiplying Idaho Power's  
3 average hourly marginal price, as calculated by AURORA, by  
4 36 average MW, which is the assumed average MW generated in  
5 each hour to serve third-party transmission losses.

6           Q.       How did the Company determine the average  
7 hourly MW generated to serve third-party transmission  
8 losses?

9           A.       The 36 MW was provided by the Load Research  
10 and Forecasting Department and is further described in the  
11 workpapers filed by Mr. Larkin.

12          Q.       How did the Company determine the 2023 Base  
13 Level amount for FERC Account 565, Third-Party Transmission  
14 Expense?

15          A.       The 2023 test year amount for FERC Account  
16 565, Third-Party Transmission Expense, of \$10.3 million was  
17 calculated by multiplying the Company's historical 3-year  
18 average wheeling rate, based on total wheeling expenses and  
19 volumes reported in the FERC Form 1, by the AURORA  
20 calculated market purchase volumes. Information used in  
21 this calculation can be found in my workpapers.

22          Q.       How did the Company determine the 2023 Base  
23 Level amounts for FERC Account 536.003, Water for Power and  
24 FERC Account 555, Demand Response?

1           A.       FERC Account 536.003, Water for Power, is  
2     forecast at 0 for the 2023 test year. Idaho Power did not  
3     have water lease expense amounts in 2022 and does not  
4     anticipate any for the 2023 test year.

5           FERC Account 555, Demand Response, was forecast for  
6     the 2023 test year based on Idaho-jurisdictionalized  
7     forecast costs associated with projected participation in  
8     the three programs.

9           Q.       Have you quantified the 2023 Base Level NPSE  
10    amounts?

11          A.       Yes.   The 2023 Base Level NPSE amounts as  
12    proposed by the Company for Commission-approval are as  
13    follows:

14   **Table 5**  
15    2023 Base Level NPSE

<b>Table 5 2023 Base Level NPSE</b>	
<b>95% Accounts (with 95% recovery in PCA)</b>	
Account 501, fuel (coal)	\$65,523,000
Account 536, water for power	\$0
Account 547, fuel (gas)	\$119,653,675
Account 555, purchased power (non-PURPA)	\$99,465,021
Account 565, third-party transmission	\$10,263,139
Account 447, surplus sales	(\$29,035,180)
Net 95% Accounts	\$265,869,655
<b>100% Accounts (with 100% recovery in PCA)</b>	
Account 555, purchased power (PURPA)	\$214,448,755
Account 555, purchased power (demand response)	\$10,240,003
Total	\$490,558,413

16  
17          Q.       How do these 2023 Base Level NPSE amounts  
18    compare with the 2013 Base Level NPSE amounts?

1           A.       The 2023 Base Level NPSE total is  
2     \$490,558,413, an increase of \$184,873,544 from the 2013  
3     Base Level NPSE of \$305,684,869.

4           Q.       Is Idaho Power proposing to update Schedule  
5     55, Power Cost Adjustment, with this filing?

6           A.       Yes. As discussed in Mr. Larkin's testimony,  
7     the update in base NPSE will result in a reduction in the  
8     variance between base and forecast NPSE embedded in current  
9     PCA rates. Therefore, Idaho Power has calculated an updated  
10    PCA rate that incorporates the proposed 2023 Base Level  
11    NPSE. If approved as filed, the Company's 2023 Base Level  
12    NPSE would result in a reduction in PCA revenue collection  
13    of \$171,516,689 using the June 2023 through May 2024 PCA  
14    year. Applying this rate change to 2023 test year sales  
15    results in the \$170,912,271 detailed in Mr. Larkin's  
16    testimony - the only difference due to differing sales  
17    between the June 2023 through May 2024 time period and the  
18    January 2023 through December 2023 time period. This  
19    comprises the majority of the PCA-related transfer  
20    adjustment discussed in Mr. Larkin's testimony. The  
21    calculations made to determine the updated PCA forecast  
22    rate, as well as the decrease in PCA revenue collection as  
23    a result of the 2023 Base Level NPSE update are provided in  
24    my workpapers.

1           Q.     Have you prepared a revised Schedule 55 that  
2 includes the updated PCA rate?

3           A.     Yes. Attachment 1 to Idaho Power's  
4 Application filed concurrently herewith is a revised  
5 Schedule 55 and includes the proposed PCA rates in clean  
6 and legislative formats.

7           Q.     Does this conclude your direct testimony in  
8 this case?

9           A.     Yes, it does.

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**DECLARATION OF JESSICA G. BRADY**

I, Jessica G. Brady, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Jessica G. Brady. I am employed by Idaho Power Company as a Regulatory Analyst in the Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 27 through 30 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
JESSICA G. BRADY

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BRADY, DI  
TESTIMONY**

**EXHIBIT NO. 27**



## IDAHO JURISDICTION

<u>Tariff Description</u>	January	February	March	April	May	June	July	August	September	October	November	December	Total
9S	19,255,806	19,379,168	18,312,689	17,438,189	17,274,189	18,892,979	21,511,585	22,634,444	21,075,381	18,294,341	17,766,240	18,647,900	230,482,910
9P	2,847,710	2,797,128	2,673,968	2,730,602	2,654,158	2,888,200	3,598,743	3,759,083	3,624,338	2,989,855	2,861,018	2,785,731	36,210,534
9T	19,615	18,436	16,813	19,323	21,093	21,097	22,257	18,131	19,404	17,795	20,650	21,615	236,229
Total Rate 9	22,123,131	22,194,732	21,003,470	20,188,114	19,949,439	21,802,275	25,132,585	26,411,659	24,719,123	21,301,992	20,647,907	21,455,245	266,929,672
19S	32,382	31,924	29,108	31,633	30,958	30,257	33,936	36,021	36,347	30,601	32,573	30,812	386,553
19P	9,788,962	10,087,930	9,021,917	9,628,156	9,321,832	9,654,913	11,877,722	12,295,915	12,512,697	9,808,203	10,023,196	9,713,467	123,734,911
19T	136,919	138,278	104,370	112,798	131,207	136,105	151,278	159,264	172,613	130,087	123,520	133,663	1,630,102
Total Rate 19	9,958,263	10,258,132	9,155,395	9,772,588	9,483,997	9,821,275	12,062,937	12,491,200	12,721,657	9,968,892	10,179,289	9,877,942	125,751,566
24S	239,676	234,703	264,214	1,982,667	10,256,227	23,998,633	33,935,281	31,863,690	26,084,365	9,504,531	1,654,254	309,507	140,327,749
24T	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 24	239,676	234,703	264,214	1,982,667	10,256,227	23,998,633	33,935,281	31,863,690	26,084,365	9,504,531	1,654,254	309,507	140,327,749

## STATE OF OREGON

<u>Tariff Description</u>	January	February	March	April	May	June	July	August	September	October	November	December	Total
9S	868,590	858,798	783,657	686,941	625,549	617,050	700,902	753,584	746,930	744,550	869,457	837,561	9,093,570
9P	79,203	79,288	75,140	74,720	67,796	72,545	90,624	98,107	89,781	73,042	71,190	73,091	944,527
9T	20,984	19,888	17,705	18,845	15,375	13,880	14,046	15,419	13,326	12,368	15,069	17,011	193,916
Total Rate 9	968,778	957,974	876,503	780,506	708,720	703,475	805,573	867,110	850,037	829,960	955,715	927,663	10,232,013
19S	0	0	0	0	0	0	0	0	0	0	0	0	0
19P	805,762	814,550	761,864	886,325	816,688	821,349	1,021,029	964,055	1,034,910	762,027	805,100	767,224	10,260,882
19T	649,323	299,320	476,115	661,593	503,234	613,486	647,969	622,494	510,390	567,447	618,667	627,932	6,797,970
Total Rate 19	1,455,085	1,113,870	1,237,979	1,547,918	1,319,922	1,434,835	1,668,998	1,586,550	1,545,300	1,329,474	1,423,767	1,395,156	17,058,851
													0
24S	16,658	14,634	14,817	83,503	406,033	1,084,281	1,660,443	1,722,943	1,229,137	250,619	35,595	17,785	6,536,448
24T	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 24	16,658	14,634	14,817	83,503	406,033	1,084,281	1,660,443	1,722,943	1,229,137	250,619	35,595	17,785	6,536,448

IDAHO POWER COMPANY  
SUMMARY OF REVENUE FORECAST  
IDAHO JURISDICTION  
BY MONTH BY RATE  
12 MONTHS ENDING DECEMBER 31, 2023

Tariff Description	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 - Residential Serv.	53,158,012	48,971,387	44,396,809	35,487,498	32,106,869	33,384,745	43,584,432	52,153,852	43,060,429	31,951,125	35,429,329	45,908,953	499,593,439
3 - Residential Master Meter	42,645	39,137	35,610	28,652	25,858	26,111	31,946	37,523	32,312	25,870	28,570	36,647	390,879
5 - Residential TOD	160,423	146,570	133,417	107,754	99,275	101,088	124,746	148,054	129,044	100,419	105,983	138,050	1,494,824
6 - Residential On-site Generation	1,440,581	1,144,090	872,781	661,961	587,409	620,389	966,836	1,082,351	856,254	702,623	1,071,531	1,560,564	11,567,368
7 - Small General Serv.	1,593,596	1,540,368	1,370,797	1,214,025	1,120,789	1,193,150	1,434,705	1,539,435	1,371,271	1,172,561	1,175,078	1,376,848	16,102,622
8 - Small General Serv. On-Site Generation	4,798	4,389	3,629	2,560	2,177	1,874	2,967	4,068	4,248	2,762	4,320	5,921	43,713
9 - Large General Serv.	22,123,131	22,194,732	21,003,470	20,188,114	19,949,439	21,802,275	25,132,585	26,411,659	24,719,123	21,301,992	20,647,907	21,455,245	266,929,672
15 - Dusk/Dawn Lighting	105,010	105,442	105,482	105,457	105,447	105,364	105,178	104,885	104,876	104,726	104,945	105,041	1,261,853
19 - Uniform Rate Cont.	9,958,263	10,258,132	9,155,395	9,772,588	9,483,997	9,821,275	12,062,937	12,491,200	12,721,657	9,968,892	10,179,289	9,877,942	125,751,566
24 - Irrigation & Pump.	239,676	234,703	264,214	1,982,667	10,256,227	23,998,633	33,935,281	31,863,690	26,084,365	9,504,531	1,654,254	309,507	140,327,749
40 - Unmetered Gen. Serv.	91,355	92,856	93,320	93,769	94,791	95,315	95,739	96,660	97,237	97,569	97,770	97,907	1,144,288
41 - Municipal St. Light.	309,637	294,498	268,883	311,728	286,073	282,636	282,155	281,011	283,919	285,135	287,859	289,786	3,463,322
42 - Traffic Control Light.	14,399	14,482	12,595	14,482	13,441	13,098	13,722	13,617	14,013	13,719	14,098	13,942	165,609
<b>Total Idaho Rates</b>	<b>89,241,526</b>	<b>85,040,785</b>	<b>77,716,403</b>	<b>69,971,254</b>	<b>74,131,791</b>	<b>91,445,953</b>	<b>117,773,229</b>	<b>126,228,004</b>	<b>109,478,748</b>	<b>75,231,922</b>	<b>70,800,934</b>	<b>81,176,352</b>	<b>1,068,236,903</b>
<b>Special Contracts</b>													
26 - Micron (IPC Energy)	2,377,310	2,190,961	2,284,587	2,233,527	2,453,393	2,547,535	2,638,119	2,673,395	2,553,247	2,421,107	2,434,504	2,546,554	29,354,238
26 - Micron (Embedded Fixed)	9,124	13,682	21,703	26,955	32,083	33,357	34,803	31,865	26,099	19,660	11,024	7,759	268,115
<b>26 - Micron Total</b>	<b>2,386,434</b>	<b>2,204,644</b>	<b>2,306,291</b>	<b>2,260,482</b>	<b>2,485,476</b>	<b>2,580,892</b>	<b>2,672,922</b>	<b>2,705,260</b>	<b>2,579,346</b>	<b>2,440,767</b>	<b>2,445,528</b>	<b>2,554,312</b>	<b>29,622,353</b>
29 - J R Simplot	650,728	686,573	683,513	519,784	629,771	614,308	652,906	644,856	640,294	687,922	683,806	664,908	7,759,368
30 - DOE	1,137,466	1,077,733	1,004,219	862,357	752,934	707,700	643,799	633,233	668,101	943,506	986,909	1,129,751	10,547,708
<b>Total Specials</b>	<b>4,174,628</b>	<b>3,968,950</b>	<b>3,994,023</b>	<b>3,642,623</b>	<b>3,868,180</b>	<b>3,902,900</b>	<b>3,969,627</b>	<b>3,983,349</b>	<b>3,887,741</b>	<b>4,072,195</b>	<b>4,116,242</b>	<b>4,348,971</b>	<b>47,929,429</b>
<b>Total Idaho Firm Sales</b>	<b>93,416,155</b>	<b>89,009,736</b>	<b>81,710,426</b>	<b>73,613,877</b>	<b>77,999,972</b>	<b>95,348,853</b>	<b>121,742,856</b>	<b>130,211,353</b>	<b>113,366,489</b>	<b>79,304,117</b>	<b>74,917,176</b>	<b>85,525,323</b>	<b>1,116,166,332</b>

IDAHO POWER COMPANY  
SUMMARY OF REVENUE FORECAST  
**STATE OF OREGON**  
BY MONTH BY RATE  
12 MONTHS ENDING DECEMBER 31, 2023

<u>Tariff Description</u>	January	February	March	April	May	June	July	August	September	October	November	December	Total
01 - Residential Serv.	2,250,893	2,049,815	1,744,816	1,377,855	1,117,003	1,023,178	1,254,244	1,358,041	1,240,290	988,950	1,301,481	1,846,107	17,552,674
05 - Residential TOD	1,102	1,033	746	579	480	511	767	772	609	465	657	963	8,687
07 - Small General Serv.	212,363	207,026	184,413	155,145	139,723	143,982	181,267	180,318	157,357	128,929	148,102	181,179	2,019,803
09 - Large General Serv.	968,778	957,974	876,503	780,506	708,720	703,475	805,573	867,110	850,037	829,960	955,715	927,663	10,232,013
15 - Dusk/Dawn Lighting	9,000	8,934	8,944	8,970	8,949	8,972	8,927	8,961	8,933	8,944	8,958	8,960	107,451
19 - Uniform Rate Cont.	1,455,085	1,113,870	1,237,979	1,547,918	1,319,922	1,434,835	1,668,998	1,586,550	1,545,300	1,329,474	1,423,767	1,395,156	17,058,851
24 - Irrigation Service	16,658	14,634	14,817	83,503	406,033	1,084,281	1,660,443	1,722,943	1,229,137	250,619	35,595	17,785	6,536,448
40 - Unmetered Gen. Serv.	28	28	28	28	28	28	28	28	28	28	28	28	333
41 - Municipal St. Light.	12,585	12,530	12,489	12,374	12,321	12,270	12,200	12,235	12,334	12,307	12,371	12,433	148,451
42 - Traffic Control Light.	210	205	190	171	168	163	174	165	160	158	161	204	2,130
<b>Total Oregon Firm Sales</b>	<b>4,926,702</b>	<b>4,366,048</b>	<b>4,080,924</b>	<b>3,967,049</b>	<b>3,713,346</b>	<b>4,411,696</b>	<b>5,592,620</b>	<b>5,737,123</b>	<b>5,044,186</b>	<b>3,549,835</b>	<b>3,886,835</b>	<b>4,390,477</b>	<b>53,666,841</b>

IDAHO POWER COMPANY  
SUMMARY OF REVENUE FORECAST  
**TOTAL COMPANY**  
12 MONTHS ENDING DECEMBER 31, 2023

<u>Tariff Description</u>	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 - Residential Serv.	55,408,906	51,021,201	46,141,625	36,865,353	33,223,872	34,407,923	44,838,676	53,511,892	44,300,719	32,940,075	36,730,810	47,755,060	517,146,113
3 - Residential Master Meter	42,645	39,137	35,610	28,652	25,858	26,111	31,946	37,523	32,312	25,870	28,570	36,647	390,879
5 - Residential TOD	161,525	147,603	134,163	108,332	99,755	101,599	125,514	148,827	129,654	100,884	106,641	139,013	1,503,511
6 - Residential On-site Generation	1,440,581	1,144,090	872,781	661,961	587,409	620,389	966,836	1,082,351	856,254	702,623	1,071,531	1,560,564	11,567,368
7 - Small General Serv.	1,805,959	1,747,394	1,555,210	1,369,170	1,260,512	1,337,132	1,615,972	1,719,753	1,528,628	1,301,489	1,323,179	1,558,027	18,122,425
8 - Small General Serv. On-site Generation	4,798	4,389	3,629	2,560	2,177	1,874	2,967	4,068	4,248	2,762	4,320	5,921	43,713
9 - Large General Serv.	23,091,909	23,152,706	21,879,973	20,968,620	20,658,159	22,505,750	25,938,157	27,278,769	25,569,160	22,131,952	21,603,623	22,382,908	277,161,685
15 - Dusk/Dawn Lighting	114,010	114,376	114,426	114,427	114,396	114,336	114,104	113,846	113,809	113,670	113,903	114,001	1,369,304
19 - Uniform Rate Cont.	11,413,348	11,372,002	10,393,374	11,320,506	10,803,919	11,256,110	13,731,935	14,077,749	14,266,957	11,298,366	11,603,056	11,273,097	142,810,418
24 - Irrigation & Pump.	256,334	249,337	279,031	2,066,170	10,662,261	25,082,914	35,595,724	33,586,634	27,313,502	9,755,150	1,689,849	327,292	146,864,197
40 - Unmetered Gen. Serv.	91,382	92,884	93,347	93,797	94,819	95,343	95,767	96,687	97,265	97,597	97,798	97,935	1,144,620
41 - Municipal St. Light.	322,223	307,028	281,372	324,102	298,394	294,907	294,355	293,246	296,254	297,443	300,230	302,219	3,611,772
42 - Traffic Control Light.	14,609	14,687	12,786	14,653	13,608	13,261	13,897	13,782	14,173	13,878	14,259	14,145	167,739
<b>Total All Rates</b>	<b>94,168,228</b>	<b>89,406,833</b>	<b>81,797,327</b>	<b>73,938,303</b>	<b>77,845,138</b>	<b>95,857,649</b>	<b>123,365,850</b>	<b>131,965,128</b>	<b>114,522,933</b>	<b>78,781,757</b>	<b>74,687,769</b>	<b>85,566,828</b>	<b>1,121,903,744</b>
<b>Special Contracts</b>													
26 - Micron	2,386,434	2,204,644	2,306,291	2,260,482	2,485,476	2,580,892	2,672,922	2,705,260	2,579,346	2,440,767	2,445,528	2,554,312	29,622,353
29 - J R Simplot	650,728	686,573	683,513	519,784	629,771	614,308	652,906	644,856	640,294	687,922	683,806	664,908	7,759,368
30 - DOE	1,137,466	1,077,733	1,004,219	862,357	752,934	707,700	643,799	633,233	668,101	943,506	986,909	1,129,751	10,547,708
<b>Total Specials</b>	<b>4,174,628</b>	<b>3,968,950</b>	<b>3,994,023</b>	<b>3,642,623</b>	<b>3,868,180</b>	<b>3,902,900</b>	<b>3,969,627</b>	<b>3,983,349</b>	<b>3,887,741</b>	<b>4,072,195</b>	<b>4,116,242</b>	<b>4,348,971</b>	<b>47,929,429</b>
<b>Total Firm Retail Sales</b>	<b>98,342,856</b>	<b>93,375,784</b>	<b>85,791,350</b>	<b>77,580,926</b>	<b>81,713,318</b>	<b>99,760,548</b>	<b>127,335,476</b>	<b>135,948,477</b>	<b>118,410,674</b>	<b>82,853,952</b>	<b>78,804,011</b>	<b>89,915,800</b>	<b>1,169,833,173</b>

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BRADY, DI**  
**TESTIMONY**

**EXHIBIT NO. 28**

## 2023 Test Year Revenue Forecast

Rate	State		Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total	Rates
			As of 6/1/2022													
IDAHO																
Rate 01	I	Bills	490,124	489,968	489,175	488,869	488,833	490,266	491,169	492,205	492,961	493,490	494,545	496,102	5,897,706	5.000000
		Min Bills	4317.0	5209.0	5532.0	6124.0	6327.0	7040.0	6746.0	6992.0	6196.0	6095.0	5680.0	4607.0	70,865	2.000000
		S 0-800	3,450	(2,569)	301	1,410	(3,970)	108,107,252	292,086,075	291,815,097	167,588,620	1,522,590	15,245	14,115	861,147,615	0.086518
		S 801-2000	(878)	(3,745)	(333)	0	5	27,007,499	124,606,380	186,550,147	95,258,304	488,793	2,744	1,656	433,910,571	0.104033
		S Over 2000	0	(137)	0	0	0	3,330,895	19,864,970	40,624,505	19,517,439	73,921	99	(53)	83,411,640	0.123585
		N 0-800	308,568,702	285,333,690	282,345,964	276,644,799	261,646,571	172,201,397	3,757,357	17,598	106,902,802	278,294,625	275,969,649	273,715,785	2,525,398,940	0.080390
		N 801-2000	181,095,731	163,194,665	144,859,882	96,634,360	80,169,435	43,571,175	1,197,932	19,505	49,563,609	68,157,038	95,452,214	153,557,678	1,077,473,224	0.088627
		N Over 2000	100,278,583	92,816,662	65,240,244	22,687,748	15,398,753	6,519,763	183,180	5,005	7,897,197	8,834,167	23,420,185	79,512,518	422,794,007	0.098154
		Total kWh	589,945,587	541,338,567	492,446,058	395,968,317	357,210,794	360,737,981	441,695,895	519,031,858	446,727,970	357,371,134	394,860,136	506,801,700	5,404,135,997	
		Rev	53,158,012	48,971,387	44,396,809	35,487,498	32,106,869	33,384,745	43,584,432	52,153,852	43,060,429	31,951,125	35,429,329	45,908,953	499,593,439	
Rate 03	I	Bills	19	19	19	19	19	19	19	19	19	19	19	19	225	5.000000
		Total kWh	488,670	448,386	407,887	327,969	295,883	298,791	365,801	429,850	370,004	296,021	327,035	419,789	4,476,086	0.087075
		Rev	42,645	39,137	35,610	28,652	25,858	26,111	31,946	37,523	32,312	25,870	28,570	36,647	390,879	
Rate 05	I	Bills	991	986	986	986	990	988	986	980	986	985	979	993	11,836	5.000000
		Min Bills	2.0	3.0	2.0	2.0	4.0	3.0	2.0	3.0	3.0	1.0	2.0	2.0	29	2.000000
		S Peak	0	0	0	0	0	104,680	384,616	494,903	325,893	7,746	0	0	1,317,837	0.128910
		S Off Peak	0	0	0	0	0	265,746	925,589	1,073,772	658,873	8,078	0	0	2,932,059	0.073899
		N Peak	732,685	712,772	640,067	519,261	474,648	309,961	6,408	0	156,111	488,436	517,770	648,820	5,206,937	0.095159
		N Off Peak	1,160,259	998,787	914,432	722,694	665,063	453,521	16,505	0	251,020	641,674	701,153	965,411	7,490,517	0.073899
		Total kWh	1,892,943	1,711,559	1,554,498	1,241,955	1,139,711	1,133,908	1,333,117	1,568,675	1,391,896	1,145,934	1,218,922	1,614,231	16,947,350	
		Rev	160,423	146,570	133,417	107,754	99,275	101,088	124,746	148,054	129,044	100,419	105,983	138,050	1,494,824	
		Rate 06	I	Bills	12,300	12,461	12,646	12,853	12,995	13,158	13,422	13,524	13,716	13,914	14,076	14,388
Min Bills	79.0			104.0	110.0	100.0	116.0	126.0	110.0	141.0	140.0	160.0	164.0	132.0	1482.0	2.000000
S 0-800	0			0	0	0	0	1,633,117	6,215,916	6,648,747	3,699,791	37,932	(112)	0	18,235,390	0.086518
S 801-2000	0			0	0	0	0	460,510	2,206,053	2,935,090	1,430,062	10,015	(597)	0	7,041,132	0.104033
S Over 2000	0			0	0	0	0	236,234	993,817	1,083,194	523,630	4,007	0	0	2,840,881	0.123585
N 0-800	7,530,201			6,019,882	5,079,746	4,590,719	4,090,000	2,673,835	68,739	0	2,153,947	5,703,638	7,864,629	8,757,924	54,533,261	0.080390
N 801-2000	4,526,918			3,571,126	2,629,146	1,578,140	1,387,124	856,949	24,536	0	664,393	1,337,460	2,731,373	4,828,226	24,135,393	0.088627
N Over 2000	3,793,654			2,864,276	1,711,168	902,479	717,938	459,007	17,243	0	221,789	518,205	1,289,650	3,631,029	16,126,439	0.098154
Total kWh	15,850,773			12,455,285	9,420,060	7,071,338	6,195,062	6,319,652	9,526,304	10,667,031	8,693,613	7,611,257	11,884,942	17,217,179	122,912,496	
Rev	1,440,581			1,144,090	872,781	661,961	587,409	620,389	966,836	1,082,351	856,254	702,623	1,071,531	1,560,564	11,567,368	
Rate 07	I	Bills	30,369	30,320	30,303	30,329	30,210	30,338	30,348	30,406	30,369	30,571	30,572	30,674	364,810	5.000000
		Min Bills	162.0	202.0	195.0	169.0	208.0	162.0	197.0	156.0	158.0	164.0	189.0	215.0	2177.0	2.000000
		S 0-300	833	(107)	329	0	(130)	2,127,752	5,445,180	4,994,740	2,930,085	28,578	(649)	(126)	15,526,486	0.098633
		S Over	2,828	(446)	0	0	(1,496)	1,837,668	6,199,162	7,613,614	4,027,601	(24,690)	(14,013)	(677)	19,639,552	0.117472
		N 0-300	5,971,026	5,661,411	5,407,777	5,565,716	5,182,326	3,348,322	79,473	189	1,974,388	5,217,804	5,119,586	5,037,758	48,565,776	0.098633
		N Over	8,233,703	8,020,646	6,623,828	4,957,968	4,429,219	2,755,344	91,119	394	2,534,016	4,878,052	5,011,199	7,017,857	54,553,347	0.103486
		kWh Total	14,208,391	13,681,505	12,031,934	10,523,684	9,609,919	10,069,086	11,814,934	12,608,938	11,466,089	10,099,744	10,116,124	12,054,812	138,285,160	
		Rev	1,593,596	1,540,368	1,370,797	1,214,025	1,120,789	1,193,150	1,434,705	1,539,435	1,371,271	1,172,561	1,175,078	1,376,848	16,102,622	
		Rate 08	I	Bills	82	82	84	85	86	88	89	90	90	90	91	93
Min Bills	0.0			0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	1.0	1.0	6.0	2.000000
S 0-300	0			0	0	0	0	3,141	10,048	8,107	5,000	51	0	0	26,347	0.098633
S Over	0			0	0	0	0	1,099	12,643	23,973	18,119	273	0	0	56,107	0.117472
N 0-300	13,968			14,066	13,982	14,138	11,432	5,653	198	0	3,414	8,410	17,319	14,716	117,296	0.098633
N Over	29,086			25,024	17,681	7,146	5,997	4,232	251	0	8,130	13,919	20,810	38,680	170,958	0.103486
kWh Total	43,055	39,090	31,663	21,284	17,429	14,126	23,140	32,081	34,664	22,653	38,129	53,395	370,708			
Rev	4,798	4,389	3,629	2,560	2,177	1,874	2,967	4,068	4,248	2,762	4,320	5,921	43,713			
Rate 09S	I	Bills	37473.4	37518.3	37564.4	37635.7	37677.7	37704.6	37761.8	37824	37924.9	37975.7	38108.3	37993.2	453162	16.000000
		Min Bills	124.0	155.0	180.0	174.0	138.0	126.0	164.0	132.0	152.0	149.0	158.0	132.0	1784.0	5.000000
		BLC 0-20	533,392	544,937	538,010	544,378	549,234	557,323	544,031	540,507	532,412	543,704	531,004	535,180	6,494,112	0.000000
		BLC Over 20	701,603	716,918	708,596	715,650	718,451	726,582	703,995	702,706	699,081	706,857	708,711	707,404	8,516,555	1.030000
		BLC Total	1,234,995	1,261,854	1,246,605	1,260,028	1,267,685	1,273,905	1,248,027	1,243,213	1,231,494	1,250,562	1,239,715	1,242,584	15,010,667	
		kW 0-20	424,991	435,973	431,269	436,271	454,035	472,744	459,882	457,592	448,945	457,594	438,929	430,970	5,349,195	0.000000
		S kW Over 20	(0)	0	0	0	0	202,621	500,914	541,931	313,328	3,161	148	147	1,562,250	6.060000
		N kW Over 20	451,304	457,962	455,474	445,971	449,595	285,476	8,568	(0)	231,668	515,678	477,424	451,757	4,230,876	4.450000
		kWh Total	876,295	893,936	886,742	882,243	903,630	960,841	969,363	999,523	993,941	976,432	916,501	882,874	11,142,321	

2023 Retail Revenue Forecast Derivation

S 0-2000	(1,606)	2,071	1,623	2,078	8,323	22,466,910	55,811,628	55,328,169	32,227,680	310,958	20,553	7,311	166,185,698	0.105250
S Over	0	0	0	0	3,727	84,106,752	225,752,868	250,290,708	144,179,468	1,338,931	78,638	5,531	705,756,622	0.048716
N 0-2000	59,089,099	59,939,263	57,030,726	57,220,840	56,660,607	34,394,189	813,745	3,440	22,158,012	55,092,345	55,263,382	57,140,717	514,806,364	0.094742
N Over	233,654,792	233,567,727	216,098,068	196,669,820	193,699,815	120,415,479	3,591,975	89,013	97,361,138	211,025,546	204,963,241	223,659,319	1,934,795,934	0.044196
<b>kWh Total</b>	<b>292,742,285</b>	<b>293,509,062</b>	<b>273,130,416</b>	<b>253,892,738</b>	<b>250,372,471</b>	<b>261,383,329</b>	<b>285,970,217</b>	<b>305,711,331</b>	<b>295,926,298</b>	<b>267,767,780</b>	<b>260,325,814</b>	<b>280,812,878</b>	<b>3,321,544,618</b>	
<b>Rev</b>	<b>19,255,806</b>	<b>19,379,168</b>	<b>18,312,689</b>	<b>17,438,189</b>	<b>17,274,189</b>	<b>18,892,979</b>	<b>21,511,585</b>	<b>22,634,444</b>	<b>21,075,381</b>	<b>18,294,341</b>	<b>17,766,240</b>	<b>18,647,900</b>	<b>230,482,910</b>	

<b>Rate 09P</b>	I	<b>Bills</b>	281.4	281.1	279	276.8	280.4	275.7	285.9	279.7	281	280	282.1	278.8	3361.9	285.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	161,070	157,417	160,006	157,428	159,471	167,508	172,468	165,516	154,215	159,557	159,756	160,908	1,935,320	1.300000
		<b>S kW</b>	0	0	0	0	0	0	140,515	142,116	139,062	314	0	(270)	421,737	5.160000
		<b>N kW</b>	122,555	118,748	121,749	118,891	120,018	132,429	2,223	0	0	140,861	128,829	123,437	1,129,739	4.520000
		<b>Total kW</b>	122,555	118,748	121,749	118,891	120,018	132,429	142,738	142,116	139,062	141,174	128,829	123,167	1,551,476	
		<b>On-peak kW</b>	0	0	0	0	0	0	131,493	133,093	130,008	308	0	(340)	394,562	0.970000
		<b>S On-peak kWh</b>	0	0	0	0	0	0	14,883,769	14,575,502	15,978,455	44,404	0	(31,571)	45,450,558	0.049454
		<b>S Mid-peak kWh</b>	0	0	0	0	0	0	22,599,333	25,103,152	23,226,698	65,998	0	(50,568)	70,944,613	0.045633
		<b>S Off-peak kWh</b>	0	0	0	0	0	0	14,746,043	17,050,278	15,069,765	32,804	0	(34,085)	46,864,805	0.043133
		<b>N Mid-peak kWh</b>	30,153,518	28,676,698	28,108,718	29,921,611	28,487,696	29,630,158	465,246	0	0	31,735,636	30,680,676	29,080,242	266,940,199	0.040920
		<b>N Off-peak kWh</b>	19,478,333	20,284,766	17,345,146	17,328,681	16,657,404	19,744,621	201,903	0	0	19,187,253	18,590,374	19,123,381	167,941,864	0.039546
		<b>Total kWh</b>	<b>49,631,851</b>	<b>48,961,464</b>	<b>45,453,864</b>	<b>47,250,292</b>	<b>45,145,100</b>	<b>49,374,779</b>	<b>52,896,294</b>	<b>56,728,933</b>	<b>54,274,918</b>	<b>51,066,095</b>	<b>49,271,050</b>	<b>48,087,399</b>	<b>598,142,039</b>	
		<b>Rev</b>	<b>2,847,710</b>	<b>2,797,128</b>	<b>2,673,968</b>	<b>2,730,602</b>	<b>2,654,158</b>	<b>2,888,200</b>	<b>3,598,743</b>	<b>3,759,083</b>	<b>3,624,338</b>	<b>2,989,855</b>	<b>2,861,018</b>	<b>2,785,731</b>	<b>36,210,534</b>	

<b>Rate 09T</b>	I	<b>Bills</b>	4	4	4	4	4	4	4	4	4	4	4	4	48	285.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	1,374	1,288	1,220	1,432	1,490	1,439	1,386	1,339	1,486	1,580	1,501	1,473	17,008	0.690000
		<b>S kW</b>	0	0	0	0	0	0	1,176	990	1,044	0	0	0	3,210	4.840000
		<b>N kW</b>	1,090	994	946	1,208	1,366	1,377	0	0	0	1,189	1,235	1,269	10,676	4.360000
		<b>Total kW</b>	1,090	994	946	1,208	1,366	1,377	1,176	990	1,044	1,189	1,235	1,269	13,886	
		<b>On-peak kW</b>	0	0	0	0	0	0	1,027	832	891	0	0	0	2,749	0.970000
		<b>S On-peak kWh</b>	0	0	0	0	0	0	75,676	54,511	63,328	0	0	0	193,515	0.048664
		<b>S Mid-peak kWh</b>	0	0	0	0	0	0	131,543	106,090	112,994	0	0	0	350,627	0.045000
		<b>S Off-peak kWh</b>	0	0	0	0	0	0	90,851	71,465	74,079	0	0	0	236,395	0.042585
		<b>N Mid-peak kWh</b>	198,448	172,384	157,731	180,772	198,713	187,011	0	0	0	164,046	198,809	203,859	1,661,772	0.040408
		<b>N Off-peak kWh</b>	121,409	130,438	110,656	118,127	126,154	137,935	0	0	0	95,780	129,116	145,218	1,114,834	0.039155
		<b>Total kWh</b>	<b>319,857</b>	<b>302,822</b>	<b>268,387</b>	<b>298,899</b>	<b>324,867</b>	<b>324,946</b>	<b>298,070</b>	<b>232,066</b>	<b>250,401</b>	<b>259,826</b>	<b>327,925</b>	<b>349,077</b>	<b>3,557,143</b>	
		<b>Rev</b>	<b>19,615</b>	<b>18,436</b>	<b>16,813</b>	<b>19,323</b>	<b>21,093</b>	<b>21,097</b>	<b>22,257</b>	<b>18,131</b>	<b>19,404</b>	<b>17,795</b>	<b>20,650</b>	<b>21,615</b>	<b>236,229</b>	

<b>Rate 19S</b>	I	<b>Bills</b>	1	1	1	1	1	1	1	1	1	1	1	1	12	39.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	5.000000
		<b>BLC</b>	1,209	1,203	1,176	1,170	1,177	1,213	1,171	1,184	1,188	1,162	1,164	1,150	14,167	0.930000
		<b>S kW</b>	0	0	0	0	0	0	1,067	1,086	1,080	0	0	0	3,233	5.990000
		<b>N kW</b>	1,142	1,127	1,104	1,135	1,152	1,134	0	0	0	1,058	1,134	1,123	10,109	4.300000
		<b>Total kW</b>	1,142	1,127	1,104	1,135	1,152	1,134	1,067	1,086	1,080	1,058	1,134	1,123	13,342	
		<b>On-peak kW</b>	0	0	0	0	0	0	830	895	866	0	0	0	2,591	1.030000
		<b>S On-peak kWh</b>	0	0	0	0	0	0	26,440	123,837	128,376	145,152	0	0	423,806	0.064456
		<b>S Mid-peak kWh</b>	0	0	0	0	0	0	34,980	164,151	181,679	182,469	0	0	563,279	0.051034
		<b>S Off-peak kWh</b>	0	0	0	0	0	0	40,473	203,224	218,708	202,568	0	0	664,973	0.045292
		<b>N Mid-peak kWh</b>	330,465	341,885	314,201	345,614	334,038	237,242	0	0	0	323,206	347,674	319,781	2,894,106	0.047466
		<b>N Off-peak kWh</b>	251,857	229,856	197,116	218,695	213,733	180,910	0	0	0	227,468	238,861	229,968	1,988,464	0.042171
		<b>Total kWh</b>	<b>582,322</b>	<b>571,741</b>	<b>511,317</b>	<b>564,309</b>	<b>547,771</b>	<b>520,046</b>	<b>491,212</b>	<b>528,763</b>	<b>530,190</b>	<b>550,674</b>	<b>586,535</b>	<b>549,749</b>	<b>6,534,628</b>	
		<b>Rev</b>	<b>32,382</b>	<b>31,924</b>	<b>29,108</b>	<b>31,633</b>	<b>30,958</b>	<b>30,257</b>	<b>33,936</b>	<b>36,021</b>	<b>36,347</b>	<b>30,601</b>	<b>32,573</b>	<b>30,812</b>	<b>386,553</b>	

<b>Rate 19P</b>	I	<b>Bills</b>	113	113	113	113	113	113	113	113	113	113	113	113	1356	299.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	431,617	440,148	420,070	427,664	439,780	445,858	437,209	444,833	443,608	434,900	436,890	438,634	5,241,211	1.280000
		<b>S kW</b>	0	0	0	0	0	0	391,774	402,402	406,562	0	0	(575)	1,200,164	6.120000
		<b>N kW</b>	378,684	385,302	367,585	369,769	374,451	380,809	0	0	0	400,556	389,446	387,351	3,433,952	4.540000
		<b>Total kW</b>	378,684	385,302	367,585	369,769	374,451	380,809	391,774	402,402	406,562	400,556	389,446	386,777	4,634,116	
		<b>On-peak kW</b>	0	0	0	0	0	0	376,296	386,737	390,330	0	0	(192)	1,153,172	0.970000
		<b>S On-peak kWh</b>	0	0	0	0	0	0	51,578,510	48,552,770	55,642,610	0	0	(31,615)	155,742,275	0.053049
		<b>S Mid-peak kWh</b>	0	0	0	0	0	0	82,749,256	88,978,533	87,097,038	0	0	(47,302)	258,777,524	0.042185
		<b>S Off-peak kWh</b>	0	0	0	0	0	0	60,965,432	67,102,459	64,250,840	0	0	(30,663)	192,288,068	0.037639
		<b>N Mid-peak kWh</b>	114,838,401	114,566,530	105,310,222	116,525,935	110,706,610	109,016,493	0	0	0	114,248,901	117,487,542	111,921,373	1,014,622,007	0.039765
		<b>N Off-peak kWh</b>	82,051,537	89,613,115	72,966,109	76,921,322	73,779,822	84,008,755	0	0	0	80,340,733	84,112,909	82,071,151	725,865,453	0.035550
		<b>Total kWh</b>	<b>196,889,938</b>	<b>204,179,645</b>	<b>178,276,331</b>	<b>193,447,257</b>	<b>184,486,432</b>	<b>193,025,248</b>	<b>195,293,198</b>	<b>204,633,762</b>	<b>206,990,488</b>	<b>194,589,634</b>	<b>201,600,451</b>	<b>193,882,943</b>	<b>2,347,295,327</b>	
		<b>Rev</b>	<b>9,788,962</b>	<b>10,087,930</b>	<b>9,021,917</b>	<b>9,628,156</b>	<b>9,321,832</b>	<b>9,654,913</b>	<b>11,877,722</b>	<b>12,295,915</b>	<b>12,512,697</b>	<b>9,808,203</b>	<b>10,023,196</b>	<b>9,713,467</b>	<b>123,734,911</b>	

<b>Rate 19T</b>	I	<b>Bills</b>	2	2	2	2	2	2	2	2	2	2	2	2	24	299.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000



2023 Retail Revenue Forecast Derivation

		BLC	5,069	5,130	4,339	4,350	5,393	5,239	4,887	5,131	5,541	5,005	4,679	5,251	60,014	0.710000		
		S kW	0	0	0	0	0	0	4,757	5,020	5,412	0	0	0	15,188	5.930000		
		N kW	4,997	5,021	4,246	4,295	5,247	5,088	0	0	0	4,876	4,551	5,134	43,455	4.410000		
		Total kW	4,997	5,021	4,246	4,295	5,247	5,088	4,757	5,020	5,412	4,876	4,551	5,134	58,643			
		On-peak kW	0	0	0	0	0	0	4,529	4,722	5,186	0	0	0	14,437	0.970000		
		S On-peak kWh	0	0	0	0	0	0	641,736	606,088	753,092	0	0	0	2,000,915	0.052447		
		S Mid-peak kWh	0	0	0	0	0	0	1,150,166	1,244,475	1,309,729	0	0	0	3,704,369	0.041889		
		S Off-peak kWh	0	0	0	0	0	0	876,461	983,033	978,764	0	0	0	2,838,258	0.037394		
		N Mid-peak kWh	1,663,670	1,628,866	1,260,363	1,406,203	1,584,213	1,588,199	0	0	0	1,567,059	1,495,850	1,581,008	13,775,429	0.039577		
		N Off-peak kWh	1,267,336	1,340,499	906,829	975,484	1,157,090	1,313,963	0	0	0	1,198,742	1,139,770	1,246,993	10,546,708	0.035383		
		Total kWh	2,931,006	2,969,365	2,167,192	2,381,687	2,741,303	2,902,162	2,668,363	2,833,595	3,041,585	2,765,801	2,635,620	2,828,001	32,865,680			
		Rev	136,919	138,278	104,370	112,798	131,207	136,105	151,278	159,264	172,613	130,087	123,520	133,663	1,630,102			
Rate 24	I	In Bills	0	0	0	0	0	19327.8	19243	19478.2	19621.3	0	0	0	77,670	22.000000		
	I	Out-Bills	18525	18838.8	18916.6	19284.1	19398	0	0	0	0	19478.4	19081.8	18953.8	152,477	3.500000		
		Min Bills	39.9	23.9	62.5	71.2	48.7	22.3	-0.3	0.0	6.9	34.6	44.7	24.3	379	1.500000		
		In-kW	Out of Season - No Impact					1,007,972	1,080,974	1,018,561	957,920	Out of Season - No Impact					4,065,427	7.060000
		Out-kW						0	0	0	0						-	0.000000
		Total kW						1,007,972	1,080,974	1,018,561	957,920						4,065,427	
		In <164 kWh per kl	(451)	(19,150)	0	0	30,276	157,613,372	167,416,604	153,196,402	132,009,262	433,728	7,163	91,152	610,778,359	0.058436		
		In >164 kWh per kl	0	(52,764)	0	0	0	129,813,328	290,438,380	282,136,227	194,707,635	449,476	0	256,153	897,748,435	0.055483		
		Out-kWh	2,605,766	2,575,541	2,950,218	28,547,278	151,846,820	661,503	(257,707)	(5,393,540)	5,555,976	139,914,453	23,656,636	3,333,035	355,995,978	0.067084		
		Total kWh	2,605,316	2,503,627	2,950,218	28,547,278	151,877,097	288,088,203	457,597,276	429,939,089	332,272,872	140,797,657	23,663,799	3,680,340	1,864,522,772			
		Rev	239,676	234,703	264,214	1,982,667	10,256,227	23,998,633	33,935,281	31,863,690	26,084,365	9,504,531	1,654,254	309,507	140,327,749			
Rate 40	I	In Bills	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	19956	0.000000		
		Min Bills	70.6	68.8	68.9	70.8	71.5	71.8	67.9	70.9	71.9	72.6	70.9	70.3	846.8	1.500000		
		kWh	1,111,671	1,129,997	1,135,643	1,141,087	1,153,527	1,159,902	1,165,140	1,176,306	1,183,323	1,187,351	1,189,839	1,191,515	13,925,301	0.082070		
		Intermittent Usage	14	14	14	14	14	14	14	14	14	14	14	14	168	1.000000		
		Rev	91,355	92,856	93,320	93,769	94,791	95,315	95,739	96,660	97,237	97,569	97,770	97,907	1,144,288			
Rate 42	I	Bills	766	766	766	766	766	766	766	766	766	766	766	766	9192	0.000000		
		kWh	247,623	249,052	216,602	249,052	231,141	225,244	235,982	234,167	240,982	235,926	242,437	239,753	2,847,961	0.058150		
		Rev	14,399	14,482	12,595	14,482	13,441	13,098	13,722	13,617	14,013	13,719	14,098	13,942	165,609			
Rate 15		1csa	7,515	7,518	7,512	7,495	7,503	7,493	7,470	7,455	7,430	7,438	7,439	7,446	89,714	9.630000		
		2csa	769	772	776	774	790	790	795	791	802	789	797	813	9,459	11.500000		
		2csf	808	812	807	814	794	793	794	795	794	795	798	796	9,599	13.780000		
		4chf	105	104	104	104	100	99	95	92	92	90	90	89	1,164	14.910000		
		4csa	139	141	151	152	157	157	151	153	152	150	149	149	1,801	15.570000		
		4csf	440	447	445	446	445	447	453	450	454	452	456	453	5,387	16.240000		
		1khf	71	79	79	80	80	80	81	80	81	82	83	80	956	23.710000		
		Min Bill	34.2	30.8	34.4	35.7	31.8	37.6	42.6	36.2	38.2	39.1	34.3	38.8	433.8	3.000000		
		kWh	467,630	460,083	454,542	448,316	445,066	440,449	434,588	434,010	429,419	424,087	418,486	410,747	5,267,423			
		Rev	105,010	105,442	105,482	105,457	105,447	105,364	105,178	104,885	104,876	104,726	104,945	105,041	1,261,853			
Rate 41A	I	70 S	36	36	36	36	36	36	36	36	36	36	35	36	431	11.550000		
		100 S	15,573	14,950	13,395	16,513	14,949	14,952	14,957	14,804	14,963	14,992	14,994	15,005	180,046	11.010000		
		200 S	1,793	1,667	1,565	1,765	1,668	1,670	1,671	1,642	1,671	1,674	1,675	1,676	20,137	14.750000		
		250 S	240	238	233	246	238	228	227	228	230	231	230	230	2,799	16.050000		
		400 S	119	120	100	144	122	125	126	126	126	126	126	126	1,486	18.300000		
		41A Variable Usage	3,624	3,624	3,624	3,624	3,624	3,624	3,624	3,402	3,624	3,624	3,624	3,624	43,270	0.074640		
		41A kWh	431,570	391,271	341,515	413,338	356,774	341,204	342,933	334,813	319,578	302,319	295,621	282,208	4,153,143			
		Rev 41A	204,616	195,894	176,821	215,113	195,931	195,888	195,955	193,847	196,074	196,453	196,460	196,597	2,359,648			
		All Rate 41 Bills	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	35,760			
		All Rate 41 kWh	2,294,057	2,126,315	1,939,585	2,126,315	1,927,140	1,868,190	1,866,664	1,879,169	1,904,924	1,904,924	1,951,450	1,971,281	23,760,014			
		Rev All 41	309,637	294,498	268,883	311,728	286,073	282,636	282,155	281,011	283,919	285,135	287,859	289,786	3,463,322			
Rate 41B		29 70 S	0	0	0	0	0	0	0	0	0	0	0	0	0	3.110000		
		39 100 S	3,219	3,092	3,008	2,976	2,957	2,060	1,917	1,913	675	661	661	660	23,799	3.480000		
		74 200 S	148	127	120	120	117	113	110	110	68	65	64	64	1,226	5.030000		
		100 250 S	858	832	826	813	794	749	674	649	574	433	419	418	8,039	6.200000		
		157 400 S	127	127	127	125	123	121	122	120	70	70	57	56	1,245	8.760000		
		Variable Usage Charge	0	0	0	0	0	0	0	0	0	0	0	0	0	0.074640		
		kWh	273,073	256,567	239,127	263,502	241,734	198,240	187,222	185,109	108,196	90,770	86,911	84,537	2,214,987			
		Rev 41B	18,379	17,670	17,305	17,096	16,879	13,441	12,472	12,286	6,863	5,925	5,719	5,701	149,735			

2023 Retail Revenue Forecast Derivation

Rate 418M		100 S	0	0	0	0	0	0	0	0	0	0	0	0	1.280000		
		200 S	0	0	0	0	0	0	0	0	0	0	0	0	1.270000		
		250 S	33	33	33	33	33	33	33	33	33	33	33	396	1.370000		
		400 S	0	0	0	0	0	0	0	0	0	0	0	0	1.370000		
		Bills	6	6	6	6	6	7	4	4	4	4	4	61	3.360000		
		kWh	10,274	8,601	7,518	7,717	6,344	5,846	5,160	4,299	4,997	5,114	5,893	6,340	78,103	0.051250	
		Rev 418M	592	506	451	461	390	368	323	279	315	321	361	384	4,750		
Rate 41C		kWh	857,989	844,827	805,767	903,470	845,378	873,468	896,048	892,087	951,296	951,591	951,646	930,670	10,704,238	0.052400	
		Rev 41C	44,959	44,269	42,222	47,342	44,298	45,770	46,953	46,745	49,848	49,863	49,866	48,767	560,902		
Rate 41CM	I	Bills	1230	1228	1226	1229	1230	1231	1233	1230	1228	1227	1226	1228	14746	3.360000	
		kWh	721,151	625,049	545,658	538,287	476,911	449,432	435,301	462,861	520,856	555,130	611,379	667,526	6,609,543	0.051250	
		Rev 41CM	41,092	36,160	32,084	31,717	28,574	27,170	26,452	27,854	30,820	32,573	35,453	38,337	388,286		
OREGON			Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Rates As of 06/1/2022		
Rate 01	O	Bills	13685.1	13717.1	13686.7	13632.1	13646.2	13682.1	13672.5	13633.4	13699.2	13728.9	13709.3	13750.3	164,243	8.000000	
		Min Bills	124.0	110.0	100.0	110.0	147.0	139.0	104.0	187.0	146.0	126.0	125.0	100.0	1,518	3.000000	
		0-1000	11,805,082	11,021,784	10,419,412	11,083,899	8,991,286	9,097,914	10,065,869	9,009,830	8,942,630	8,970,207	10,121,329	9,934,042	119,463,283	0.079919	
		Over 1000	12,726,917	11,253,020	8,526,271	4,066,509	3,069,297	1,978,853	3,614,255	5,614,894	4,416,336	1,720,009	4,065,347	10,009,519	71,061,228	0.094099	
		Total kWh	24,531,999	22,274,803	18,945,683	15,150,408	12,060,582	11,076,767	13,680,124	14,624,725	13,358,966	10,690,217	14,186,675	19,943,561	190,524,510		
		Rev	2,250,893	2,049,815	1,744,816	1,377,855	1,117,003	1,023,178	1,254,244	1,358,041	1,240,290	988,950	1,301,481	1,846,107	17,552,674		
Rate 05	O	Bills	4	4	4	4	4	4	4	4	3	4	4	4	47	8.000000	
		Min Bills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.000000	
		S Peak	0	0	0	0	0	492	1,399	1,582	947	0	0	0	4,420	0.122949	
		S Off Peak	0	0	0	0	0	1,535	4,629	4,486	2,569	0	0	0	13,220	0.121709	
		N Peak	3,106	3,134	2,339	1,751	1,480	690	0	0	511	1,635	2,185	3,115	19,947	0.075445	
		N Off Peak	11,220	10,268	7,219	5,567	4,519	2,416	0	0	1,560	4,160	6,184	9,343	62,457	0.074486	
		Total kWh	14,326	13,402	9,558	7,318	6,000	5,133	6,028	6,068	5,587	5,795	8,369	12,459	100,043		
		Rev	1,102	1,033	746	579	480	511	767	772	609	465	657	963	8,687		
Rate 07	O	1 phase	2,306.6	2,304.0	2,321.9	2,305.9	2,299.4	2,297.5	2,245.4	2,271.5	2,299.2	2,289.9	2,301.2	2,345.6	27,588.1	9.250000	
		3 phase	410.9	402.9	409.1	403.6	404.6	402.0	391.8	404.0	404.1	393.5	402.0	406.1	4,834.6	17.650000	
		Total Bills	2,717.5	2,706.9	2,731.0	2,709.5	2,704.0	2,699.5	2,637.2	2,675.5	2,703.3	2,683.4	2,703.2	2,751.7	32,422.7		
		Min Bills	11.0	14.0	8.0	14.0	8.0	6.0	11.0	7.0	13.0	6.0	12.0	11.0	121.0	3.000000	
		S 0-500	0	0	0	0	0	284,043	787,364	620,507	364,158	(1,031)	1,022	(1)	2,056,063	0.079527	
		S Over	0	0	0	0	0	208,282	851,275	982,560	521,035	(616)	0	0	2,562,537	0.104633	
		N 0-500	795,997	791,377	758,982	798,938	732,291	486,903	4,011	0	227,958	616,801	691,633	671,988	6,576,879	0.079527	
		N Over	1,378,998	1,323,893	1,091,528	722,636	607,435	372,266	17,653	0	312,712	593,993	739,662	1,131,717	8,292,494	0.087337	
		Total kWh	2,174,996	2,115,269	1,850,510	1,521,574	1,339,725	1,351,495	1,660,302	1,603,067	1,425,864	1,209,148	1,432,317	1,803,704	19,487,972		
		Rev	212,363	207,026	184,413	155,145	139,723	143,982	181,267	180,318	157,357	128,929	148,102	181,179	2,019,803		
		Rate 09S	O	1 phase	461.1	459.6	446.7	462.1	463.4	471.1	502.5	489.9	482.3	488.0	490.1	467.9	5,684.6
3 phase	468.1			477.5	462.3	458.7	456.8	458.4	487.2	471.6	472.0	474.0	471.0	463.2	5,620.9	17.350000	
Total Bills	929.2			937.1	909.0	920.8	920.2	929.5	989.7	961.5	954.3	962.0	961.1	931.1	11,305.5		
Min Bills	1.0			1.0	4.0	3.0	12.0	3.0	2.0	1.0	1.0	6.0	6.0	7.0	47.0	5.000000	
BLC	43,425			44,738	44,551	45,068	44,171	43,499	44,144	44,093	45,256	45,894	47,257	43,560	535,657	0.730000	
S kW	0			0	0	0	0	10,040	28,261	30,291	19,693	(33)	35	(0)	88,287	5.900000	
N kW	33,137			33,768	32,940	31,310	28,978	17,750	0	0	11,646	33,774	36,519	33,467	293,291	4.440000	
Total kW	33,137			33,768	32,940	31,310	28,978	27,790	28,261	30,291	31,339	33,741	36,554	33,467	381,578		
S kWh	0			0	0	0	0	2,711,961	8,177,460	8,866,446	5,832,743	(5,824)	6,714	0	25,589,500	0.059716	
N kWh	12,167,822			11,921,529	10,646,215	9,029,379	8,123,248	4,898,418	0	0	3,317,360	9,857,424	11,845,606	11,581,726	93,388,728	0.055631	
Total kWh	12,167,822			11,921,529	10,646,215	9,029,379	8,123,248	7,610,380	8,177,460	8,866,446	9,150,102	9,851,600	11,852,320	11,581,726	118,978,228		
Rev	868,590			858,798	783,657	686,941	625,549	617,050	700,902	753,584	746,930	744,550	869,457	837,561	9,093,570		
Rate 09P	O	Bills	6	6	6	6	6	6	6	6	6	5.1	6	71.1	202.000000		
		Min Bills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000		
		BLC	3,292	3,129	3,200	3,305	3,263	3,578	3,724	3,556	3,110	3,300	3,195	3,117	39,767	1.230000	
		S kW	0	0	0	0	0	0	2,914	2,970	2,743	0	0	0	8,628	5.830000	
		N kW	2,537	2,500	2,573	2,663	2,444	2,649	0	0	0	2,643	2,466	2,398	22,872	4.760000	
		Total kW	2,537	2,500	2,573	2,663	2,444	2,649	2,914	2,970	2,743	2,643	2,466	2,398	31,500		
		On-Peak kW	0	0	0	0	0	0	2,829	2,819	2,673	0	0	0	8,321	0.860000	
		S On-Peak kWh	0	0	0	0	0	0	326,735	334,447	344,365	0	0	0	1,005,547	0.058938	
		S Mid-Peak kWh	0	0	0	0	0	0	499,469	567,414	500,399	0	0	0	1,567,282	0.055790	
		S Off-Peak kWh	0	0	0	0	0	0	340,090	398,245	339,222	0	0	0	1,077,558	0.053767	
		NS Mid-Peak kWh	726,574	714,080	698,035	697,480	627,840	641,448	0	0	0	674,934	666,585	655,921	6,102,898	0.051464	

		NS Off-Peak kWh	487,832	509,834	434,984	416,069	371,217	424,821	0	0	0	407,755	402,374	455,902	3,910,787	0.050170
		<b>Total kWh</b>	<b>1,214,406</b>	<b>1,223,914</b>	<b>1,133,019</b>	<b>1,113,549</b>	<b>999,057</b>	<b>1,066,269</b>	<b>1,166,294</b>	<b>1,300,106</b>	<b>1,183,987</b>	<b>1,082,689</b>	<b>1,068,959</b>	<b>1,111,823</b>	<b>13,664,072</b>	
		<b>Rev</b>	<b>79,203</b>	<b>79,288</b>	<b>75,140</b>	<b>74,720</b>	<b>67,796</b>	<b>72,545</b>	<b>90,624</b>	<b>98,107</b>	<b>89,781</b>	<b>73,042</b>	<b>71,190</b>	<b>73,091</b>	<b>944,527</b>	
Rate 09T	O	<b>Bills</b>	1	1	1	1	1	1	1	1	1	1	1	1	12	200.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	933	947	944	987	899	908	925	1,052	911	904	915	873	11,198	0.320000
		S kW	0	0	0	0	0	0	741	824	687	0	0	0	2,251	3.790000
		N kW	947	913	884	932	819	751	0	0	0	699	778	813	7,535	4.060000
		<b>Total kW</b>	<b>947</b>	<b>913</b>	<b>884</b>	<b>932</b>	<b>819</b>	<b>751</b>	<b>741</b>	<b>824</b>	<b>687</b>	<b>699</b>	<b>778</b>	<b>813</b>	<b>9,786</b>	
		<b>On-Peak kW</b>	0	0	0	0	0	0	614	735	663	0	0	0	2,011	0.730000
		S On-Peak kWh	0	0	0	0	0	0	54,114	54,166	53,242	0	0	0	161,522	0.052528
		S Mid-Peak kWh	0	0	0	0	0	0	96,716	107,628	89,124	0	0	0	293,468	0.049680
		S Off-Peak kWh	0	0	0	0	0	0	55,349	63,419	52,783	0	0	0	171,551	0.047818
		NS Mid-Peak kWh	225,142	197,694	181,329	191,014	153,987	130,089	0	0	0	118,553	152,002	171,202	1,521,012	0.045607
		NS Off-Peak kWh	143,453	149,977	120,348	131,362	102,227	99,181	0	0	0	81,782	100,980	122,129	1,051,439	0.044419
		<b>Total kWh</b>	<b>368,595</b>	<b>347,671</b>	<b>301,677</b>	<b>322,376</b>	<b>256,214</b>	<b>229,270</b>	<b>206,179</b>	<b>225,213</b>	<b>195,149</b>	<b>200,335</b>	<b>252,982</b>	<b>293,331</b>	<b>3,198,992</b>	
		<b>Rev</b>	<b>20,984</b>	<b>19,888</b>	<b>17,705</b>	<b>18,845</b>	<b>15,375</b>	<b>13,880</b>	<b>14,046</b>	<b>15,419</b>	<b>13,326</b>	<b>12,368</b>	<b>15,069</b>	<b>17,011</b>	<b>193,916</b>	
Rate 19P	O	<b>Bills</b>	6	6	6	6	6	6	6	6	6	6	6	6	72	208.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	28,974	28,897	26,724	29,031	27,599	27,112	27,706	27,196	28,813	25,110	26,362	26,687	330,209	1.230000
		S kW	0	0	0	0	0	0	27,061	26,329	27,937	0	0	0	81,327	5.910000
		N kW	26,280	25,949	23,825	26,268	24,629	25,094	0	0	0	23,808	24,374	24,266	224,491	4.780000
		<b>Total kW</b>	<b>26,280</b>	<b>25,949</b>	<b>23,825</b>	<b>26,268</b>	<b>24,629</b>	<b>25,094</b>	<b>27,061</b>	<b>26,329</b>	<b>27,937</b>	<b>23,808</b>	<b>24,374</b>	<b>24,266</b>	<b>305,817</b>	
		<b>On-peak kW</b>	0	0	0	0	0	0	26,542	26,024	27,541	0	0	0	80,107	0.870000
		S On-peak kWh	0	0	0	0	0	0	3,966,893	3,371,688	3,987,154	0	0	0	11,325,735	0.061492
		S Mid-peak kWh	0	0	0	0	0	0	6,505,304	6,348,380	6,591,910	0	0	0	19,445,593	0.050557
		S Off-peak kWh	0	0	0	0	0	0	5,014,885	4,861,372	5,033,281	0	0	0	14,909,538	0.045836
		N Mid-peak kWh	7,900,619	7,902,970	7,687,376	9,127,779	8,336,070	8,163,090	0	0	0	7,444,844	7,953,759	7,609,396	72,125,903	0.048407
		N Off-peak kWh	5,827,819	6,059,143	5,401,697	6,300,377	5,815,072	6,070,089	0	0	0	5,713,831	6,030,953	5,559,697	52,778,678	0.044753
		<b>Total kWh</b>	<b>13,728,438</b>	<b>13,962,113</b>	<b>13,089,073</b>	<b>15,428,156</b>	<b>14,151,142</b>	<b>14,233,179</b>	<b>15,487,082</b>	<b>14,581,440</b>	<b>15,612,344</b>	<b>13,158,675</b>	<b>13,984,712</b>	<b>13,169,093</b>	<b>170,585,447</b>	
		<b>Rev</b>	<b>805,762</b>	<b>814,550</b>	<b>761,864</b>	<b>886,325</b>	<b>816,688</b>	<b>821,349</b>	<b>1,021,029</b>	<b>964,055</b>	<b>1,034,910</b>	<b>762,027</b>	<b>805,100</b>	<b>767,224</b>	<b>10,260,882</b>	
Rate 19T	O	<b>Bills</b>	1	1	1	1	1	1	1	1	1	1	1	1	12	215.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.000000
		<b>BLC</b>	17,180	16,375	21,675	19,489	14,563	16,699	16,446	16,337	13,417	16,708	17,158	16,524	202,572	0.330000
		S kW	0	0	0	0	0	0	15,316	15,064	12,579	0	0	0	42,959	4.920000
		N kW	16,912	13,835	21,043	18,892	13,931	15,540	0	0	0	15,412	16,557	16,220	148,343	4.640000
		<b>Total kW</b>	<b>16,912</b>	<b>13,835</b>	<b>21,043</b>	<b>18,892</b>	<b>13,931</b>	<b>15,540</b>	<b>15,316</b>	<b>15,064</b>	<b>12,579</b>	<b>15,412</b>	<b>16,557</b>	<b>16,220</b>	<b>191,302</b>	
		<b>On-peak kW</b>	0	0	0	0	0	0	15,180	15,064	12,555	0	0	0	42,799	0.950000
		S On-peak kWh	0	0	0	0	0	0	2,401,845	2,105,233	1,893,425	0	0	0	6,400,503	0.064184
		S Mid-peak kWh	0	0	0	0	0	0	4,237,881	4,091,573	3,278,347	0	0	0	11,607,801	0.053947
		S Off-peak kWh	0	0	0	0	0	0	3,429,444	3,486,826	2,697,651	0	0	0	9,613,921	0.049504
		N Mid-peak kWh	6,439,972	2,520,221	4,268,261	6,406,036	4,883,604	5,674,612	0	0	0	5,277,519	5,825,032	5,884,811	47,180,068	0.051774
		N Off-peak kWh	4,788,311	2,047,787	3,104,489	4,872,626	3,737,445	5,001,627	0	0	0	4,486,881	4,846,995	5,011,252	37,897,413	0.048356
		<b>Total kWh</b>	<b>11,228,283</b>	<b>4,568,008</b>	<b>7,372,750</b>	<b>11,278,662</b>	<b>8,621,049</b>	<b>10,676,239</b>	<b>10,069,171</b>	<b>9,683,632</b>	<b>7,869,423</b>	<b>9,764,400</b>	<b>10,672,027</b>	<b>10,896,063</b>	<b>112,699,707</b>	
		<b>Rev</b>	<b>649,323</b>	<b>299,320</b>	<b>476,115</b>	<b>661,593</b>	<b>503,234</b>	<b>613,486</b>	<b>647,969</b>	<b>622,494</b>	<b>510,390</b>	<b>567,447</b>	<b>618,667</b>	<b>627,932</b>	<b>6,797,970</b>	
Rate 24S	O	<b>In Bills</b>	0	0	0	0	0	2241.2	2245.3	2244.1	2293.7	0	0	0	9,024	16.850000
		<b>Out-Bills</b>	2093.8	2130.5	2131.9	2214	2269	0	0	0	0	2245.6	2226.1	2201.3	17,512	3.000000
		<b>Min Bills</b>	18.6	18.2	50.8	55.5	37.7	6.8	0.1	0.5	0.6	3.1	13.4	16.1	221	3.000000
		In-kW						38,747	45,409	44,353	38,265				166,774	7.760000
		Out-kW						0	0	0	0				-	0.000000
		<b>Total kW</b>						38,747	45,409	44,353	38,265				166,774	
		In <164 kWh per kl	466	0	0	0	15,958	5,935,980	7,838,390	6,578,801	5,243,274	0	0	0	25,612,869	0.075272
		In >164 kWh per kl	0	0	0	0	677	4,169,982	9,487,053	11,795,714	6,957,878	0	0	0	32,411,305	0.071700
		Out-kWh	131,672	104,821	105,851	981,833	5,093,369	255	0	0	0	3,122,012	369,673	142,517	10,052,004	0.078114
		<b>Total kWh</b>	<b>132,138</b>	<b>104,821</b>	<b>105,851</b>	<b>981,833</b>	<b>5,110,005</b>	<b>10,106,217</b>	<b>17,325,443</b>	<b>18,374,515</b>	<b>12,201,152</b>	<b>3,122,012</b>	<b>369,673</b>	<b>142,517</b>	<b>68,076,178</b>	
		<b>Rev</b>	<b>16,658</b>	<b>14,634</b>	<b>14,817</b>	<b>83,503</b>	<b>406,033</b>	<b>1,084,281</b>	<b>1,660,443</b>	<b>1,722,943</b>	<b>1,229,137</b>	<b>250,619</b>	<b>35,595</b>	<b>17,785</b>	<b>6,536,448</b>	
Rate 40	O	<b>In Bills</b>	2	2	2	2	2	2	2	2	2	2	2	2	24	0.000000
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.500000
		kWh	449	449	449	449	449	449	449	449	449	449	449	449	5,388	0.061730
		<b>Rev</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>333</b>	
Rate 42	O	<b>In Bills</b>	10	10	10	10	10	10	10	10	10	10	10	10	120	0.000000
		kWh	2,129	2,077	1,931	1,735	1,699	1,655	1,767	1,671	1,626	1,607	1,636	2,065	21,598	0.098630
		<b>Rev</b>	<b>210</b>	<b>205</b>	<b>190</b>	<b>171</b>	<b>168</b>	<b>163</b>	<b>174</b>	<b>165</b>	<b>160</b>	<b>158</b>	<b>161</b>	<b>204</b>	<b>2,130</b>	

Rate 15	1csa	673	666	668	672	669	671	667	670	668	672	671	670	8,039	10.880000
	2csa	66	66	65	65	65	65	65	65	65	64	64	64	779	12.920000
	2csf	22	22	22	22	22	22	22	22	22	22	23	23	266	15.510000
	4csa	17	17	17	17	17	17	17	17	17	17	17	17	204	17.470000
	4csf	10	10	10	10	10	10	10	10	10	9	9	9	117	18.270000
	Min Bill	1.0	3.6	1.4	2.9	2.3	2.4	2.0	2.0	2.7	2.0	4.0	6.3	32.6	3.000000
	kWh	35,752	35,570	35,671	35,572	35,449	35,440	35,422	35,652	35,547	34,887	35,063	34,667	424,692	
	Rev	9,000	8,934	8,944	8,970	8,949	8,972	8,927	8,961	8,933	8,944	8,958	8,960	107,451	
Rate 41A	O														
	100 S	832	831	831	831	831	831	831	831	830	830	830	830	9,969	9.320000
	200 S	171	171	169	169	169	169	169	169	170	170	169	169	2,034	12.270000
	250 S	20	20	22	22	22	22	22	22	22	22	22	22	260	13.330000
	400 S	83	83	83	83	83	83	83	83	83	83	83	83	996	15.120000
	41A kWh	53,883	48,976	43,454	44,506	43,694	43,404	45,345	43,717	43,365	39,906	38,606	32,430	521,285	
	Rev 41A	11,374	11,365	11,367	11,367	11,367	11,367	11,367	11,367	11,370	11,370	11,357	11,357	136,394	
Rate 41B	155 400 M	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000000
	39 100S	5	5	5	5	5	5	5	5	4	4	4	4	56	3.320000
	74 200 S	5	5	5	5	5	5	5	5	3	3	3	3	52	4.550000
	100 250 S	1	1	1	1	1	1	1	1	1	1	1	1	12	5.480000
	157 400 S	1	1	1	1	1	1	1	1	1	1	1	1	12	7.510000
	kWh	1,232	1,341	1,347	1,411	1,388	1,382	1,447	1,397	1,080	1,035	1,013	867	14,940	
	Rev 41B	52	52	52	52	52	52	52	52	40	40	40	40	578	
Rate 41C	O														
	kWh	405	440	442	463	456	454	475	459	660	715	701	599	6,270	0.05133
Rate 41CM	O														
	kWh	21,501	20,567	19,722	17,469	16,448	15,456	14,064	14,792	16,706	16,124	17,612	18,935	209,395	0.05133
SPECIAL CONTRACTS															
Rate 26	Micron														
	Bills	1	1	1	1	1	1	1	1	1	1	1	1	12	
	Contract kW	69,000	69,000	69,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000	918,000	1.67
	kW	75,602	75,994	78,177	80,421	89,224	94,876	96,812	96,545	90,833	80,808	78,389	80,063	1,017,744	10.98
	kWh IPC	50,869,270	44,096,520	46,571,000	43,288,600	47,665,490	48,805,200	51,267,950	52,625,260	50,585,100	49,801,240	51,220,700	54,548,210	591,344,540	0.028150
	kWh PPA	3,466,730	5,198,480	8,246,000	10,241,400	12,189,510	12,673,800	13,223,050	12,106,740	9,915,900	7,469,760	4,188,300	2,947,790	101,867,460	
	kWh PPA Embedde	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002632
	Excess Generation	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Capacity Credit	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rate 29	Simplot														
	Bills	1	1	1	1	1	1	1	1	1	1	1	1	12	
	Contract kW	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	300,000	2.31
	kW	23,000	22,757	22,589	22,648	21,678	21,552	22,620	22,332	21,170	21,488	22,601	22,823	267,258	7.88
	kWh	14,525,952	15,858,114	15,796,851	10,004,150	14,154,104	13,643,597	14,708,422	14,504,488	14,666,594	16,258,484	15,803,836	15,075,409	175,000,001	0.028345
	Rev	650,728	686,573	683,513	519,784	629,771	614,308	652,906	644,856	640,294	687,922	683,806	664,908	7,759,368	
Rate 30	DOE														
	Bills	1	1	1	1	1	1	1	1	1	1	1	1	12	
	Contract kW	44,343	44,306	40,900	36,094	30,910	28,035	24,362	24,517	26,522	38,301	38,514	45,882	422,686	8.5
	kWh	25,600,000	23,600,000	22,100,000	18,700,000	16,500,000	15,800,000	14,700,000	14,300,000	14,900,000	20,800,000	22,200,000	24,900,000	234,100,000	0.029709
SPECIAL CONTRACTS															
Rate 26															
Rate 29															
Rate 30															

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BRADY, DI**  
**TESTIMONY**

**EXHIBIT NO. 29**

## 2023 Proposed Billing Determinants

Rate	State		Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
<b>IDAHO</b>															
<b>Rate 01</b>	I	<b>Bills</b>	490,124	489,968	489,175	488,869	488,833	490,266	491,169	492,205	492,961	493,490	494,545	496,102	5,897,706
		<b>Min Bills</b>	4317.0	5209.0	5532.0	6124.0	6327.0	7040.0	6746.0	6992.0	6196.0	6095.0	5680.0	4607.0	70,865
		S 0-800	0	0	0	0	0	107,705,737	291,989,525	291,836,540	274,547,850	165,245,533	1,339,673	0	1,132,664,858
		S 801-2000	0	0	0	0	0	26,992,602	124,621,446	186,566,162	144,752,733	42,838,290	307,424	0	526,078,657
		S Over 2000	0	0	0	0	0	3,317,782	19,892,419	40,629,156	27,427,387	5,887,679	52,441	0	97,206,864
		N 0-800	308,603,018	285,279,810	282,368,836	276,613,660	261,630,242	172,597,029	3,801,286	0	0	114,611,674	274,630,797	273,741,005	2,253,877,358
		N 801-2000	181,074,217	163,221,926	144,830,325	96,638,421	80,154,063	43,601,180	1,199,924	0	0	25,787,003	95,143,097	153,536,687	985,186,843
		N Over 2000	100,268,352	92,836,831	65,246,897	22,716,236	15,426,489	6,523,651	191,294	0	0	3,000,955	23,386,704	79,524,007	409,121,417
		<b>Total kWh</b>	589,945,587	541,338,567	492,446,058	395,968,317	357,210,794	360,737,981	441,695,895	519,031,858	446,727,970	357,371,134	394,860,136	506,801,700	5,404,135,997
<b>Rate 03</b>	I	<b>Bills</b>	19	19	19	19	19	19	19	19	19	19	19	19	225
		<b>Total kWh</b>	488,670	448,386	407,887	327,969	295,883	298,791	365,801	429,850	370,004	296,021	327,035	419,789	4,476,086
<b>Rate 05</b>	I	<b>Bills</b>	991	986	986	986	990	988	986	980	986	985	979	993	11,836
		<b>Min Bills</b>	2.0	3.0	2.0	2.0	4.0	3.0	2.0	3.0	3.0	1.0	2.0	2.0	29
		S Peak	0	0	0	0	0	73,623	244,425	297,960	254,108	128,468	1,219	0	999,802
		S Off Peak	0	0	0	0	0	326,158	1,068,942	1,270,715	1,137,789	601,957	4,874	0	4,410,435
		N Peak	353,659	345,296	316,405	250,974	229,201	139,106	2,441	0	0	82,674	245,279	314,792	2,279,827
		N Off Peak	1,539,285	1,366,262	1,238,094	990,981	910,510	595,021	17,308	0	0	332,836	967,550	1,299,438	9,257,286
		<b>Total kWh</b>	1,892,943	1,711,559	1,554,498	1,241,955	1,139,711	1,133,908	1,333,117	1,568,675	1,391,896	1,145,934	1,218,922	1,614,231	16,947,350
<b>Rate 06</b>	I	<b>Bills</b>	12,300	12,461	12,646	12,853	12,995	13,158	13,422	13,524	13,716	13,914	14,076	14,388	159,453
		<b>Min Bills</b>	79.0	104.0	110.0	100.0	116.0	126.0	110.0	141.0	140.0	160.0	164.0	132.0	1,482
		S 0-800	0	0	0	0	0	2,051,568	7,084,721	6,998,160	6,060,077	3,605,974	36,437	0	25,836,936
		S 801-2000	0	0	0	0	0	336,577	1,840,392	2,937,785	2,105,840	712,107	7,711	0	7,940,411
		S Over 2000	0	0	0	0	0	101,560	490,603	731,086	527,696	178,508	3,527	0	2,032,980
		N 0-800	7,566,814	6,218,974	5,398,532	5,075,688	4,673,904	3,057,927	83,552	0	0	2,570,480	8,189,198	8,880,983	51,716,052
		N 801-2000	4,570,064	3,514,475	2,546,593	1,438,269	1,135,857	575,237	18,685	0	0	443,790	2,686,331	4,896,001	21,825,301
		N Over 2000	3,713,895	2,721,836	1,474,936	557,381	385,301	196,784	8,351	0	0	100,399	961,738	3,440,195	13,560,815
		<b>Total kWh</b>	15,850,773	12,455,285	9,420,060	7,071,338	6,195,062	6,319,652	9,526,304	10,667,031	8,693,613	7,611,257	11,884,942	17,217,179	122,912,496
<b>Rate 07</b>	I	<b>Bills</b>	30,369	30,320	30,303	30,329	30,210	30,338	30,348	30,406	30,369	30,571	30,572	30,674	364,810
		<b>Min Bills</b>	162.0	202.0	195.0	169.0	208.0	162.0	197.0	156.0	158.0	164.0	189.0	215.0	2,177
		S 0-300	0	0	0	0	0	2,117,834	5,448,832	4,985,729	4,869,976	3,001,748	24,600	0	20,448,718
		S Over	0	0	0	0	0	1,824,743	6,201,802	7,623,209	6,596,113	2,888,691	20,601	0	25,155,159
		N 0-300	5,973,181	5,636,154	5,389,761	5,564,306	5,193,310	3,345,939	80,908	0	0	2,190,665	5,077,315	5,011,164	43,462,704
		N Over	8,235,210	8,045,351	6,642,173	4,959,378	4,416,609	2,780,570	83,392	0	0	2,018,639	4,993,608	7,043,648	49,218,578
		<b>Total kWh</b>	14,208,391	13,681,505	12,031,934	10,523,684	9,609,919	10,069,086	11,814,934	12,608,938	11,466,089	10,099,744	10,116,124	12,054,812	138,285,160
<b>Rate 08</b>	I	<b>Bills</b>	82	82	84	85	86	88	89	90	90	90	91	93	1,050
		<b>Min Bills</b>	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	1.0	1.0	6
		S 0-300	0	0	0	0	0	3,172	10,788	9,995	10,666	6,454	57	0	41,132
		S Over	0	0	0	0	0	1,748	12,069	22,086	23,998	8,878	169	0	68,948
		N 0-300	14,137	14,187	13,145	12,700	9,982	5,859	152	0	0	3,925	16,377	14,611	105,075
		N Over	28,918	24,904	18,518	8,584	7,447	3,346	131	0	0	3,395	21,525	38,785	155,553
		<b>Total kWh</b>	43,055	39,090	31,663	21,284	17,429	14,126	23,140	32,081	34,664	22,653	38,129	53,395	370,708
<b>Rate 09S</b>	I	<b>Bills</b>	37473.4	37518.3	37564.4	37635.7	37677.7	37704.6	37761.8	37824	37924.9	37975.7	38108.3	37993.2	453,162
		<b>Min Bills</b>	124.0	155.0	180.0	174.0	138.0	126.0	164.0	132.0	152.0	149.0	158.0	132.0	1,784
		<b>BLC</b>	1,234,995	1,261,854	1,246,605	1,260,028	1,267,685	1,283,905	1,248,027	1,243,213	1,231,494	1,250,562	1,239,715	1,242,584	15,010,667
		S kW	0	0	0	0	0	388,390	954,495	999,523	993,941	556,495	4,971	0	3,897,816
		N kW	876,295	893,936	886,742	882,243	903,630	572,451	14,868	0	0	419,937	911,529	882,874	7,244,505
		<b>kW Total</b>	876,295	893,936	886,742	882,243	903,630	960,841	969,363	999,523	993,941	976,432	916,501	882,874	11,142,321
		S kWh	0	0	0	0	0	106,429,828	281,656,066	305,711,331	295,926,298	152,217,968	1,356,127	0	1,143,297,617
		N kWh	292,742,285	293,509,062	273,130,416	253,892,738	250,372,471	154,953,501	4,314,151	0	0	115,549,812	258,969,687	280,812,878	2,178,247,001

		<b>Total kWh</b>	292,742,285	293,509,062	273,130,416	253,892,738	250,372,471	261,383,329	285,970,217	305,711,331	295,926,298	267,767,780	260,325,814	280,812,878	3,321,544,618
<b>Rate 09P</b>	I	<b>Bills</b>	281.4	281.1	279	276.8	280.4	275.7	285.9	279.7	281	280	282.1	278.8	3,362
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
		<b>BLC</b>	161,070	157,417	160,006	157,428	159,471	167,508	172,468	165,516	154,215	159,557	159,756	160,908	1,935,320
		S kW	0	0	0	0	0	0	140,515	142,116	139,062	141,174	0	(270)	562,598
		N kW	122,555	118,748	121,749	118,891	120,018	132,429	2,223	0	0	0	128,829	123,437	988,878
		<b>Total kW</b>	122,555	118,748	121,749	118,891	120,018	132,429	142,738	142,116	139,062	141,174	128,829	123,167	1,551,476
		<b>On-peak kW</b>	0	0	0	0	0	0	131,493	133,093	130,008	131,415	0	(340)	525,669
		S On-peak kWh	0	0	0	0	0	0	7,458,614	7,670,305	7,647,899	6,824,805	0	0	29,601,623
		S Mid-peak kWh	0	0	0	0	0	0	10,414,972	10,630,151	10,879,434	9,712,760	0	0	41,637,317
		S Off-peak kWh	0	0	0	0	0	0	35,022,708	38,428,477	35,747,585	34,528,530	0	0	143,727,301
		N On-peak kWh	11,099,904	10,559,968	10,345,919	10,874,684	10,290,804	10,547,528	0	0	0	0	10,997,644	10,683,576	85,400,026
		N Mid-peak kWh	11,296,591	10,729,769	10,537,625	11,210,443	10,694,244	11,119,677	0	0	0	0	11,372,637	10,870,847	87,831,834
		N Off-peak kWh	27,235,357	27,671,727	24,570,320	25,165,165	24,160,052	27,707,574	0	0	0	0	26,900,769	26,532,976	209,943,940
		<b>Total kWh</b>	49,631,851	48,961,464	45,453,864	47,250,292	45,145,100	49,374,779	52,896,294	56,728,933	54,274,918	51,066,095	49,271,050	48,087,399	598,142,039
<b>Rate 09T</b>	I	<b>Bills</b>	4	4	4	4	4	4	4	4	4	4	4	4	48
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
		<b>BLC</b>	1,374	1,288	1,220	1,432	1,490	1,439	1,386	1,339	1,486	1,580	1,501	1,473	17,008
		S kW	0	0	0	0	0	0	1,176	990	1,044	1,189	0	0	4,400
		N kW	1,090	994	946	1,208	1,366	1,377	0	0	0	0	1,235	1,269	9,486
		<b>Total kW</b>	1,090	994	946	1,208	1,366	1,377	1,176	990	1,044	1,189	1,235	1,269	13,886
		<b>On-peak kW</b>	0	0	0	0	0	0	1,027	832	891	1,018	0	0	3,767
		S On-peak kWh	0	0	0	0	0	0	33,165	24,083	28,203	25,210	0	0	110,660
		S Mid-peak kWh	0	0	0	0	0	0	51,785	36,518	40,463	40,253	0	0	169,020
		S Off-peak kWh	0	0	0	0	0	0	213,120	171,466	181,735	194,362	0	0	760,683
		N On-peak kWh	71,700	61,108	57,802	65,925	71,263	67,286	0	0	0	0	72,835	74,551	542,469
		N Mid-peak kWh	74,456	66,349	60,911	70,033	75,809	71,570	0	0	0	0	75,641	77,582	572,351
		N Off-peak kWh	173,701	175,365	149,673	162,941	177,795	186,090	0	0	0	0	179,449	196,945	1,401,959
		<b>Total kWh</b>	319,857	302,822	268,387	298,899	324,867	324,946	298,070	232,066	250,401	259,826	327,925	349,077	3,557,143
<b>Rate 19S</b>	I	<b>Bills</b>	1	1	1	1	1	1	1	1	1	1	1	1	12
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
		<b>BLC</b>	1,209	1,203	1,176	1,170	1,177	1,213	1,171	1,184	1,188	1,162	1,164	1,150	14,167
		S kW	0	0	0	0	0	0	1,067	1,086	1,080	1,058	0	0	4,291
		N kW	1,142	1,127	1,104	1,135	1,152	1,134	0	0	0	0	1,134	1,123	9,051
		<b>Total kW</b>	1,142	1,127	1,104	1,135	1,152	1,134	1,067	1,086	1,080	1,058	1,134	1,123	13,342
		<b>On-peak kW</b>	0	0	0	0	0	0	830	895	866	848	0	0	3,439
		S On-peak kWh	0	0	0	0	0	0	15,186	72,153	77,575	81,111	78,585	0	324,610
		S Mid-peak kWh	0	0	0	0	0	0	19,311	90,864	99,176	105,959	103,593	0	418,903
		S Off-peak kWh	0	0	0	0	0	0	67,396	328,195	352,012	343,120	368,497	0	1,459,219
		N On-peak kWh	121,298	124,751	113,939	126,095	121,616	86,802	0	0	0	0	126,064	117,161	937,724
		N Mid-peak kWh	124,357	129,140	118,204	129,497	125,204	88,967	0	0	0	0	129,587	120,529	965,486
		N Off-peak kWh	336,667	317,850	279,175	308,717	300,952	242,383	0	0	0	0	330,883	312,059	2,428,686
		<b>Total kWh</b>	582,322	571,741	511,317	564,309	547,771	520,046	491,212	528,763	530,190	550,674	586,535	549,749	6,534,628
<b>Rate 19P</b>	I	<b>Bills</b>	113	113	113	113	113	113	113	113	113	113	113	113	1,356
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
		<b>BLC</b>	431,617	440,148	420,070	427,664	439,780	445,858	437,209	444,833	443,608	434,900	436,890	438,634	5,241,211
		S kW	0	0	0	0	0	0	391,774	402,402	406,562	400,556	0	(575)	1,600,720
		N kW	378,684	385,302	367,585	369,769	374,451	380,809	0	0	0	0	389,446	387,351	3,033,396
		<b>Total kW</b>	378,684	385,302	367,585	369,769	374,451	380,809	391,774	402,402	406,562	400,556	389,446	386,777	4,634,116
		<b>On-peak kW</b>	0	0	0	0	0	0	376,296	386,737	390,330	384,753	0	(192)	1,537,925
		S On-peak kWh	0	0	0	0	0	0	28,850,445	28,546,246	30,640,333	27,694,697	0	0	115,731,721
		S Mid-peak kWh	0	0	0	0	0	0	37,159,894	36,904,813	39,760,363	36,013,270	0	0	149,838,340
		S Off-peak kWh	0	0	0	0	0	0	129,282,859	139,182,703	136,589,792	130,881,667	0	0	535,937,021
		N On-peak kWh	42,825,906	42,579,852	39,164,829	43,167,842	41,003,880	40,184,243	0	0	0	0	43,514,945	41,794,107	334,235,604
		N Mid-peak kWh	43,038,301	42,960,026	39,497,565	43,655,658	41,504,801	40,877,795	0	0	0	0	43,834,897	42,064,849	337,433,892
		N Off-peak kWh	111,025,731	118,639,767	99,613,937	106,623,757	101,977,752	111,963,209	0	0	0	0	114,250,609	110,023,987	874,118,749
		<b>Total kWh</b>	196,889,938	204,179,645	178,276,331	193,447,257	184,486,432	193,025,248	195,293,198	204,633,762	206,990,488	194,589,634	201,600,451	193,882,943	2,347,295,327
<b>Rate 19T</b>	I	<b>Bills</b>	2	2	2	2	2	2	2	2	2	2	2	2	24
		<b>Min Bills</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-

		<b>BLC</b>	5,069	5,130	4,339	4,350	5,393	5,239	4,887	5,131	5,541	5,005	4,679	5,251	60,014
		S kW	0	0	0	0	0	0	4,757	5,020	5,412	4,876	0	0	20,063
		N kW	4,997	5,021	4,246	4,295	5,247	5,088	0	0	0	0	4,551	5,134	38,580
		<b>Total kW</b>	4,997	5,021	4,246	4,295	5,247	5,088	4,757	5,020	5,412	4,876	4,551	5,134	58,643
		<b>On-peak kW</b>	0	0	0	0	0	0	4,529	4,722	5,186	4,634	0	0	19,071
		S On-peak kWh	0	0	0	0	0	0	365,330	357,420	427,079	367,027	0	0	1,516,856
		S Mid-peak kWh	0	0	0	0	0	0	456,627	459,872	535,646	456,828	0	0	1,908,973
		S Off-peak kWh	0	0	0	0	0	0	1,846,406	2,016,303	2,078,860	1,941,946	0	0	7,883,515
		N On-peak kWh	628,706	614,421	474,389	526,466	596,933	603,009	0	0	0	0	561,956	600,646	4,606,525
		N Mid-peak kWh	626,332	615,646	475,024	532,592	599,586	597,293	0	0	0	0	564,016	597,709	4,608,196
		N Off-peak kWh	1,675,969	1,739,298	1,217,779	1,322,629	1,544,785	1,701,860	0	0	0	0	1,509,648	1,629,647	12,341,615
		<b>Total kWh</b>	2,931,006	2,969,365	2,167,192	2,381,687	2,741,303	2,902,162	2,668,363	2,833,595	3,041,585	2,765,801	2,635,620	2,828,001	32,865,680
<b>Rate 24</b>	I	<b>In Bills</b>	0	0	0	0	0	19327.8	19243	19478.2	19621.3	0	0	0	77,670
	I	<b>Out-Bills</b>	18525	18838.8	18916.6	19284.1	19398	0	0	0	0	19478.4	19081.8	18953.8	152,477
		<b>Min Bills</b>	39.9	23.9	62.5	71.2	48.7	22.3	-0.3	0.0	6.9	34.6	44.7	24.3	379
		In-kW	Out of Season - No Impact					1,007,972	1,080,974	1,018,561	957,920	Out of Season - No Impact			4,065,427
		Out-kW						0	0	0	0				-
		<b>Total kW</b>						1,007,972	1,080,974	1,018,561	957,920				4,065,427
		In-kWh	(451)	(71,914)	0	0	30,276	287,426,700	457,854,983	435,332,630	326,716,896	883,204	7,163	347,305	1,508,526,794
		Out-kWh	2,605,766	2,575,541	2,950,218	28,547,278	151,846,820	661,503	(257,707)	(5,393,540)	5,555,976	139,914,453	23,656,636	3,333,035	355,995,978
		<b>Total kWh</b>	2,605,316	2,503,627	2,950,218	28,547,278	151,877,097	288,088,203	457,597,276	429,939,089	332,272,872	140,797,657	23,663,799	3,680,340	1,864,522,772
<b>Rate 40</b>	I	<b>In Bills</b>	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663	19,956
		<b>Min Bills</b>	70.6	68.8	68.9	70.8	71.5	71.8	67.9	70.9	71.9	72.6	70.9	70.3	847
		kWh	1,111,671	1,129,997	1,135,643	1,141,087	1,153,527	1,159,902	1,165,140	1,176,306	1,183,323	1,187,351	1,189,839	1,191,515	13,925,301
		Intermittent Usage	14	14	14	14	14	14	14	14	14	14	14	14	168
<b>Rate 42</b>	I	<b>Bills</b>	766	766	766	766	766	766	766	766	766	766	766	766	9,192
		kWh	247,623	249,052	216,602	249,052	231,141	225,244	235,982	234,167	240,982	235,926	242,437	239,753	2,847,961
<b>Rate 15</b>		1csa	7,515	7,518	7,512	7,495	7,503	7,493	7,470	7,455	7,430	7,438	7,439	7,446	89,714
		2csa	769	772	776	774	790	790	795	791	802	789	797	813	9,459
		2csf	808	812	807	814	794	793	794	795	794	795	798	796	9,599
		4chf	105	104	104	104	100	99	95	92	92	90	90	89	1,164
		4csa	139	141	151	152	157	157	151	153	152	150	149	149	1,801
		4csf	440	447	445	446	445	447	453	450	454	452	456	453	5,387
		1khf	71	79	79	80	80	80	81	80	81	82	83	80	956
		<b>Min Bill</b>	34.2	30.8	34.4	35.7	31.8	37.6	42.6	36.2	38.2	39.1	34.3	38.8	434
		<b>Total kWh</b>	467,630	460,083	454,542	448,316	445,066	440,449	434,588	434,010	429,419	424,087	418,486	410,747	5,267,423
<b>Rate 41A</b>	I	70 S	36	36	36	36	36	36	36	36	36	36	35	36	431
		100 S	15,573	14,950	13,395	16,513	14,949	14,952	14,957	14,804	14,963	14,992	14,994	15,005	180,046
		200 S	1,793	1,667	1,565	1,765	1,668	1,670	1,671	1,642	1,671	1,674	1,675	1,676	20,137
		250 S	240	238	233	246	238	228	227	228	230	231	230	230	2,799
		400 S	119	120	100	144	122	125	126	126	126	126	126	126	1,486
		41A Variable Usage	3,624	3,624	3,624	3,624	3,624	3,624	3,624	3,402	3,624	3,624	3,624	3,624	43,270
		<b>41A kWh</b>	431,570	391,271	341,515	413,338	356,774	341,204	342,933	334,813	319,578	302,319	295,621	282,208	4,153,143
		<b>All Rate 41 Bills</b>	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	2,980	35,760
		<b>All Rate 41 kWh</b>	2,294,057	2,126,315	1,939,585	2,126,315	1,927,140	1,868,190	1,866,664	1,879,169	1,904,924	1,904,924	1,951,450	1,971,281	23,760,014
<b>Rate 41B</b>		29 70 S	0	0	0	0	0	0	0	0	0	0	0	0	-
		39 100 S	3,219	3,092	3,008	2,976	2,957	2,060	1,917	1,913	675	661	661	660	23,799
		74 200 S	148	127	120	120	117	113	110	110	68	65	64	64	1,226
		100 250 S	858	832	826	813	794	749	674	649	574	433	419	418	8,039
		157 400 S	127	127	127	125	123	121	122	120	70	70	57	56	1,245
		Variable Usage Charge	0	0	0	0	0	0	0	0	0	0	0	0	-
		<b>kwh</b>	273,073	256,567	239,127	263,502	241,734	198,240	187,222	185,109	108,196	90,770	86,911	84,537	2,214,987
<b>Rate 41BM</b>		100 S	0	0	0	0	0	0	0	0	0	0	0	0	-
		200 S	0	0	0	0	0	0	0	0	0	0	0	0	-
		250 S	33	33	33	33	33	33	33	33	33	33	33	33	396



		400 S	0	0	0	0	0	0	0	0	0	0	0	0	-
		Bills	6	6	6	6	6	7	4	4	4	4	4	4	61
		kWh	10,274	8,601	7,518	7,717	6,344	5,846	5,160	4,299	4,997	5,114	5,893	6,340	78,103
															-
Rate 41C		kWh	857,989	844,827	805,767	903,470	845,378	873,468	896,048	892,087	951,296	951,591	951,646	930,670	10,704,238
															-
Rate 41CM	I	Bills	1230	1228	1226	1229	1230	1231	1233	1230	1228	1227	1226	1228	14,746
		kWh	721,151	625,049	545,658	538,287	476,911	449,432	435,301	462,861	520,856	555,130	611,379	667,526	6,609,543
															-
															-
Rate 09S TOU	I	Bills	37473.4	37518.3	37564.4	37635.7	37677.7	37704.6	37761.8	37824	37924.9	37975.7	38108.3	37993.2	453,162
		Min Bills	124	155	180	174	138	126	164	132	152	149	158	132	1,784
		BLC	1,234,995	1,261,854	1,246,605	1,260,028	1,267,685	1,283,905	1,248,027	1,243,213	1,231,494	1,250,562	1,239,715	1,242,584	15,010,667
		S kW	0	0	0	0	0	388,390	954,495	999,523	993,941	556,495	4,971	0	3,897,816
		N kW	876,295	893,936	886,742	882,243	903,630	572,451	14,868	0	0	419,937	911,529	882,874	7,244,505
		kW Total	876,295	893,936	886,742	882,243	903,630	960,841	969,363	999,523	993,941	976,432	916,501	882,874	11,142,321
		S On-peak kWh	0	0	0	0	0	14,902,260	39,345,426	43,384,600	40,177,715	20,707,976	203,810	0	158,721,787
		S Mid-peak kWh	0	0	0	0	0	21,368,181	55,903,775	62,139,039	58,851,349	30,472,640	292,401	0	229,027,384
		S Off-peak kWh	0	0	0	0	0	70,159,387	186,406,865	200,187,692	196,897,234	101,037,352	859,916	0	755,548,446
		N On-peak kWh	62,279,428	66,275,196	61,650,260	57,174,536	56,124,199	32,736,594	634,547	0	0	25,846,693	58,333,605	61,883,748	482,938,805
		N Mid-peak kWh	64,317,629	68,677,467	64,349,644	60,822,507	60,323,472	35,368,238	680,640	0	0	27,346,279	61,243,599	63,867,562	506,997,039
		N Off-peak kWh	166,145,229	158,556,399	147,130,512	135,895,695	133,924,800	86,848,668	2,998,964	0	0	62,356,841	139,392,483	155,061,568	1,188,311,158
		Total kWh	292,742,285	293,509,062	273,130,416	253,892,738	250,372,471	261,383,329	285,970,217	305,711,331	295,926,298	267,767,780	260,325,814	280,812,878	3,321,544,618

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**BRADY, DI**  
**TESTIMONY**

**EXHIBIT NO. 30**

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	AVERAGE													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual	
Hydroelectric Generation (MWh)	786,100.5	761,910.5	810,884.1	849,798.1	889,410.6	882,292.4	739,722.5	603,685.1	565,117.7	460,156.2	414,198.9	578,194.8	8,341,471.4	
Bridger Coal														
Energy (MWh)	124,033.1	76,906.0	48,937.0	52,205.3	57,219.6	103,063.0	168,516.7	225,325.0	213,150.9	221,858.4	233,383.2	248,640.8	1,773,238.9	
Expense (\$ x 1000)	\$ 3,883.4	\$ 2,497.3	\$ 1,723.4	\$ 1,807.2	\$ 2,191.7	\$ 3,570.9	\$ 5,475.0	\$ 7,110.2	\$ 6,739.6	\$ 7,010.3	\$ 7,322.0	\$ 7,781.4	\$ 57,112.4	
Valmy														
Energy (MWh)	121.5	-	-	-	-	166.4	30,862.0	36,500.4	18,944.3	5,165.1	39,955.1	49,495.5	181,210.3	
Expense (\$ x 1000)	\$ 5.8	\$ -	\$ -	\$ -	\$ -	\$ 7.9	\$ 1,436.8	\$ 1,694.9	\$ 884.0	\$ 240.5	\$ 1,859.4	\$ 2,281.5	\$ 8,410.6	
Bridger Gas														
Energy (MWh)	-	35,241.7	-	2,431.8	1,151.2	3,960.5	20,893.2	32,167.9	18,107.6	24,179.7	-	-	138,133.7	
Expense (\$ x 1000)	\$ -	\$ 1,297.2	\$ -	\$ 107.3	\$ 43.9	\$ 174.1	\$ 1,006.2	\$ 1,559.2	\$ 814.8	\$ 1,070.3	\$ -	\$ -	\$ 6,072.8	
Langley Gulch														
Energy (MWh)	129,390.0	114,764.4	57,729.0	53,023.0	86,144.4	126,796.3	214,814.5	215,911.8	207,623.4	221,421.4	159,251.6	125,022.9	1,711,892.7	
Expense (\$ x 1000)	\$ 10,055.9	\$ 3,250.2	\$ 3,580.0	\$ 1,781.3	\$ 2,457.2	\$ 3,864.7	\$ 7,210.1	\$ 7,795.7	\$ 6,909.8	\$ 7,462.7	\$ 11,314.8	\$ 13,032.6	\$ 78,715.1	
Danskin														
Energy (MWh)	13,089.2	144.4	735.0	17.5	157.3	21,732.9	91,822.7	71,882.8	4,729.6	432.8	553.9	7,834.8	213,132.9	
Expense (\$ x 1000)	\$ 1,716.8	\$ 6.7	\$ 70.4	\$ 1.0	\$ 7.0	\$ 1,051.8	\$ 5,015.8	\$ 4,284.0	\$ 258.5	\$ 24.1	\$ 63.2	\$ 1,257.5	\$ 13,756.8	
Bennett Mountain														
Energy (MWh)	3,593.0	108.5	353.6	6.1	118.4	10,534.4	52,008.4	38,590.4	2,352.8	-	689.7	2,853.8	111,209.3	
Expense (\$ x 1000)	\$ 464.9	\$ 4.9	\$ 32.9	\$ 0.3	\$ 5.7	\$ 515.7	\$ 2,870.6	\$ 2,305.2	\$ 127.1	\$ -	\$ 76.6	\$ 445.8	\$ 6,849.8	
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.5	\$ 1,111.1	\$ 1,207.5	\$ 1,173.8	\$ 1,207.5	\$ 1,173.8	\$ 1,207.5	\$ 1,207.5	\$ 1,173.8	\$ 1,207.5	\$ 1,173.8	\$ 1,207.5	\$ 14,259.2	
Purchased Power (Excluding PURPA)														
Market Energy (MWh)	147,710.0	44,687.6	78,700.4	24,845.4	50,190.5	112,253.4	221,549.1	175,750.7	73,528.3	51,327.0	168,173.5	225,320.1	1,374,036.1	
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4	
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5	
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2	
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8	
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5	
Total Energy Excl. PURPA (MWh)	223,482.2	108,916.2	161,143.9	110,184.8	140,943.6	202,339.6	315,901.5	264,236.1	149,125.0	123,723.6	237,439.5	295,120.5	2,332,556.4	
Market Expense (\$ x 1000)	\$ 7,109.0	\$ 1,484.7	\$ 2,193.0	\$ 717.3	\$ 1,311.7	\$ 3,269.4	\$ 7,687.3	\$ 6,730.4	\$ 2,731.8	\$ 1,919.8	\$ 6,578.8	\$ 10,393.9	\$ 52,127.0	
Market Expense - No Wheeling (\$ x 1000)	\$ 6,005.68	\$ 1,150.92	\$ 1,605.15	\$ 531.70	\$ 936.77	\$ 2,430.91	\$ 6,032.49	\$ 5,417.70	\$ 2,182.54	\$ 1,536.45	\$ 5,322.66	\$ 8,710.94	\$ 41,863.9	
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.0	\$ 1,720.3	\$ 1,870.3	\$ 1,914.6	\$ 1,926.4	\$ 1,795.5	\$ 2,109.1	\$ 1,843.1	\$ 1,419.1	\$ 1,543.2	\$ 1,926.7	\$ 2,221.4	\$ 22,740.5	
Jackpot Solar Expense (\$ x 1000)	\$ 212.4	\$ 270.6	\$ 456.4	\$ 551.6	\$ 686.4	\$ 755.1	\$ 792.2	\$ 732.7	\$ 591.6	\$ 430.4	\$ 223.2	\$ 174.7	\$ 5,877.5	
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.1	\$ 1,956.5	\$ 2,308.4	\$ 1,951.7	\$ 1,687.2	\$ 1,464.7	\$ 1,095.4	\$ 1,270.7	\$ 1,510.6	\$ 2,009.0	\$ 2,450.0	\$ 2,444.1	\$ 22,628.3	
Raft River Geothermal Expense (\$ x 1000)	\$ 614.8	\$ 497.5	\$ 617.5	\$ 534.1	\$ 481.9	\$ 432.2	\$ 481.0	\$ 496.2	\$ 472.7	\$ 536.7	\$ 595.1	\$ 595.3	\$ 6,354.9	
Black Mesa Solar Expense (\$ x 1000)													\$ -	
Total Expense Excl. PURPA ( \$ x 1000)	\$ 11,763.9	\$ 5,595.9	\$ 6,857.8	\$ 5,483.7	\$ 5,718.6	\$ 6,878.4	\$ 10,510.2	\$ 9,760.3	\$ 6,176.5	\$ 6,055.6	\$ 10,517.6	\$ 14,146.5	\$ 99,465.0	
Storage														
Black Mesa Battery Energy (MWh)	(1,231.6)	(983.0)	(1,238.9)	(1,124.7)	(967.4)	(854.0)	(877.7)	(871.0)	(805.5)	(922.2)	(911.7)	(1,102.7)	(11,890.3)	
80 MW Grid Battery Energy (MWh)	(2,447.3)	(1,979.2)	(2,467.2)	(2,252.3)	(1,948.3)	(1,709.9)	(1,752.9)	(1,740.0)	(1,617.6)	(1,841.0)	(1,790.9)	(2,177.3)	(23,723.7)	
11 MW Grid Battery Energy (MWh)	(332.6)	(261.4)	(316.8)	(300.0)	(256.0)	(225.4)	(241.6)	(236.5)	(214.4)	(251.6)	(231.4)	(277.8)	(3,145.4)	

Total Storage (MWh)	(4,011.4)	(3,223.6)	(4,022.9)	(3,677.0)	(3,171.6)	(2,789.2)	(2,872.2)	(2,847.5)	(2,637.5)	(3,014.8)	(2,933.9)	(3,557.8)	(38,759.4)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.3	8,800.0	8,106.7	800.0	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.2	33.5	74.9	73.1	88.6	102.2	98.2	88.9	75.2	68.7	47.6	24.8	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.4	225,952.5	246,142.3	288,603.1	313,597.5	318,696.2	295,393.9	281,711.2	234,049.4	222,197.3	177,903.2	183,093.7	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	49,744.8	86,332.7	104,135.1	184,194.9	131,842.8	65,626.2	8,733.1	11,500.0	37,597.0	57,258.7	9,118.6	10,498.6	756,582.5
Revenue (\$ x 1000)	\$ 2,016.2	\$ 3,149.8	\$ 2,928.0	\$ 5,401.5	\$ 3,539.0	\$ 1,886.0	\$ 363.9	\$ 606.0	\$ 1,622.8	\$ 2,360.9	\$ 467.9	\$ 484.4	\$ 24,826.5
Revenue - No Wheeling (\$ x 1000)	\$ 1,644.61	\$ 2,504.99	\$ 2,150.23	\$ 4,025.64	\$ 2,554.24	\$ 1,395.80	\$ 298.62	\$ 520.11	\$ 1,342.01	\$ 1,933.24	\$ 399.80	\$ 406.00	\$ 19,175.3
Total Energy	1,428,850.9	1,234,421.5	1,217,841.8	1,168,470.8	1,353,816.9	1,602,921.8	1,927,228.2	1,763,858.9	1,373,841.6	1,218,929.6	1,251,370.2	1,476,225.0	17,017,777.3
Total NPSE	\$ 42,370.7	\$ 27,921.2	\$ 24,164.6	\$ 20,892.7	\$ 24,326.8	\$ 37,795.5	\$ 58,527.8	\$ 58,366.8	\$ 38,788.0	\$ 36,567.6	\$ 47,715.9	\$ 56,826.4	\$ 479,915.2

Wheeling 3-Year Average \$ 7.47

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1981

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	792,720.5	868,647.5	806,477.0	844,673.8	693,665.0	868,212.9	712,875.4	546,547.0	603,413.2	456,539.7	358,142.4	632,637.8	8,184,552.0
Bridger Coal													
Energy (MWh)	125,632.9	75,815.2	46,769.8	44,383.7	49,018.5	91,570.6	166,180.9	238,667.4	232,977.2	231,209.7	240,568.8	250,686.7	1,793,481.27
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,465.92	\$ 1,661.07	\$ 1,582.25	\$ 1,955.60	\$ 3,240.12	\$ 5,407.83	\$ 7,494.24	\$ 7,310.26	\$ 7,279.46	\$ 7,528.89	\$ 7,840.28	\$ 57,695.29
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	40,144.1	42,831.9	1,535.4	282.6	40,297.4	51,238.0	176,450.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,867.74	\$ 1,991.24	\$ 71.80	\$ 13.16	\$ 1,876.93	\$ 2,366.95	\$ 8,193.6
Bridger Gas													
Energy (MWh)	-	30,048.1	-	4,725.1	226.4	974.4	33,091.8	28,406.7	14,879.1	29,853.2	-	-	142,204.8
Expense (\$ x 1000)	\$ -	\$ 1,099.29	\$ -	\$ 210.77	\$ 8.83	\$ 42.08	\$ 1,572.08	\$ 1,372.58	\$ 656.29	\$ 1,307.35	\$ -	\$ -	\$ 6,269.3
Langley Gulch													
Energy (MWh)	178,716.7	8,151.3	-	-	189,688.2	207,604.3	215,555.0	216,497.2	212,066.9	221,374.3	176,754.7	149,975.9	1,776,384.5
Expense (\$ x 1000)	\$ 13,597.30	\$ 221.74	\$ -	\$ -	\$ 5,134.39	\$ 6,069.07	\$ 7,204.54	\$ 7,786.00	\$ 7,016.50	\$ 7,432.39	\$ 12,387.60	\$ 15,084.51	\$ 81,934.0
Danskin													
Energy (MWh)	-	-	-	-	-	1,658.0	100,192.6	97,164.2	-	-	5,322.4	-	204,337.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70.78	\$ 5,259.45	\$ 5,473.72	\$ -	\$ -	\$ 592.97	\$ -	\$ 11,396.9
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	1,387.3	48,037.1	35,720.4	3,521.1	-	486.1	-	89,151.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62.57	\$ 2,535.48	\$ 2,022.16	\$ 180.70	\$ -	\$ 54.14	\$ -	\$ 4,855.1
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	79,913.8	26,799.4	71,423.8	7,974.7	62,844.7	75,528.6	223,295.9	188,212.8	42,002.8	51,890.9	192,905.3	153,036.2	1,175,828.8
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	155,686.0	91,028.0	153,867.3	93,314.1	153,597.8	165,614.8	317,648.4	276,698.1	117,599.5	124,287.4	262,171.3	222,836.6	2,134,349.2
Market Expense (\$ x 1000)	\$ 3,279.43	\$ 817.22	\$ 1,799.19	\$ 201.96	\$ 1,561.04	\$ 2,029.49	\$ 7,414.09	\$ 7,166.49	\$ 1,535.87	\$ 1,952.53	\$ 7,622.81	\$ 6,483.81	\$ 41,863.9
Market Expense - No Wheeling (\$ x 1000)	\$ 2,682.53	\$ 617.05	\$ 1,265.70	\$ 142.39	\$ 1,091.63	\$ 1,465.34	\$ 5,746.22	\$ 5,760.67	\$ 1,222.14	\$ 1,564.94	\$ 6,181.94	\$ 5,340.73	\$ 33,081.3
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 8,440.8	\$ 5,062.0	\$ 6,518.3	\$ 5,094.4	\$ 5,873.5	\$ 5,912.8	\$ 10,223.9	\$ 10,103.2	\$ 5,216.1	\$ 6,084.1	\$ 11,376.9	\$ 10,776.3	\$ 90,682.4
Storage													
Black Mesa Battery Energy (MWh)	(1,256.78)	(892.75)	(1,132.3)	(1,147.9)	(938.2)	(861.2)	(868.9)	(870.5)	(814.4)	(975.3)	(951.0)	(1,178.9)	(11,888.1)
80 MW Grid Battery Energy (MWh)	(2,466.44)	(1,775.24)	(2,269.9)	(2,284.3)	(1,867.7)	(1,763.1)	(1,750.9)	(1,737.4)	(1,603.4)	(1,999.3)	(1,868.2)	(2,326.3)	(23,712.2)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	1982												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	807,357.3	900,601.9	1,074,415.8	1,008,560.2	1,134,295.4	1,155,438.1	1,193,723.0	877,453.3	765,593.0	575,288.8	656,255.0	1,084,226.2	11,233,208.0
Bridger Coal													
Energy (MWh)	124,993.1	50,669.3	34,203.4	32,779.7	37,125.8	71,746.2	114,961.6	165,360.7	104,903.7	156,413.4	202,298.2	215,894.3	1,311,349.54
Expense (\$ x 1000)	\$ 3,910.97	\$ 1,742.66	\$ 1,299.62	\$ 1,248.49	\$ 1,613.37	\$ 2,669.51	\$ 3,933.56	\$ 5,384.18	\$ 3,623.50	\$ 5,126.34	\$ 6,427.28	\$ 6,838.50	\$ 43,817.98
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	-	3,695.9	-	40.5	32,801.4	2,465.2	39,124.5
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 173.71	\$ -	\$ 1.92	\$ 1,538.65	\$ 115.38	\$ 1,835.4
Bridger Gas													
Energy (MWh)	-	44,106.1	-	3,054.3	716.4	4,833.7	15,701.8	26,010.2	4,399.5	15,949.5	-	-	114,771.5
Expense (\$ x 1000)	\$ -	\$ 1,390.39	\$ -	\$ 117.44	\$ 24.04	\$ 180.25	\$ 642.32	\$ 1,082.34	\$ 167.22	\$ 601.32	\$ -	\$ -	\$ 4,205.3
Langley Gulch													
Energy (MWh)	162,902.6	3,576.4	-	-	-	27,234.3	200,974.1	215,512.3	214,339.5	223,932.0	7,617.0	-	1,056,088.1
Expense (\$ x 1000)	\$ 10,880.87	\$ 87.07	\$ -	\$ -	\$ -	\$ 713.12	\$ 5,953.07	\$ 6,856.28	\$ 6,276.61	\$ 6,652.49	\$ 488.24	\$ -	\$ 37,907.8
Danskin													
Energy (MWh)	63.5	-	-	-	-	-	183.6	739.9	-	-	-	-	986.9
Expense (\$ x 1000)	\$ 7.06	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8.71	\$ 35.74	\$ -	\$ -	\$ -	\$ -	\$ 51.5
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	-	2,074.6	-	-	-	-	2,074.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97.56	\$ -	\$ -	\$ -	\$ -	\$ 97.6
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	76,635.1	25,643.3	622.9	661.1	5,033.6	46,392.7	68,923.8	118,857.5	23,851.0	27,332.3	120,567.0	9,252.5	523,772.7
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	152,407.2	89,871.8	83,066.4	86,000.5	95,786.7	136,478.9	163,276.3	207,342.9	99,447.7	99,728.8	189,833.0	79,052.9	1,482,293.1
Market Expense (\$ x 1000)	\$ 2,873.53	\$ 714.13	\$ 15.07	\$ 17.63	\$ 114.02	\$ 1,255.78	\$ 2,134.69	\$ 3,756.12	\$ 698.99	\$ 845.60	\$ 3,976.30	\$ 322.35	\$ 16,724.2
Market Expense - No Wheeling (\$ x 1000)	\$ 2,301.12	\$ 522.59	\$ 10.42	\$ 12.69	\$ 76.42	\$ 909.26	\$ 1,619.87	\$ 2,868.33	\$ 520.84	\$ 641.45	\$ 3,075.74	\$ 253.24	\$ 12,812.0
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 8,059.4	\$ 4,967.5	\$ 5,263.0	\$ 4,964.7	\$ 4,858.3	\$ 5,356.8	\$ 6,097.6	\$ 7,210.9	\$ 4,514.8	\$ 5,160.6	\$ 8,270.7	\$ 5,688.8	\$ 70,413.1
Storage													
Black Mesa Battery Energy (MWh)	(1,134.97)	(924.46)	(1,448.2)	(1,209.5)	(1,077.4)	(886.1)	(875.8)	(841.4)	(638.5)	(952.7)	(892.3)	(1,059.1)	(11,940.3)
80 MW Grid Battery Energy (MWh)	(2,207.54)	(1,968.88)	(2,942.9)	(2,398.3)	(2,167.0)	(1,760.0)	(1,757.6)	(1,690.1)	(1,296.4)	(1,845.3)	(1,728.7)	(2,132.2)	(23,894.8)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1983													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	1,291,179.9	1,043,293.8	1,144,542.7	1,145,167.5	1,230,303.6	1,255,844.0	1,073,430.3	877,964.0	750,148.8	602,517.6	740,356.6	1,113,103.0	12,267,851.7
Bridger Coal													
Energy (MWh)	114,579.2	37,720.4	30,750.2	32,944.6	45,147.6	83,296.6	130,229.2	163,269.4	127,194.8	149,725.3	196,151.5	220,114.3	1,331,123.15
Expense (\$ x 1000)	\$ 3,611.44	\$ 1,370.22	\$ 1,200.30	\$ 1,253.23	\$ 1,844.24	\$ 3,001.99	\$ 4,373.02	\$ 5,324.00	\$ 4,265.11	\$ 4,933.90	\$ 6,250.28	\$ 6,959.90	\$ 44,387.63
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	1,473.5	4,772.2	-	40.5	20,555.8	4,966.8	31,930.4
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69.04	\$ 224.15	\$ -	\$ 1.92	\$ 959.19	\$ 230.13	\$ 1,490.2
Bridger Gas													
Energy (MWh)	-	29,983.8	-	2,863.5	2,651.0	7,486.8	22,278.1	35,538.4	12,965.7	22,288.5	-	-	136,055.7
Expense (\$ x 1000)	\$ -	\$ 960.13	\$ -	\$ 111.75	\$ 90.44	\$ 283.24	\$ 925.55	\$ 1,502.73	\$ 500.84	\$ 853.86	\$ -	\$ -	\$ 5,228.5
Langley Gulch													
Energy (MWh)	-	-	-	-	-	13,793.4	216,137.6	215,040.4	214,279.6	219,085.5	-	-	878,336.5
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 367.43	\$ 6,490.54	\$ 6,944.39	\$ 6,368.13	\$ 6,611.75	\$ -	\$ -	\$ 26,782.2
Danskin													
Energy (MWh)	-	-	-	-	-	123.1	1,270.7	185.1	-	-	-	-	1,578.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.11	\$ 62.10	\$ 9.82	\$ -	\$ -	\$ -	\$ -	\$ 77.0
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	2,876.2	1,978.8	-	-	-	-	4,855.0
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 131.06	\$ 95.94	\$ -	\$ -	\$ -	\$ -	\$ 227.0
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	1,060.8	3,362.3	456.4	50.3	2,907.3	36,213.5	115,634.1	118,795.4	29,970.7	24,172.2	73,953.8	6,416.2	412,993.1
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	76,833.0	67,590.9	82,900.0	85,389.7	93,660.4	126,299.8	209,986.6	207,280.8	105,567.4	96,568.7	143,219.8	76,216.6	1,371,513.5
Market Expense (\$ x 1000)	\$ 45.12	\$ 98.75	\$ 10.53	\$ 1.31	\$ 67.85	\$ 994.99	\$ 3,619.70	\$ 3,729.08	\$ 867.15	\$ 743.97	\$ 2,397.45	\$ 226.65	\$ 12,802.6
Market Expense - No Wheeling (\$ x 1000)	\$ 37.20	\$ 73.64	\$ 7.12	\$ 0.93	\$ 46.13	\$ 724.50	\$ 2,755.99	\$ 2,841.76	\$ 643.29	\$ 563.42	\$ 1,845.06	\$ 178.73	\$ 9,717.8
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,795.4	\$ 4,518.6	\$ 5,259.8	\$ 4,953.0	\$ 4,828.0	\$ 5,172.0	\$ 7,233.7	\$ 7,184.3	\$ 4,637.3	\$ 5,082.6	\$ 7,040.0	\$ 5,614.3	\$ 67,318.9
Storage													
Black Mesa Battery Energy (MWh)	(1,287.82)	(1,143.90)	(1,419.1)	(1,218.1)	(1,143.3)	(864.3)	(889.9)	(873.3)	(833.7)	(910.7)	(941.6)	(1,134.8)	(12,660.5)
80 MW Grid Battery Energy (MWh)	(2,492.56)	(2,319.18)	(2,832.3)	(2,476.5)	(2,356.5)	(1,746.3)	(1,777.8)	(1,744.1)	(1,691.5)	(1,862.7)	(1,856.3)	(2,256.3)	(25,411.9)

11 MW Grid Battery Energy (MWh)	(343.85)	(315.68)	(376.7)	(326.1)	(295.3)	(229.7)	(245.2)	(239.7)	(222.4)	(253.5)	(250.5)	(289.9)	(3,388.5)
Total Storage (MWh)	(4,124.2)	(3,778.8)	(4,628.1)	(4,020.8)	(3,795.1)	(2,840.3)	(2,912.9)	(2,857.0)	(2,747.6)	(3,026.9)	(3,048.3)	(3,680.9)	(41,460.9)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	252,536.0	166,374.7	281,940.2	382,549.8	327,836.7	201,533.4	31,833.2	29,219.9	68,491.7	90,535.7	23,816.0	117,613.3	1,974,280.4
Revenue (\$ x 1000)	\$ 9,325.1	\$ 5,198.4	\$ 6,997.9	\$ 10,108.7	\$ 8,109.8	\$ 5,414.9	\$ 1,200.8	\$ 1,361.9	\$ 2,642.7	\$ 3,314.4	\$ 1,065.9	\$ 4,741.5	\$ 59,482.0
Revenue - No Wheeling (\$ x 1000)	\$ 7,438.8	\$ 3,955.7	\$ 4,892.0	\$ 7,251.3	\$ 5,661.0	\$ 3,909.6	\$ 963.1	\$ 1,143.7	\$ 2,131.2	\$ 2,638.2	\$ 888.0	\$ 3,863.0	\$ 44,735.4
Total Energy	1,428,850.96	1,234,421.47	1,217,841.83	1,168,470.79	1,353,816.94	1,602,921.79	1,927,228.23	1,763,858.92	1,373,841.58	1,218,929.55	1,251,370.20	1,476,224.98	17,017,777.24
<b>Total NPSE</b>	<b>\$ 16,583.7</b>	<b>\$ 20,069.4</b>	<b>\$ 14,290.3</b>	<b>\$ 13,322.6</b>	<b>\$ 16,094.7</b>	<b>\$ 27,032.8</b>	<b>\$ 43,451.2</b>	<b>\$ 44,386.8</b>	<b>\$ 31,629.2</b>	<b>\$ 31,234.6</b>	<b>\$ 30,213.7</b>	<b>\$ 26,428.4</b>	<b>\$ 329,484.0</b>

Wheeling 3-Year Average                   \$           7.47

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1984

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,165,120.1	1,005,842.4	1,072,179.7	1,104,538.3	1,203,764.7	1,262,895.6	1,081,669.5	922,060.6	797,505.3	583,026.6	735,916.1	916,636.8	11,851,155.6
Bridger Coal													
Energy (MWh)	124,571.2	42,998.0	32,752.8	30,296.0	47,137.9	74,918.3	126,075.0	167,059.1	158,831.7	161,414.7	202,615.8	250,179.6	1,418,850.09
Expense (\$ x 1000)	\$ 3,898.83	\$ 1,522.01	\$ 1,257.90	\$ 1,177.05	\$ 1,901.49	\$ 2,760.82	\$ 4,253.45	\$ 5,432.90	\$ 5,175.92	\$ 5,270.35	\$ 6,436.33	\$ 7,825.69	\$ 46,912.74
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	-	162.0	-	40.5	19,837.7	30,497.3	50,659.1
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7.67	\$ -	\$ 1.92	\$ 926.28	\$ 1,417.57	\$ 2,359.2
Bridger Gas													
Energy (MWh)	-	31,682.0	-	841.2	2,031.3	1,644.4	5,468.7	11,764.3	12,098.5	11,976.8	-	-	77,507.3
Expense (\$ x 1000)	\$ -	\$ 1,041.00	\$ -	\$ 33.70	\$ 71.03	\$ 63.81	\$ 232.91	\$ 509.72	\$ 479.32	\$ 470.44	\$ -	\$ -	\$ 2,901.9
Langley Gulch													
Energy (MWh)	-	-	-	-	-	13,739.9	214,881.5	214,264.2	118,525.2	219,048.7	-	4,156.5	784,616.0
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 372.87	\$ 6,575.90	\$ 7,051.62	\$ 3,593.79	\$ 6,735.09	\$ -	\$ 382.87	\$ 24,712.1
Danskin													
Energy (MWh)	-	-	-	-	-	122.5	1,160.2	61.5	-	-	-	-	1,344.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.29	\$ 58.27	\$ 3.29	\$ -	\$ -	\$ -	\$ -	\$ 66.9
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	3,081.6	1,915.0	-	-	-	-	4,996.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 142.30	\$ 93.34	\$ -	\$ -	\$ -	\$ -	\$ 235.6
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	4,426.7	2,713.6	1,103.7	79.2	4,248.6	40,084.5	120,153.2	90,450.6	37,707.5	25,501.4	69,415.0	48,800.1	444,684.0
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	80,198.8	66,942.1	83,547.2	85,418.6	95,001.7	130,170.7	214,505.7	178,936.0	113,304.1	97,897.9	138,681.1	118,600.6	1,403,204.4
Market Expense (\$ x 1000)	\$ 204.15	\$ 78.30	\$ 26.37	\$ 2.19	\$ 100.50	\$ 1,075.30	\$ 3,722.78	\$ 2,935.59	\$ 1,147.54	\$ 806.69	\$ 2,283.39	\$ 1,842.28	\$ 14,225.1
Market Expense - No Wheeling (\$ x 1000)	\$ 171.09	\$ 58.03	\$ 18.13	\$ 1.60	\$ 68.77	\$ 775.90	\$ 2,825.31	\$ 2,259.98	\$ 865.89	\$ 616.21	\$ 1,764.91	\$ 1,477.78	\$ 10,903.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,929.3	\$ 4,503.0	\$ 5,270.8	\$ 4,953.6	\$ 4,850.6	\$ 5,223.4	\$ 7,303.0	\$ 6,602.6	\$ 4,859.9	\$ 5,135.4	\$ 6,959.8	\$ 6,913.3	\$ 68,504.7
Storage													
Black Mesa Battery Energy (MWh)	(1,272.54)	(1,028.43)	(1,417.1)	(1,157.3)	(1,114.9)	(850.9)	(869.0)	(851.2)	(806.9)	(868.9)	(953.3)	(1,102.7)	(12,293.1)
80 MW Grid Battery Energy (MWh)	(2,574.08)	(2,187.77)	(2,813.6)	(2,316.7)	(2,306.7)	(1,702.0)	(1,736.9)	(1,730.1)	(1,612.5)	(1,702.3)	(1,794.8)	(2,185.7)	(24,663.2)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1985

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,153,565.0	1,002,266.7	1,063,634.4	1,212,128.4	1,149,775.3	936,564.5	719,629.0	594,046.5	715,658.8	521,946.7	392,289.7	543,294.2	10,004,799.2
Bridger Coal													
Energy (MWh)	125,632.9	50,896.6	36,487.4	37,546.8	42,636.4	83,222.1	163,605.3	237,147.7	206,339.5	212,993.2	241,092.5	250,686.7	1,688,286.99
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,749.20	\$ 1,365.32	\$ 1,385.60	\$ 1,771.96	\$ 2,999.83	\$ 5,333.70	\$ 7,450.48	\$ 6,543.23	\$ 6,755.10	\$ 7,543.96	\$ 7,840.28	\$ 54,668.03
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	35,652.1	42,850.2	1,212.4	40.5	41,036.0	47,058.8	167,971.5
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,665.49	\$ 1,992.06	\$ 56.73	\$ 1.92	\$ 1,909.85	\$ 2,178.31	\$ 7,810.1
Bridger Gas													
Energy (MWh)	-	29,200.7	-	311.9	135.1	976.3	17,970.3	31,586.4	16,198.7	20,284.0	-	-	116,663.3
Expense (\$ x 1000)	\$ -	\$ 1,043.69	\$ -	\$ 13.55	\$ 5.12	\$ 41.22	\$ 833.50	\$ 1,491.44	\$ 698.76	\$ 867.34	\$ -	\$ -	\$ 4,994.6
Langley Gulch													
Energy (MWh)	-	-	-	-	-	114,121.0	215,734.3	216,631.6	176,180.7	220,232.8	178,553.2	153,424.1	1,274,877.8
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,278.27	\$ 7,074.88	\$ 7,643.10	\$ 5,724.02	\$ 7,256.44	\$ 12,303.66	\$ 15,230.63	\$ 58,511.0
Danskin													
Energy (MWh)	383.4	-	-	-	-	1,492.2	110,445.0	56,301.4	250.2	-	427.3	3,481.3	172,780.7
Expense (\$ x 1000)	\$ 46.78	\$ -	\$ -	\$ -	\$ -	\$ 62.45	\$ 5,657.65	\$ 3,092.53	\$ 13.72	\$ -	\$ 47.14	\$ 522.26	\$ 9,442.5
Bennett Mountain													
Energy (MWh)	249.7	-	-	-	-	774.0	42,931.3	34,231.2	-	-	243.0	1,762.0	80,191.1
Expense (\$ x 1000)	\$ 29.84	\$ -	\$ -	\$ -	\$ -	\$ 35.11	\$ 2,216.92	\$ 1,896.95	\$ -	\$ -	\$ 26.52	\$ 259.06	\$ 4,464.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	7,732.3	2,436.2	1,723.8	54.3	4,628.9	93,583.9	229,391.1	185,873.2	21,325.4	30,716.6	163,007.3	230,356.0	970,828.8
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	83,504.5	66,664.7	84,167.3	85,393.7	95,382.0	183,670.1	323,743.6	274,358.5	96,922.0	103,113.1	232,273.3	300,156.4	1,929,349.2
Market Expense (\$ x 1000)	\$ 355.91	\$ 76.17	\$ 45.56	\$ 1.56	\$ 112.51	\$ 2,467.18	\$ 7,619.27	\$ 6,956.89	\$ 728.01	\$ 1,078.40	\$ 6,266.96	\$ 9,915.96	\$ 35,624.4
Market Expense - No Wheeling (\$ x 1000)	\$ 298.15	\$ 57.97	\$ 32.68	\$ 1.15	\$ 77.94	\$ 1,768.17	\$ 5,905.87	\$ 5,568.54	\$ 568.72	\$ 848.97	\$ 5,049.40	\$ 8,195.35	\$ 28,372.9
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 6,056.4	\$ 4,502.9	\$ 5,285.3	\$ 4,953.2	\$ 4,859.8	\$ 6,215.7	\$ 10,383.6	\$ 9,911.1	\$ 4,562.7	\$ 5,368.2	\$ 10,244.3	\$ 13,630.9	\$ 85,974.0
Storage													
Black Mesa Battery Energy (MWh)	(1,359.73)	(1,078.49)	(1,397.8)	(1,171.1)	(918.9)	(875.1)	(882.4)	(875.3)	(815.7)	(1,003.6)	(870.1)	(1,068.9)	(12,317.0)
80 MW Grid Battery Energy (MWh)	(2,731.69)	(2,325.83)	(2,790.3)	(2,384.8)	(1,857.9)	(1,732.1)	(1,757.2)	(1,750.6)	(1,718.2)	(1,894.4)	(1,682.9)	(2,134.7)	(24,760.6)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1986

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,014,443.6	1,004,353.3	1,232,902.0	1,175,608.2	1,242,534.9	1,222,624.4	802,870.1	774,467.9	756,537.7	551,371.1	552,958.9	838,261.2	11,168,933.4
Bridger Coal													
Energy (MWh)	125,603.1	46,484.0	31,317.0	33,197.2	38,200.7	79,652.8	140,328.9	176,322.5	146,579.8	171,932.7	213,836.6	250,418.8	1,453,874.02
Expense (\$ x 1000)	\$ 3,928.51	\$ 1,622.28	\$ 1,216.60	\$ 1,260.49	\$ 1,644.30	\$ 2,897.09	\$ 4,663.71	\$ 5,699.72	\$ 4,823.10	\$ 5,573.18	\$ 6,759.37	\$ 7,832.57	\$ 47,920.92
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	17,883.9	25,159.0	-	40.5	35,835.0	40,663.0	119,702.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 843.56	\$ 1,179.05	\$ -	\$ 1.92	\$ 1,678.02	\$ 1,887.95	\$ 5,596.3
Bridger Gas													
Energy (MWh)	-	35,589.0	-	1,790.9	865.4	2,634.0	18,729.8	32,605.4	5,415.3	29,702.6	-	-	127,332.5
Expense (\$ x 1000)	\$ -	\$ 1,174.89	\$ -	\$ 72.06	\$ 30.44	\$ 102.72	\$ 802.23	\$ 1,421.65	\$ 215.80	\$ 1,174.37	\$ -	\$ -	\$ 4,994.2
Langley Gulch													
Energy (MWh)	7,855.0	-	-	-	-	20,328.7	215,611.5	216,246.9	144,086.4	219,822.6	91,607.0	36,247.9	951,805.9
Expense (\$ x 1000)	\$ 569.74	\$ -	\$ -	\$ -	\$ -	\$ 552.86	\$ 6,637.87	\$ 7,158.59	\$ 4,396.18	\$ 6,799.48	\$ 5,940.00	\$ 3,353.55	\$ 35,408.3
Danskin													
Energy (MWh)	255.9	-	-	-	-	122.5	82,925.5	9,355.7	-	-	-	-	92,659.6
Expense (\$ x 1000)	\$ 29.20	\$ -	\$ -	\$ -	\$ -	\$ 5.33	\$ 3,960.88	\$ 480.33	\$ -	\$ -	\$ -	\$ -	\$ 4,475.7
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	22,203.5	702.2	-	-	-	-	22,905.7
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,084.16	\$ 35.88	\$ -	\$ -	\$ -	\$ -	\$ 1,120.0
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	36,694.4	3,738.5	52.7	169.7	2,915.6	43,028.2	235,212.1	169,596.9	48,785.9	34,744.7	121,460.2	77,227.7	773,626.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	112,466.6	67,967.0	82,496.2	85,509.1	93,668.7	133,114.4	329,564.6	258,082.3	124,382.6	107,141.2	190,726.2	147,028.1	1,732,146.9
Market Expense (\$ x 1000)	\$ 1,465.32	\$ 108.45	\$ 1.20	\$ 4.71	\$ 67.66	\$ 1,162.12	\$ 7,015.47	\$ 5,549.29	\$ 1,463.26	\$ 1,100.21	\$ 4,098.43	\$ 2,919.96	\$ 24,956.1
Market Expense - No Wheeling (\$ x 1000)	\$ 1,191.24	\$ 80.53	\$ 0.81	\$ 3.44	\$ 45.88	\$ 840.73	\$ 5,258.59	\$ 4,282.51	\$ 1,098.86	\$ 840.69	\$ 3,191.20	\$ 2,343.12	\$ 19,177.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 6,949.5	\$ 4,525.5	\$ 5,253.4	\$ 4,955.5	\$ 4,827.7	\$ 5,288.2	\$ 9,736.3	\$ 8,625.1	\$ 5,092.9	\$ 5,359.9	\$ 8,386.1	\$ 7,778.7	\$ 76,778.7
Storage													
Black Mesa Battery Energy (MWh)	(1,216.85)	(1,117.51)	(1,483.7)	(1,207.1)	(1,077.6)	(868.7)	(870.3)	(880.7)	(694.7)	(931.5)	(834.7)	(1,064.9)	(12,248.3)
80 MW Grid Battery Energy (MWh)	(2,486.49)	(2,232.65)	(3,001.7)	(2,393.4)	(2,123.0)	(1,719.8)	(1,762.7)	(1,760.3)	(1,364.1)	(1,850.6)	(1,696.6)	(2,128.0)	(24,519.3)

11 MW Grid Battery Energy (MWh)	(343.08)	(293.13)	(385.8)	(316.4)	(279.1)	(228.5)	(241.2)	(242.7)	(188.2)	(249.2)	(204.8)	(273.7)	(3,245.8)
Total Storage (MWh)	(4,046.4)	(3,643.3)	(4,871.3)	(3,916.9)	(3,479.6)	(2,816.9)	(2,874.2)	(2,883.7)	(2,247.0)	(3,031.3)	(2,736.2)	(3,466.6)	(40,013.4)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	30,645.9	142,314.5	370,219.4	412,393.9	331,659.2	173,189.7	4,307.4	16,106.0	35,837.9	80,315.9	8,808.1	16,045.8	1,621,843.7
Revenue (\$ x 1000)	\$ 1,449.5	\$ 4,796.1	\$ 9,169.8	\$ 10,872.8	\$ 7,985.2	\$ 4,700.1	\$ 209.9	\$ 816.7	\$ 1,372.2	\$ 3,255.7	\$ 421.9	\$ 862.0	\$ 45,911.8
Revenue - No Wheeling (\$ x 1000)	\$ 1,220.6	\$ 3,733.1	\$ 6,404.5	\$ 7,792.5	\$ 5,507.9	\$ 3,406.5	\$ 177.7	\$ 696.4	\$ 1,104.5	\$ 2,655.8	\$ 356.1	\$ 742.2	\$ 33,797.7
Total Energy	1,428,850.94	1,234,421.49	1,217,841.83	1,168,470.82	1,353,816.93	1,602,921.82	1,927,228.25	1,763,858.89	1,373,841.58	1,218,929.59	1,251,370.18	1,476,225.01	17,017,777.33
<b>Total NPSE</b>	<b>\$ 26,529.4</b>	<b>\$ 20,945.4</b>	<b>\$ 12,128.4</b>	<b>\$ 12,528.5</b>	<b>\$ 15,959.0</b>	<b>\$ 27,764.1</b>	<b>\$ 52,885.8</b>	<b>\$ 48,247.1</b>	<b>\$ 31,656.3</b>	<b>\$ 32,718.1</b>	<b>\$ 39,371.8</b>	<b>\$ 38,356.3</b>	<b>\$ 371,204.3</b>

Wheeling 3-Year Average                   \$           7.47



IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1987

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,003,291.6	936,478.0	821,438.3	613,947.8	694,452.3	631,436.2	634,293.2	520,576.3	535,778.8	463,890.7	388,369.4	466,181.3	7,710,133.8
Bridger Coal													
Energy (MWh)	125,632.9	68,053.2	45,292.7	56,605.1	56,526.2	116,701.6	175,085.8	246,652.0	239,552.2	237,086.2	242,600.0	250,686.7	1,860,474.48
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,242.66	\$ 1,618.58	\$ 1,933.77	\$ 2,171.63	\$ 3,963.49	\$ 5,664.11	\$ 7,724.11	\$ 7,499.63	\$ 7,448.64	\$ 7,587.37	\$ 7,840.28	\$ 59,623.64
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	41,664.4	41,842.6	17,068.1	684.8	42,316.5	52,302.1	196,000.1
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,938.87	\$ 1,947.15	\$ 801.26	\$ 31.53	\$ 1,966.93	\$ 2,414.38	\$ 9,105.9
Bridger Gas													
Energy (MWh)	-	28,396.0	-	4,965.0	1,411.9	2,417.3	22,833.9	24,340.3	12,322.0	36,658.9	-	-	133,345.4
Expense (\$ x 1000)	\$ -	\$ 1,074.03	\$ -	\$ 229.01	\$ 56.94	\$ 107.95	\$ 1,121.74	\$ 1,216.33	\$ 562.75	\$ 1,661.22	\$ -	\$ -	\$ 6,030.0
Langley Gulch													
Energy (MWh)	17,951.8	-	-	151,692.8	216,765.7	208,813.2	215,639.5	215,381.6	212,840.2	220,919.6	179,380.5	157,471.7	1,796,856.6
Expense (\$ x 1000)	\$ 1,419.10	\$ -	\$ -	\$ 4,894.57	\$ 6,027.17	\$ 6,271.82	\$ 7,410.31	\$ 7,967.18	\$ 7,239.44	\$ 7,626.85	\$ 12,953.84	\$ 16,425.82	\$ 78,236.1
Danskin													
Energy (MWh)	-	-	-	-	-	47,176.9	124,986.5	109,593.7	-	-	197.7	11,826.6	293,781.5
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,183.88	\$ 6,812.18	\$ 6,407.21	\$ -	\$ -	\$ 22.77	\$ 1,863.44	\$ 17,289.5
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	21,946.6	75,256.0	60,121.6	1,315.0	-	243.0	2,265.4	161,147.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,045.04	\$ 4,092.47	\$ 3,553.56	\$ 68.66	\$ -	\$ 27.90	\$ 350.50	\$ 9,138.1
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	39,038.0	9,554.6	63,005.5	34,786.5	45,397.5	175,884.1	246,952.5	178,963.6	72,011.3	37,909.2	164,030.0	286,780.7	1,354,313.4
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	114,810.2	73,783.1	145,449.1	120,125.8	136,150.6	265,970.3	341,304.9	267,449.0	147,607.9	110,305.7	233,296.0	356,581.1	2,312,833.8
Market Expense (\$ x 1000)	\$ 1,714.24	\$ 289.83	\$ 1,616.35	\$ 997.77	\$ 1,132.23	\$ 5,087.39	\$ 8,635.99	\$ 6,998.80	\$ 2,676.84	\$ 1,440.72	\$ 6,583.79	\$ 13,184.06	\$ 50,358.0
Market Expense - No Wheeling (\$ x 1000)	\$ 1,422.65	\$ 218.46	\$ 1,145.74	\$ 737.94	\$ 793.14	\$ 3,773.65	\$ 6,791.42	\$ 5,662.06	\$ 2,138.96	\$ 1,157.56	\$ 5,358.59	\$ 11,042.00	\$ 40,242.2
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 7,180.9	\$ 4,663.4	\$ 6,398.4	\$ 5,690.0	\$ 5,575.0	\$ 8,221.2	\$ 11,269.1	\$ 10,004.6	\$ 6,133.0	\$ 5,676.8	\$ 10,553.5	\$ 16,477.5	\$ 97,843.3
Storage													
Black Mesa Battery Energy (MWh)	(1,265.31)	(1,006.39)	(1,054.6)	(1,101.2)	(995.6)	(852.7)	(868.7)	(868.1)	(805.7)	(896.1)	(897.6)	(1,088.2)	(11,700.0)
80 MW Grid Battery Energy (MWh)	(2,521.19)	(1,961.85)	(2,071.9)	(2,171.7)	(1,977.5)	(1,733.9)	(1,736.9)	(1,743.5)	(1,675.7)	(1,811.1)	(1,755.1)	(2,227.5)	(23,387.9)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1988													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	537,905.8	515,706.8	400,960.2	501,926.1	497,614.3	496,996.2	617,091.2	466,009.6	475,857.0	428,490.0	374,706.7	457,972.0	5,771,235.7
Bridger Coal													
Energy (MWh)	125,632.9	104,497.9	68,674.7	74,666.2	76,514.0	135,603.6	209,956.7	250,462.5	242,600.0	249,339.5	242,600.0	250,686.7	2,031,234.74
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,290.91	\$ 2,291.11	\$ 2,453.25	\$ 2,746.96	\$ 4,507.56	\$ 6,667.78	\$ 7,833.82	\$ 7,587.37	\$ 7,801.48	\$ 7,587.37	\$ 7,840.28	\$ 64,537.26
Valmy													
Energy (MWh)	121.5	-	-	-	-	1,701.4	44,184.8	48,741.0	38,015.5	10,735.1	43,044.7	67,608.1	254,152.2
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 80.55	\$ 2,052.89	\$ 2,251.95	\$ 1,775.21	\$ 500.93	\$ 1,999.38	\$ 3,096.85	\$ 11,763.5
Bridger Gas													
Energy (MWh)	-	45,349.0	-	673.8	954.1	7,038.3	24,464.4	42,309.2	16,880.3	12,869.7	-	-	150,538.8
Expense (\$ x 1000)	\$ -	\$ 1,828.35	\$ -	\$ 32.99	\$ 40.90	\$ 335.76	\$ 1,281.44	\$ 2,254.53	\$ 822.01	\$ 621.32	\$ -	\$ -	\$ 7,217.3
Langley Gulch													
Energy (MWh)	202,790.8	208,671.3	164,696.9	207,951.3	229,231.8	207,880.4	215,408.7	215,915.5	213,506.4	221,148.0	180,745.9	155,888.8	2,423,835.7
Expense (\$ x 1000)	\$ 16,388.38	\$ 6,113.44	\$ 10,379.68	\$ 7,081.47	\$ 6,720.99	\$ 6,592.88	\$ 7,821.84	\$ 8,442.27	\$ 7,672.44	\$ 8,067.24	\$ 13,775.52	\$ 17,334.78	\$ 116,390.9
Danskin													
Energy (MWh)	21,295.1	386.7	24,937.4	-	1,963.4	88,409.9	128,984.7	122,141.3	1,048.4	-	889.0	12,480.9	402,536.8
Expense (\$ x 1000)	\$ 2,883.64	\$ 18.91	\$ 2,395.22	\$ -	\$ 84.91	\$ 4,428.74	\$ 7,459.92	\$ 7,609.71	\$ 61.85	\$ -	\$ 109.17	\$ 2,089.71	\$ 27,141.8
Bennett Mountain													
Energy (MWh)	7,240.1	-	4,672.3	-	675.8	45,330.8	78,979.9	67,480.1	4,772.9	-	486.1	3,649.8	213,287.7
Expense (\$ x 1000)	\$ 966.15	\$ -	\$ 440.20	\$ -	\$ 32.97	\$ 2,264.96	\$ 4,567.56	\$ 4,191.01	\$ 264.99	\$ -	\$ 59.20	\$ 599.49	\$ 13,386.5
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	259,337.6	105,299.7	235,097.4	54,126.8	162,240.5	217,765.3	217,198.1	185,104.2	96,771.7	53,791.2	172,734.8	279,122.9	2,038,590.1
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	335,109.8	169,528.2	317,540.9	139,466.2	252,993.6	307,851.5	311,550.6	273,589.6	172,368.3	126,187.7	242,000.8	348,923.3	2,997,110.5
Market Expense (\$ x 1000)	\$ 13,363.61	\$ 3,672.04	\$ 6,962.46	\$ 1,582.91	\$ 4,449.98	\$ 6,879.32	\$ 8,270.68	\$ 7,852.49	\$ 3,885.40	\$ 2,205.81	\$ 7,274.39	\$ 13,717.34	\$ 80,116.4
Market Expense - No Wheeling (\$ x 1000)	\$ 11,426.53	\$ 2,885.52	\$ 5,206.44	\$ 1,178.62	\$ 3,238.15	\$ 5,252.76	\$ 6,648.35	\$ 6,469.88	\$ 3,162.58	\$ 1,804.03	\$ 5,984.18	\$ 11,632.48	\$ 64,889.5
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,184.8	\$ 7,330.5	\$ 10,459.1	\$ 6,130.6	\$ 8,020.0	\$ 9,700.3	\$ 11,126.0	\$ 10,812.5	\$ 7,156.6	\$ 6,323.2	\$ 11,179.1	\$ 17,068.0	\$ 122,490.6
Storage													
Black Mesa Battery Energy (MWh)	(1,235.07)	(1,031.00)	(1,085.4)	(1,076.4)	(816.1)	(826.3)	(868.6)	(863.5)	(798.1)	(910.4)	(911.3)	(1,056.7)	(11,478.8)
80 MW Grid Battery Energy (MWh)	(2,471.21)	(1,929.32)	(2,171.3)	(2,184.6)	(1,653.6)	(1,642.4)	(1,736.9)	(1,736.5)	(1,613.8)	(1,827.6)	(1,746.2)	(2,049.0)	(22,762.3)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1989

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	554,645.1	642,609.4	1,043,334.6	1,199,078.5	937,308.5	828,375.1	738,030.8	594,338.5	580,406.8	461,061.5	388,305.5	455,772.5	8,423,266.7
Bridger Coal													
Energy (MWh)	125,632.8	87,336.9	40,187.4	45,961.0	68,255.2	103,368.7	175,722.0	244,235.3	239,207.4	241,249.1	242,570.4	250,686.7	1,864,412.77
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,797.31	\$ 1,471.74	\$ 1,627.62	\$ 2,509.29	\$ 3,579.68	\$ 5,682.45	\$ 7,654.53	\$ 7,489.68	\$ 7,568.51	\$ 7,586.52	\$ 7,840.28	\$ 59,736.98
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	42,726.8	43,872.1	10,046.6	684.8	42,616.5	53,230.7	193,298.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,986.22	\$ 2,037.61	\$ 466.87	\$ 31.53	\$ 1,980.29	\$ 2,455.88	\$ 8,964.2
Bridger Gas													
Energy (MWh)	-	37,815.2	-	1,171.7	2,557.7	1,676.4	23,412.4	26,772.5	31,874.6	27,379.6	-	-	152,660.0
Expense (\$ x 1000)	\$ -	\$ 1,440.12	\$ -	\$ 54.31	\$ 103.81	\$ 75.28	\$ 1,156.55	\$ 1,346.41	\$ 1,466.05	\$ 1,248.61	\$ -	\$ -	\$ 6,891.1
Langley Gulch													
Energy (MWh)	198,833.8	206,651.4	-	-	-	161,150.3	215,488.7	215,688.0	213,398.1	221,458.2	177,420.4	154,381.1	1,764,469.9
Expense (\$ x 1000)	\$ 15,390.29	\$ 5,767.62	\$ -	\$ -	\$ -	\$ 4,870.56	\$ 7,445.89	\$ 8,022.25	\$ 7,297.51	\$ 7,686.76	\$ 12,954.00	\$ 16,369.55	\$ 85,804.4
Danskin													
Energy (MWh)	24,096.9	-	-	-	-	1,897.2	75,647.5	69,855.8	400.9	-	197.7	12,154.6	184,250.5
Expense (\$ x 1000)	\$ 3,098.29	\$ -	\$ -	\$ -	\$ -	\$ 85.24	\$ 4,101.31	\$ 4,078.81	\$ 22.38	\$ -	\$ 22.91	\$ 1,927.24	\$ 13,336.2
Bennett Mountain													
Energy (MWh)	1,997.3	-	-	-	-	1,918.9	49,527.2	22,875.6	-	-	243.0	3,020.5	79,582.5
Expense (\$ x 1000)	\$ 252.62	\$ -	\$ -	\$ -	\$ -	\$ 89.99	\$ 2,706.30	\$ 1,348.48	\$ -	\$ -	\$ 28.06	\$ 470.12	\$ 4,895.6
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	248,936.4	37,893.6	2,107.3	148.5	25,773.5	124,937.8	214,778.5	179,016.5	47,375.9	45,570.7	165,462.9	297,792.0	1,389,793.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	324,708.6	102,122.1	84,550.8	85,487.9	116,526.6	215,024.0	309,131.0	267,501.9	122,972.5	117,967.2	234,728.9	367,592.4	2,348,313.9
Market Expense (\$ x 1000)	\$ 11,824.75	\$ 1,161.61	\$ 53.62	\$ 4.31	\$ 639.15	\$ 3,502.04	\$ 7,454.94	\$ 7,023.77	\$ 1,787.21	\$ 1,759.90	\$ 6,556.29	\$ 13,720.84	\$ 55,488.4
Market Expense - No Wheeling (\$ x 1000)	\$ 9,965.36	\$ 878.57	\$ 37.88	\$ 3.20	\$ 446.64	\$ 2,568.84	\$ 5,850.69	\$ 5,686.64	\$ 1,433.34	\$ 1,419.52	\$ 5,320.39	\$ 11,496.53	\$ 45,107.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 15,723.6	\$ 5,323.5	\$ 5,290.5	\$ 4,955.2	\$ 5,228.5	\$ 7,016.3	\$ 10,328.4	\$ 10,029.2	\$ 5,427.3	\$ 5,938.7	\$ 10,515.3	\$ 16,932.1	\$ 102,708.7
Storage													
Black Mesa Battery Energy (MWh)	(1,186.86)	(899.72)	(1,368.9)	(1,235.7)	(901.2)	(862.6)	(875.7)	(873.9)	(845.7)	(1,014.5)	(925.0)	(1,007.9)	(11,997.8)
80 MW Grid Battery Energy (MWh)	(2,363.50)	(1,805.74)	(2,775.7)	(2,442.0)	(1,840.0)	(1,711.0)	(1,751.0)	(1,727.3)	(1,711.5)	(2,029.0)	(1,775.9)	(1,979.9)	(23,912.5)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	1990												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	674,066.3	641,743.9	717,544.6	679,737.8	673,218.5	757,882.1	542,780.4	493,669.8	521,253.3	438,890.0	383,395.4	441,092.9	6,965,274.7
Bridger Coal													
Energy (MWh)	125,632.9	91,192.6	50,671.1	69,676.6	58,950.2	114,253.1	182,376.4	248,143.7	242,299.3	242,997.1	242,600.0	250,686.7	1,919,479.59
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,908.21	\$ 1,773.28	\$ 2,309.73	\$ 2,241.46	\$ 3,892.99	\$ 5,873.98	\$ 7,767.07	\$ 7,578.71	\$ 7,618.84	\$ 7,587.37	\$ 7,840.28	\$ 61,321.29
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	41,835.4	42,828.9	18,666.9	684.8	39,587.4	55,412.1	199,137.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,943.80	\$ 1,988.42	\$ 872.64	\$ 31.53	\$ 1,845.28	\$ 2,553.11	\$ 9,240.5
Bridger Gas													
Energy (MWh)	-	36,479.8	-	993.4	562.4	4,267.6	22,479.7	29,708.4	20,014.0	19,902.1	-	-	134,407.4
Expense (\$ x 1000)	\$ -	\$ 1,398.12	\$ -	\$ 46.34	\$ 22.91	\$ 193.41	\$ 1,118.69	\$ 1,504.55	\$ 926.08	\$ 913.05	\$ -	\$ -	\$ 6,123.2
Langley Gulch													
Energy (MWh)	200,284.9	208,772.7	18,159.6	768.6	224,601.6	207,179.0	215,986.2	215,691.4	213,564.6	221,650.6	178,479.9	156,019.3	2,061,158.3
Expense (\$ x 1000)	\$ 15,536.09	\$ 5,857.90	\$ 1,128.37	\$ 26.61	\$ 6,310.50	\$ 6,292.02	\$ 7,503.17	\$ 8,066.45	\$ 7,342.81	\$ 7,735.19	\$ 13,067.18	\$ 16,545.72	\$ 95,412.0
Danskin													
Energy (MWh)	865.9	-	-	-	-	7,233.4	140,865.3	118,376.0	-	1,905.8	197.7	14,516.3	283,960.5
Expense (\$ x 1000)	\$ 111.94	\$ -	\$ -	\$ -	\$ -	\$ 331.53	\$ 7,783.83	\$ 7,002.78	\$ -	\$ 108.83	\$ 23.05	\$ 2,316.56	\$ 17,678.5
Bennett Mountain													
Energy (MWh)	998.6	-	-	-	-	2,467.2	96,541.0	65,676.5	1,363.7	-	243.0	2,517.1	169,807.0
Expense (\$ x 1000)	\$ 127.05	\$ -	\$ -	\$ -	\$ -	\$ 116.36	\$ 5,313.64	\$ 3,902.70	\$ 71.19	\$ -	\$ 28.23	\$ 394.09	\$ 9,953.3
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	154,823.5	33,654.8	121,362.4	71,005.0	49,694.9	124,698.1	290,828.0	182,897.3	78,838.0	53,205.4	170,390.5	306,999.0	1,638,396.8
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	230,595.7	97,883.3	203,805.9	156,344.4	140,448.0	214,784.3	385,180.5	271,382.7	154,434.6	125,601.9	239,656.5	376,799.4	2,596,917.1
Market Expense (\$ x 1000)	\$ 7,228.68	\$ 1,033.09	\$ 3,240.65	\$ 1,997.16	\$ 1,232.47	\$ 3,509.86	\$ 10,815.01	\$ 7,296.07	\$ 3,030.22	\$ 2,100.38	\$ 6,751.44	\$ 14,459.47	\$ 62,694.5
Market Expense - No Wheeling (\$ x 1000)	\$ 6,072.25	\$ 781.71	\$ 2,334.15	\$ 1,466.80	\$ 861.28	\$ 2,578.45	\$ 8,642.72	\$ 5,929.95	\$ 2,441.35	\$ 1,702.97	\$ 5,478.74	\$ 12,166.39	\$ 50,456.8
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 11,830.5	\$ 5,226.6	\$ 7,586.8	\$ 6,418.8	\$ 5,643.1	\$ 7,025.9	\$ 13,120.4	\$ 10,272.5	\$ 6,435.3	\$ 6,222.2	\$ 10,673.7	\$ 17,601.9	\$ 108,057.9
Storage													
Black Mesa Battery Energy (MWh)	(1,236.10)	(951.08)	(1,054.4)	(1,064.0)	(924.2)	(853.8)	(872.5)	(866.7)	(827.1)	(924.4)	(879.3)	(1,069.9)	(11,523.5)
80 MW Grid Battery Energy (MWh)	(2,436.03)	(1,865.05)	(2,091.7)	(2,098.7)	(1,829.6)	(1,716.3)	(1,750.9)	(1,731.0)	(1,671.2)	(1,900.0)	(1,717.1)	(2,175.0)	(22,982.5)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1991

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	497,530.1	470,410.1	401,941.8	452,086.4	593,144.5	597,331.5	663,446.4	537,861.9	509,034.1	448,522.6	370,598.5	437,953.1	5,979,860.9
Bridger Coal													
Energy (MWh)	125,632.9	105,247.9	70,300.0	74,821.0	72,703.9	130,988.0	180,927.0	248,124.7	242,226.6	247,199.9	242,600.0	250,686.7	1,991,458.37
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,312.48	\$ 2,337.85	\$ 2,457.70	\$ 2,637.29	\$ 4,374.68	\$ 5,832.20	\$ 7,766.53	\$ 7,576.61	\$ 7,739.87	\$ 7,587.37	\$ 7,840.28	\$ 63,392.23
Valmy													
Energy (MWh)	121.5	-	-	-	-	162.0	40,089.9	42,934.2	27,973.6	674.5	41,123.4	60,203.8	213,282.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 7.67	\$ 1,868.69	\$ 1,995.81	\$ 1,306.08	\$ 31.07	\$ 1,913.74	\$ 2,766.70	\$ 9,895.5
Bridger Gas													
Energy (MWh)	-	42,394.4	-	2,377.1	614.7	5,208.0	12,736.6	15,197.7	14,589.3	21,106.9	-	-	114,224.8
Expense (\$ x 1000)	\$ -	\$ 1,670.81	\$ -	\$ 113.93	\$ 25.68	\$ 242.53	\$ 651.22	\$ 790.80	\$ 693.85	\$ 995.72	\$ -	\$ -	\$ 5,184.5
Langley Gulch													
Energy (MWh)	199,094.3	209,024.9	168,140.2	212,228.3	228,755.4	207,881.7	215,510.1	215,164.5	213,172.4	221,382.8	178,732.6	156,335.2	2,425,422.1
Expense (\$ x 1000)	\$ 15,873.97	\$ 5,999.16	\$ 10,258.20	\$ 7,076.69	\$ 6,572.12	\$ 6,458.27	\$ 7,663.07	\$ 8,237.81	\$ 7,501.92	\$ 7,907.84	\$ 13,400.47	\$ 16,975.61	\$ 113,925.1
Danskin													
Energy (MWh)	43,240.9	759.7	784.4	493.0	-	54,002.2	120,712.0	100,347.0	-	-	634.2	16,317.6	337,291.0
Expense (\$ x 1000)	\$ 5,718.50	\$ 35.77	\$ 73.69	\$ 27.83	\$ -	\$ 2,602.14	\$ 6,813.65	\$ 6,102.17	\$ -	\$ -	\$ 77.05	\$ 2,674.57	\$ 24,125.4
Bennett Mountain													
Energy (MWh)	7,240.1	1,736.2	3,971.4	225.6	-	24,333.1	66,085.6	35,022.1	1,363.7	-	243.0	4,027.4	144,248.3
Expense (\$ x 1000)	\$ 944.55	\$ 78.07	\$ 365.89	\$ 12.60	\$ -	\$ 1,188.21	\$ 3,736.68	\$ 2,128.37	\$ 72.96	\$ -	\$ 28.94	\$ 646.64	\$ 9,202.9
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	281,241.6	137,741.3	254,025.7	89,961.3	98,375.4	183,656.1	234,984.2	197,083.5	84,332.7	47,777.3	179,513.8	301,818.0	2,090,510.9
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	357,013.8	201,969.8	336,469.2	175,300.7	189,128.5	273,742.3	329,336.7	285,568.9	159,929.3	120,173.8	248,779.8	371,618.4	3,049,031.3
Market Expense (\$ x 1000)	\$ 13,912.68	\$ 4,802.65	\$ 7,548.21	\$ 2,760.42	\$ 2,533.24	\$ 5,504.42	\$ 8,468.48	\$ 7,889.17	\$ 3,284.84	\$ 1,926.79	\$ 7,381.00	\$ 14,623.95	\$ 80,635.9
Market Expense - No Wheeling (\$ x 1000)	\$ 11,811.99	\$ 3,773.81	\$ 5,650.81	\$ 2,088.47	\$ 1,798.44	\$ 4,132.63	\$ 6,713.30	\$ 6,417.09	\$ 2,654.93	\$ 1,569.93	\$ 6,040.15	\$ 12,369.57	\$ 65,021.1
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,570.2	\$ 8,218.7	\$ 10,903.4	\$ 7,040.5	\$ 6,580.3	\$ 8,580.1	\$ 11,191.0	\$ 10,759.7	\$ 6,648.9	\$ 6,089.1	\$ 11,235.1	\$ 17,805.1	\$ 122,622.2
Storage													
Black Mesa Battery Energy (MWh)	(1,188.59)	(844.56)	(1,165.2)	(1,064.1)	(985.7)	(861.3)	(875.6)	(868.2)	(803.8)	(934.1)	(848.6)	(1,110.3)	(11,549.9)
80 MW Grid Battery Energy (MWh)	(2,320.77)	(1,704.55)	(2,256.5)	(2,093.5)	(1,950.3)	(1,719.6)	(1,750.9)	(1,736.5)	(1,645.6)	(1,853.5)	(1,738.1)	(2,211.7)	(22,981.4)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	1992												
	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	567,350.4	598,175.8	466,006.8	464,625.5	447,567.3	493,021.3	491,130.2	380,378.8	345,001.1	388,447.4	372,879.0	413,738.0	5,428,321.3
Bridger Coal													
Energy (MWh)	125,632.9	104,507.9	68,944.2	72,570.5	85,839.9	135,834.5	217,757.1	250,532.5	242,600.0	249,998.5	242,600.0	250,686.7	2,047,504.78
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,291.20	\$ 2,298.86	\$ 2,392.97	\$ 3,015.38	\$ 4,514.20	\$ 6,892.31	\$ 7,835.84	\$ 7,587.37	\$ 7,820.47	\$ 7,587.37	\$ 7,840.28	\$ 65,005.62
Valmy													
Energy (MWh)	121.5	-	-	-	-	2,228.0	45,484.7	47,659.5	37,180.5	12,026.8	44,062.0	65,642.3	254,405.3
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 105.48	\$ 2,109.49	\$ 2,206.43	\$ 1,737.99	\$ 558.50	\$ 2,044.73	\$ 3,009.23	\$ 11,777.6
Bridger Gas													
Energy (MWh)	-	44,197.3	-	1,369.0	1,268.5	8,019.1	28,835.7	39,684.6	15,991.3	18,392.7	-	-	157,758.2
Expense (\$ x 1000)	\$ -	\$ 1,782.18	\$ -	\$ 67.15	\$ 54.45	\$ 382.22	\$ 1,510.17	\$ 2,115.02	\$ 778.66	\$ 887.62	\$ -	\$ -	\$ 7,577.5
Langley Gulch													
Energy (MWh)	200,832.4	208,721.8	166,054.5	211,919.7	230,404.8	207,973.1	215,441.5	215,410.0	213,875.1	221,881.6	183,296.3	155,172.5	2,430,983.1
Expense (\$ x 1000)	\$ 16,304.33	\$ 6,114.85	\$ 10,420.20	\$ 7,215.28	\$ 6,753.76	\$ 6,595.69	\$ 7,823.00	\$ 8,423.02	\$ 7,685.28	\$ 8,093.19	\$ 13,873.25	\$ 17,297.56	\$ 116,599.4
Danskin													
Energy (MWh)	14,722.8	-	63.8	-	3,384.2	84,729.6	148,180.3	136,060.3	28,161.0	394.3	197.7	21,827.6	437,721.6
Expense (\$ x 1000)	\$ 1,987.47	\$ -	\$ 5.99	\$ -	\$ 152.52	\$ 4,254.88	\$ 8,616.72	\$ 8,543.47	\$ 1,536.86	\$ 23.65	\$ 24.21	\$ 3,651.19	\$ 28,797.0
Bennett Mountain													
Energy (MWh)	8,488.4	-	1,401.7	-	2,129.9	43,324.3	96,235.1	93,615.3	27,878.0	-	486.1	4,782.5	278,341.2
Expense (\$ x 1000)	\$ 1,132.73	\$ -	\$ 132.06	\$ -	\$ 99.82	\$ 2,153.48	\$ 5,554.81	\$ 5,860.08	\$ 1,585.05	\$ -	\$ 59.20	\$ 785.54	\$ 17,362.8
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	237,229.1	51,130.3	202,031.0	78,661.4	193,212.9	225,424.0	290,552.1	230,485.2	166,927.5	77,264.9	171,218.0	315,090.3	2,239,226.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	313,001.3	115,358.8	284,474.5	164,000.8	283,966.0	315,510.2	384,904.6	318,970.6	242,524.1	149,661.4	240,484.0	384,890.7	3,197,746.9
Market Expense (\$ x 1000)	\$ 12,017.16	\$ 1,719.28	\$ 5,981.26	\$ 2,407.60	\$ 5,404.74	\$ 7,092.64	\$ 11,720.36	\$ 9,743.25	\$ 6,641.21	\$ 3,227.88	\$ 7,277.39	\$ 15,478.23	\$ 88,711.0
Market Expense - No Wheeling (\$ x 1000)	\$ 10,245.22	\$ 1,337.37	\$ 4,472.22	\$ 1,820.05	\$ 3,961.57	\$ 5,408.87	\$ 9,550.13	\$ 8,021.68	\$ 5,394.37	\$ 2,650.76	\$ 5,998.51	\$ 13,124.71	\$ 71,985.5
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,003.5	\$ 5,782.3	\$ 9,724.9	\$ 6,772.1	\$ 8,743.4	\$ 9,856.4	\$ 14,027.8	\$ 12,364.2	\$ 9,388.4	\$ 7,170.0	\$ 11,193.4	\$ 18,560.3	\$ 129,586.6
Storage													
Black Mesa Battery Energy (MWh)	(1,221.57)	(1,015.92)	(1,192.9)	(966.2)	(827.7)	(852.0)	(882.7)	(882.3)	(813.1)	(900.8)	(922.3)	(1,038.2)	(11,515.6)
80 MW Grid Battery Energy (MWh)	(2,457.27)	(1,994.49)	(2,317.0)	(1,940.7)	(1,683.7)	(1,711.0)	(1,765.0)	(1,764.7)	(1,637.0)	(1,817.7)	(1,811.8)	(2,013.1)	(22,913.5)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1993													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	471,058.7	511,285.8	820,399.1	1,002,773.4	1,095,890.3	1,071,254.0	761,464.4	591,165.2	547,779.4	458,643.4	375,618.4	491,635.4	8,198,967.4
Bridger Coal													
Energy (MWh)	125,632.9	100,134.9	53,856.8	42,944.8	47,089.2	100,140.4	174,039.0	248,542.0	242,588.7	238,771.2	242,553.8	250,686.7	1,866,980.37
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,165.42	\$ 1,864.91	\$ 1,540.86	\$ 1,900.13	\$ 3,486.79	\$ 5,633.99	\$ 7,778.53	\$ 7,587.04	\$ 7,497.12	\$ 7,586.04	\$ 7,840.28	\$ 59,810.48
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	40,803.5	44,801.8	18,375.0	684.8	41,208.5	54,015.0	200,010.2
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,900.49	\$ 2,077.71	\$ 859.52	\$ 31.53	\$ 1,917.54	\$ 2,490.84	\$ 9,283.4
Bridger Gas													
Energy (MWh)	-	48,539.0	-	171.0	-	2,812.9	18,026.1	30,853.6	17,152.3	34,225.3	-	-	151,780.2
Expense (\$ x 1000)	\$ -	\$ 1,848.24	\$ -	\$ 7.90	\$ -	\$ 126.70	\$ 890.60	\$ 1,551.93	\$ 788.89	\$ 1,561.19	\$ -	\$ -	\$ 6,775.5
Langley Gulch													
Energy (MWh)	202,181.6	208,970.8	-	-	-	39,615.8	215,269.3	215,964.2	213,006.8	220,774.9	175,879.8	155,035.7	1,646,699.0
Expense (\$ x 1000)	\$ 15,559.67	\$ 5,842.50	\$ -	\$ -	\$ -	\$ 1,209.51	\$ 7,452.09	\$ 8,046.93	\$ 7,297.82	\$ 7,677.77	\$ 12,925.58	\$ 16,433.53	\$ 82,445.4
Danskin													
Energy (MWh)	57,250.8	1,109.0	-	-	-	-	80,781.0	57,858.0	-	-	65.1	2,823.8	199,887.8
Expense (\$ x 1000)	\$ 7,335.42	\$ 49.77	\$ -	\$ -	\$ -	\$ -	\$ 4,396.48	\$ 3,381.16	\$ -	\$ -	\$ 7.87	\$ 450.46	\$ 15,621.2
Bennett Mountain													
Energy (MWh)	11,609.1	-	-	-	-	774.0	31,882.9	31,506.5	811.7	-	1,579.7	2,265.4	80,429.3
Expense (\$ x 1000)	\$ 1,471.23	\$ -	\$ -	\$ -	\$ -	\$ 37.15	\$ 1,748.88	\$ 1,854.79	\$ 41.32	\$ -	\$ 182.75	\$ 353.29	\$ 5,689.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	286,657.9	108,197.5	67,498.3	1,725.8	9,068.8	49,884.5	216,324.4	176,392.3	57,810.5	40,582.1	177,977.5	271,564.8	1,463,684.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	362,430.1	172,426.0	149,941.8	87,065.2	99,821.9	139,970.7	310,676.9	264,877.6	133,407.2	112,978.6	247,243.5	341,365.3	2,422,204.9
Market Expense (\$ x 1000)	\$ 14,158.00	\$ 3,603.20	\$ 1,795.58	\$ 49.63	\$ 235.36	\$ 1,440.08	\$ 7,402.06	\$ 7,004.30	\$ 2,197.14	\$ 1,566.97	\$ 7,147.15	\$ 12,563.52	\$ 59,163.0
Market Expense - No Wheeling (\$ x 1000)	\$ 12,016.86	\$ 2,795.04	\$ 1,291.41	\$ 36.74	\$ 167.62	\$ 1,067.48	\$ 5,786.26	\$ 5,686.77	\$ 1,765.33	\$ 1,263.85	\$ 5,817.78	\$ 10,535.11	\$ 48,230.2
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,775.1	\$ 7,240.0	\$ 6,544.0	\$ 4,988.8	\$ 4,949.5	\$ 5,515.0	\$ 10,263.9	\$ 10,029.3	\$ 5,759.3	\$ 5,783.0	\$ 11,012.7	\$ 15,970.7	\$ 105,831.3
Storage													
Black Mesa Battery Energy (MWh)	(1,304.52)	(923.93)	(1,212.7)	(1,204.3)	(894.4)	(845.7)	(875.2)	(863.9)	(787.0)	(912.5)	(894.1)	(1,080.3)	(11,798.7)
80 MW Grid Battery Energy (MWh)	(2,579.22)	(1,893.00)	(2,417.2)	(2,440.9)	(1,794.5)	(1,694.4)	(1,750.6)	(1,741.4)	(1,605.1)	(1,838.5)	(1,779.9)	(2,123.0)	(23,657.7)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1994

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	958,118.7	815,981.8	638,515.2	573,505.8	599,491.0	586,018.3	599,142.7	451,620.7	441,352.9	418,703.9	374,381.1	455,211.1	6,912,043.2
Bridger Coal													
Energy (MWh)	125,632.9	95,420.6	58,899.4	68,423.2	75,820.0	119,579.4	187,037.3	249,142.5	242,600.0	243,466.9	242,600.0	250,686.7	1,959,308.91
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,029.82	\$ 2,009.94	\$ 2,273.69	\$ 2,727.01	\$ 4,046.31	\$ 6,008.09	\$ 7,795.82	\$ 7,587.37	\$ 7,632.35	\$ 7,587.37	\$ 7,840.28	\$ 62,467.42
Valmy													
Energy (MWh)	121.5	-	-	-	-	243.1	44,710.6	48,224.0	43,518.0	11,614.2	43,763.4	58,829.0	251,023.7
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 11.51	\$ 2,076.33	\$ 2,232.93	\$ 2,020.48	\$ 540.11	\$ 2,031.42	\$ 2,705.42	\$ 11,624.0
Bridger Gas													
Energy (MWh)	-	23,126.1	-	4,413.6	463.1	3,068.5	23,591.8	43,012.3	37,344.6	27,305.5	-	-	162,325.5
Expense (\$ x 1000)	\$ -	\$ 907.61	\$ -	\$ 210.80	\$ 19.32	\$ 142.25	\$ 1,201.70	\$ 2,230.16	\$ 1,770.39	\$ 1,283.35	\$ -	\$ -	\$ 7,765.6
Langley Gulch													
Energy (MWh)	27,139.3	33,124.3	115,076.9	160,655.6	229,487.2	207,232.8	215,682.8	216,068.5	214,614.3	221,497.2	183,000.2	157,899.2	1,981,478.3
Expense (\$ x 1000)	\$ 2,232.82	\$ 950.52	\$ 7,180.13	\$ 5,342.95	\$ 6,569.45	\$ 6,416.60	\$ 7,641.93	\$ 8,242.04	\$ 7,524.35	\$ 7,883.83	\$ 13,509.90	\$ 16,991.02	\$ 90,485.5
Danskin													
Energy (MWh)	-	-	-	-	-	56,837.3	130,208.8	129,192.5	9,406.1	-	263.7	13,304.1	339,212.4
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,730.78	\$ 7,340.94	\$ 7,812.88	\$ 495.56	\$ -	\$ 31.41	\$ 2,168.25	\$ 20,579.8
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	27,622.7	86,480.5	65,712.5	4,784.4	-	486.1	3,272.2	188,358.3
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,362.52	\$ 4,858.35	\$ 3,967.11	\$ 263.77	\$ -	\$ 57.66	\$ 523.39	\$ 11,032.8
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	63,219.2	32,469.0	110,100.1	44,546.1	92,737.6	200,999.7	248,168.8	195,050.4	110,046.6	58,296.8	170,714.9	288,229.2	1,614,578.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	138,991.4	96,697.5	192,543.7	129,885.5	183,490.6	291,085.9	342,521.3	283,535.8	185,643.3	130,693.3	239,980.9	358,029.6	2,573,098.7
Market Expense (\$ x 1000)	\$ 2,852.12	\$ 1,021.06	\$ 2,960.55	\$ 1,312.32	\$ 2,398.12	\$ 5,940.16	\$ 9,213.81	\$ 8,152.15	\$ 4,358.07	\$ 2,324.63	\$ 7,062.12	\$ 13,745.40	\$ 61,340.5
Market Expense - No Wheeling (\$ x 1000)	\$ 2,379.91	\$ 778.54	\$ 2,138.17	\$ 979.59	\$ 1,705.43	\$ 4,438.83	\$ 7,360.15	\$ 6,695.25	\$ 3,536.09	\$ 1,889.19	\$ 5,786.99	\$ 11,592.52	\$ 49,280.7
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 8,138.2	\$ 5,223.5	\$ 7,390.8	\$ 5,931.6	\$ 6,487.3	\$ 8,886.3	\$ 11,837.8	\$ 11,037.8	\$ 7,530.1	\$ 6,408.4	\$ 10,981.9	\$ 17,028.1	\$ 106,881.8
Storage													
Black Mesa Battery Energy (MWh)	(1,247.47)	(834.87)	(1,133.4)	(1,093.8)	(989.0)	(825.0)	(875.6)	(882.7)	(840.9)	(939.6)	(941.1)	(1,099.9)	(11,703.1)
80 MW Grid Battery Energy (MWh)	(2,508.98)	(1,622.99)	(2,286.0)	(2,119.3)	(1,958.2)	(1,672.9)	(1,750.9)	(1,764.7)	(1,661.7)	(1,896.3)	(1,920.1)	(2,174.9)	(23,336.9)

11 MW Grid Battery Energy (MWh)	(334.28)	(231.99)	(278.5)	(293.8)	(268.3)	(219.5)	(239.1)	(238.9)	(223.8)	(258.0)	(247.5)	(277.4)	(3,110.9)
Total Storage (MWh)	(4,090.7)	(2,689.9)	(3,697.8)	(3,506.9)	(3,215.4)	(2,717.4)	(2,865.6)	(2,886.2)	(2,726.4)	(3,093.9)	(3,108.7)	(3,552.2)	(38,150.9)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	19,859.7	53,225.0	29,712.8	53,582.3	45,405.7	6,500.5	3,574.0	9,670.5	37,620.2	53,523.6	7,947.2	573.1	321,194.5
Revenue (\$ x 1000)	\$ 1,148.3	\$ 2,199.4	\$ 1,174.8	\$ 2,177.8	\$ 1,531.5	\$ 263.8	\$ 174.3	\$ 578.1	\$ 1,933.6	\$ 2,386.7	\$ 431.1	\$ 36.9	\$ 14,036.4
Revenue - No Wheeling (\$ x 1000)	\$ 999.9	\$ 1,801.9	\$ 952.9	\$ 1,777.6	\$ 1,192.3	\$ 215.2	\$ 147.6	\$ 505.9	\$ 1,652.6	\$ 1,986.9	\$ 371.8	\$ 32.6	\$ 11,637.3
Total Energy	1,428,850.93	1,234,421.47	1,217,841.83	1,168,470.79	1,353,816.91	1,602,921.80	1,927,228.27	1,763,858.88	1,373,841.59	1,218,929.58	1,251,370.20	1,476,224.97	17,017,777.22
Total NPSE	\$ 29,654.1	\$ 26,330.9	\$ 30,234.2	\$ 28,694.5	\$ 31,713.4	\$ 46,950.4	\$ 66,157.9	\$ 67,204.1	\$ 43,759.0	\$ 38,426.3	\$ 50,798.7	\$ 65,585.1	\$ 527,907.5

Wheeling 3-Year Average                      \$            7.47



IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1995

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	629,205.8	740,356.2	872,859.4	1,083,299.8	1,180,796.0	1,091,883.4	852,501.1	773,838.5	679,112.0	439,483.2	374,410.0	937,105.3	9,654,850.7
Bridger Coal													
Energy (MWh)	125,632.9	59,086.1	39,493.8	38,241.8	54,178.0	80,210.6	154,969.3	216,543.0	188,485.0	219,823.9	237,133.3	250,638.2	1,664,435.73
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,984.75	\$ 1,451.79	\$ 1,405.59	\$ 2,104.15	\$ 2,913.16	\$ 5,085.14	\$ 6,857.38	\$ 6,029.21	\$ 6,951.70	\$ 7,429.97	\$ 7,838.89	\$ 53,981.10
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	-	39,019.0	-	162.0	41,731.6	22,096.0	103,130.1
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,818.26	\$ -	\$ 7.67	\$ 1,940.85	\$ 1,024.25	\$ 4,796.8
Bridger Gas													
Energy (MWh)	-	38,532.9	-	2,431.7	877.8	1,450.2	17,104.1	32,285.3	17,561.9	43,204.1	-	-	153,448.1
Expense (\$ x 1000)	\$ -	\$ 1,342.66	\$ -	\$ 103.40	\$ 32.53	\$ 59.49	\$ 773.52	\$ 1,485.58	\$ 738.61	\$ 1,802.89	\$ -	\$ -	\$ 6,338.7
Langley Gulch													
Energy (MWh)	191,482.2	202,785.4	-	-	-	42,889.1	215,290.8	216,212.6	209,125.1	221,412.7	181,688.6	12,005.3	1,492,891.8
Expense (\$ x 1000)	\$ 13,997.29	\$ 5,280.46	\$ -	\$ -	\$ -	\$ 1,216.21	\$ 6,925.74	\$ 7,481.51	\$ 6,663.17	\$ 7,154.08	\$ 11,953.75	\$ 1,145.58	\$ 61,817.8
Danskin													
Energy (MWh)	10,632.4	-	-	-	-	60.9	38,288.5	463.0	246.7	-	1,018.9	-	50,710.4
Expense (\$ x 1000)	\$ 1,254.44	\$ -	\$ -	\$ -	\$ -	\$ 2.84	\$ 1,912.08	\$ 26.62	\$ 12.72	\$ -	\$ 110.00	\$ -	\$ 3,318.7
Bennett Mountain													
Energy (MWh)	2,246.9	-	-	-	-	1,241.7	56,340.7	3,111.8	-	-	972.1	-	63,913.3
Expense (\$ x 1000)	\$ 262.96	\$ -	\$ -	\$ -	\$ -	\$ 51.84	\$ 2,890.79	\$ 163.75	\$ -	\$ -	\$ 103.88	\$ -	\$ 3,473.2
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	196,664.3	8,619.3	43,414.3	139.0	5,495.1	51,651.2	203,039.1	128,868.0	27,931.0	61,201.2	178,345.2	51,709.0	957,076.6
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	272,436.5	72,847.8	125,857.8	85,478.4	96,248.2	141,737.4	297,391.6	217,353.4	103,527.6	133,597.7	247,611.2	121,509.4	1,915,596.9
Market Expense (\$ x 1000)	\$ 8,225.46	\$ 242.24	\$ 1,069.25	\$ 3.92	\$ 139.14	\$ 1,420.74	\$ 6,256.14	\$ 4,540.50	\$ 899.30	\$ 2,137.66	\$ 6,788.08	\$ 2,105.88	\$ 33,828.3
Market Expense - No Wheeling (\$ x 1000)	\$ 6,756.51	\$ 177.86	\$ 744.97	\$ 2.88	\$ 98.10	\$ 1,034.94	\$ 4,739.57	\$ 3,577.94	\$ 690.67	\$ 1,680.53	\$ 5,455.96	\$ 1,719.65	\$ 26,679.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 12,514.8	\$ 4,622.8	\$ 5,997.6	\$ 4,954.9	\$ 4,879.9	\$ 5,482.4	\$ 9,217.3	\$ 7,920.5	\$ 4,684.7	\$ 6,199.7	\$ 10,650.9	\$ 7,155.2	\$ 84,280.7
Storage													
Black Mesa Battery Energy (MWh)	(1,106.23)	(1,009.51)	(1,292.8)	(1,187.5)	(1,011.9)	(854.5)	(897.6)	(875.6)	(791.9)	(902.0)	(932.7)	(1,191.3)	(12,053.5)
80 MW Grid Battery Energy (MWh)	(2,187.82)	(2,024.87)	(2,585.8)	(2,393.3)	(2,038.7)	(1,720.6)	(1,779.4)	(1,738.0)	(1,616.7)	(1,786.5)	(1,823.6)	(2,426.0)	(24,121.2)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	1996												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	1,250,147.6	1,050,397.2	1,097,538.9	1,040,497.6	1,113,862.5	1,211,285.7	831,576.1	796,940.8	673,648.9	505,588.0	417,966.8	841,480.6	10,830,930.5
Bridger Coal													
Energy (MWh)	107,324.5	36,762.1	29,523.4	34,083.2	39,635.7	67,466.5	126,275.0	165,447.1	149,456.8	165,957.3	212,121.2	247,567.9	1,381,620.54
Expense (\$ x 1000)	\$ 3,402.77	\$ 1,342.65	\$ 1,165.02	\$ 1,285.98	\$ 1,685.61	\$ 2,546.36	\$ 4,259.18	\$ 5,386.74	\$ 4,905.90	\$ 5,401.18	\$ 6,709.99	\$ 7,750.47	\$ 45,841.85
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	10,505.1	5,620.8	-	40.5	35,745.2	30,373.8	82,406.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 495.94	\$ 263.32	\$ -	\$ 1.92	\$ 1,674.01	\$ 1,411.38	\$ 3,852.3
Bridger Gas													
Energy (MWh)	-	34,025.5	-	4,398.7	2,650.5	4,028.8	17,535.1	42,079.9	13,367.2	16,449.2	-	-	134,534.8
Expense (\$ x 1000)	\$ -	\$ 1,067.26	\$ -	\$ 168.31	\$ 88.59	\$ 149.38	\$ 713.25	\$ 1,742.09	\$ 505.48	\$ 617.05	\$ -	\$ -	\$ 5,051.4
Langley Gulch													
Energy (MWh)	-	-	-	-	-	23,882.9	216,216.5	216,676.4	214,936.2	223,602.6	177,596.7	41,890.4	1,114,801.7
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 622.35	\$ 6,370.63	\$ 6,862.29	\$ 6,266.57	\$ 6,614.90	\$ 10,759.34	\$ 3,669.72	\$ 41,165.8
Danskin													
Energy (MWh)	-	-	-	-	-	-	82,001.4	1,337.3	1,688.8	1,948.6	197.7	-	87,173.8
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,742.56	\$ 63.06	\$ 82.10	\$ 96.30	\$ 19.16	\$ -	\$ 4,003.2
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	9,039.4	4,037.4	-	-	486.1	-	13,562.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 420.84	\$ 195.16	\$ -	\$ -	\$ 47.21	\$ -	\$ 663.2
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	1,353.9	3,034.2	391.7	384.5	5,550.6	41,735.0	241,638.8	175,610.1	55,903.8	57,038.9	173,258.5	81,401.8	837,301.8
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	77,126.0	67,262.8	82,835.2	85,723.9	96,303.7	131,821.2	335,991.3	264,095.5	131,500.5	129,435.4	242,524.6	151,202.2	1,795,822.2
Market Expense (\$ x 1000)	\$ 53.43	\$ 87.47	\$ 9.24	\$ 10.40	\$ 129.34	\$ 1,134.70	\$ 6,938.17	\$ 5,538.24	\$ 1,627.21	\$ 1,778.83	\$ 5,874.53	\$ 2,986.84	\$ 26,168.4
Market Expense - No Wheeling (\$ x 1000)	\$ 43.32	\$ 64.81	\$ 6.31	\$ 7.53	\$ 87.88	\$ 822.97	\$ 5,133.29	\$ 4,226.55	\$ 1,209.65	\$ 1,352.79	\$ 4,580.40	\$ 2,378.82	\$ 19,914.3
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,801.6	\$ 4,509.7	\$ 5,258.9	\$ 4,959.5	\$ 4,869.7	\$ 5,270.5	\$ 9,611.0	\$ 8,569.1	\$ 5,203.6	\$ 5,872.0	\$ 9,775.3	\$ 7,814.4	\$ 77,515.4
Storage													
Black Mesa Battery Energy (MWh)	(1,175.63)	(1,139.91)	(1,436.8)	(1,265.2)	(1,065.1)	(842.4)	(882.3)	(872.7)	(777.3)	(839.2)	(890.7)	(1,053.5)	(12,240.9)
80 MW Grid Battery Energy (MWh)	(2,351.24)	(2,343.56)	(2,914.1)	(2,518.3)	(2,162.9)	(1,682.7)	(1,751.1)	(1,736.5)	(1,560.1)	(1,695.2)	(1,793.7)	(2,087.5)	(24,596.9)



IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1997

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,300,991.3	1,093,940.3	1,071,701.8	1,018,577.9	1,118,426.1	1,192,855.5	1,041,480.5	866,665.1	730,894.9	561,326.0	677,594.2	873,137.5	11,547,591.0
Bridger Coal													
Energy (MWh)	100,183.3	35,338.5	34,686.1	32,018.4	38,048.5	69,662.3	120,325.1	154,997.0	121,645.8	150,778.1	193,448.3	244,918.8	1,296,050.08
Expense (\$ x 1000)	\$ 3,197.37	\$ 1,301.71	\$ 1,313.51	\$ 1,226.59	\$ 1,639.88	\$ 2,609.55	\$ 4,087.93	\$ 5,085.89	\$ 4,105.45	\$ 4,964.22	\$ 6,172.49	\$ 7,674.20	\$ 43,378.79
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	-	5,602.1	-	40.5	33,122.4	30,763.9	69,650.4
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 263.72	\$ -	\$ 1.92	\$ 1,553.18	\$ 1,434.61	\$ 3,259.2
Bridger Gas													
Energy (MWh)	-	35,312.0	-	3,740.8	2,612.4	2,679.7	16,145.4	36,424.8	23,622.8	17,730.9	-	-	138,268.8
Expense (\$ x 1000)	\$ -	\$ 1,095.74	\$ -	\$ 141.48	\$ 86.30	\$ 98.26	\$ 649.48	\$ 1,491.84	\$ 884.43	\$ 657.88	\$ -	\$ -	\$ 5,105.4
Langley Gulch													
Energy (MWh)	-	-	-	-	-	20,118.2	216,119.2	215,625.4	214,201.5	223,445.7	-	21,858.0	911,368.0
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 519.68	\$ 6,313.62	\$ 6,771.61	\$ 6,192.91	\$ 6,554.02	\$ -	\$ 1,926.88	\$ 28,278.7
Danskin													
Energy (MWh)	-	-	-	-	-	61.6	3,049.3	308.7	-	-	-	-	3,419.5
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.48	\$ 143.40	\$ 15.92	\$ -	\$ -	\$ -	\$ -	\$ 161.8
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	3,698.4	2,090.5	-	-	-	-	5,788.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 162.14	\$ 99.00	\$ -	\$ -	\$ -	\$ -	\$ 261.1
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	1,515.9	2,080.6	973.6	654.3	5,741.8	47,425.9	145,409.6	132,703.2	43,689.3	35,713.6	115,222.6	73,733.9	604,864.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	77,288.1	66,309.2	83,417.1	85,993.7	96,494.9	137,512.1	239,762.0	221,188.6	119,286.0	108,110.1	184,488.6	143,534.3	1,563,384.6
Market Expense (\$ x 1000)	\$ 57.53	\$ 58.88	\$ 22.57	\$ 17.34	\$ 132.72	\$ 1,277.95	\$ 4,284.35	\$ 4,052.95	\$ 1,233.26	\$ 1,077.74	\$ 3,760.76	\$ 2,656.67	\$ 18,632.7
Market Expense - No Wheeling (\$ x 1000)	\$ 46.21	\$ 43.34	\$ 15.30	\$ 12.45	\$ 89.83	\$ 923.71	\$ 3,198.24	\$ 3,061.74	\$ 906.93	\$ 810.98	\$ 2,900.12	\$ 2,105.93	\$ 14,114.8
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,804.5	\$ 4,488.3	\$ 5,267.9	\$ 4,964.5	\$ 4,871.7	\$ 5,371.2	\$ 7,675.9	\$ 7,404.3	\$ 4,900.9	\$ 5,330.2	\$ 8,095.1	\$ 7,541.5	\$ 71,715.9
Storage													
Black Mesa Battery Energy (MWh)	(1,266.83)	(1,147.74)	(1,450.9)	(1,193.4)	(1,090.7)	(873.1)	(877.0)	(875.2)	(828.2)	(873.0)	(876.8)	(1,041.7)	(12,394.4)
80 MW Grid Battery Energy (MWh)	(2,549.15)	(2,393.16)	(2,962.6)	(2,458.1)	(2,236.4)	(1,758.6)	(1,751.2)	(1,755.0)	(1,656.3)	(1,750.0)	(1,731.4)	(1,933.6)	(24,935.5)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

	1998												
	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,223,780.9	1,079,596.8	1,112,674.9	1,160,395.9	1,238,229.9	1,218,531.6	955,932.7	778,483.5	711,680.5	501,927.8	379,696.0	655,686.4	11,016,616.8
Bridger Coal													
Energy (MWh)	124,435.8	43,914.6	33,756.7	33,694.7	45,915.6	69,735.1	136,009.6	191,684.5	163,580.5	186,052.0	219,003.6	250,589.5	1,498,372.16
Expense (\$ x 1000)	\$ 3,894.94	\$ 1,548.38	\$ 1,286.78	\$ 1,274.80	\$ 1,866.32	\$ 2,611.63	\$ 4,539.40	\$ 6,141.87	\$ 5,312.42	\$ 5,979.59	\$ 6,908.08	\$ 7,837.48	\$ 49,201.69
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	2,462.0	26,842.1	-	40.5	38,900.8	44,637.7	113,004.7
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115.79	\$ 1,253.29	\$ -	\$ 1.92	\$ 1,814.67	\$ 2,070.39	\$ 5,261.8
Bridger Gas													
Energy (MWh)	-	36,495.7	-	1,777.7	2,117.3	1,519.9	24,087.8	48,537.0	18,449.2	19,617.7	-	-	152,602.2
Expense (\$ x 1000)	\$ -	\$ 1,211.01	\$ -	\$ 71.89	\$ 74.83	\$ 59.59	\$ 1,037.56	\$ 2,127.59	\$ 738.45	\$ 778.80	\$ -	\$ -	\$ 6,099.7
Langley Gulch													
Energy (MWh)	-	-	-	-	-	17,340.8	215,269.7	217,103.4	209,978.0	220,264.1	185,732.5	120,963.2	1,186,651.7
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 474.50	\$ 6,641.31	\$ 7,200.68	\$ 6,415.49	\$ 6,826.46	\$ 11,768.14	\$ 11,100.85	\$ 50,427.4
Danskin													
Energy (MWh)	-	-	-	-	-	61.6	20,607.8	4,498.4	-	-	131.8	-	25,299.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.63	\$ 986.16	\$ 234.42	\$ -	\$ -	\$ 13.45	\$ -	\$ 1,236.7
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	7,917.4	1,755.4	-	-	2,430.3	251.7	12,354.8
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 384.34	\$ 86.32	\$ -	\$ -	\$ 248.14	\$ 34.61	\$ 753.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	3,315.4	1,591.9	419.7	44.2	2,996.9	41,017.7	177,300.5	142,092.7	28,450.8	50,884.8	190,590.6	162,538.4	801,243.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	79,087.5	65,820.4	82,863.3	85,383.6	93,750.0	131,104.0	271,653.0	230,578.1	104,047.4	123,281.3	259,856.6	232,338.8	1,759,763.9
Market Expense (\$ x 1000)	\$ 138.36	\$ 46.93	\$ 10.53	\$ 1.09	\$ 73.31	\$ 1,119.27	\$ 5,283.01	\$ 4,811.03	\$ 861.30	\$ 1,653.99	\$ 6,819.26	\$ 6,503.58	\$ 27,321.7
Market Expense - No Wheeling (\$ x 1000)	\$ 113.60	\$ 35.04	\$ 7.39	\$ 0.76	\$ 50.92	\$ 812.89	\$ 3,958.69	\$ 3,749.69	\$ 648.79	\$ 1,273.91	\$ 5,395.67	\$ 5,289.53	\$ 21,336.9
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,871.8	\$ 4,480.0	\$ 5,260.0	\$ 4,952.8	\$ 4,832.8	\$ 5,260.4	\$ 8,436.4	\$ 8,092.3	\$ 4,642.8	\$ 5,793.1	\$ 10,590.6	\$ 10,725.1	\$ 78,938.0
Storage													
Black Mesa Battery Energy (MWh)	(1,162.21)	(1,163.82)	(1,456.9)	(1,196.7)	(1,138.8)	(886.4)	(869.3)	(863.9)	(819.1)	(900.1)	(917.3)	(1,225.8)	(12,600.2)
80 MW Grid Battery Energy (MWh)	(2,306.91)	(2,271.20)	(2,895.2)	(2,406.4)	(2,313.0)	(1,772.8)	(1,751.3)	(1,736.3)	(1,678.4)	(1,829.2)	(1,809.3)	(2,318.0)	(25,088.0)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

1999

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,235,081.9	1,071,591.9	1,085,508.7	1,042,566.2	1,141,955.7	1,270,802.0	919,773.7	777,180.6	664,018.2	475,023.2	378,146.6	705,067.6	10,766,716.3
Bridger Coal													
Energy (MWh)	124,183.3	43,755.2	37,860.1	36,001.1	42,140.8	66,328.6	136,109.1	185,686.3	165,871.6	191,179.6	222,108.5	250,589.5	1,501,813.38
Expense (\$ x 1000)	\$ 3,887.67	\$ 1,543.79	\$ 1,404.80	\$ 1,341.14	\$ 1,757.71	\$ 2,513.58	\$ 4,542.25	\$ 5,969.25	\$ 5,378.43	\$ 6,127.10	\$ 6,997.45	\$ 7,837.48	\$ 49,300.65
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	12,002.3	25,133.0	-	40.5	40,427.5	43,906.4	121,631.2
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 564.58	\$ 1,175.09	\$ -	\$ 1.92	\$ 1,882.72	\$ 2,037.79	\$ 5,667.9
Bridger Gas													
Energy (MWh)	-	33,802.5	-	3,556.0	1,039.5	710.4	21,422.5	40,615.2	11,149.6	18,956.9	-	-	131,252.6
Expense (\$ x 1000)	\$ -	\$ 1,124.36	\$ -	\$ 144.40	\$ 36.84	\$ 27.91	\$ 924.65	\$ 1,784.38	\$ 447.53	\$ 754.11	\$ -	\$ -	\$ 5,244.2
Langley Gulch													
Energy (MWh)	-	-	-	-	-	13,722.1	215,336.4	216,229.0	209,433.7	220,596.4	181,284.0	103,928.5	1,160,530.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 376.92	\$ 6,670.31	\$ 7,202.21	\$ 6,425.59	\$ 6,864.17	\$ 11,506.76	\$ 9,579.74	\$ 48,625.7
Danskin													
Energy (MWh)	-	-	-	-	-	60.9	25,742.1	1,799.6	1,110.0	-	2,093.6	66.0	30,872.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.72	\$ 1,227.43	\$ 91.88	\$ 54.85	\$ -	\$ 213.61	\$ 9.19	\$ 1,599.7
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	5,452.1	2,361.8	-	-	243.0	-	8,056.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 265.79	\$ 119.52	\$ -	\$ -	\$ 24.92	\$ -	\$ 410.2
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	2,201.2	1,890.0	760.6	231.3	4,511.4	39,396.9	205,818.1	156,614.6	55,077.2	59,521.5	191,224.3	135,571.1	852,818.0
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	77,973.3	66,118.6	83,204.1	85,570.6	95,264.5	129,483.1	300,170.6	245,100.0	130,673.9	131,918.1	260,490.3	205,371.5	1,811,338.4
Market Expense (\$ x 1000)	\$ 93.24	\$ 55.70	\$ 18.82	\$ 6.44	\$ 108.79	\$ 1,047.49	\$ 6,169.48	\$ 5,175.83	\$ 1,666.98	\$ 1,962.74	\$ 6,953.37	\$ 5,384.02	\$ 28,642.9
Market Expense - No Wheeling (\$ x 1000)	\$ 76.80	\$ 41.58	\$ 13.14	\$ 4.71	\$ 75.09	\$ 753.22	\$ 4,632.16	\$ 4,006.02	\$ 1,255.59	\$ 1,518.15	\$ 5,525.05	\$ 4,371.39	\$ 22,272.9
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,835.0	\$ 4,486.5	\$ 5,265.8	\$ 4,956.7	\$ 4,856.9	\$ 5,200.7	\$ 9,109.8	\$ 8,348.6	\$ 5,249.6	\$ 6,037.3	\$ 10,720.0	\$ 9,806.9	\$ 79,874.0
Storage													
Black Mesa Battery Energy (MWh)	(1,219.97)	(1,151.55)	(1,377.4)	(1,124.2)	(1,123.4)	(870.1)	(882.7)	(879.3)	(777.9)	(852.1)	(979.2)	(1,162.1)	(12,399.9)
80 MW Grid Battery Energy (MWh)	(2,456.45)	(2,331.77)	(2,784.8)	(2,304.9)	(2,237.0)	(1,730.2)	(1,760.9)	(1,754.8)	(1,564.3)	(1,724.9)	(1,948.4)	(2,278.7)	(24,877.3)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2000

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,177,062.3	1,025,758.9	1,063,824.3	1,113,599.8	1,025,771.8	922,963.5	755,900.8	549,604.2	611,660.4	453,721.2	374,657.2	462,891.2	9,537,415.5
Bridger Coal													
Energy (MWh)	125,632.9	46,571.7	33,862.3	39,805.9	53,719.9	95,960.0	162,350.0	234,984.8	226,160.4	222,295.7	238,959.6	250,685.4	1,730,988.53
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,624.80	\$ 1,289.81	\$ 1,450.58	\$ 2,090.94	\$ 3,366.45	\$ 5,297.60	\$ 7,388.26	\$ 7,114.00	\$ 7,022.82	\$ 7,482.55	\$ 7,840.25	\$ 55,897.43
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	34,679.6	41,898.6	-	40.5	40,400.1	47,845.3	164,985.7
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,622.15	\$ 1,948.30	\$ -	\$ 1.92	\$ 1,881.50	\$ 2,213.37	\$ 7,673.0
Bridger Gas													
Energy (MWh)	-	29,625.0	-	550.1	2,516.6	4,015.4	21,797.6	25,982.9	13,475.2	26,999.8	-	-	124,962.4
Expense (\$ x 1000)	\$ -	\$ 1,044.32	\$ -	\$ 23.66	\$ 94.48	\$ 167.18	\$ 997.62	\$ 1,209.63	\$ 573.38	\$ 1,139.35	\$ -	\$ -	\$ 5,249.6
Langley Gulch													
Energy (MWh)	4,761.3	-	-	-	-	136,554.2	215,900.8	216,926.0	210,782.0	221,742.6	183,305.9	159,414.3	1,349,387.1
Expense (\$ x 1000)	\$ 374.13	\$ -	\$ -	\$ -	\$ -	\$ 3,875.80	\$ 6,998.80	\$ 7,564.48	\$ 6,766.17	\$ 7,220.32	\$ 12,315.89	\$ 15,523.85	\$ 60,639.4
Danskin													
Energy (MWh)	-	-	-	-	-	-	84,988.8	81,533.9	-	-	580.4	13,372.1	180,475.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,280.98	\$ 4,454.00	\$ -	\$ -	\$ 63.40	\$ 1,976.71	\$ 10,775.1
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	1,838.3	34,609.0	55,706.6	4,383.7	-	243.0	2,391.2	99,171.9
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 77.70	\$ 1,757.59	\$ 3,056.01	\$ 215.19	\$ -	\$ 26.19	\$ 347.17	\$ 5,479.9
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	4,987.8	1,762.6	2,228.6	222.4	8,676.4	83,001.4	227,048.1	189,220.3	41,544.8	55,538.8	176,667.5	291,193.6	1,082,092.1
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	80,760.0	65,991.1	84,672.1	85,561.8	99,429.5	173,087.6	321,400.6	277,705.6	117,141.4	127,935.3	245,933.5	360,994.0	2,040,612.4
Market Expense (\$ x 1000)	\$ 227.24	\$ 55.61	\$ 58.94	\$ 6.32	\$ 212.11	\$ 2,176.46	\$ 7,346.46	\$ 7,074.38	\$ 1,442.29	\$ 1,992.67	\$ 6,659.58	\$ 12,956.37	\$ 40,208.4
Market Expense - No Wheeling (\$ x 1000)	\$ 189.98	\$ 42.44	\$ 42.29	\$ 4.66	\$ 147.30	\$ 1,556.49	\$ 5,650.56	\$ 5,661.03	\$ 1,131.98	\$ 1,577.83	\$ 5,339.99	\$ 10,781.35	\$ 32,125.9
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 5,948.2	\$ 4,487.4	\$ 5,294.9	\$ 4,956.7	\$ 4,929.2	\$ 6,004.0	\$ 10,128.3	\$ 10,003.6	\$ 5,126.0	\$ 6,097.0	\$ 10,534.9	\$ 16,216.9	\$ 89,727.0
Storage													
Black Mesa Battery Energy (MWh)	(1,273.16)	(1,203.42)	(1,415.5)	(1,221.0)	(957.8)	(872.3)	(883.0)	(873.1)	(805.2)	(916.8)	(887.3)	(1,144.4)	(12,452.9)
80 MW Grid Battery Energy (MWh)	(2,543.51)	(2,523.16)	(2,871.4)	(2,427.4)	(1,969.5)	(1,744.6)	(1,751.2)	(1,741.0)	(1,584.1)	(1,851.2)	(1,743.8)	(2,299.7)	(25,050.4)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2001

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	552,748.8	538,036.7	524,468.4	520,027.3	569,434.5	621,169.1	553,042.5	451,074.6	434,807.6	405,936.6	371,689.5	445,257.4	5,987,692.9
Bridger Coal													
Energy (MWh)	125,632.8	107,814.8	71,617.0	72,584.8	73,897.9	137,201.8	218,306.4	250,686.7	242,600.0	250,038.1	242,600.0	250,686.7	2,043,666.96
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,386.31	\$ 2,375.73	\$ 2,393.38	\$ 2,671.63	\$ 4,553.55	\$ 6,908.19	\$ 7,840.28	\$ 7,587.37	\$ 7,821.61	\$ 7,587.37	\$ 7,840.28	\$ 64,895.07
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	47,085.1	50,504.2	42,809.6	17,324.0	47,268.8	69,079.7	274,193.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,182.17	\$ 2,333.23	\$ 1,988.91	\$ 805.49	\$ 2,187.67	\$ 3,162.45	\$ 12,665.7
Bridger Gas													
Energy (MWh)	-	30,745.6	-	1,673.5	883.4	4,764.2	27,513.0	42,717.7	28,482.4	20,118.4	-	-	156,898.1
Expense (\$ x 1000)	\$ -	\$ 1,260.36	\$ -	\$ 83.50	\$ 38.64	\$ 230.48	\$ 1,464.07	\$ 2,313.96	\$ 1,410.24	\$ 987.33	\$ -	\$ -	\$ 7,788.6
Langley Gulch													
Energy (MWh)	198,592.6	208,685.8	159,830.2	197,724.8	228,936.4	207,738.9	215,601.9	216,018.1	214,314.2	221,547.0	185,059.2	156,921.7	2,410,970.5
Expense (\$ x 1000)	\$ 16,414.49	\$ 6,186.16	\$ 10,168.78	\$ 6,817.76	\$ 6,791.88	\$ 6,667.05	\$ 7,923.39	\$ 8,549.18	\$ 7,793.77	\$ 8,179.26	\$ 14,118.22	\$ 17,611.91	\$ 117,221.9
Danskin													
Energy (MWh)	22,168.0	483.3	-	-	-	43,414.8	133,241.9	124,265.9	24,288.4	-	295.8	13,372.3	361,530.5
Expense (\$ x 1000)	\$ 3,037.96	\$ 23.96	\$ -	\$ -	\$ -	\$ 2,180.41	\$ 7,814.96	\$ 7,827.72	\$ 1,317.37	\$ -	\$ 37.03	\$ 2,266.03	\$ 24,505.4
Bennett Mountain													
Energy (MWh)	2,621.4	-	-	-	-	21,624.1	92,068.6	70,216.1	1,136.4	-	243.0	3,272.2	191,181.8
Expense (\$ x 1000)	\$ 354.38	\$ -	\$ -	\$ -	\$ -	\$ 1,091.41	\$ 5,387.62	\$ 4,420.34	\$ 61.63	\$ -	\$ 29.99	\$ 544.52	\$ 11,889.9
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	252,238.4	89,400.7	154,902.5	46,981.2	110,088.1	168,387.4	247,803.7	192,688.5	107,186.9	63,926.9	169,050.9	289,121.0	1,891,776.0
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	328,010.5	153,629.2	237,346.0	132,320.6	200,841.2	258,473.6	342,156.1	281,173.9	182,783.5	136,323.4	238,316.9	358,921.5	2,850,296.4
Market Expense (\$ x 1000)	\$ 12,774.32	\$ 3,127.69	\$ 4,389.76	\$ 1,366.42	\$ 2,930.71	\$ 5,271.93	\$ 9,868.11	\$ 8,405.78	\$ 4,386.24	\$ 2,690.44	\$ 7,283.88	\$ 14,434.11	\$ 76,929.4
Market Expense - No Wheeling (\$ x 1000)	\$ 10,890.27	\$ 2,459.93	\$ 3,232.74	\$ 1,015.50	\$ 2,108.42	\$ 4,014.19	\$ 8,017.18	\$ 6,966.52	\$ 3,585.63	\$ 2,212.95	\$ 6,021.18	\$ 12,274.57	\$ 62,799.1
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,648.5	\$ 6,904.9	\$ 8,485.4	\$ 5,967.5	\$ 6,890.3	\$ 8,461.7	\$ 12,494.9	\$ 11,309.1	\$ 7,579.6	\$ 6,732.1	\$ 11,216.1	\$ 17,710.1	\$ 120,400.2
Storage													
Black Mesa Battery Energy (MWh)	(1,169.61)	(962.05)	(1,221.4)	(1,003.1)	(869.5)	(846.2)	(875.6)	(868.2)	(831.4)	(913.2)	(948.4)	(1,128.9)	(11,637.4)
80 MW Grid Battery Energy (MWh)	(2,356.85)	(1,828.61)	(2,390.3)	(1,981.3)	(1,772.5)	(1,716.0)	(1,736.8)	(1,736.5)	(1,643.5)	(1,804.2)	(1,921.3)	(2,180.2)	(23,068.1)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2002													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	530,478.9	500,179.5	571,011.9	749,779.5	690,474.9	699,685.9	548,521.0	449,495.2	409,544.9	406,703.4	372,357.1	439,478.2	6,367,710.4
Bridger Coal													
Energy (MWh)	125,632.8	106,121.8	67,469.9	70,293.8	57,438.7	121,919.4	205,507.9	250,111.8	242,559.3	247,328.2	242,600.0	250,686.7	1,987,670.33
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,337.62	\$ 2,256.45	\$ 2,327.49	\$ 2,197.97	\$ 4,113.68	\$ 6,539.74	\$ 7,823.73	\$ 7,586.20	\$ 7,743.57	\$ 7,587.37	\$ 7,840.28	\$ 63,283.47
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	44,125.8	44,269.0	40,747.6	17,089.0	43,439.0	60,595.9	250,387.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,047.24	\$ 2,052.61	\$ 1,896.99	\$ 795.02	\$ 2,016.96	\$ 2,784.18	\$ 11,598.8
Bridger Gas													
Energy (MWh)	-	46,595.2	-	1,770.3	49.0	4,732.9	28,629.0	34,181.4	30,520.5	29,949.0	-	-	176,427.2
Expense (\$ x 1000)	\$ -	\$ 1,836.27	\$ -	\$ 85.25	\$ 2.05	\$ 220.49	\$ 1,464.96	\$ 1,779.98	\$ 1,453.03	\$ 1,413.68	\$ -	\$ -	\$ 8,255.7
Langley Gulch													
Energy (MWh)	199,553.5	208,920.8	145,532.2	-	213,170.8	207,525.2	215,823.8	215,637.7	213,972.9	222,117.9	181,687.3	154,851.5	2,178,793.5
Expense (\$ x 1000)	\$ 15,922.82	\$ 6,006.65	\$ 8,960.18	\$ -	\$ 6,140.33	\$ 6,458.87	\$ 7,687.41	\$ 8,270.13	\$ 7,542.47	\$ 7,947.29	\$ 13,536.90	\$ 16,931.96	\$ 105,405.0
Danskin													
Energy (MWh)	27,015.6	259.7	-	-	-	20,608.5	138,557.1	126,681.1	39,783.9	-	197.7	14,318.0	367,421.6
Expense (\$ x 1000)	\$ 3,577.78	\$ 12.19	\$ -	\$ -	\$ -	\$ 991.18	\$ 7,864.51	\$ 7,732.92	\$ 2,210.65	\$ -	\$ 23.70	\$ 2,349.33	\$ 24,762.3
Bennett Mountain													
Energy (MWh)	4,369.0	596.3	-	-	-	6,305.0	96,163.8	69,970.6	1,363.7	-	486.1	2,517.1	181,771.5
Expense (\$ x 1000)	\$ 571.07	\$ 26.58	\$ -	\$ -	\$ -	\$ 305.23	\$ 5,441.20	\$ 4,269.93	\$ 73.09	\$ -	\$ 57.99	\$ 404.93	\$ 11,150.0
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	267,065.2	113,525.6	131,492.1	30,707.6	47,616.2	151,375.8	257,066.0	204,988.7	120,273.5	62,640.6	174,663.2	304,812.1	1,866,226.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	342,837.3	177,754.2	213,935.6	116,046.9	138,369.3	241,462.0	351,418.4	293,474.0	195,870.1	135,037.1	243,929.2	374,612.5	2,824,746.7
Market Expense (\$ x 1000)	\$ 13,137.04	\$ 3,937.31	\$ 3,605.01	\$ 855.02	\$ 1,200.65	\$ 4,400.27	\$ 9,849.95	\$ 8,421.17	\$ 4,752.06	\$ 2,487.77	\$ 7,246.08	\$ 14,654.12	\$ 74,546.5
Market Expense - No Wheeling (\$ x 1000)	\$ 11,142.24	\$ 3,089.35	\$ 2,622.85	\$ 625.65	\$ 844.99	\$ 3,269.59	\$ 7,929.84	\$ 6,890.04	\$ 3,853.70	\$ 2,019.89	\$ 5,941.46	\$ 12,377.38	\$ 60,607.0
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,900.5	\$ 7,534.3	\$ 7,875.5	\$ 5,577.7	\$ 5,626.8	\$ 7,717.1	\$ 12,407.5	\$ 11,232.6	\$ 7,847.7	\$ 6,539.1	\$ 11,136.4	\$ 17,812.9	\$ 118,208.1
Storage													
Black Mesa Battery Energy (MWh)	(1,228.23)	(947.68)	(1,159.3)	(1,086.0)	(913.9)	(843.4)	(875.6)	(882.3)	(837.0)	(975.0)	(931.1)	(1,066.2)	(11,745.7)
80 MW Grid Battery Energy (MWh)	(2,407.31)	(1,844.47)	(2,302.6)	(2,180.9)	(1,901.9)	(1,679.1)	(1,736.8)	(1,750.6)	(1,685.3)	(1,967.5)	(1,822.8)	(2,104.3)	(23,383.4)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2003														
	January	February	March	April	May	June	July	August	September	October	November	December	Annual	
Hydroelectric Generation (MWh)	549,352.8	566,762.0	486,790.1	613,989.8	878,135.9	778,846.8	611,808.0	477,579.0	414,163.9	408,111.3	374,086.4	433,578.3	6,593,204.4	
Bridger Coal														
Energy (MWh)	125,632.9	101,742.5	65,841.9	63,050.9	76,555.4	122,345.1	193,840.4	247,338.2	242,565.5	245,553.9	242,600.0	250,686.7	1,977,753.47	
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,211.66	\$ 2,209.63	\$ 2,119.16	\$ 2,748.14	\$ 4,125.91	\$ 6,203.94	\$ 7,743.87	\$ 7,586.37	\$ 7,692.46	\$ 7,587.37	\$ 7,840.28	\$ 62,998.16	
Valmy														
Energy (MWh)	121.5	-	-	-	-	-	44,736.2	45,523.4	38,498.8	15,928.8	40,134.4	63,646.9	248,590.0	
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,075.79	\$ 2,109.87	\$ 1,796.75	\$ 743.30	\$ 1,869.66	\$ 2,920.18	\$ 11,521.3	
Bridger Gas														
Energy (MWh)	-	29,405.7	-	787.3	415.9	1,506.8	27,132.6	32,504.2	19,514.2	16,498.1	-	-	127,764.8	
Expense (\$ x 1000)	\$ -	\$ 1,156.45	\$ -	\$ 37.77	\$ 17.36	\$ 69.90	\$ 1,385.61	\$ 1,688.88	\$ 926.72	\$ 776.38	\$ -	\$ -	\$ 6,059.1	
Langley Gulch														
Energy (MWh)	201,500.0	208,844.5	161,032.1	103,988.7	-	203,822.3	215,423.6	215,429.8	213,812.8	221,818.3	181,722.5	159,440.5	2,086,835.1	
Expense (\$ x 1000)	\$ 15,976.31	\$ 5,994.22	\$ 9,885.33	\$ 3,470.83	\$ -	\$ 6,333.87	\$ 7,660.09	\$ 8,247.69	\$ 7,523.72	\$ 7,922.90	\$ 13,512.01	\$ 17,133.35	\$ 103,660.3	
Danskin														
Energy (MWh)	19,018.2	-	367.5	92.4	-	3,639.0	126,807.5	110,747.0	20,187.7	-	197.7	4,762.7	285,819.8	
Expense (\$ x 1000)	\$ 2,506.35	\$ -	\$ 34.52	\$ 5.22	\$ -	\$ 178.62	\$ 7,173.35	\$ 6,753.13	\$ 1,086.84	\$ -	\$ 23.65	\$ 782.61	\$ 18,544.3	
Bennett Mountain														
Energy (MWh)	6,116.6	-	934.5	-	-	7,998.2	79,783.1	77,196.7	1,818.2	-	486.1	15,606.0	189,939.3	
Expense (\$ x 1000)	\$ 797.98	\$ -	\$ 86.09	\$ -	\$ -	\$ 385.68	\$ 4,507.83	\$ 4,723.85	\$ 99.84	\$ -	\$ 57.88	\$ 2,505.74	\$ 13,164.9	
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18	
Purchased Power (Excluding PURPA)														
Market Energy (MWh)	252,714.7	74,341.2	191,610.2	51,306.1	55,844.1	111,596.5	237,328.9	190,599.5	135,139.8	63,302.8	173,801.8	299,604.0	1,837,189.6	
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4	
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5	
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2	
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8	
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5	
Total Energy Excl. PURPA (MWh)	328,486.9	138,569.7	274,053.7	136,645.5	146,597.2	201,682.7	331,681.4	279,084.9	210,736.5	135,699.3	243,067.9	369,404.5	2,795,710.0	
Market Expense (\$ x 1000)	\$ 12,522.34	\$ 2,445.05	\$ 5,460.84	\$ 1,440.58	\$ 1,442.33	\$ 3,228.62	\$ 8,738.90	\$ 7,686.78	\$ 5,238.93	\$ 2,537.48	\$ 6,985.43	\$ 14,538.52	\$ 72,265.8	
Market Expense - No Wheeling (\$ x 1000)	\$ 10,634.73	\$ 1,889.77	\$ 4,029.64	\$ 1,057.36	\$ 1,025.21	\$ 2,395.07	\$ 6,966.21	\$ 6,263.13	\$ 4,229.52	\$ 2,064.65	\$ 5,687.25	\$ 12,300.68	\$ 58,543.2	
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5	
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5	
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3	
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9	
Black Mesa Solar Expense (\$ x 1000)														\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,393.0	\$ 6,334.7	\$ 9,282.3	\$ 6,009.4	\$ 5,807.1	\$ 6,842.6	\$ 11,443.9	\$ 10,605.7	\$ 8,223.5	\$ 6,583.8	\$ 10,882.2	\$ 17,736.2	\$ 116,144.3	
Storage														
Black Mesa Battery Energy (MWh)	(1,275.29)	(805.48)	(1,177.5)	(988.1)	(878.2)	(827.6)	(875.7)	(875.2)	(821.3)	(963.8)	(844.7)	(1,127.2)	(11,460.0)	
80 MW Grid Battery Energy (MWh)	(2,520.96)	(1,658.70)	(2,280.3)	(1,962.2)	(1,816.3)	(1,653.6)	(1,751.0)	(1,750.6)	(1,642.3)	(1,838.6)	(1,676.0)	(2,189.4)	(22,739.7)	

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2004

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	502,582.4	556,777.9	616,274.4	635,197.8	746,862.3	660,396.6	569,674.6	485,210.3	475,454.6	419,509.1	358,416.2	451,797.6	6,478,153.8
Bridger Coal													
Energy (MWh)	125,632.9	107,633.5	70,610.5	82,767.6	87,011.1	123,533.3	199,898.2	250,015.4	242,600.0	250,165.5	242,600.0	250,686.7	2,033,154.78
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,381.10	\$ 2,346.79	\$ 2,686.27	\$ 3,048.90	\$ 4,160.11	\$ 6,378.29	\$ 7,820.95	\$ 7,587.37	\$ 7,825.27	\$ 7,587.37	\$ 7,840.28	\$ 64,592.07
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	40,201.7	46,008.8	40,611.5	12,067.8	45,883.6	66,537.6	251,432.5
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,873.67	\$ 2,130.16	\$ 1,890.93	\$ 560.33	\$ 2,125.92	\$ 3,049.14	\$ 11,635.9
Bridger Gas													
Energy (MWh)	-	28,859.9	-	3,831.7	4,086.8	5,254.3	16,047.4	22,977.7	21,374.7	33,958.6	-	-	136,391.1
Expense (\$ x 1000)	\$ -	\$ 1,170.91	\$ -	\$ 189.60	\$ 176.89	\$ 251.95	\$ 845.09	\$ 1,231.48	\$ 1,047.10	\$ 1,650.61	\$ -	\$ -	\$ 6,563.6
Langley Gulch													
Energy (MWh)	199,287.8	208,772.7	133,355.4	50,821.4	45,408.0	206,689.2	214,989.1	216,602.1	214,267.9	221,181.0	182,476.9	161,077.9	2,054,929.5
Expense (\$ x 1000)	\$ 16,295.31	\$ 6,136.95	\$ 8,475.54	\$ 1,744.57	\$ 1,338.30	\$ 6,578.94	\$ 7,834.07	\$ 8,497.93	\$ 7,725.58	\$ 8,096.33	\$ 13,897.17	\$ 17,669.08	\$ 104,289.8
Danskin													
Energy (MWh)	39,928.0	-	-	-	-	38,762.5	130,704.9	123,229.6	1,679.5	-	1,994.7	13,268.3	349,567.5
Expense (\$ x 1000)	\$ 5,437.39	\$ -	\$ -	\$ -	\$ -	\$ 1,929.58	\$ 7,597.06	\$ 7,648.92	\$ 89.61	\$ -	\$ 242.50	\$ 2,229.26	\$ 25,174.3
Bennett Mountain													
Energy (MWh)	7,739.4	-	-	-	-	12,851.9	88,858.8	62,086.5	4,220.9	-	486.1	2,139.5	178,383.0
Expense (\$ x 1000)	\$ 1,036.63	\$ -	\$ -	\$ -	\$ -	\$ 646.87	\$ 5,189.01	\$ 3,863.85	\$ 234.71	\$ -	\$ 59.42	\$ 352.74	\$ 11,383.2
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	278,970.3	77,098.9	102,543.6	56,809.0	105,430.6	159,938.7	273,274.9	186,512.5	96,897.0	54,499.9	182,224.2	282,819.8	1,857,019.5
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	354,742.5	141,327.5	184,987.1	142,148.4	196,183.7	250,024.9	367,627.4	274,997.9	172,493.6	126,896.4	251,490.3	352,620.2	2,815,539.9
Market Expense (\$ x 1000)	\$ 14,301.12	\$ 2,663.53	\$ 2,826.46	\$ 1,672.57	\$ 2,846.10	\$ 4,769.28	\$ 10,410.15	\$ 7,923.44	\$ 3,980.18	\$ 2,203.18	\$ 7,884.64	\$ 14,190.62	\$ 75,671.3
Market Expense - No Wheeling (\$ x 1000)	\$ 12,217.40	\$ 2,087.65	\$ 2,060.53	\$ 1,248.24	\$ 2,058.60	\$ 3,574.64	\$ 8,368.97	\$ 6,530.32	\$ 3,256.42	\$ 1,796.10	\$ 6,523.55	\$ 12,078.14	\$ 61,800.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,975.6	\$ 6,532.6	\$ 7,313.2	\$ 6,200.3	\$ 6,840.5	\$ 8,022.1	\$ 12,846.7	\$ 10,872.9	\$ 7,250.4	\$ 6,315.3	\$ 11,718.5	\$ 17,513.7	\$ 119,401.7
Storage													
Black Mesa Battery Energy (MWh)	(1,211.84)	(831.79)	(1,093.8)	(1,037.7)	(837.3)	(763.8)	(868.2)	(882.0)	(819.7)	(892.2)	(943.1)	(1,200.3)	(11,381.5)
80 MW Grid Battery Energy (MWh)	(2,367.42)	(1,647.23)	(2,148.2)	(2,059.2)	(1,702.0)	(1,548.4)	(1,750.6)	(1,730.9)	(1,676.9)	(1,810.1)	(1,802.2)	(2,406.7)	(22,649.8)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2005

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	535,163.9	489,349.9	482,191.3	576,436.7	855,261.5	645,856.0	709,742.8	537,194.7	482,049.6	418,609.5	370,787.5	580,443.2	6,683,086.4
Bridger Coal													
Energy (MWh)	125,632.9	104,566.0	67,573.6	72,683.2	64,139.3	129,881.0	184,854.4	246,352.5	242,600.0	245,981.4	242,600.0	250,686.7	1,977,551.02
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,292.87	\$ 2,259.44	\$ 2,396.21	\$ 2,390.74	\$ 4,342.84	\$ 5,945.28	\$ 7,715.52	\$ 7,587.37	\$ 7,704.78	\$ 7,587.37	\$ 7,840.28	\$ 62,992.07
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	41,158.5	44,743.8	37,450.2	17,464.7	43,288.4	58,585.0	242,812.2
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,916.32	\$ 2,073.78	\$ 1,750.01	\$ 811.76	\$ 2,010.25	\$ 2,694.54	\$ 11,262.4
Bridger Gas													
Energy (MWh)	-	48,811.2	-	8,777.8	100.6	2,560.3	19,739.8	28,359.6	18,883.7	31,511.6	-	-	158,744.6
Expense (\$ x 1000)	\$ -	\$ 1,923.68	\$ -	\$ 421.64	\$ 4.20	\$ 119.17	\$ 1,009.78	\$ 1,476.00	\$ 898.58	\$ 1,487.38	\$ -	\$ -	\$ 7,340.4
Langley Gulch													
Energy (MWh)	199,501.3	208,976.4	161,084.6	156,146.6	22,581.1	208,276.8	214,999.7	215,745.5	213,661.5	221,544.4	180,831.7	148,959.5	2,152,308.9
Expense (\$ x 1000)	\$ 15,892.09	\$ 5,997.83	\$ 9,879.67	\$ 5,210.76	\$ 652.83	\$ 6,470.03	\$ 7,645.50	\$ 8,259.45	\$ 7,518.57	\$ 7,913.42	\$ 13,479.02	\$ 16,249.61	\$ 105,168.8
Danskin													
Energy (MWh)	24,095.6	647.3	372.0	-	-	41,926.9	108,535.7	106,277.2	92.5	-	349.3	-	282,296.5
Expense (\$ x 1000)	\$ 3,175.92	\$ 30.57	\$ 34.91	\$ -	\$ -	\$ 1,997.85	\$ 6,122.31	\$ 6,418.74	\$ 5.33	\$ -	\$ 42.70	\$ -	\$ 17,828.3
Bennett Mountain													
Energy (MWh)	4,743.5	1,385.4	700.8	-	-	12,070.8	36,295.5	43,128.7	1,477.3	-	729.1	-	100,531.2
Expense (\$ x 1000)	\$ 618.84	\$ 63.27	\$ 64.57	\$ -	\$ -	\$ 578.60	\$ 2,045.32	\$ 2,606.46	\$ 79.68	\$ -	\$ 86.82	\$ -	\$ 6,143.6
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	265,039.1	120,810.8	194,078.9	43,892.7	62,985.8	168,126.1	221,350.2	173,614.9	95,253.3	53,332.0	177,887.4	193,948.5	1,770,319.4
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	340,811.2	185,039.4	276,522.4	129,232.1	153,738.8	258,212.3	315,702.7	262,100.2	170,849.9	125,728.5	247,153.4	263,748.9	2,728,839.8
Market Expense (\$ x 1000)	\$ 13,200.17	\$ 4,177.49	\$ 5,531.14	\$ 1,252.51	\$ 1,637.17	\$ 4,996.25	\$ 7,822.13	\$ 6,984.55	\$ 3,712.79	\$ 2,131.81	\$ 7,301.04	\$ 8,876.66	\$ 67,623.7
Market Expense - No Wheeling (\$ x 1000)	\$ 11,220.50	\$ 3,275.11	\$ 4,081.50	\$ 924.66	\$ 1,166.71	\$ 3,740.46	\$ 6,168.79	\$ 5,687.76	\$ 3,001.31	\$ 1,733.46	\$ 5,972.34	\$ 7,427.99	\$ 54,400.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,978.8	\$ 7,720.0	\$ 9,334.1	\$ 5,876.7	\$ 5,948.6	\$ 8,188.0	\$ 10,646.5	\$ 10,030.3	\$ 6,995.3	\$ 6,252.6	\$ 11,167.3	\$ 12,863.5	\$ 112,001.7
Storage													
Black Mesa Battery Energy (MWh)	(1,226.90)	(901.46)	(1,143.5)	(1,146.6)	(989.6)	(880.1)	(882.7)	(863.9)	(832.1)	(954.2)	(938.6)	(1,084.7)	(11,844.3)
80 MW Grid Battery Energy (MWh)	(2,452.20)	(1,824.33)	(2,299.2)	(2,329.8)	(1,967.5)	(1,722.7)	(1,765.1)	(1,730.9)	(1,616.4)	(1,868.3)	(1,850.9)	(2,083.8)	(23,511.0)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2006

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	965,495.3	838,056.2	983,174.4	1,109,570.6	1,213,641.1	1,101,975.6	767,329.9	576,398.7	572,030.2	442,225.4	367,035.5	480,507.9	9,417,440.8
Bridger Coal													
Energy (MWh)	125,632.9	73,901.0	34,245.2	38,101.6	48,873.2	89,393.9	157,355.1	229,303.9	220,699.3	226,723.7	234,123.9	250,686.7	1,729,040.25
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,410.86	\$ 1,300.83	\$ 1,401.56	\$ 1,951.46	\$ 3,177.48	\$ 5,153.80	\$ 7,224.72	\$ 6,956.82	\$ 7,150.35	\$ 7,343.36	\$ 7,840.28	\$ 55,840.89
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	27,813.4	37,198.2	-	162.0	39,481.1	45,810.2	150,586.6
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,302.64	\$ 1,738.78	\$ -	\$ 7.67	\$ 1,840.54	\$ 2,122.66	\$ 7,018.0
Bridger Gas													
Energy (MWh)	-	40,938.9	-	2,043.7	1,399.0	2,144.2	16,509.1	21,323.7	12,214.5	22,745.1	-	-	119,318.1
Expense (\$ x 1000)	\$ -	\$ 1,422.64	\$ -	\$ 86.76	\$ 51.78	\$ 88.11	\$ 744.75	\$ 978.30	\$ 512.07	\$ 945.76	\$ -	\$ -	\$ 4,830.2
Langley Gulch													
Energy (MWh)	41,948.5	46,566.0	-	-	-	37,530.9	215,104.9	216,433.6	212,369.7	221,791.6	185,895.6	157,792.4	1,335,433.3
Expense (\$ x 1000)	\$ 3,169.71	\$ 1,215.60	\$ -	\$ -	\$ -	\$ 1,063.14	\$ 6,906.49	\$ 7,474.16	\$ 6,749.17	\$ 7,151.85	\$ 12,278.54	\$ 15,289.31	\$ 61,298.0
Danskin													
Energy (MWh)	-	-	-	-	-	61.6	86,587.2	70,887.0	1,461.1	-	328.0	12,320.1	171,645.0
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.75	\$ 4,338.92	\$ 3,830.32	\$ 69.10	\$ -	\$ 35.58	\$ 1,801.96	\$ 10,078.6
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	33,001.9	27,655.4	4,334.5	-	2,308.8	3,020.5	70,321.1
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,668.24	\$ 1,507.68	\$ 211.37	\$ -	\$ 246.19	\$ 433.89	\$ 4,067.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	44,081.9	26,134.3	8,071.4	128.2	3,773.0	47,653.6	231,834.9	214,263.7	70,070.6	59,358.1	185,092.6	277,593.1	1,168,055.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	119,854.1	90,362.8	90,514.9	85,467.6	94,526.1	137,739.8	326,187.3	302,749.0	145,667.2	131,754.7	254,358.6	347,393.6	2,126,575.7
Market Expense (\$ x 1000)	\$ 1,902.13	\$ 796.42	\$ 208.15	\$ 3.66	\$ 91.64	\$ 1,296.84	\$ 7,280.27	\$ 7,721.20	\$ 2,362.29	\$ 2,098.51	\$ 6,854.52	\$ 11,984.10	\$ 42,599.7
Market Expense - No Wheeling (\$ x 1000)	\$ 1,572.87	\$ 601.21	\$ 147.86	\$ 2.70	\$ 63.46	\$ 940.90	\$ 5,548.62	\$ 6,120.79	\$ 1,838.91	\$ 1,655.14	\$ 5,472.00	\$ 9,910.66	\$ 33,875.1
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 7,331.1	\$ 5,046.1	\$ 5,400.5	\$ 4,954.7	\$ 4,845.3	\$ 5,388.4	\$ 10,026.3	\$ 10,463.4	\$ 5,832.9	\$ 6,174.3	\$ 10,666.9	\$ 15,346.2	\$ 91,476.2
Storage													
Black Mesa Battery Energy (MWh)	(1,223.19)	(1,040.06)	(1,311.4)	(1,195.4)	(993.8)	(872.3)	(889.7)	(853.2)	(779.3)	(916.7)	(897.6)	(1,074.1)	(12,046.8)
80 MW Grid Battery Energy (MWh)	(2,443.54)	(2,057.61)	(2,640.7)	(2,351.7)	(1,970.8)	(1,756.5)	(1,752.3)	(1,713.8)	(1,548.6)	(1,817.3)	(1,746.5)	(2,085.9)	(23,885.3)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2007

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	627,408.0	652,046.7	712,213.4	636,254.8	663,358.6	627,434.1	560,698.2	467,516.9	514,749.6	417,003.2	364,336.8	434,099.5	6,677,119.9
Bridger Coal													
Energy (MWh)	125,632.9	89,010.5	59,748.3	57,629.9	59,518.4	117,084.8	187,608.0	247,436.1	242,600.0	246,751.7	242,600.0	250,686.7	1,926,307.35
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,845.45	\$ 2,034.36	\$ 1,963.24	\$ 2,257.86	\$ 3,974.50	\$ 6,024.52	\$ 7,746.71	\$ 7,587.37	\$ 7,726.95	\$ 7,587.37	\$ 7,840.28	\$ 61,517.98
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	42,200.0	45,610.5	20,101.5	684.8	43,601.0	58,084.8	210,404.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,964.42	\$ 2,113.75	\$ 937.37	\$ 31.53	\$ 2,024.18	\$ 2,672.25	\$ 9,749.3
Bridger Gas													
Energy (MWh)	-	22,500.6	-	951.5	1,379.2	4,270.4	18,690.1	29,621.3	24,561.4	38,502.7	-	-	140,477.3
Expense (\$ x 1000)	\$ -	\$ 871.75	\$ -	\$ 45.03	\$ 56.95	\$ 195.48	\$ 939.95	\$ 1,516.29	\$ 1,149.25	\$ 1,787.02	\$ -	\$ -	\$ 6,561.7
Langley Gulch													
Energy (MWh)	198,975.1	208,835.6	29,857.8	101,253.7	228,250.5	207,400.3	215,730.5	215,807.2	214,269.0	222,349.4	180,460.4	156,763.3	2,179,952.8
Expense (\$ x 1000)	\$ 15,662.07	\$ 5,921.61	\$ 1,889.90	\$ 3,341.55	\$ 6,479.43	\$ 6,365.60	\$ 7,575.85	\$ 8,158.85	\$ 7,446.08	\$ 7,843.00	\$ 13,295.57	\$ 16,774.01	\$ 100,753.5
Danskin													
Energy (MWh)	642.7	-	-	-	-	45,454.1	134,575.8	124,888.1	1,679.5	1,905.8	758.0	19,380.0	329,284.0
Expense (\$ x 1000)	\$ 83.96	\$ -	\$ -	\$ -	\$ -	\$ 2,148.19	\$ 7,517.86	\$ 7,478.66	\$ 86.20	\$ 110.14	\$ 89.42	\$ 3,129.59	\$ 20,644.0
Bennett Mountain													
Energy (MWh)	4,119.4	-	-	-	-	22,762.6	89,994.8	68,130.6	2,987.1	-	850.6	2,013.7	190,858.7
Expense (\$ x 1000)	\$ 530.24	\$ -	\$ -	\$ -	\$ -	\$ 1,103.48	\$ 5,028.44	\$ 4,082.31	\$ 163.52	\$ -	\$ 99.95	\$ 318.99	\$ 11,326.9
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	198,013.5	28,439.7	108,830.3	47,885.4	54,629.3	179,236.3	284,764.6	194,617.5	78,484.3	61,247.9	182,641.5	306,351.8	1,725,142.2
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	273,785.7	92,668.2	191,273.8	133,224.8	145,382.4	269,322.6	379,117.1	283,102.9	154,080.9	133,644.4	251,907.6	376,152.3	2,683,662.6
Market Expense (\$ x 1000)	\$ 9,431.85	\$ 867.14	\$ 2,950.50	\$ 1,346.24	\$ 1,347.51	\$ 5,281.83	\$ 10,542.81	\$ 7,944.03	\$ 3,075.31	\$ 2,454.54	\$ 7,526.56	\$ 14,502.63	\$ 67,271.0
Market Expense - No Wheeling (\$ x 1000)	\$ 7,952.82	\$ 654.71	\$ 2,137.61	\$ 988.57	\$ 939.47	\$ 3,943.05	\$ 8,415.81	\$ 6,490.37	\$ 2,489.08	\$ 1,997.06	\$ 6,162.35	\$ 12,214.38	\$ 54,385.3
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 13,711.1	\$ 5,099.6	\$ 7,390.2	\$ 5,940.6	\$ 5,721.3	\$ 8,390.6	\$ 12,893.5	\$ 10,832.9	\$ 6,483.1	\$ 6,516.2	\$ 11,357.3	\$ 17,649.9	\$ 111,986.4
Storage													
Black Mesa Battery Energy (MWh)	(1,268.79)	(772.27)	(1,121.7)	(1,038.7)	(907.1)	(847.4)	(868.4)	(865.8)	(843.0)	(945.0)	(921.0)	(1,120.9)	(11,520.1)
80 MW Grid Battery Energy (MWh)	(2,514.64)	(1,524.16)	(2,215.4)	(2,125.3)	(1,788.5)	(1,694.4)	(1,736.7)	(1,708.3)	(1,641.8)	(1,886.9)	(1,767.1)	(2,194.7)	(22,797.9)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2008													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	497,754.8	516,053.1	650,723.0	847,638.7	875,471.5	879,557.2	666,727.3	616,656.0	505,170.3	438,387.0	369,264.7	431,758.4	7,295,162.0
Bridger Coal													
Energy (MWh)	125,632.9	101,278.3	51,676.7	49,365.1	60,239.9	112,064.0	173,663.7	247,648.4	240,087.2	240,827.5	242,600.0	250,686.7	1,895,770.36
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,198.30	\$ 1,802.20	\$ 1,725.52	\$ 2,278.56	\$ 3,829.97	\$ 5,623.18	\$ 7,752.81	\$ 7,515.00	\$ 7,556.37	\$ 7,587.37	\$ 7,840.28	\$ 60,638.93
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	43,089.6	46,995.8	33,090.6	8,097.3	41,076.6	56,378.5	228,850.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,002.39	\$ 2,178.19	\$ 1,555.69	\$ 378.08	\$ 1,911.66	\$ 2,596.19	\$ 10,628.0
Bridger Gas													
Energy (MWh)	-	41,045.1	-	4,140.0	-	2,208.6	22,239.1	39,903.0	9,598.5	19,642.5	-	-	138,776.7
Expense (\$ x 1000)	\$ -	\$ 1,569.13	\$ -	\$ 193.12	\$ -	\$ 99.74	\$ 1,103.58	\$ 2,016.44	\$ 443.10	\$ 899.12	\$ -	\$ -	\$ 6,324.2
Langley Gulch													
Energy (MWh)	200,190.6	208,930.1	115,625.6	-	-	136,023.0	215,594.7	215,834.7	212,628.7	221,203.8	180,248.6	156,160.9	1,862,440.8
Expense (\$ x 1000)	\$ 15,509.05	\$ 5,851.76	\$ 6,933.10	\$ -	\$ -	\$ 4,125.94	\$ 7,476.50	\$ 8,056.95	\$ 7,298.52	\$ 7,706.15	\$ 13,112.96	\$ 16,520.89	\$ 92,591.8
Danskin													
Energy (MWh)	41,926.2	128.9	-	-	-	1,688.0	112,253.3	49,091.3	-	-	678.5	16,588.2	222,354.4
Expense (\$ x 1000)	\$ 5,373.80	\$ 5.99	\$ -	\$ -	\$ -	\$ 76.94	\$ 6,171.58	\$ 2,860.30	\$ -	\$ -	\$ 80.00	\$ 2,641.75	\$ 17,210.4
Bennett Mountain													
Energy (MWh)	7,739.4	-	-	-	-	4,015.2	57,699.2	21,734.0	1,363.7	-	243.0	5,034.2	97,828.7
Expense (\$ x 1000)	\$ 982.74	\$ -	\$ -	\$ -	\$ -	\$ 183.93	\$ 3,173.03	\$ 1,279.80	\$ 71.05	\$ -	\$ 28.17	\$ 786.63	\$ 6,505.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	281,078.3	107,593.8	103,639.3	5,641.0	54,898.6	101,979.0	244,798.3	161,391.2	81,286.6	50,510.9	180,093.9	310,593.4	1,683,504.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	356,850.4	171,822.4	186,082.8	90,980.4	145,651.7	192,065.2	339,150.8	249,876.6	156,883.2	122,907.4	249,360.0	380,393.8	2,642,024.7
Market Expense (\$ x 1000)	\$ 13,784.37	\$ 3,600.88	\$ 2,710.76	\$ 149.20	\$ 1,369.69	\$ 2,803.78	\$ 8,578.87	\$ 6,421.70	\$ 3,019.68	\$ 1,967.16	\$ 7,347.02	\$ 14,637.20	\$ 66,390.3
Market Expense - No Wheeling (\$ x 1000)	\$ 11,684.90	\$ 2,797.23	\$ 1,936.64	\$ 107.07	\$ 959.63	\$ 2,042.06	\$ 6,750.39	\$ 5,216.21	\$ 2,412.52	\$ 1,589.88	\$ 6,001.84	\$ 12,317.27	\$ 53,815.6
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,443.2	\$ 7,242.2	\$ 7,189.3	\$ 5,059.1	\$ 5,741.5	\$ 6,489.6	\$ 11,228.1	\$ 9,558.8	\$ 6,406.5	\$ 6,109.1	\$ 11,196.8	\$ 17,752.8	\$ 111,416.8
Storage													
Black Mesa Battery Energy (MWh)	(1,271.44)	(918.00)	(1,061.3)	(1,065.0)	(890.5)	(868.0)	(882.7)	(870.5)	(807.7)	(916.8)	(912.1)	(1,095.0)	(11,559.0)
80 MW Grid Battery Energy (MWh)	(2,553.44)	(1,877.67)	(2,100.8)	(2,160.1)	(1,792.5)	(1,730.9)	(1,751.0)	(1,745.4)	(1,619.1)	(1,826.2)	(1,755.9)	(2,190.8)	(23,103.8)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2009

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	632,112.3	631,888.0	829,949.4	1,107,615.1	1,040,748.3	1,118,188.1	734,454.0	630,979.7	508,909.6	442,960.4	373,023.8	440,438.7	8,491,267.4
Bridger Coal													
Energy (MWh)	125,632.9	89,328.0	45,232.9	42,610.2	55,051.8	99,182.1	170,866.9	239,011.9	241,145.2	240,402.6	242,280.9	250,686.7	1,841,431.99
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,854.58	\$ 1,616.86	\$ 1,531.24	\$ 2,129.22	\$ 3,459.23	\$ 5,542.71	\$ 7,504.19	\$ 7,545.48	\$ 7,544.16	\$ 7,578.18	\$ 7,840.28	\$ 59,075.50
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	41,809.8	45,345.6	37,845.3	483.2	40,269.2	50,649.3	216,523.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,945.35	\$ 2,104.63	\$ 1,767.63	\$ 22.21	\$ 1,875.67	\$ 2,340.71	\$ 10,062.0
Bridger Gas													
Energy (MWh)	-	36,975.0	-	919.4	1,195.9	3,315.8	24,069.7	30,711.2	25,373.1	23,176.2	-	-	145,736.2
Expense (\$ x 1000)	\$ -	\$ 1,389.58	\$ -	\$ 42.14	\$ 47.85	\$ 147.04	\$ 1,173.88	\$ 1,523.66	\$ 1,151.21	\$ 1,042.75	\$ -	\$ -	\$ 6,518.1
Langley Gulch													
Energy (MWh)	200,965.1	208,920.8	-	-	-	33,423.4	215,508.6	215,899.6	213,899.1	221,771.5	177,966.8	155,183.4	1,643,538.4
Expense (\$ x 1000)	\$ 15,302.36	\$ 5,768.77	\$ -	\$ -	\$ -	\$ 1,006.67	\$ 7,365.39	\$ 7,941.65	\$ 7,234.33	\$ 7,613.26	\$ 12,826.99	\$ 16,218.55	\$ 81,278.0
Danskin													
Energy (MWh)	833.7	-	-	-	-	-	84,841.7	42,119.3	61.7	1,248.7	678.5	14,651.6	144,435.0
Expense (\$ x 1000)	\$ 105.88	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,552.19	\$ 2,411.57	\$ 3.40	\$ 70.01	\$ 78.73	\$ 2,295.42	\$ 9,517.2
Bennett Mountain													
Energy (MWh)	2,246.9	-	-	-	-	-	43,097.1	21,734.9	1,136.4	-	243.0	4,404.9	72,863.3
Expense (\$ x 1000)	\$ 280.84	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,319.00	\$ 1,260.23	\$ 57.07	\$ -	\$ 27.73	\$ 677.46	\$ 4,622.3
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	193,085.2	39,474.6	57,305.0	137.1	10,091.5	38,876.1	222,945.9	172,328.1	75,946.0	50,420.0	180,298.0	311,190.2	1,352,097.6
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	268,857.4	103,703.1	139,748.5	85,476.4	100,844.6	128,962.3	317,298.3	260,813.5	151,542.6	122,816.5	249,564.0	380,990.6	2,310,617.9
Market Expense (\$ x 1000)	\$ 9,094.72	\$ 1,207.47	\$ 1,450.91	\$ 3.70	\$ 256.19	\$ 1,117.19	\$ 7,619.24	\$ 6,679.39	\$ 2,897.67	\$ 1,951.07	\$ 7,055.91	\$ 14,386.25	\$ 53,719.7
Market Expense - No Wheeling (\$ x 1000)	\$ 7,652.50	\$ 912.62	\$ 1,022.88	\$ 2.68	\$ 180.81	\$ 826.81	\$ 5,953.98	\$ 5,392.21	\$ 2,330.40	\$ 1,574.47	\$ 5,709.20	\$ 12,061.87	\$ 43,620.4
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 13,410.8	\$ 5,357.6	\$ 6,275.5	\$ 4,954.7	\$ 4,962.7	\$ 5,274.3	\$ 10,431.7	\$ 9,734.8	\$ 6,324.4	\$ 6,093.7	\$ 10,904.1	\$ 17,497.4	\$ 101,221.5
Storage													
Black Mesa Battery Energy (MWh)	(1,266.41)	(944.83)	(1,059.0)	(1,188.8)	(1,029.6)	(859.6)	(875.7)	(875.3)	(823.6)	(914.8)	(873.6)	(1,070.1)	(11,781.2)
80 MW Grid Battery Energy (MWh)	(2,512.58)	(1,795.76)	(2,118.4)	(2,412.5)	(2,053.1)	(1,733.7)	(1,751.0)	(1,736.9)	(1,616.7)	(1,832.6)	(1,667.7)	(2,106.2)	(23,337.1)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2010

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	648,189.0	621,083.7	657,025.5	663,823.6	837,985.5	1,014,381.1	594,717.3	504,228.0	513,470.7	442,434.0	368,534.7	512,325.1	7,378,198.2
Bridger Coal													
Energy (MWh)	125,632.8	93,350.9	54,423.5	63,353.5	59,318.8	109,922.9	181,214.9	245,312.5	240,288.0	238,360.1	242,600.0	250,686.7	1,904,464.58
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,970.29	\$ 1,881.21	\$ 2,127.87	\$ 2,252.08	\$ 3,768.37	\$ 5,840.53	\$ 7,685.56	\$ 7,520.80	\$ 7,485.32	\$ 7,587.37	\$ 7,840.28	\$ 60,889.05
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	43,581.9	46,857.2	39,918.5	16,649.9	43,889.3	55,526.1	246,544.5
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,024.34	\$ 2,172.01	\$ 1,860.04	\$ 775.44	\$ 2,037.03	\$ 2,558.20	\$ 11,432.8
Bridger Gas													
Energy (MWh)	-	34,988.2	-	25.0	-	11,328.9	29,086.0	32,344.2	28,075.5	32,276.0	-	-	168,123.8
Expense (\$ x 1000)	\$ -	\$ 1,338.12	\$ -	\$ 1.16	\$ -	\$ 512.44	\$ 1,444.21	\$ 1,633.88	\$ 1,296.71	\$ 1,478.49	\$ -	\$ -	\$ 7,705.0
Langley Gulch													
Energy (MWh)	197,416.3	208,810.1	97,343.3	22,490.3	9,307.4	57,578.7	215,958.4	215,895.6	213,585.0	221,091.8	181,118.0	158,172.1	1,798,767.0
Expense (\$ x 1000)	\$ 15,393.72	\$ 5,848.56	\$ 5,852.44	\$ 734.64	\$ 262.53	\$ 1,754.41	\$ 7,488.68	\$ 8,059.16	\$ 7,330.22	\$ 7,702.38	\$ 13,141.71	\$ 16,620.32	\$ 90,188.8
Danskin													
Energy (MWh)	129.0	-	63.8	-	-	1,326.4	131,125.9	107,195.0	124.2	-	130.3	1,741.3	241,835.9
Expense (\$ x 1000)	\$ 16.48	\$ -	\$ 5.69	\$ -	\$ -	\$ 58.85	\$ 7,211.10	\$ 6,303.62	\$ 7.11	\$ -	\$ 15.78	\$ 277.23	\$ 13,895.9
Bennett Mountain													
Energy (MWh)	2,246.9	-	-	-	-	1,741.5	82,509.7	62,586.0	1,136.4	-	1,822.7	3,398.1	155,441.4
Expense (\$ x 1000)	\$ 285.31	\$ -	\$ -	\$ -	\$ -	\$ 80.42	\$ 4,535.51	\$ 3,702.69	\$ 57.96	\$ -	\$ 211.28	\$ 530.97	\$ 9,404.1
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	181,979.1	43,933.2	111,046.7	71,652.7	76,583.7	59,902.6	259,559.6	181,794.5	75,028.9	42,159.8	178,956.2	246,905.5	1,529,502.3
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	257,751.3	108,161.7	193,490.2	156,992.1	167,336.8	149,988.8	353,912.1	270,279.9	150,625.5	114,556.3	248,222.2	316,705.9	2,488,022.7
Market Expense (\$ x 1000)	\$ 8,452.25	\$ 1,373.46	\$ 2,983.30	\$ 1,961.59	\$ 1,928.59	\$ 1,761.77	\$ 9,435.98	\$ 7,290.31	\$ 2,872.56	\$ 1,611.66	\$ 7,311.74	\$ 11,489.42	\$ 58,472.6
Market Expense - No Wheeling (\$ x 1000)	\$ 7,092.99	\$ 1,045.31	\$ 2,153.85	\$ 1,426.39	\$ 1,356.56	\$ 1,314.34	\$ 7,497.24	\$ 5,932.43	\$ 2,312.14	\$ 1,296.75	\$ 5,975.06	\$ 9,645.20	\$ 47,048.3
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 12,851.2	\$ 5,490.2	\$ 7,406.5	\$ 6,378.4	\$ 6,138.4	\$ 5,761.8	\$ 11,974.9	\$ 10,275.0	\$ 6,306.1	\$ 5,815.9	\$ 11,170.0	\$ 15,080.7	\$ 104,649.4
Storage													
Black Mesa Battery Energy (MWh)	(1,278.57)	(879.54)	(1,153.4)	(1,025.8)	(909.8)	(865.1)	(882.7)	(874.5)	(818.4)	(944.9)	(968.0)	(1,101.7)	(11,702.2)
80 MW Grid Battery Energy (MWh)	(2,460.06)	(1,848.76)	(2,236.1)	(2,077.0)	(1,775.3)	(1,716.8)	(1,765.0)	(1,755.2)	(1,630.0)	(1,854.2)	(1,886.9)	(2,205.6)	(23,211.0)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2011

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	716,216.1	809,762.2	1,040,628.5	984,821.5	1,053,868.5	1,258,411.0	1,150,224.9	830,461.2	635,327.5	473,094.5	372,615.2	762,177.6	10,087,608.6
Bridger Coal													
Energy (MWh)	125,632.9	53,560.8	36,393.3	33,219.1	39,495.5	78,775.1	118,242.0	169,562.6	175,893.0	189,995.9	221,210.5	250,259.4	1,492,239.76
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,825.83	\$ 1,362.61	\$ 1,261.12	\$ 1,681.57	\$ 2,871.85	\$ 4,027.98	\$ 5,505.13	\$ 5,667.02	\$ 6,093.13	\$ 6,971.60	\$ 7,827.97	\$ 49,025.18
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	-	18,621.2	-	40.5	38,922.4	42,970.2	100,675.8
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 876.54	\$ -	\$ 1.92	\$ 1,815.64	\$ 1,996.06	\$ 4,695.9
Bridger Gas													
Energy (MWh)	-	34,429.9	-	3,701.6	1,353.1	7,839.9	8,227.3	27,827.9	15,867.9	14,953.8	-	-	114,201.4
Expense (\$ x 1000)	\$ -	\$ 1,142.07	\$ -	\$ 149.95	\$ 47.85	\$ 307.66	\$ 354.10	\$ 1,219.33	\$ 635.46	\$ 593.38	\$ -	\$ -	\$ 4,449.8
Langley Gulch													
Energy (MWh)	188,759.4	101,344.4	-	-	-	13,764.2	203,021.5	215,220.0	210,191.1	220,979.4	179,009.1	55,201.9	1,387,491.0
Expense (\$ x 1000)	\$ 13,234.26	\$ 2,539.60	\$ -	\$ -	\$ -	\$ 376.49	\$ 6,268.60	\$ 7,140.51	\$ 6,421.72	\$ 6,847.69	\$ 11,390.50	\$ 5,115.30	\$ 59,334.7
Danskin													
Energy (MWh)	-	-	-	-	-	61.6	396.8	185.1	1,665.1	1,971.6	65.1	-	4,345.2
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.63	\$ 20.17	\$ 10.12	\$ 81.89	\$ 98.57	\$ 6.92	\$ -	\$ 220.3
Bennett Mountain													
Energy (MWh)	249.7	-	-	-	-	-	2,228.3	1,958.9	-	-	2,673.4	-	7,110.2
Expense (\$ x 1000)	\$ 27.91	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.39	\$ 98.05	\$ -	\$ -	\$ 272.96	\$ -	\$ 502.3
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	130,273.0	26,373.9	2,233.6	978.8	9,165.8	31,395.5	88,774.2	142,414.4	60,460.5	62,129.2	199,316.6	124,351.0	877,866.4
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	206,045.2	90,602.4	84,677.2	86,318.2	99,918.9	121,481.7	183,126.7	230,899.8	136,057.2	134,525.7	268,582.6	194,151.4	1,836,386.8
Market Expense (\$ x 1000)	\$ 5,080.34	\$ 765.15	\$ 54.76	\$ 26.48	\$ 216.99	\$ 869.01	\$ 2,805.24	\$ 4,600.89	\$ 1,833.74	\$ 1,986.10	\$ 7,120.70	\$ 4,834.03	\$ 30,193.4
Market Expense - No Wheeling (\$ x 1000)	\$ 4,107.29	\$ 568.15	\$ 38.08	\$ 19.17	\$ 148.53	\$ 634.51	\$ 2,142.16	\$ 3,537.15	\$ 1,382.14	\$ 1,522.04	\$ 5,631.94	\$ 3,905.21	\$ 23,636.3
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 9,865.5	\$ 5,013.1	\$ 5,290.7	\$ 4,971.2	\$ 4,930.4	\$ 5,082.0	\$ 6,619.8	\$ 7,879.7	\$ 5,376.1	\$ 6,041.2	\$ 10,826.9	\$ 9,340.8	\$ 81,237.5
Storage													
Black Mesa Battery Energy (MWh)	(1,077.45)	(931.87)	(1,426.8)	(1,080.9)	(990.7)	(865.4)	(880.1)	(869.8)	(777.2)	(866.9)	(892.4)	(1,069.3)	(11,728.8)
80 MW Grid Battery Energy (MWh)	(2,100.96)	(1,956.82)	(2,851.1)	(2,145.5)	(1,966.9)	(1,744.4)	(1,759.1)	(1,736.4)	(1,538.1)	(1,689.3)	(1,753.7)	(2,120.2)	(23,362.4)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2012

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	1,139,742.1	1,009,320.7	1,010,613.1	970,253.1	720,629.3	671,525.7	736,201.3	541,931.2	581,497.4	428,371.3	361,968.2	450,863.3	8,622,916.6
Bridger Coal													
Energy (MWh)	125,632.9	53,303.0	39,253.5	39,841.7	60,076.1	103,554.6	160,446.9	239,992.1	232,091.6	230,158.8	240,565.9	250,686.7	1,775,603.62
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,818.41	\$ 1,444.88	\$ 1,451.61	\$ 2,273.91	\$ 3,585.04	\$ 5,242.79	\$ 7,532.40	\$ 7,284.77	\$ 7,249.22	\$ 7,528.80	\$ 7,840.28	\$ 57,181.48
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	34,376.6	42,965.0	-	162.0	44,697.8	51,618.7	173,941.6
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,613.35	\$ 1,995.83	\$ -	\$ 7.67	\$ 2,073.07	\$ 2,381.56	\$ 8,077.2
Bridger Gas													
Energy (MWh)	-	31,337.4	-	974.1	507.7	1,871.3	12,628.4	32,386.0	7,906.1	22,575.0	-	-	110,186.0
Expense (\$ x 1000)	\$ -	\$ 1,120.40	\$ -	\$ 42.45	\$ 19.29	\$ 79.09	\$ 586.01	\$ 1,529.05	\$ 340.96	\$ 965.66	\$ -	\$ -	\$ 4,682.9
Langley Gulch													
Energy (MWh)	5,170.7	-	-	-	201,777.5	209,101.1	215,180.2	216,649.0	211,339.9	221,923.6	185,271.6	161,693.2	1,628,106.8
Expense (\$ x 1000)	\$ 422.59	\$ -	\$ -	\$ -	\$ 5,359.01	\$ 5,997.88	\$ 7,057.39	\$ 7,643.69	\$ 6,862.11	\$ 7,310.06	\$ 12,543.84	\$ 15,822.85	\$ 69,019.4
Danskin													
Energy (MWh)	-	-	-	-	-	33,968.8	103,315.4	85,430.9	1,511.5	1,905.8	545.5	16,810.7	243,488.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,507.24	\$ 5,291.69	\$ 4,707.91	\$ 72.17	\$ 102.05	\$ 61.13	\$ 2,524.26	\$ 14,266.5
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	10,626.6	35,771.4	53,218.8	4,294.0	-	850.6	1,510.3	106,271.7
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 477.03	\$ 1,851.17	\$ 2,954.50	\$ 214.84	\$ -	\$ 92.82	\$ 222.05	\$ 5,812.4
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	7,122.9	2,188.4	4,231.7	1,038.3	36,174.1	175,564.8	236,925.9	183,632.4	54,301.8	65,695.0	181,946.6	294,366.6	1,243,188.6
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	82,895.1	66,417.0	86,675.2	86,377.7	126,927.2	265,651.0	331,278.4	272,117.8	129,898.4	138,091.6	251,212.7	364,167.1	2,201,709.0
Market Expense (\$ x 1000)	\$ 339.21	\$ 68.00	\$ 104.72	\$ 28.43	\$ 882.98	\$ 4,846.84	\$ 7,681.83	\$ 6,911.09	\$ 1,889.15	\$ 2,401.49	\$ 7,214.34	\$ 13,406.07	\$ 45,774.2
Market Expense - No Wheeling (\$ x 1000)	\$ 286.01	\$ 51.65	\$ 73.11	\$ 20.67	\$ 612.78	\$ 3,535.49	\$ 5,912.15	\$ 5,539.48	\$ 1,483.55	\$ 1,910.79	\$ 5,855.32	\$ 11,207.35	\$ 36,488.4
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 6,044.3	\$ 4,496.6	\$ 5,325.7	\$ 4,972.7	\$ 5,394.6	\$ 7,983.0	\$ 10,389.8	\$ 9,882.0	\$ 5,477.5	\$ 6,430.0	\$ 11,050.3	\$ 16,642.9	\$ 94,089.5
Storage													
Black Mesa Battery Energy (MWh)	(1,281.67)	(1,151.23)	(1,312.2)	(1,176.4)	(955.4)	(845.3)	(880.4)	(866.6)	(791.0)	(919.3)	(986.3)	(1,118.7)	(12,284.4)
80 MW Grid Battery Energy (MWh)	(2,616.81)	(2,365.76)	(2,617.4)	(2,344.6)	(1,922.5)	(1,685.5)	(1,762.2)	(1,736.8)	(1,559.0)	(1,889.1)	(1,918.5)	(2,246.4)	(24,664.6)

11 MW Grid Battery Energy (MWh)	(344.84)	(295.39)	(348.4)	(315.4)	(246.5)	(224.3)	(241.5)	(231.3)	(213.2)	(252.9)	(249.9)	(286.7)	(3,250.3)
Total Storage (MWh)	(4,243.3)	(3,812.4)	(4,278.0)	(3,836.4)	(3,124.5)	(2,755.1)	(2,884.1)	(2,834.7)	(2,563.1)	(3,061.3)	(3,154.7)	(3,651.9)	(40,199.3)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	123,265.7	148,130.2	160,639.3	213,815.5	66,662.5	11,073.8	3,378.3	7,903.8	27,058.9	43,463.4	8,538.1	591.4	814,520.9
Revenue (\$ x 1000)	\$ 5,532.4	\$ 5,188.3	\$ 4,704.2	\$ 6,248.2	\$ 2,044.5	\$ 385.6	\$ 177.4	\$ 447.9	\$ 1,053.6	\$ 1,711.7	\$ 471.3	\$ 37.8	\$ 28,002.7
Revenue - No Wheeling (\$ x 1000)	\$ 4,611.7	\$ 4,081.9	\$ 3,504.3	\$ 4,651.1	\$ 1,546.6	\$ 302.9	\$ 152.1	\$ 388.9	\$ 851.5	\$ 1,387.0	\$ 407.5	\$ 33.4	\$ 21,918.8
Total Energy	1,428,850.93	1,234,421.47	1,217,841.83	1,168,470.81	1,353,816.91	1,602,921.81	1,927,228.24	1,763,858.89	1,373,841.60	1,218,929.61	1,251,370.20	1,476,224.99	17,017,777.29
<b>Total NPSE</b>	<b>\$ 21,365.8</b>	<b>\$ 20,666.0</b>	<b>\$ 16,894.6</b>	<b>\$ 17,331.9</b>	<b>\$ 28,444.1</b>	<b>\$ 42,861.6</b>	<b>\$ 57,221.9</b>	<b>\$ 60,260.9</b>	<b>\$ 37,699.3</b>	<b>\$ 37,418.0</b>	<b>\$ 49,908.8</b>	<b>\$ 63,761.7</b>	<b>\$ 459,918.5</b>

Wheeling 3-Year Average                   \$           7.47

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2013													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	478,267.1	528,065.9	440,890.2	493,061.6	568,572.6	629,598.1	522,814.4	420,474.8	450,038.6	422,196.4	369,506.5	423,562.5	5,747,048.8
Bridger Coal													
Energy (MWh)	125,632.9	105,206.1	63,822.7	76,356.9	62,965.3	124,458.7	195,676.5	250,575.7	242,600.0	247,592.1	242,600.0	250,686.7	1,988,173.52
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,311.28	\$ 2,151.55	\$ 2,501.88	\$ 2,357.06	\$ 4,186.77	\$ 6,256.72	\$ 7,837.08	\$ 7,587.37	\$ 7,751.16	\$ 7,587.37	\$ 7,840.28	\$ 63,297.89
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	44,227.4	45,612.3	39,212.2	10,350.7	43,274.2	63,809.5	246,607.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,052.10	\$ 2,115.18	\$ 1,828.55	\$ 483.79	\$ 2,009.61	\$ 2,927.53	\$ 11,422.5
Bridger Gas													
Energy (MWh)	-	35,615.6	-	382.9	100.6	2,770.3	27,650.6	33,990.9	21,673.4	13,899.8	-	-	136,084.3
Expense (\$ x 1000)	\$ -	\$ 1,403.41	\$ -	\$ 18.39	\$ 4.20	\$ 128.91	\$ 1,415.45	\$ 1,770.42	\$ 1,031.55	\$ 655.51	\$ -	\$ -	\$ 6,427.8
Langley Gulch													
Energy (MWh)	202,642.6	208,931.2	165,612.5	212,515.7	228,507.8	207,474.8	216,044.6	215,835.9	214,464.4	221,671.4	181,957.8	159,934.0	2,435,592.6
Expense (\$ x 1000)	\$ 16,056.84	\$ 6,006.94	\$ 10,202.97	\$ 7,098.33	\$ 6,576.64	\$ 6,457.37	\$ 7,695.02	\$ 8,277.52	\$ 7,559.23	\$ 7,931.81	\$ 13,545.95	\$ 17,190.63	\$ 114,599.3
Danskin													
Energy (MWh)	48,899.3	327.0	541.6	-	-	42,768.4	141,443.2	130,823.7	10,034.9	-	678.5	20,450.6	395,967.2
Expense (\$ x 1000)	\$ 6,465.58	\$ 15.04	\$ 50.03	\$ -	\$ -	\$ 2,050.96	\$ 8,023.86	\$ 7,983.46	\$ 528.30	\$ -	\$ 82.39	\$ 3,345.90	\$ 28,545.5
Bennett Mountain													
Energy (MWh)	14,854.6	-	1,401.7	-	-	21,286.1	95,405.8	82,147.7	2,289.0	-	243.0	2,643.0	220,270.9
Expense (\$ x 1000)	\$ 1,941.64	\$ -	\$ 129.38	\$ -	\$ -	\$ 1,052.48	\$ 5,377.77	\$ 5,010.95	\$ 122.42	\$ -	\$ 29.00	\$ 425.17	\$ 14,088.8
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	284,039.0	97,934.5	229,268.6	55,413.2	115,819.4	174,951.3	291,496.4	216,048.7	112,590.9	57,134.1	176,726.8	306,312.1	2,117,735.1
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	359,811.2	162,163.0	311,712.2	140,752.6	206,572.5	265,037.5	385,848.9	304,534.1	188,187.5	129,530.7	245,992.8	376,112.5	3,076,255.5
Market Expense (\$ x 1000)	\$ 14,413.13	\$ 3,335.09	\$ 6,648.69	\$ 1,595.29	\$ 3,008.62	\$ 5,197.21	\$ 11,239.79	\$ 8,973.82	\$ 4,422.58	\$ 2,286.89	\$ 7,297.76	\$ 15,039.39	\$ 83,458.3
Market Expense - No Wheeling (\$ x 1000)	\$ 12,291.55	\$ 2,603.58	\$ 4,936.21	\$ 1,181.39	\$ 2,143.53	\$ 3,890.44	\$ 9,062.50	\$ 7,360.08	\$ 3,581.60	\$ 1,860.14	\$ 5,977.73	\$ 12,751.44	\$ 67,640.2
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 18,049.8	\$ 7,048.5	\$ 10,188.8	\$ 6,133.4	\$ 6,925.4	\$ 8,337.9	\$ 13,540.2	\$ 11,702.6	\$ 7,575.6	\$ 6,379.3	\$ 11,172.7	\$ 18,187.0	\$ 125,241.3
Storage													
Black Mesa Battery Energy (MWh)	(1,281.01)	(864.70)	(1,140.3)	(1,121.0)	(872.7)	(851.2)	(873.1)	(888.2)	(832.5)	(902.6)	(934.7)	(1,119.7)	(11,681.6)
80 MW Grid Battery Energy (MWh)	(2,550.74)	(1,790.44)	(2,301.9)	(2,235.0)	(1,774.2)	(1,708.5)	(1,737.7)	(1,778.6)	(1,656.4)	(1,838.4)	(1,880.3)	(2,198.3)	(23,450.5)

11 MW Grid Battery Energy (MWh)	(344.08)	(228.96)	(295.2)	(310.5)	(227.5)	(222.5)	(242.9)	(238.7)	(212.6)	(248.2)	(239.2)	(288.4)	(3,098.8)
Total Storage (MWh)	(4,175.8)	(2,884.1)	(3,737.4)	(3,666.4)	(2,874.5)	(2,782.2)	(2,853.7)	(2,905.5)	(2,701.5)	(2,989.2)	(3,054.2)	(3,606.5)	(38,230.9)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	-	28,989.3	8,618.9	39,608.6	23,713.5	8,141.5	3,321.5	7,137.4	26,881.7	45,588.3	7,779.3	485.8	200,265.9
Revenue (\$ x 1000)	\$ -	\$ 1,356.6	\$ 332.8	\$ 1,424.9	\$ 782.5	\$ 319.8	\$ 184.7	\$ 410.2	\$ 1,314.7	\$ 1,836.3	\$ 429.2	\$ 33.1	\$ 8,424.7
Revenue - No Wheeling (\$ x 1000)	\$ -	\$ 1,140.1	\$ 268.4	\$ 1,129.1	\$ 605.4	\$ 259.0	\$ 159.9	\$ 356.9	\$ 1,114.0	\$ 1,495.7	\$ 371.1	\$ 29.4	\$ 6,928.9
Total Energy	1,428,850.93	1,234,421.47	1,217,841.83	1,168,470.79	1,353,816.92	1,602,921.84	1,927,228.25	1,763,858.92	1,373,841.60	1,218,929.59	1,251,370.20	1,476,225.00	17,017,777.34
<b>Total NPSE</b>	<b>\$ 62,945.2</b>	<b>\$ 34,847.5</b>	<b>\$ 37,218.2</b>	<b>\$ 31,440.4</b>	<b>\$ 32,522.5</b>	<b>\$ 45,512.6</b>	<b>\$ 69,543.4</b>	<b>\$ 68,750.5</b>	<b>\$ 43,418.8</b>	<b>\$ 38,430.3</b>	<b>\$ 51,028.0</b>	<b>\$ 68,249.0</b>	<b>\$ 585,402.2</b>

Wheeling 3-Year Average                   \$           7.47

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2014													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	446,750.2	501,595.4	629,767.2	715,976.8	690,263.4	589,505.2	654,006.7	541,110.2	470,566.3	426,309.4	367,074.2	499,036.8	6,531,961.8
Bridger Coal													
Energy (MWh)	125,632.8	99,964.3	45,472.4	66,433.1	60,377.9	117,524.2	175,881.1	250,611.3	241,402.1	244,528.6	242,600.0	250,686.7	1,921,114.59
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,160.51	\$ 1,623.75	\$ 2,216.44	\$ 2,282.54	\$ 3,987.15	\$ 5,687.03	\$ 7,838.11	\$ 7,552.88	\$ 7,662.93	\$ 7,587.37	\$ 7,840.28	\$ 61,368.36
Valmy													
Energy (MWh)	121.5	-	-	-	-	162.0	42,390.6	44,561.9	38,856.7	9,913.4	43,191.9	54,592.3	233,790.4
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 7.67	\$ 1,971.24	\$ 2,067.01	\$ 1,812.71	\$ 461.72	\$ 2,005.94	\$ 2,516.57	\$ 10,848.6
Bridger Gas													
Energy (MWh)	-	26,042.6	-	1,258.3	899.1	4,470.3	21,464.9	34,175.4	21,894.2	33,870.8	-	-	144,075.6
Expense (\$ x 1000)	\$ -	\$ 997.83	\$ -	\$ 58.73	\$ 36.66	\$ 202.34	\$ 1,067.85	\$ 1,730.69	\$ 1,013.08	\$ 1,554.80	\$ -	\$ -	\$ 6,662.0
Langley Gulch													
Energy (MWh)	200,769.8	209,050.4	128,154.3	-	216,534.7	207,360.7	215,546.8	215,740.6	214,067.3	222,263.7	181,748.1	158,004.0	2,169,240.5
Expense (\$ x 1000)	\$ 15,557.57	\$ 5,865.31	\$ 7,759.52	\$ -	\$ 6,086.07	\$ 6,297.30	\$ 7,488.43	\$ 8,068.23	\$ 7,359.51	\$ 7,755.87	\$ 13,191.73	\$ 16,644.04	\$ 102,073.6
Danskin													
Energy (MWh)	63,186.8	1,240.8	-	-	-	56,835.4	121,891.3	93,563.0	185.0	-	162.9	1,547.7	338,612.7
Expense (\$ x 1000)	\$ 8,149.55	\$ 55.75	\$ -	\$ -	\$ -	\$ 2,674.93	\$ 6,710.84	\$ 5,510.00	\$ 10.39	\$ -	\$ 19.76	\$ 246.58	\$ 23,377.8
Bennett Mountain													
Energy (MWh)	24,841.0	298.1	-	-	-	24,762.1	66,561.6	36,639.8	1,526.0	-	1,701.2	1,636.1	157,965.9
Expense (\$ x 1000)	\$ 3,160.47	\$ 12.95	\$ -	\$ -	\$ -	\$ 1,197.44	\$ 3,678.46	\$ 2,164.05	\$ 79.49	\$ -	\$ 197.58	\$ 256.16	\$ 10,746.6
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	293,059.1	126,213.6	112,612.6	50,693.2	43,505.3	201,814.8	239,228.7	181,583.7	105,536.5	52,548.8	179,909.7	263,686.7	1,850,392.6
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	368,831.3	190,442.2	195,056.2	136,032.6	134,258.4	291,901.0	333,581.2	270,069.1	181,133.1	124,945.3	249,175.7	333,487.1	2,808,913.0
Market Expense (\$ x 1000)	\$ 14,302.59	\$ 4,233.61	\$ 2,930.32	\$ 1,414.49	\$ 1,084.21	\$ 5,798.19	\$ 8,451.16	\$ 7,251.63	\$ 4,069.57	\$ 2,089.99	\$ 7,299.07	\$ 12,186.59	\$ 71,111.4
Market Expense - No Wheeling (\$ x 1000)	\$ 12,113.63	\$ 3,290.88	\$ 2,089.18	\$ 1,035.85	\$ 759.25	\$ 4,290.77	\$ 6,664.28	\$ 5,895.32	\$ 3,281.28	\$ 1,697.49	\$ 5,955.26	\$ 10,217.03	\$ 57,290.2
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 17,871.9	\$ 7,735.8	\$ 7,341.8	\$ 5,987.9	\$ 5,541.1	\$ 8,738.3	\$ 11,142.0	\$ 10,237.9	\$ 7,275.3	\$ 6,216.7	\$ 11,150.2	\$ 15,652.6	\$ 114,891.3
Storage													
Black Mesa Battery Energy (MWh)	(1,241.42)	(831.36)	(927.7)	(1,059.4)	(992.3)	(852.3)	(882.8)	(868.2)	(820.7)	(951.0)	(940.1)	(1,141.7)	(11,509.0)
80 MW Grid Battery Energy (MWh)	(2,504.21)	(1,624.58)	(1,782.5)	(2,123.3)	(1,972.8)	(1,705.2)	(1,765.2)	(1,736.5)	(1,681.9)	(1,928.6)	(1,888.1)	(2,251.6)	(22,964.3)

Wheeling 3-Year Average	\$	7.47
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IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2015													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	644,246.9	800,225.5	607,459.9	538,007.1	488,825.2	517,665.3	643,917.1	474,960.9	433,859.5	411,956.5	364,885.7	474,432.2	6,400,441.7
Bridger Coal													
Energy (MWh)	125,632.9	93,983.3	65,175.3	77,850.2	71,178.0	136,440.9	205,320.9	250,253.1	242,600.0	248,997.9	242,600.0	250,686.7	2,010,719.14
Expense (\$ x 1000)	\$ 3,929.37	\$ 2,988.48	\$ 2,190.45	\$ 2,544.83	\$ 2,593.36	\$ 4,531.66	\$ 6,534.38	\$ 7,827.79	\$ 7,587.37	\$ 7,791.64	\$ 7,587.37	\$ 7,840.28	\$ 63,946.98
Valmy													
Energy (MWh)	121.5	-	-	-	-	1,498.9	43,131.8	48,359.1	39,946.4	16,623.9	42,407.5	67,853.1	259,942.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 70.96	\$ 2,005.95	\$ 2,237.61	\$ 1,861.28	\$ 774.29	\$ 1,970.98	\$ 3,107.77	\$ 12,034.6
Bridger Gas													
Energy (MWh)	-	36,103.4	-	364.8	199.8	7,789.1	20,344.4	31,018.5	18,013.8	16,581.0	-	-	130,414.7
Expense (\$ x 1000)	\$ -	\$ 1,459.17	\$ -	\$ 17.90	\$ 8.61	\$ 372.02	\$ 1,067.49	\$ 1,655.98	\$ 878.74	\$ 801.79	\$ -	\$ -	\$ 6,261.7
Langley Gulch													
Energy (MWh)	202,132.1	93,322.4	134,603.8	171,693.1	229,360.1	207,983.4	215,112.8	215,880.3	213,963.0	221,573.1	182,877.3	157,476.0	2,245,977.3
Expense (\$ x 1000)	\$ 16,361.91	\$ 2,737.63	\$ 8,585.52	\$ 5,851.87	\$ 6,724.57	\$ 6,596.01	\$ 7,811.43	\$ 8,440.93	\$ 7,688.34	\$ 8,082.27	\$ 13,858.70	\$ 17,417.26	\$ 110,156.4
Danskin													
Energy (MWh)	2,846.0	-	-	61.6	474.3	73,174.6	119,609.1	113,971.7	29,526.5	4,731.7	754.8	11,760.5	356,910.8
Expense (\$ x 1000)	\$ 386.94	\$ -	\$ -	\$ 3.56	\$ 22.50	\$ 3,653.96	\$ 6,896.92	\$ 7,093.05	\$ 1,691.85	\$ 283.76	\$ 93.67	\$ 1,967.60	\$ 22,093.8
Bennett Mountain													
Energy (MWh)	1,747.6	-	-	-	1,576.8	42,195.3	71,644.4	72,356.8	2,126.7	-	243.0	2,139.5	194,030.2
Expense (\$ x 1000)	\$ 233.21	\$ -	\$ -	\$ -	\$ 76.93	\$ 2,114.43	\$ 4,143.41	\$ 4,491.51	\$ 116.23	\$ -	\$ 29.60	\$ 351.43	\$ 11,556.8
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	181,594.5	17,392.0	109,634.7	49,440.0	175,090.7	212,327.0	218,269.8	187,736.5	112,983.3	58,568.2	180,435.4	264,212.3	1,767,684.2
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	257,366.6	81,620.6	192,078.2	134,779.4	265,843.8	302,413.2	312,622.3	276,221.8	188,579.9	130,964.7	249,701.4	334,012.7	2,726,204.6
Market Expense (\$ x 1000)	\$ 9,288.59	\$ 570.60	\$ 3,018.42	\$ 1,452.18	\$ 4,791.30	\$ 6,602.81	\$ 8,170.50	\$ 7,859.90	\$ 4,501.79	\$ 2,422.19	\$ 7,573.99	\$ 12,890.86	\$ 69,143.1
Market Expense - No Wheeling (\$ x 1000)	\$ 7,932.20	\$ 440.69	\$ 2,199.52	\$ 1,082.90	\$ 3,483.49	\$ 5,016.87	\$ 6,540.17	\$ 6,457.63	\$ 3,657.88	\$ 1,984.72	\$ 6,226.26	\$ 10,917.37	\$ 55,939.7
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 13,690.4	\$ 4,885.6	\$ 7,452.2	\$ 6,034.9	\$ 8,265.3	\$ 9,464.4	\$ 11,017.9	\$ 10,800.2	\$ 7,651.9	\$ 6,503.9	\$ 11,421.2	\$ 16,352.9	\$ 113,540.8
Storage													
Black Mesa Battery Energy (MWh)	(1,265.32)	(1,106.75)	(1,066.3)	(1,048.2)	(794.4)	(821.4)	(875.6)	(877.3)	(829.8)	(936.2)	(926.1)	(1,096.3)	(11,643.6)
80 MW Grid Battery Energy (MWh)	(2,509.48)	(2,090.23)	(1,975.3)	(2,054.8)	(1,637.0)	(1,650.3)	(1,750.9)	(1,750.6)	(1,662.4)	(1,892.7)	(1,809.0)	(2,179.8)	(22,962.4)

11 MW Grid Battery Energy (MWh)	(344.18)	(287.14)	(258.8)	(276.7)	(200.5)	(216.8)	(241.0)	(240.8)	(219.4)	(248.3)	(234.6)	(273.7)	(3,041.6)
Total Storage (MWh)	(4,119.0)	(3,484.1)	(3,300.4)	(3,379.7)	(2,631.9)	(2,688.5)	(2,867.4)	(2,868.7)	(2,711.6)	(3,077.1)	(2,969.7)	(3,549.7)	(37,647.7)
Black Mesa Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 MW Grid Battery Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Storage Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demand Response													
Energy (MWh)	-	-	-	-	-	1,653.33	8,800.00	8,106.67	800.00	-	-	-	19,360.0
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oregon Solar													
Energy (MWh)	36.15	33.52	74.93	73.10	88.61	102.22	98.16	88.94	75.20	68.73	47.60	24.77	811.9
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PURPA													
Energy (MWh)	202,761.41	225,952.50	246,142.34	288,603.09	313,597.50	318,696.17	295,393.89	281,711.20	234,049.41	222,197.34	177,903.16	183,093.65	2,990,101.66
Expense (\$ x 1000)	\$ 15,288.7	\$ 17,307.7	\$ 13,620.6	\$ 15,939.5	\$ 16,234.2	\$ 22,444.1	\$ 24,159.5	\$ 23,255.9	\$ 17,326.7	\$ 15,857.5	\$ 15,856.3	\$ 17,158.0	\$ 214,448.8
Surplus Sales													
Energy (MWh)	3,921.3	93,335.6	24,392.2	39,582.0	14,695.2	4,002.1	5,899.2	6,201.4	26,987.2	51,688.0	7,080.6	1,704.3	279,489.2
Revenue (\$ x 1000)	\$ 269.6	\$ 3,971.6	\$ 978.1	\$ 1,562.1	\$ 501.4	\$ 162.7	\$ 301.4	\$ 376.8	\$ 1,339.1	\$ 2,169.0	\$ 401.8	\$ 107.7	\$ 12,141.3
Revenue - No Wheeling (\$ x 1000)	\$ 240.4	\$ 3,274.4	\$ 795.9	\$ 1,266.4	\$ 391.7	\$ 132.8	\$ 257.3	\$ 330.5	\$ 1,137.5	\$ 1,782.9	\$ 348.9	\$ 95.0	\$ 10,053.7
Total Energy	1,428,850.93	1,234,421.47	1,217,841.83	1,168,470.79	1,353,816.92	1,602,921.80	1,927,228.25	1,763,858.91	1,373,841.59	1,218,929.59	1,251,370.22	1,476,224.97	17,017,777.27
Total NPSE	\$ 50,834.2	\$ 26,518.2	\$ 32,078.2	\$ 30,004.3	\$ 34,631.6	\$ 50,258.7	\$ 64,543.1	\$ 66,633.7	\$ 44,637.2	\$ 39,133.7	\$ 51,589.9	\$ 65,295.1	\$ 558,245.3

Wheeling 3-Year Average \$ 7.47

IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2016													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	536,402.2	589,739.9	671,951.7	781,505.7	798,213.2	592,262.4	643,237.7	479,247.2	471,804.2	421,128.3	364,446.4	443,054.1	6,792,992.8
Bridger Coal													
Energy (MWh)	125,632.8	99,558.8	58,525.2	55,141.2	67,136.2	122,127.1	185,989.9	248,509.5	242,600.0	243,002.4	242,600.0	250,686.7	1,941,509.95
Expense (\$ x 1000)	\$ 3,929.37	\$ 3,148.85	\$ 1,999.18	\$ 1,891.66	\$ 2,477.09	\$ 4,119.63	\$ 5,977.97	\$ 7,777.61	\$ 7,587.37	\$ 7,618.99	\$ 7,587.37	\$ 7,840.28	\$ 61,955.37
Valmy													
Energy (MWh)	121.5	-	-	-	-	162.0	42,753.4	45,546.9	35,995.3	9,386.6	41,870.5	58,437.7	234,273.9
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ 7.67	\$ 1,987.41	\$ 2,110.92	\$ 1,685.16	\$ 438.24	\$ 1,947.05	\$ 2,687.98	\$ 10,870.2
Bridger Gas													
Energy (MWh)	-	41,113.1	-	4,054.5	1,922.1	7,852.6	22,659.7	28,027.3	12,645.8	34,314.6	-	-	152,589.7
Expense (\$ x 1000)	\$ -	\$ 1,599.97	\$ -	\$ 192.25	\$ 79.66	\$ 361.54	\$ 1,144.21	\$ 1,440.64	\$ 594.33	\$ 1,599.48	\$ -	\$ -	\$ 7,012.1
Langley Gulch													
Energy (MWh)	199,125.8	208,920.8	71,812.6	-	14,573.9	207,562.0	215,475.0	215,590.2	213,776.7	221,178.3	177,472.0	157,748.5	1,903,235.7
Expense (\$ x 1000)	\$ 15,729.32	\$ 5,944.60	\$ 4,499.88	\$ -	\$ 416.63	\$ 6,392.75	\$ 7,594.23	\$ 8,180.25	\$ 7,456.09	\$ 7,830.95	\$ 13,229.22	\$ 16,887.39	\$ 94,161.3
Danskin													
Energy (MWh)	20,805.2	-	63.8	-	-	56,378.9	120,862.1	125,990.7	278.4	-	98.9	3,419.6	327,897.6
Expense (\$ x 1000)	\$ 2,731.79	\$ -	\$ 5.80	\$ -	\$ -	\$ 2,685.12	\$ 6,758.57	\$ 7,607.35	\$ 16.04	\$ -	\$ 11.71	\$ 553.91	\$ 20,370.3
Bennett Mountain													
Energy (MWh)	9,237.3	-	-	-	-	28,574.9	77,264.9	59,992.9	4,675.5	-	1,093.7	15,354.3	196,193.3
Expense (\$ x 1000)	\$ 1,193.63	\$ -	\$ -	\$ -	\$ -	\$ 1,380.46	\$ 4,321.29	\$ 3,595.82	\$ 253.26	\$ -	\$ 129.00	\$ 2,441.72	\$ 13,315.2
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	262,960.3	58,550.6	110,789.1	20,886.0	99,876.9	188,688.8	228,842.6	190,321.3	103,302.0	54,203.7	186,504.2	298,804.2	1,803,729.6
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	338,732.5	122,779.2	193,232.7	106,225.4	190,630.0	278,775.0	323,195.0	278,806.7	178,898.7	126,600.2	255,770.2	368,604.6	2,762,250.0
Market Expense (\$ x 1000)	\$ 12,740.49	\$ 1,895.37	\$ 2,999.70	\$ 582.04	\$ 2,570.12	\$ 5,547.56	\$ 8,258.82	\$ 7,719.40	\$ 3,993.09	\$ 2,099.46	\$ 7,606.31	\$ 14,335.24	\$ 70,347.6
Market Expense - No Wheeling (\$ x 1000)	\$ 10,776.35	\$ 1,458.04	\$ 2,172.18	\$ 426.04	\$ 1,824.11	\$ 4,138.18	\$ 6,549.52	\$ 6,297.83	\$ 3,221.49	\$ 1,694.59	\$ 6,213.25	\$ 12,103.37	\$ 56,874.9
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 16,534.6	\$ 5,903.0	\$ 7,424.8	\$ 5,378.1	\$ 6,606.0	\$ 8,585.7	\$ 11,027.2	\$ 10,640.4	\$ 7,215.5	\$ 6,213.8	\$ 11,408.2	\$ 17,538.9	\$ 114,476.0
Storage													
Black Mesa Battery Energy (MWh)	(1,227.44)	(900.47)	(1,075.9)	(1,047.1)	(921.2)	(845.0)	(875.6)	(868.6)	(802.0)	(917.4)	(864.4)	(1,131.7)	(11,476.8)
80 MW Grid Battery Energy (MWh)	(2,412.62)	(1,794.82)	(2,122.2)	(2,153.2)	(1,819.3)	(1,676.2)	(1,750.9)	(1,726.9)	(1,650.3)	(1,770.2)	(1,704.3)	(2,220.7)	(22,801.6)



IPCO NORMALIZED POWER SUPPLY EXPENSES FOR JANUARY 1, 2023 -- DECEMBER 31, 2023 (Multiple Gas Prices/37 Hydro Year Conditions)  
AURORA Developed Results - 2023 General Rate Case

2017													
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Hydroelectric Generation (MWh)	778,184.8	1,022,708.0	1,079,181.1	1,061,274.0	1,204,380.1	1,166,144.6	713,872.3	680,956.5	619,576.2	466,433.4	368,689.2	467,311.9	9,628,712.1
Bridger Coal													
Energy (MWh)	125,632.9	38,795.8	35,298.2	39,650.6	39,246.2	77,683.8	140,123.2	191,297.6	185,950.2	202,467.5	225,735.4	250,686.7	1,552,567.88
Expense (\$ x 1000)	\$ 3,929.37	\$ 1,401.15	\$ 1,331.11	\$ 1,446.11	\$ 1,674.38	\$ 2,840.42	\$ 4,657.79	\$ 6,130.71	\$ 5,956.57	\$ 6,452.01	\$ 7,101.85	\$ 7,840.28	\$ 50,761.75
Valmy													
Energy (MWh)	121.5	-	-	-	-	-	22,908.3	27,299.1	2,264.6	40.5	37,229.8	43,401.2	133,265.0
Expense (\$ x 1000)	\$ 5.75	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,077.72	\$ 1,271.64	\$ 106.32	\$ 1.92	\$ 1,740.19	\$ 2,015.27	\$ 6,218.8
Bridger Gas													
Energy (MWh)	-	23,737.1	-	8,142.2	1,831.6	4,394.9	22,704.8	44,428.9	23,632.0	19,221.5	-	-	148,092.9
Expense (\$ x 1000)	\$ -	\$ 789.42	\$ -	\$ 330.70	\$ 64.93	\$ 172.76	\$ 980.49	\$ 1,952.48	\$ 948.84	\$ 764.93	\$ -	\$ -	\$ 6,004.6
Langley Gulch													
Energy (MWh)	156,070.5	-	-	-	-	33,152.4	215,567.2	216,268.8	211,569.2	221,311.8	185,432.3	158,400.6	1,397,772.8
Expense (\$ x 1000)	\$ 11,042.79	\$ -	\$ -	\$ -	\$ -	\$ 906.54	\$ 6,677.16	\$ 7,203.48	\$ 6,488.26	\$ 6,885.50	\$ 11,806.10	\$ 14,739.78	\$ 65,749.6
Danskin													
Energy (MWh)	-	-	-	-	-	-	101,468.4	27,143.6	125.1	-	164.8	3,323.3	132,225.2
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,892.42	\$ 1,409.23	\$ 6.43	\$ -	\$ 16.89	\$ 465.85	\$ 6,790.8
Bennett Mountain													
Energy (MWh)	-	-	-	-	-	-	58,788.1	9,396.6	974.1	-	1,701.2	10,697.6	81,557.6
Expense (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,870.65	\$ 493.08	\$ 44.06	\$ -	\$ 174.47	\$ 1,477.45	\$ 5,059.7
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 1,207.53	\$ 1,111.14	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 1,173.82	\$ 1,207.53	\$ 14,259.18
Purchased Power (Excluding PURPA)													
Market Energy (MWh)	104,972.7	4,423.4	824.6	63.8	3,422.6	39,253.3	260,399.7	206,353.2	65,453.0	58,768.6	194,209.3	293,536.9	1,231,681.1
Elkhorn Wind Energy (MWh)	33,655.9	23,622.4	25,682.3	26,290.7	26,451.8	24,654.7	28,961.0	25,307.9	19,486.0	21,189.8	26,456.0	30,502.9	312,261.4
Jackpot Solar Energy (MWh)	9,761.6	12,439.8	20,980.2	25,354.8	31,549.0	34,708.5	36,414.5	33,679.6	27,194.7	19,783.6	10,259.4	8,031.8	270,157.5
Neal Hot Springs Energy (MWh)	20,096.4	15,853.7	18,705.2	15,814.5	13,671.9	11,869.0	8,876.4	10,296.2	12,240.4	16,278.9	19,852.6	19,805.0	183,360.2
Raft River Geothermal Energy (MWh)	8,791.6	7,114.1	8,829.8	7,638.0	6,890.9	6,180.3	6,877.6	7,094.9	6,759.6	7,674.5	8,509.7	8,512.9	90,873.8
Black Mesa Solar Energy (MWh)	3,466.7	5,198.5	8,246.0	10,241.4	12,189.5	12,673.8	13,223.1	12,106.7	9,915.9	7,469.8	4,188.3	2,947.8	101,867.5
Total Energy Excl. PURPA (MWh)	180,744.8	68,651.9	83,268.1	85,403.2	94,175.7	129,339.5	354,752.2	294,838.6	141,049.7	131,165.2	263,475.3	363,337.3	2,190,201.5
Market Expense (\$ x 1000)	\$ 4,177.37	\$ 127.36	\$ 21.15	\$ 1.86	\$ 82.48	\$ 1,060.03	\$ 7,891.84	\$ 6,984.75	\$ 2,035.11	\$ 1,929.78	\$ 6,972.14	\$ 12,392.65	\$ 43,676.5
Market Expense - No Wheeling (\$ x 1000)	\$ 3,393.29	\$ 94.32	\$ 14.99	\$ 1.38	\$ 56.92	\$ 766.83	\$ 5,946.83	\$ 5,443.43	\$ 1,546.22	\$ 1,490.82	\$ 5,521.53	\$ 10,200.12	\$ 34,476.7
Elkhorn Wind Expense (\$ x 1000)	\$ 2,451.00	\$ 1,720.31	\$ 1,870.32	\$ 1,914.63	\$ 1,926.36	\$ 1,795.48	\$ 2,109.09	\$ 1,843.05	\$ 1,419.07	\$ 1,543.15	\$ 1,926.66	\$ 2,221.38	\$ 22,740.5
Jackpot Solar Expense (\$ x 1000)	\$ 212.37	\$ 270.64	\$ 456.44	\$ 551.61	\$ 686.37	\$ 755.10	\$ 792.22	\$ 732.72	\$ 591.64	\$ 430.40	\$ 223.20	\$ 174.74	\$ 5,877.5
Neal Hot Springs Expense (\$ x 1000)	\$ 2,480.08	\$ 1,956.49	\$ 2,308.39	\$ 1,951.65	\$ 1,687.23	\$ 1,464.73	\$ 1,095.43	\$ 1,270.65	\$ 1,510.57	\$ 2,008.96	\$ 2,449.99	\$ 2,444.11	\$ 22,628.3
Raft River Geothermal Expense (\$ x 1000)	\$ 614.80	\$ 497.49	\$ 617.48	\$ 534.13	\$ 481.89	\$ 432.19	\$ 480.95	\$ 496.15	\$ 472.71	\$ 536.68	\$ 595.09	\$ 595.32	\$ 6,354.9
Black Mesa Solar Expense (\$ x 1000)													\$ -
Total Expense Excl. PURPA ( \$ x 1000)	\$ 9,151.5	\$ 4,539.3	\$ 5,267.6	\$ 4,953.4	\$ 4,838.8	\$ 5,214.3	\$ 10,424.5	\$ 9,786.0	\$ 5,540.2	\$ 6,010.0	\$ 10,716.5	\$ 15,635.7	\$ 92,077.8
Storage													
Black Mesa Battery Energy (MWh)	(1,155.67)	(1,073.31)	(1,391.9)	(1,200.8)	(1,054.6)	(858.3)	(887.1)	(875.2)	(811.0)	(935.2)	(863.7)	(1,075.5)	(12,182.3)
80 MW Grid Battery Energy (MWh)	(2,254.15)	(2,224.37)	(2,852.1)	(2,383.6)	(2,130.6)	(1,708.3)	(1,753.7)	(1,736.8)	(1,614.5)	(1,835.9)	(1,689.8)	(2,135.1)	(24,319.0)

11 MW Grid Battery Energy (MWh)		(320.93)		(288.66)		(363.6)		(323.1)		(277.6)		(227.4)		(243.3)		(235.2)		(221.5)		(258.1)		(215.0)		(274.5)		(3,248.8)
Total Storage (MWh)		(3,730.8)		(3,586.3)		(4,607.7)		(3,907.5)		(3,462.8)		(2,794.0)		(2,884.2)		(2,847.3)		(2,646.9)		(3,029.1)		(2,768.5)		(3,485.2)		(39,750.1)
Black Mesa Battery Expense (\$ x 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
80 MW Grid Battery Expense (\$ x 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
11 MW Grid Battery Expense (\$ x 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Storage Expense (\$ x 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Demand Response																										
Energy (MWh)		-		-		-		-		-		1,653.33		8,800.00		8,106.67		800.00		-		-		-		19,360.0
Cost(\$ X 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Oregon Solar																										
Energy (MWh)		36.15		33.52		74.93		73.10		88.61		102.22		98.16		88.94		75.20		68.73		47.60		24.77		811.9
Cost(\$ X 1000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
PURPA																										
Energy (MWh)		202,761.41		225,952.50		246,142.34		288,603.09		313,597.50		318,696.17		295,393.89		281,711.20		234,049.41		222,197.34		177,903.16		183,093.65		2,990,101.66
Expense (\$ x 1000)	\$	15,288.7	\$	17,307.7	\$	13,620.6	\$	15,939.5	\$	16,234.2	\$	22,444.1	\$	24,159.5	\$	23,255.9	\$	17,326.7	\$	15,857.5	\$	15,856.3	\$	17,158.0	\$	214,448.8
Surplus Sales																										
Energy (MWh)		10,970.4		141,871.0		221,515.1		310,767.9		296,040.0		125,451.2		4,364.2		14,830.3		43,577.0		40,947.1		6,240.1		566.9		1,217,141.1
Revenue (\$ x 1000)	\$	588.9	\$	4,334.3	\$	5,899.8	\$	8,927.3	\$	7,340.2	\$	3,453.8	\$	217.4	\$	776.3	\$	1,824.7	\$	1,622.4	\$	292.5	\$	30.4	\$	35,308.0
Revenue - No Wheeling (\$ x 1000)	\$	507.0	\$	3,274.6	\$	4,245.3	\$	6,606.1	\$	5,128.9	\$	2,516.7	\$	184.8	\$	665.6	\$	1,499.2	\$	1,316.5	\$	245.9	\$	26.1	\$	26,216.7
Total Energy		1,428,850.92		1,234,421.50		1,217,841.85		1,168,470.80		1,353,816.89		1,602,921.79		1,927,228.26		1,763,858.90		1,373,841.58		1,218,929.60		1,251,370.21		1,476,224.98		17,017,777.28
<b>Total NPSE</b>	\$	40,036.8	\$	20,814.4	\$	15,527.0	\$	14,916.2	\$	16,679.7	\$	29,298.2	\$	56,730.4	\$	51,933.7	\$	35,766.5	\$	35,557.0	\$	48,293.6	\$	60,509.5	\$	435,154.3

Wheeling 3-Year Average
\$
7.47

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION )  
OF IDAHO POWER COMPANY FOR ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES )  
AND CHARGES FOR ELECTRIC SERVICE )  
IN THE STATE OF IDAHO AND FOR )  
ASSOCIATED REGULATORY ACCOUNTING )  
TREATMENT. )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

KELLEY NOE

1 Q. Please state your name and business address.

2 A. My name is Kelley Noe. My business address is  
3 1221 West Idaho Street, Boise, Idaho.

4 Q. By whom are you employed and in what capacity?

5 A. I am employed by Idaho Power Company ("Idaho  
6 Power" or "Company") as a Regulatory Consultant.

7 Q. Please describe your educational background.

8 A. In May of 2004, I received a Bachelor of Business  
9 Administration in Finance from Boise State University. I  
10 have also attended electric utility ratemaking courses,  
11 including "The Basics: Practical Regulatory Training for  
12 the Electric Industry," a course offered through New Mexico  
13 State University's Center for Public Utilities as well as  
14 "Introduction to Rate Design and Cost of Service Concepts  
15 and Techniques" presented by Electric Utilities  
16 Consultants, Inc.

17 Q. Please describe your business experience with  
18 Idaho Power Company.

19 A. In September 2006, I accepted a position at Idaho  
20 Power as a Financial Analyst in the Finance Department. My  
21 primary duties included performing credit reviews on  
22 current and prospective transmission customers as well as  
23 providing the financial support for Grid Operations,  
24 Planning, and Operations Analysis and Development. In  
25 October 2010, I accepted a Regulatory Analyst II position



1 within the Regulatory Affairs department of the Company. In  
2 2015, I was promoted to Senior Regulatory Analyst, and in  
3 2020 was promoted to my current position, Regulatory  
4 Consultant. My duties as a Regulatory Consultant include  
5 gathering, analyzing, and coordinating data from various  
6 departments throughout the Company required for preparing  
7 jurisdictional separation studies, developing complex cost-  
8 related studies, and the analysis of strategic regulatory  
9 issues.

10 Q. What is the scope of your testimony in this  
11 proceeding?

12 A. I am sponsoring testimony to summarize the  
13 development of the system revenue requirement for purposes  
14 of forecasting the Company's rate base, revenues, and  
15 expenses for the 2023 Test Year, as well as, quantifying  
16 the Idaho Jurisdictional Revenue Requirement resulting from  
17 the Jurisdictional Separation Study ("JSS") for the twelve  
18 months ending December 31, 2023.

19 Q. Have you prepared exhibits for this proceeding?

20 A. Yes. I am offering the following exhibits:

21 1. Exhibit No. 31, Major Plant Additions  
22 Annualized for 2023

23 2. Exhibit No. 32, Depreciation & Amortization  
24 Annualizing Adjustments

25 3. Exhibit No. 33, Summary of Payroll-Related

1 Annualizing Adjustments

2 4. Exhibit No. 34, Development of System  
3 Revenue Requirement

4 5. Exhibit No. 35, Jurisdictional Separation  
5 Study - Idaho Revenue Requirement.

6 ***Development of the System Revenue Requirement***

7 Q. Could you briefly summarize how the Company  
8 developed its 2023 Test Year?

9 A. Yes. As described in the Direct Testimonies and  
10 Exhibits of Company Witnesses Ms. Paula Jeppsen and Mr.  
11 Matthew Larkin, the development of the 2023 Test Year  
12 begins with 2022 actual financial data ("2022 Actuals").  
13 The 2022 Actuals were adjusted to reflect currently  
14 approved ratemaking adjustments and amounts previously  
15 deferred related to wildfire mitigation ("WFM") in 2022 to  
16 arrive at 2022 adjusted actual financial information ("2022  
17 Base"). The 2022 Base was then adjusted to reach 2023  
18 forecasted financial levels ("2023 Unadjusted Test Year").  
19 After the 2023 Unadjusted Test Year figures were compiled,  
20 they were provided to me as the starting point for the  
21 development of the Company's total 2023 Test Year figures  
22 used in this filing.

23 Q. Were any additional adjustments made to the 2023  
24 Unadjusted Test Year amounts to reach the Company's total  
25 2023 Test Year figures?



1 analysis compared to the annualized forecast, as  
2 illustrated in column 8 - Net Annualizing Adjustments, is  
3 the \$161,434,512 annualizing adjustment for the Company's  
4 electric plant-in-service investment in this filing.  
5 Additional annualizing adjustments associated with Major  
6 Plant Additions include \$498,233 in property taxes (column  
7 11 - Annual Composite Property Tax) and \$75,269 in property  
8 insurance (column 13 - Annual Insurance Expense). Because  
9 none of the Major Plant Additions were attributable to load  
10 growth not already accounted for within the load forecast  
11 (see Summary on Exhibit No. 31), an imputed revenue  
12 adjustment was not required.

13 Q. How did you determine the Depreciation &  
14 Amortization Annualizing Adjustments?

15 A. Depreciation and amortization expenses presented  
16 in Exhibit No. 32 are forecast on a month-by-month basis  
17 during 2023 and summarized in the column entitled  
18 "Forecasted Depreciation Expense" (column 4). The expenses  
19 for December 2023 are multiplied by twelve to calculate the  
20 "Annualized Depreciation Expense" (column 3). The  
21 difference between these two columns equals the  
22 "Annualizing Adjustment" (column 5) of \$8,884,245  
23 depreciation expense and \$95,740 amortization expense.  
24 Adjustments of \$4,442,123 to Accumulated Depreciation and  
25 \$47,870 to Accumulated Amortization, illustrated as the

1 "Reserve Adjustment" (column 6), are conventionally  
2 computed as half the expense amounts.

3 Q. Were there any additional labor-related  
4 annualizing adjustments?

5 A. Yes. As set forth in Exhibit No. 33, Summary of  
6 Payroll-Related Annualizing Adjustments, there are two  
7 additional labor-related annualizing adjustments in this  
8 filing totaling \$9,561,383.

9 The first adjustment utilizes 2022 actual labor data  
10 as a proxy to annualize 2023 payroll and reflects an entire  
11 year of expense at that year-end level. Because the method  
12 applied to forecast the 2023 Operations and Maintenance  
13 ("O&M") labor expense (detailed in the Direct Testimony of  
14 Mr. Larkin) provided only a forecast of the annual 2023 O&M  
15 labor expense, a December labor expense amount from which a  
16 conventional annualizing labor adjustment could be  
17 calculated was not known. Therefore, an annualizing  
18 adjustment based upon actual 2022 labor was calculated and  
19 used as a proxy to adjust the O&M labor total for the 2023  
20 Test Year. After applying the Company's O&M and benefit  
21 loading percentages, the annualizing adjustment is  
22 \$3,683,272.

23 The second adjustment of \$5,878,111 reflects the  
24 projected 2024 salary structure adjustment of 3 percent.  
25 This adjustment was applied to the annualized 2023 payroll

1 and has been adjusted by the Company's O&M and benefit  
2 loading percentages.

3 Q. How is Exhibit No. 34, Development of System  
4 Revenue Requirement organized?

5 A. Exhibit No. 34 provides the development of the  
6 adjusted total electric system rate base and net income for  
7 the test year ending December 31, 2023.

8 The first set of data, displayed in column 3 "2022  
9 Actual", is the unadjusted 2022 actual results of  
10 operations provided by Ms. Jeppsen. The adjustments  
11 proposed by the Company for purposes of developing the 2023  
12 adjusted total electric system combined rate base and net  
13 income are shown in columns 4 ("2022 Actual Adjustments"),  
14 6 ("Forecast Adjustments"), and 8 ("Annualizing  
15 Adjustment"), with the total system adjusted test year rate  
16 base, expenses, and revenues summarized in column 9. The  
17 proposed adjustments and resulting base amounts are set  
18 forth in columns 4 through 8 and result in the 2023 test  
19 year data set in column 9, described more fully as follows:

20 (1) Column 4, titled "2022 Actual Adjustments",  
21 was provided by Ms. Jeppsen and Company Witness Ms. Jessica  
22 Brady. It reflects currently approved regulatory  
23 adjustments that should be applied to the 2022 actual  
24 results prior to applying methods to adjust to 2023 levels,  
25 as well as adjustments to reflect WFM related expenses

1 deferred in 2022 thus resetting 2022 actual WFM-related O&M  
2 to what it would have been absent the deferral;

3 (2) Column 5, titled "2022 Base" is the adjusted  
4 base to which the methods to create a 2023 test year were  
5 applied;

6 (3) Column 6, titled "Forecast Adjustments",  
7 reflects the results of the various methods from the  
8 Forecast Methodology Manual sponsored by Mr. Larkin and  
9 detailed in his testimony, that were used to adjust totals  
10 from the 2022 Base to a 2023 Unadjusted Test Year.

11 (4) Column 7, titled "2023 Unadjusted Test Year",  
12 includes the resulting dataset once the standard regulatory  
13 adjustments and various methods were applied;

14 (5) Column 8, titled "Annualizing Adjustment",  
15 includes standard annualizing adjustments, to reflect  
16 changes that occur within the test year, but need to be  
17 incorporated for the full year on an ongoing basis. All  
18 annualizing adjustments included in this filing were  
19 discussed earlier in my testimony.

20 (6) Column 9, titled "2023 Test Year", is the  
21 resulting dataset for the 2023 test year (twelve months  
22 ending December 31, 2023).

23 Q. How did you develop the total combined rate base  
24 for the 2023 Test Year?

25 A. Page two of Exhibit No. 34 summarizes the

1 development of rate base components for the 2023 Test Year.  
2 The total combined rate base, based on actual, unadjusted  
3 2022 results was \$3,870,331,388 (column 3, line 67). After  
4 adjustments, the total combined rate base for the 2023 Test  
5 Year increases to \$4,092,522,974 (column 9, line 67).

6 Q. Have you prepared any exhibits that detail the  
7 total system net income?

8 A. Yes. Page two of Exhibit No. 34 also includes the  
9 development of the total system net income for the twelve  
10 months ending December 31, 2023. Operating revenues are  
11 summarized on line 73. Total operating expenses are  
12 summarized on line 84.

13 ***Idaho Jurisdictional Revenue Requirement***

14 Q. Have you prepared an exhibit that sets forth the  
15 Idaho jurisdictional revenue deficiency?

16 A. Yes. I prepared Exhibit No. 35 titled  
17 "Jurisdictional Separation Study - Idaho Revenue  
18 Requirement" consisting of 36 pages.

19 Q. Please describe what is included in the  
20 Jurisdictional Separation Study report.

21 A. Exhibit No. 35 is the complete Jurisdictional  
22 Separation Study report detailing the allocation of each  
23 component of rate base, operating revenues, and expenses by  
24 Federal Energy Regulatory Commission ("FERC") account  
25 resulting in the Idaho jurisdictional revenue deficiency.



1 The JSS is organized as follows:

- 2 • Summary of Results
- 3 • Table 1 - Electric Plant in Service;
- 4 • Table 2 - Accumulated Provision for
- 5 Depreciation (and Amortization);
- 6 • Table 3 - Additions & Deductions to Rate Base;
- 7 • Table 4 - Operating Revenues;
- 8 • Table 5 - Operation & Maintenance Expenses;
- 9 • Table 6 - Depreciation & Amortization Expense;
- 10 • Table 7 - Taxes Other Than Income Taxes;
- 11 • Table 8 - Regulatory Debits & Credits;
- 12 • Table 9 - Income Taxes;
- 13 • Table 10 - Calculation of Federal Income Tax;
- 14 • Table 11 - Oregon State Income Tax;
- 15 • Table 12 - Idaho State Income Tax and Other
- 16 State Income Tax;
- 17 • Table 13 - Development of Labor Related
- 18 Allocator;
- 19 • Table 14 - Allocation Factors;
- 20 • Table 15 - Allocation Factors-Ratios.

21 Q. Please discuss the methodology used to  
22 jurisdictionally separate costs in the preparation of this  
23 study.

24 A. A three-step process was used to separate costs

1 among jurisdictions. The three steps are  
2 functionalization, classification, and allocation of costs.  
3 In all three steps, recognition was given to the way in  
4 which costs are incurred by relating these costs to utility  
5 operations.

6 Q. Would you please briefly explain what each of the  
7 three steps (functionalization, classification, and  
8 allocation) entails?

9 A. Functionalized costs are identified with utility  
10 operating functions such as generation, transmission, and  
11 distribution. Individual plant items are examined and,  
12 where possible, the associated investment costs are  
13 assigned to one or more operating functions. Classification  
14 groups the functionalized costs into three categories:  
15 demand-related, energy-related, and customer-related.

16 Once the Company's total system costs are classified  
17 and assigned to the appropriate function, they are  
18 allocated among jurisdictions.

19 The process of allocation is one of apportioning the  
20 total system cost among jurisdictions by introducing  
21 allocation factors into the process. An allocation factor  
22 is an array of numbers which specifies the jurisdictional  
23 value as a share or percent of the total system quantity.  
24 For example, in the case of energy-related costs, the  
25 allocation factor is annual jurisdictional energy use,

1 adjusted for losses, divided by the total system energy  
2 use.

3       Once individual accounts have been allocated to the  
4 various jurisdictions, it is possible to summarize these  
5 into total utility rate base and net income by  
6 jurisdiction. The results are stated in a summary form to  
7 measure adequacy of revenues for the jurisdiction under  
8 consideration. The measure of adequacy is typically the  
9 rate of return earned on rate base, which is compared to  
10 the requested rate of return.

11       Q. Is the methodology used to separate costs by  
12 jurisdiction and calculate the Idaho jurisdictional revenue  
13 requirement in the present case primarily the same  
14 methodology utilized in the Company's last general rate  
15 case, Case No. IPC-E-11-08?

16       A. Yes.

17       Q. How have the various functional plant and cost  
18 items been allocated?

19       A. The average of the twelve monthly coincident peak  
20 demands was used to allocate the demand-related costs.  
21 This allocation method has been used by the Company for at  
22 least two decades in all of its filings requiring a  
23 jurisdictional separation study. This allocation method  
24 was adopted by this Commission and also accepted by the  
25 Public Utility Commission of Oregon. The demand-related

1 allocation factors used in the study are designated as D10,  
2 D11, D12 and D60. The respective values used in these  
3 demand allocation factors are shown at line numbers 1048  
4 through 1051 of Exhibit No. 35.

5 Q. How were the energy-related expenses allocated  
6 among jurisdictions?

7 A. Energy-related expenses were allocated based on  
8 normalized jurisdictional kilowatt-hour sales and adjusted  
9 for losses to establish energy requirements at the  
10 generation level. The energy-related allocation factors  
11 used in the study are designated as E10 and E99. The  
12 respective values used in these energy allocation factors  
13 are shown on lines 1054 and 1055 of Exhibit No. 35.

14 Q. What was the method by which you allocated  
15 customer-related costs?

16 A. The principal customer-related expenses which  
17 required allocation, were meter reading (FERC Account 902)  
18 and customer accounting and billing (FERC Account 903).  
19 These accounts were allocated based upon a review of actual  
20 costs to read meters and prepare monthly bills or  
21 statements.

22 Q. What method was used to allocate certain labor-  
23 related administrative and general expenses?

24 A. In accordance with FERC-approved procedures,  
25 administrative and general expenses were allocated in

1 accordance with functionalized wages and salaries. These  
2 labor-related allocation factors are shown on lines 848  
3 through 1043 of Exhibit No. 35.

4 Q. Please describe the derivation of the 2023 total  
5 system allocation factors used in this case.

6 A. The allocation factors in the 2023 JSS were based  
7 on either the 2022 year-end data or 2023 forecast data.  
8 The capacity or demand-related allocation factors (D10,  
9 D11, D12 and D60) were created using the 2022 demand ratios  
10 from the load research analysis applied to the 2023 test  
11 year energy. The energy-related allocation factors were the  
12 2023 test year load at generation level (E10) and at  
13 customer level (E99). This data is prepared by the  
14 Company's Load Research and Forecasting Department and is  
15 further described in workpapers filed by Mr. Larkin.

16 Q. Briefly describe the manner in which you  
17 allocated electric plant-in-service as shown in Table 1 of  
18 Exhibit No. 35.

19 A. Both production and transmission plant were  
20 allocated to each jurisdiction based on the average of the  
21 twelve-monthly coincident peaks. Distribution plant,  
22 unless otherwise noted, was directly allocated to Idaho  
23 based on 2022 actual jurisdictional data.

24 Q. Please describe the manner in which you allocated  
25 general electric plant-in-service.



1 allocated based on demand.

2 All rate base items, with the exception of other  
3 deferred programs, reflect a 13-month average of ending  
4 balances or average of year-end balances.

5 Q. How did you assign the firm operating revenues to  
6 each jurisdiction?

7 A. Table 4 of Exhibit No. 35 contains the firm  
8 operating revenues directly assigned to each jurisdiction  
9 for the test year (twelve months ending December 31, 2023).  
10 Opportunity sales and financial losses are also credited to  
11 each jurisdiction in proportion to generation-level energy  
12 use.

13 Other operating revenues were either allocated among  
14 jurisdictions in a manner that offset related allocations  
15 of rate base or, where a particular revenue item could be  
16 associated with a specific jurisdiction, directly assigned.

17 Lastly, at the direction of Mr. Larkin I included the  
18 transfer adjustments for both the Power Cost Adjustment  
19 ("PCA") mechanism and the Energy Efficiency rider labor in  
20 this table to more accurately reflect the net impact to  
21 customers in the revenue requirement calculation. The  
22 Direct Testimony of Mr. Pawel Goralski details the  
23 quantification of the revenue transfer from the PCA, and  
24 Mr. Larkin details the quantification of the Energy  
25 Efficiency rider offset.





1 amortization of limited term plant?

2 A. The allocation of depreciation expense and  
3 amortization of limited term plant is set forth in Table 6  
4 of Exhibit No. 35. These expenses were identified by type  
5 of production plant or by primary plant account for other  
6 functional plant groups and allocated consistent with the  
7 related plant account.

8 Q. How did you approach the allocation of taxes  
9 other than income taxes?

10 A. As set forth in Table 7 of Exhibit No. 35, taxes  
11 other than income taxes were treated individually and  
12 allocated in a manner consistent with the bases by which  
13 the respective taxes are assessed.

14 Q. How did you address the amortization of  
15 regulatory debits and credits?

16 A. Table 8 of Exhibit No. 35 details the  
17 amortization of regulatory debits and credits and were  
18 directly assigned to the appropriate jurisdiction.

19 Q. Does the JSS report detail how deferred income  
20 taxes and investment tax credit adjustments were allocated?

21 A. Yes. The expenses shown on Table 9 of Exhibit No.  
22 35 consist of deferred income taxes and the investment tax  
23 credit adjustments, which were allocated based on the  
24 Company's plant investment and net income before tax  
25 adjustments. State and federal income tax liabilities are

1 also summarized on Table 9. The income taxes shown on  
2 Tables 10 through 12 were obtained from the Company's Tax  
3 Department.

4 Q. How were federal and state income taxes, shown on  
5 Tables 10 through 12 of Exhibit No. 35, allocated in the  
6 JSS?

7 A. The respective tax bases were developed, and  
8 taxes were calculated directly for each jurisdiction.  
9 Operating income before taxes represents adjusted operating  
10 revenues less all adjusted operating expenses treated  
11 heretofore with the exception of deferred income taxes and  
12 investment tax credits. Adjusted interest expense was  
13 allocated by the combined rate base to develop net  
14 operating income before taxes. As discussed earlier in  
15 this testimony, subsequent additions to or deductions from  
16 the respective tax bases were allocated to each  
17 jurisdiction by aligning it with its causation or  
18 fundamental association. In this manner, taxable income  
19 for each jurisdiction was developed and the appropriate tax  
20 rate was applied. Final tax amounts result after the  
21 allocation of adjustments and tax credits. All details  
22 relating to the calculation of federal, Oregon, Idaho, and  
23 other state income taxes are found on Tables 10, 11, and  
24 12.

25 Q. What is the purpose of Tables 13 through 15 of

1 Exhibit No. 35?

2 A. Tables 13 through 15 of Exhibit No. 35 list the  
3 principal allocation factors used in the JSS and the  
4 respective jurisdictional values for each allocation  
5 factor. Table 15 lists the ratios of the principal  
6 allocation factors included in Table 14.

7 Q. How was the Idaho jurisdictional revenue  
8 deficiency developed?

9 A. The summary of JSS results is presented on pages  
10 one and two of Exhibit No. 35. The development of the Idaho  
11 jurisdictional revenue deficiency is presented in the  
12 column entitled "Idaho Retail" on page one of Exhibit No.  
13 35. As discussed further in Mr. Larkin's testimony, due to  
14 the approved balancing account mechanisms for recovery of  
15 coal-related costs at the Jim Bridger Power Plant  
16 ("Bridger") and North Valmy Power Plant ("Valmy"), a true  
17 revenue deficiency cannot be computed until the levelized  
18 revenue requirement associated with these mechanisms is  
19 accounted for in the calculation. While the approved  
20 revenue collection is embedded in the Firm Jurisdictional  
21 Sales contained on line 9 of the JSS, the corresponding  
22 costs were removed from the determination of the Company's  
23 non-levelized revenue requirement as described by Mr.  
24 Larkin. Therefore, JSS summary information contained on  
25 lines 6 through 38 will understate required revenues

1 because it only reflects currently approved revenues  
2 related to non-fuel coal recovery, not the corresponding  
3 currently approved costs.

4 Q. How was the Idaho jurisdictional revenue  
5 requirement calculated before adjusting for Bridger and  
6 Valmy?

7 A. The pre-adjusted Idaho consolidated operating  
8 income of \$287,151,546 (line 26) resulted in a return on  
9 rate base of 7.34 percent (line 27). Based upon the  
10 Company's request for an overall rate of return of 7.702  
11 percent provided by Company Witness Mr. Brian Buckham, the  
12 Company's Idaho jurisdictional net income should be  
13 \$301,346,128, as shown on line 32. The resulting earnings  
14 deficiency is \$14,194,582, as shown on line 33. Inclusion  
15 of Hells Canyon Relicensing Construction Work in Progress  
16 allowed in the Company's most recent rate case (Case No.  
17 IPC-E-11-08) of \$6,537,444, as shown on line 34, increases  
18 the earnings deficiency to \$20,732,026, as shown on line  
19 35. Once again, as discussed previously, this figure is  
20 understated and must be adjusted because it includes  
21 Bridger and Valmy coal-related revenue recovery without  
22 reflecting the corresponding costs.

23 Q. What net-to-gross or incremental income tax  
24 factor did you use in developing the Idaho jurisdictional  
25 revenue deficiency?





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**DECLARATION OF KELLEY NOE**

I, Kelley Noe, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Kelley Noe. I am employed by  
Idaho Power Company as Regulatory Consultant in the  
Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony and Exhibit Nos. 31-35 in this  
matter.

3. To the best of my knowledge, my pre-filed  
direct testimony and exhibit are true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.



Signed: \_\_\_\_\_  
Kelley Noe

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**NOE, DI  
TESTIMONY**

**EXHIBIT NO. 31**



Idaho Power Company  
Major Plant Additions Annualized for 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Line No.	Project Type	Project ID	Description	In Service Date	Annualized Plant	Adjustment for Plant Est to Close 2023	Net Annualizing Adjustments	State	Annual Composite Property Tax Rate	Annual Property Tax	Annual Insurance Rate Per \$1000	Annual Insurance Expense
1	Thermal:											
2	21	JBRG160152	Jim Bridger Flu Gas Desulfurization (FGD) pond	September, 2023	13,451,811	4,139,019	9,312,792	WY	0.166%	15,459	\$ 0.46625	4,342
3	21	JBRG160152	Jim Bridger Flu Gas Desulfurization (FGD) pond	October, 2023	90,660	20,922	69,738	WY	0.166%	116	\$ 0.46625	33
4	21	JBRG160152	Jim Bridger Flu Gas Desulfurization (FGD) pond	November, 2023	59,908	9,217	50,692	WY	0.166%	84	\$ 0.46625	24
5	21	JBRG160152	Jim Bridger Flu Gas Desulfurization (FGD) pond	December, 2023	187,014	14,386	172,628	WY	0.166%	287	\$ 0.46625	80
5	21 Total				13,789,393	4,183,543	9,605,851			15,946		4,479
6	Hydro Production:											
7	23	LSPR140001	LSPR U13 Turbine and Generator Refurbishment	December, 2023	13,407,405	1,031,339	12,376,066	ID	0.324%	40,098	\$ 0.46625	5,770
7	23 Total				13,407,405	1,031,339	12,376,066			40,098		5,770
8	Other Production:											
9	24	HMWY220002	2023 Peak Capacity Resource HMWY - 80MW	July, 2023	80,131,922	36,983,964	43,147,958	ID	0.324%	139,799	\$ 0.46625	20,118
10		HMWY220002	2023 Peak Capacity Resource HMWY - 80MW	August, 2023	16,244,744	6,247,978	9,996,765	ID	0.324%	32,390	\$ 0.46625	4,661
11		HMWY220002	2023 Peak Capacity HMWY Degradation Mitigation	July, 2023	14,627,794	6,751,290	7,876,504	ID	0.324%	25,520	\$ 0.46625	3,672
12		HMWY220002	2023 Peak Capacity HMWY Degradation Mitigation	August, 2023	2,965,419	1,140,546	1,824,874	ID	0.324%	5,913	\$ 0.46625	851
13		BMSU220002	2023 Peak Capacity Resource BMSU - 40MW	October, 2023	48,426,919	11,175,443	37,251,476	ID	0.324%	120,695	\$ 0.46625	17,369
14		BMSU220002	2023 Peak Capacity Resource BMSU - 40MW	November, 2023	2,021,173	310,950	1,710,223	ID	0.324%	5,541	\$ 0.46625	797
15		BMSU220002	2023 Peak Capacity BMSU Degradation Mitigation	October, 2023	10,004,104	2,308,639	7,695,465	ID	0.324%	24,933	\$ 0.46625	3,588
16		BMSU220002	2023 Peak Capacity BMSU Degradation Mitigation	November, 2023	378,461	58,225	320,236	ID	0.324%	1,038	\$ 0.46625	149
17		DNPR160002	Danskin major overhaul, upgrade, and inspection	June, 2023	28,805,688	15,510,755	13,294,933	ID	0.324%	43,076	\$ 0.46625	6,199
17	24 Total				203,606,223	80,487,789	123,118,434			398,904		57,404
18	General Land and Buildings:											
19	51	CHQB220012	New Distribution Center at Boise Bench	December, 2023	17,695,340	1,361,180	16,334,160	ID	0.265%	43,286	\$ 0.46625	7,616
19	51 Total				17,695,340	1,361,180	16,334,160			43,286		7,616
20	Total				\$ 248,498,362	\$ 87,063,851	\$ 161,434,512			\$ 498,233		\$ 75,269
<b>Summary</b>												
			2023 Peak Capacity Resource HMWY - 80MW		\$ 96,376,665	\$ 43,231,942	\$ 53,144,723					Capacity resource to meet summer peak beginning 2023
			2023 Peak Capacity HMWY Degradation Mitigation		17,593,213	7,891,835	9,701,378					Capacity resource to meet summer peak beginning 2023
			2023 Peak Capacity Resource BMSU - 40MW		50,448,092	11,486,393	38,961,699					Capacity resource to meet summer peak beginning 2023
			2023 Peak Capacity BMSU Degradation Mitigation		10,382,565	2,366,864	8,015,701					Capacity resource to meet summer peak beginning 2023
			Danskin major overhaul, upgrade, and inspection		28,805,688	15,510,755	13,294,933					Routine maintenance/Reliability
			New Distribution Center at Boise Bench		17,695,340	1,361,180	16,334,160					New facility to house current materials and supplies inventory and prepare for growth in inventory levels
			LSPR U13 Turbine and Generator Refurbishment		13,407,405	1,031,339	12,376,066					Replace existing turbines/Refurbish existing generators
			Jim Bridger Flu Gas Desulfurization (FGD) pond		13,789,393	4,183,543	9,605,851					Compliance required by the Coal Combustion Rules established by the EPA
			Total		\$ 248,498,362	\$ 87,063,851	\$ 161,434,512					

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**NOE, DI  
TESTIMONY**

**EXHIBIT NO. 32**

**Idaho Power Company**  
**Depreciation & Amortization Annualizing Adjustments**  
**Estimated 2023**

(1)	(2)	(3)	(4)	(5)	(6)
Account	Account Description	Annualized Depreciation Expense	Forecasted Depreciation Expense	Annualizing Adjustment	Reserve Adjustment
30100	Organization				
30200	Franchises and Consents	1,543,543	1,491,028	52,515	26,258
30300	Miscellaneous Intangible Plant	4,422,755	4,379,530	43,225	21,612
<b>TOTAL</b>	<b>INTANGIBLE PLANT- AMORT</b>	<b>5,966,298</b>	<b>5,870,558</b>	<b>95,740</b>	<b>47,870</b>
31020	Land and Land Rights	2,382	2,382	0	0
31100	Structures and Improvements	563,201	559,244	3,957	1,979
31200	Boiler Plant Equipment	6,584,388	6,171,214	413,174	206,587
31400	Turbogenerator Units	1,878,471	1,864,516	13,956	6,978
31500	Accessory electric Equipment	225,323	223,222	2,101	1,051
31600	Misc Power Plant Equipment	351,009	347,339	3,671	1,835
<b>TOTAL</b>	<b>STEAM PRODUCTION PLANT</b>	<b>9,604,775</b>	<b>9,167,916</b>	<b>436,859</b>	<b>218,429</b>
33000	Land and Land Rights			0	0
33100	Structures and Improvements	5,609,656	5,492,451	117,204	58,602
33200	Reservoirs, Dams, Waterways	5,235,046	5,210,790	24,256	12,128
33300	Waterwheel, Turbines, Generato	10,598,627	10,491,523	107,104	53,552
33400	Accessory Electric Equipment	2,439,434	2,424,611	14,823	7,412
33500	Misc Power Plant Equipment	937,450	931,562	5,888	2,944
33600	Roads, Railroads and Bridges	538,928	536,914	2,014	1,007
<b>TOTAL</b>	<b>HYDRO PRODUCTION PLANT</b>	<b>25,359,140</b>	<b>25,087,850</b>	<b>271,290</b>	<b>135,645</b>
34000	LAND AND LAND RIGHTS				
34100	Structures and Improvements	4,190,693	4,098,677	92,016	46,008
34200	Fuel Holders, Producers, Acces	277,392	277,508	(116)	(58)
34300	Prime Movers	10,925,820	10,712,761	213,059	106,530
34400	Generators	1,596,062	1,594,750	1,312	656
34500	Accessory Electric Equipment	2,758,832	2,741,883	16,949	8,475
34600	Misc Power Plant Equipment	239,317	231,735	7,582	3,791
<b>TOTAL</b>	<b>OTHER PRODUCTION PLANT</b>	<b>19,988,116</b>	<b>19,657,314</b>	<b>330,803</b>	<b>165,401</b>
35020	Land and Land Rights	416,355	412,063 *	4,292	2,146
35200	Structures and Improvements	1,920,891	1,908,869	12,023	6,011
35300	Station Equipment	10,291,818	10,197,461	94,357	47,178
35400	Towers and Fixtures	2,890,165	2,839,713	50,452	25,226
35500	Poles and Fixtures	6,155,439	6,030,005	125,434	62,717
35600	Overhead Conductors, Devices	4,098,377	4,042,321	56,057	28,028
35900	Roads and Trails	2,693	2,693	0	0
<b>TOTAL</b>	<b>TRANSMISSION PLANT</b>	<b>25,775,739</b>	<b>25,433,125</b>	<b>342,614</b>	<b>171,307</b>
36022	ROW Renewal Cost	30,928	29,976	952	476
36100	Structures and improvements	1,393,285	1,328,548	64,736	32,368
36200	Station Equipment	6,761,927	6,491,454	270,474	135,237
<b>TOTAL</b>	<b>SUBSTATION EQUIPMENT</b>	<b>8,186,140</b>	<b>7,849,978</b>	<b>336,162</b>	<b>168,081</b>
363	Battery Storage	8,740,027	2,791,254	5,948,773	2,974,387
<b>TOTAL</b>	<b>BATTERY STORAGE</b>	<b>8,740,027</b>	<b>2,791,254</b>	<b>5,948,773</b>	<b>2,974,387</b>
36400	Poles, Towers and Fixtures	6,652,506	6,508,229	144,277	72,138
36500	Overhead Conductors, Devices	3,687,824	3,622,711	65,113	32,556
36600	Underground Conduit	1,327,818	1,296,790	31,029	15,514
36700	Underground Conductors, Device	7,931,228	7,666,237	264,991	132,496
36800	Line Transformers	14,560,366	14,287,602	272,764	136,382
36900	Services	1,163,810	1,156,367	7,443	3,722
37000	Meters	5,908,929	5,762,874	146,055	73,028
37100	Installations, Cust Premises	193,380	193,303	77	39
37300	Street Lighting, Signal System	217,455	208,871	8,584	4,292
<b>TOTAL</b>	<b>DISTRIBUTION LINES</b>	<b>41,643,317</b>	<b>40,702,983</b>	<b>940,333</b>	<b>470,167</b>
38900	Land and Land Rights				
39000	Structures and Improvements	3,366,802	3,314,372	52,430	26,215
39100	Office Furniture, Equipment	6,992,274	6,957,077	35,197	17,598
39200	Transportation Equipment	72,444	72,444	0	0
39300	Stores Equipment	227,417	215,091	12,326	6,163
39400	Tools, Shop, Garage Equipment	808,645	797,039	11,606	5,803
39500	Laboratory Equipment	781,567	774,650	6,918	3,459
39600	Power Operated Equipment	0	0	0	0
39700	Communication Equipment	5,615,068	5,492,570	122,498	61,249
39800	Miscellaneous Equipment	860,793	824,356	36,437	18,218
<b>TOTAL</b>	<b>GENERAL EQUIPMENT PLANT</b>	<b>18,725,011</b>	<b>18,447,600</b>	<b>277,411</b>	<b>138,706</b>
<b>DEPR ON ELECTRIC PLANT IN SERVICE</b>		<b>158,022,265</b>	<b>149,138,020 #</b>	<b>8,884,245</b>	<b>4,442,123</b>
	Amortization of Disallowed Costs	(296,299)	(296,299)	0	0
<b>TOTAL DEPRECIATION &amp; AMORTIZATION</b>		<b>163,692,264</b>	<b>154,712,279</b>	<b>8,979,985</b>	<b>4,489,993</b>

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**NOE, DI**  
**TESTIMONY**

**EXHIBIT NO. 33**

**Idaho Power Company  
Summary of Adjustments to 2023  
Operating Expenses**

(1)

<u>Line No.</u>	<u>Source Page</u>		<u>Amount</u>
1	A	Operating Payroll - Annualizing Adjustment	\$ 3,683,272
2	A	2024 Salary Structure Adjustment	<u>5,878,111</u>
3		<b>Total Adjustments</b>	<u><u>\$9,561,383</u></u>

**Idaho Power Company**  
**Detail of Adjustments to 2022**  
**Operating Expenses**

**A**

Line No.	Source Page	(1)	
		Amount	
		1) Operating Payroll (Various accts)	
1	1	Actual Total Year 2022 ST Payroll	216,374,243
2	1	Actual December 2022 ST Payroll	17,032,740
3		Annualized December 2022 (Dec multiplied by 13)	x 13
4		Increase Over 2022 Actual	221,425,623
5	1	O&M and DSM Percentage	5,051,380
6		Annualized December 2023 O&M and DSM ST payroll	50.55%
7	2	Benefit Loading Percent	2,553,589
8		Annualized December 2023 O&M and DSM ST w>Loading	44.24%
			<u>\$ 3,683,272</u>
		2) 2023 Operating Payroll SSA (Various accts)	
9		2023 O&M & DSM Labor Forecast	\$ 192,253,748
10	A	Annualized December 2023 O&M & DSM ST w>Loading	3,683,272
11		Total 2023 O&M & DSM Labor	\$ 195,937,021
12		2024 Structured Salary Adjustment	3.00% 5,878,111
13		Adjustment to Operating Expense	<u>\$ 5,878,111</u>

2022 ACTUAL for 111 - STRAIGHT TIME PAYROLL  
By Account and Month

Source Page 1

	<u>1 - O&amp;M</u>	<u>2 - Construction</u>	<u>3 - Other</u>	<u>Other - DSM - 2542</u>	<u>242 Accounts</u>	<u>Total</u>
Jan,22	7,429,209	4,154,126	752,295	160,632	3,924,111	16,420,373
Feb,22	8,794,660	5,032,082	867,709	194,712	1,589,994	16,479,157
Mar,22	8,303,169	4,823,048	830,033	168,452	2,306,017	16,430,719
Apr,22	12,628,549	7,654,701	1,336,388	273,478	2,732,281	24,625,397
May,22	8,451,566	5,108,183	865,730	199,361	1,790,870	16,415,710
Jun,22	7,830,267	4,621,191	798,777	169,626	3,063,271	16,483,131
Jul,22	7,720,804	4,759,981	757,015	178,905	3,235,456	16,652,161
Aug,22	8,291,104	5,072,560	849,313	185,654	2,360,010	16,758,642
Sep,22	12,433,425	7,640,932	1,284,408	259,517	3,595,978	25,214,259
Oct,22	8,478,135	5,368,094	873,005	188,031	1,969,829	16,877,094
Nov,22	7,929,170	4,946,804	824,824	174,548	3,109,515	16,984,861
Dec,22	8,761,272	5,283,430	891,192	177,924	1,918,922	<b>17,032,740</b>
	107,051,329	64,465,132	10,930,688	2,330,839	31,596,255	<b>216,374,243</b>
% of Total	<b>49.48%</b>	29.79%	5.05%	1.08%	14.60%	100.00%

Annualized December ( x 13) 221,425,623

Annualized Payroll Growth Factor 2.33%

## 2022 Actual Benefits Loading %

Source Page 2

	Feb-23	
111 - STRAIGHT TIME PAYROLL	16,700,119	
131 - INDIRECT BENEFIT LOADING	5,670,955	33.96%
140 - TAXES-EMPLOYER PAID	1,717,020	10.28%
<b>Subtotal loading</b>	<b>7,387,975</b>	<b>44.24%</b>



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**NOE, DI  
TESTIMONY**

**EXHIBIT NO. 34**

**IDAHO POWER COMPANY**  
**DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT**  
**FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Description	2022 Actual	2022 Actual Adjustments	2022 Base	Forecast Adjustment	2023 Unadjusted Test Year	Annualizing Adjustment	2023 Test Year
4	<b>SUMMARY OF RESULTS</b>							
5	<b><u>RATE OF RETURN UNDER PRESENT RATES</u></b>							
6	TOTAL COMBINED RATE BASE	3,870,331,388	(286,529,338)	3,583,802,050	351,776,405	3,935,578,455	156,944,519	4,092,522,974
7								
8	OPERATING REVENUES							
9	FIRM JURISDICTIONAL SALES	1,372,758,056	(221,241,806)	1,151,516,250	195,160,431	1,346,676,681	0	1,346,676,681
10	SYSTEM OPPORTUNITY SALES	145,798,279	(94,063,126)	51,735,153	(22,699,973)	29,035,180	0	29,035,180
11	OTHER OPERATING REVENUES	118,571,647	(29,285,298)	89,286,349	80,336	89,366,685	0	89,366,685
12	TOTAL OPERATING REVENUES	1,637,127,982	(344,590,231)	1,292,537,752	172,540,794	1,465,078,546	0	1,465,078,546
13	OPERATING EXPENSES							
14	OPERATION & MAINTENANCE EXPENSES	1,103,041,646	(392,959,807)	710,081,839	210,696,109	920,777,948	9,636,652	930,414,600
15	DEPRECIATION EXPENSE	163,581,418	(24,584,889)	138,996,530	9,845,191	148,841,721	8,884,245	157,725,966
16	AMORTIZATION OF LIMITED TERM PLANT	5,266,930	0	5,266,930	618,646	5,885,576	95,740	5,981,316
17	TAXES OTHER THAN INCOME	28,701,676	(1,596,793)	27,104,883	4,559,257	31,664,141	498,234	32,162,375
18	REGULATORY DEBITS/CREDITS	1,753,318	(173,640)	1,579,678	1,865,167	3,444,845	0	3,444,845
19	PROVISION FOR DEFERRED INCOME TAXES	(10,828,286)	0	(10,828,286)	(7,044,937)	(17,873,223)	0	(17,873,223)
20	INVESTMENT TAX CREDIT ADJUSTMENT	5,825,740	0	5,825,740	19,188,438	25,014,178	0	25,014,178
21	FEDERAL INCOME TAXES	32,209,533	4,643,860	36,853,393	6,099,210	42,952,604	(3,773,276)	39,179,328
22	STATE INCOME TAXES	11,819,161	1,411,508	13,230,668	(15,537,797)	(2,307,129)	(1,146,892)	(3,454,021)
23	TOTAL OPERATING EXPENSES	1,341,371,137	(413,259,761)	928,111,376	230,289,285	1,158,400,661	14,194,704	1,172,595,364
24	OPERATING INCOME	295,756,846	68,669,530	364,426,376	(57,748,491)	306,677,885	(14,194,704)	292,483,181
25	ADD: IERCO OPERATING INCOME	8,782,042	0	8,782,042	(6,940,924)	1,841,118	0	1,841,118
26	CONSOLIDATED OPERATING INCOME	304,538,888	68,669,530	373,208,418	(64,689,415)	308,519,003	(14,194,704)	294,324,299
27	RATE OF RETURN UNDER PRESENT RATES	7.87%		10.41%				7.19%
28								
29	<b><u>DEVELOPMENT OF REVENUE REQUIREMENTS</u></b>							
30	RATE OF RETURN @ 10.4% ROE	7.702%	7.702%	7.702%	7.702%	7.702%	7.702%	7.702%
31								
32	RETURN	298,092,924	(22,068,490)	276,024,434	27,093,819	303,118,253	12,087,867	315,206,119
33	EARNINGS DEFICIENCY	(6,445,964)	(90,738,020)	(97,183,984)	91,783,233	(5,400,750)	26,282,570	20,881,820
34	ADD: CWIP (RELICENSING)	6,815,472	0	6,815,472	0	6,815,472	0	6,815,472
35	EARNINGS DEFICIENCY WITH CWIP	369,508	(90,738,020)	(90,368,512)	91,783,233	1,414,722	26,282,570	27,697,292
36								
37	NET-TO-GROSS TAX MULTIPLIER	1.347	1.347	1.347	1.347	1.347	1.347	1.347
38	REVENUE DEFICIENCY	497,587	(122,189,632)	(121,692,045)	123,597,138	1,905,092	35,392,635	37,297,728
39								
40	ADD: VALMY LEVELIZED REVENUE REQUIREMENT	0	0	0	36,957,501	36,957,501	0	36,957,501
41	ADD: BRIDGER LEVELIZED REVENUE REQUIREMENT	0	0	0	67,579,174	67,579,174	0	67,579,174
42	LESS: BATTERY ADITC MITIGATION	0	0	0	21,149,854	21,149,854	0	21,149,854
43	<b>REVENUE DEFICIENCY WITH VALMY AND BRIDGER</b>	<b>497,587</b>	<b>(122,189,632)</b>	<b>(121,692,045)</b>	<b>206,983,958</b>	<b>85,291,913</b>	<b>35,392,635</b>	<b>120,684,548</b>
44								
45	FIRM JURISDICTIONAL RETAIL REVENUES	1,372,758,056	(221,241,806)	1,151,516,250	195,160,431	1,346,676,681	0	1,346,676,681
46	PERCENT INCREASE REQUIRED							8.96%
47								
48	SALES AND WHEELING REVENUES REQUIRED	1,373,255,643	(343,431,438)	1,029,824,205	402,144,389	1,431,968,594	35,392,635	1,467,361,229

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Description	2022 Actual	2022 Actual Adjustments	2022 Base	Forecast Adjustment	2023 Unadjusted Test Year	Annualizing Adjustment	2023 Test Year
49	<b>SUMMARY OF RESULTS</b>							
50	<b>DEVELOPMENT OF RATE BASE COMPONENTS</b>							
51	ELECTRIC PLANT IN SERVICE							
52	INTANGIBLE PLANT	94,248,072	0	94,248,072	10,972,838	105,220,910	0	105,220,910
53	PRODUCTION PLANT	2,612,211,078	(728,213,069)	1,883,998,009	94,967,748	1,978,965,757	35,276,850	2,014,242,607
54	TRANSMISSION PLANT	1,325,332,196	(9,281,041)	1,316,051,155	30,141,720	1,355,473,916	0	1,355,473,916
55	DISTRIBUTION PLANT	2,112,875,054	0	2,112,875,054	200,700,828	2,313,575,882	109,823,501	2,423,399,384
56	GENERAL PLANT	476,150,325	0	476,150,325	24,760,007	500,910,332	16,334,160	517,244,492
57	TOTAL ELECTRIC PLANT IN SERVICE	6,620,816,724	(737,494,110)	5,883,322,614	370,824,182	6,254,146,797	161,434,512	6,415,581,308
58	LESS: ACCUM PROVISION FOR DEPRECIATION	2,505,846,014	(484,022,808)	2,021,823,206	59,406,156	2,081,229,362	4,442,122	2,085,671,484
59	AMORT OF OTHER UTILITY PLANT	40,225,910	0	40,225,910	1,641,727	41,867,637	47,870	41,915,507
60	NET ELECTRIC PLANT IN SERVICE	4,074,744,800	(253,471,301)	3,821,273,499	309,776,300	4,131,049,798	156,944,519	4,287,994,318
61	LESS: CUSTOMER ADV FOR CONSTRUCTION	13,139,360	0	13,139,360	(5,697,395)	7,441,965	0	7,441,965
62	LESS: ACCUM DEFERRED INCOME TAXES	404,274,757	0	404,274,757	(22,134,252)	382,140,505	0	382,140,505
63	ADD : PLT HLD FOR FUTURE+ACQUIS ADJ	7,773,040	(501,610)	7,271,430	1,607,122	8,878,552	0	8,878,552
64	ADD : WORKING CAPITAL	120,944,517	(18,125,045)	102,819,472	12,470,781	115,290,253	0	115,290,253
65	ADD : CONSERVATION+OTHER DFRD PROG.	54,682,328	(14,431,382)	40,250,946	(1,679,383)	38,571,563	0	38,571,563
66	ADD : SUBSIDIARY RATE BASE	29,600,820	0	29,600,820	1,769,938	31,370,758	0	31,370,758
67	TOTAL COMBINED RATE BASE	3,870,331,388	(286,529,338)	3,583,802,050	351,776,405	3,935,578,455	156,944,519	4,092,522,974
68								
69	<b>DEVELOPMENT OF NET INCOME COMPONENTS</b>							
70	OPERATING REVENUES							
71	SALES REVENUES	1,518,556,336	(315,304,933)	1,203,251,403	172,460,458	1,375,711,861	0	1,375,711,861
72	OTHER OPERATING REVENUES	118,571,647	(29,285,298)	89,286,349	80,336	89,366,685	0	89,366,685
73	TOTAL OPERATING REVENUES	1,637,127,982	(344,590,231)	1,292,537,752	172,540,794	1,465,078,546	0	1,465,078,546
74	OPERATING EXPENSES							
75	OPERATION & MAINTENANCE EXPENSES	1,103,041,646	(392,959,807)	710,081,839	210,696,109	920,777,948	9,636,652	930,414,600
76	DEPRECIATION EXPENSE	163,581,418	(24,584,889)	138,996,530	9,845,191	148,841,721	8,884,245	157,725,966
77	AMORTIZATION OF LIMITED TERM PLANT	5,266,930	0	5,266,930	618,646	5,885,576	95,740	5,981,316
78	TAXES OTHER THAN INCOME	28,701,676	(1,596,793)	27,104,883	4,559,257	31,664,141	498,234	32,162,375
79	REGULATORY DEBITS/CREDITS	1,753,318	(173,640)	1,579,678	1,865,167	3,444,845	0	3,444,845
80	PROVISION FOR DEFERRED INCOME TAXES	(10,828,286)	0	(10,828,286)	(7,044,937)	(17,873,223)	0	(17,873,223)
81	INVESTMENT TAX CREDIT ADJUSTMENT	5,825,740	0	5,825,740	19,188,438	25,014,178	0	25,014,178
82	FEDERAL INCOME TAXES	32,209,533	4,643,860	36,853,393	6,099,210	42,952,604	(3,773,276)	39,179,328
83	STATE INCOME TAXES	11,819,161	1,411,508	13,230,668	(15,537,797)	(2,307,129)	(1,146,892)	(3,454,021)
84	TOTAL OPERATING EXPENSES	1,341,371,137	(413,259,761)	928,111,376	230,289,285	1,158,400,661	14,194,704	1,172,595,364
85	OPERATING INCOME	295,756,846	68,669,530	364,426,376	(57,748,491)	306,677,885	(14,194,704)	292,483,181
86	ADD: IERCO OPERATING INCOME	8,782,042	0	8,782,042	(6,940,924)	1,841,118	0	1,841,118
87	CONSOLIDATED OPERATING INCOME	304,538,888	68,669,530	373,208,418	(64,689,415)	308,519,003	(14,194,704)	294,324,299
88								
89	<b>NET POWER SUPPLY COSTS:</b>							
90	ACCT 447/SURPLUS SALES + LOSS REV	(145,798,279)	94,063,126	(51,735,153)	22,699,973	(29,035,180)	0	(29,035,180)
91	ACCT 501/FUEL-THERMAL PLANTS	105,551,917	2,951,263	108,503,180	(42,980,180)	65,523,000	0	65,523,000
92	ACCT 547/FUEL - DIESEL+OTHER	124,647,878	(91,280,315)	33,367,563	86,286,112	119,653,675	0	119,653,675
93	ACCT 555/NON-FIRM PURCHASES+LOSSES	335,687,514	(273,080,921)	62,606,593	36,858,428	99,465,021	0	99,465,021
94	ACCT 555/DEMAND RESPONSE INCENTIVES	8,311,328	2,940,937	11,252,265	(1,012,262)	10,240,003	0	10,240,003
95	ACCT 555/CSPP PURCHASES	<u>189,033,362</u>	<u>(55,179,493)</u>	<u>133,853,869</u>	<u>80,594,886</u>	<u>214,448,755</u>	<u>0</u>	<u>214,448,755</u>
96	SUBTOTAL	617,433,720	(319,585,403)	297,848,317	182,446,957	480,295,274	0	480,295,274
97	ACCT 536/WATER FOR POWER	(9,801)	2,390,398	2,380,597	(2,380,597)	0	0	0
98	ACCT 565/TRANS OF ELECTRICITY BY OTHERS	<u>11,322,964</u>	<u>(5,867,009)</u>	<u>5,455,955</u>	<u>4,807,184</u>	<u>10,263,139</u>	<u>0</u>	<u>10,263,139</u>
99	TOTAL NET POWER SUPPLY COSTS	628,746,882	(323,062,013)	305,684,869	184,873,544	490,558,413	0	490,558,413
100	<b>OTHER O&amp;M</b>							
101	TOTAL O&M EXPENSES	1,103,041,646	(392,959,807)	710,081,839	210,696,109	920,777,948	9,636,652	930,414,600
102	LESS: ACCT 501/FUEL - THERMAL PLANTS	(105,551,917)	(2,951,263)	(108,503,180)	42,980,180	(65,523,000)	0	(65,523,000)
103	ACCT 547/FUEL - DIESEL+OTHER	(124,647,878)	91,280,315	(33,367,563)	(86,286,112)	(119,653,675)	0	(119,653,675)
104	ACCT 555/NON-FIRM PURCHASES+LOSSES	(335,687,514)	273,080,921	(62,606,593)	(36,858,428)	(99,465,021)	0	(99,465,021)
105	ACCT 555/DEMAND RESPONSE INCENTIVES	(8,311,328)	(2,940,937)	(11,252,265)	1,012,262	(10,240,003)	0	(10,240,003)
106	ACCT 555/CSPP PURCHASES	(189,033,362)	55,179,493	(133,853,869)	(80,594,886)	(214,448,755)	0	(214,448,755)
107	SUBTOTAL	339,809,646	20,688,722	360,498,369	50,949,125	411,447,494	9,636,652	421,084,146
108	ACCT 536/WATER FOR POWER	9,801	(2,390,398)	(2,380,597)	2,380,597	0	0	0
109	ACCT 565/TRANS OF ELECTRICITY BY OTHERS	(11,322,964)	5,867,009	(5,455,955)	(4,807,184)	(10,263,139)	0	(10,263,139)
110	ACCT 416/MERCHANDISING EXPENSE	<u>0</u>	<u>(4,701,875)</u>	<u>(4,701,875)</u>	<u>0</u>	<u>(4,701,875)</u>	<u>0</u>	<u>(4,701,875)</u>
111	NET OTHER O&M	328,496,484	19,463,458	708,458,310	48,522,538	396,482,479	9,636,652	406,119,132

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
112	<b>TABLE 1-ELECTRIC PLANT IN SERVICE</b>							
113	INTANGIBLE PLANT							
114	301 - ORGANIZATION	\$ 5,703	0	5,703	0	5,703.01	0	5,703
115	302 - FRANCHISES & CONSENTS	44,082,858	0	44,082,858	8,607,466	52,690,323.89	0	52,690,324
116	303 - MISCELLANEOUS	50,159,510	0	50,159,510	2,365,373	52,524,883.01	0	52,524,883
117								
118	TOTAL INTANGIBLE PLANT	94,248,072	0	94,248,072	10,972,838	105,220,910	0	105,220,910
119								
120	PRODUCTION PLANT							
121	310-316 / STEAM PRODUCTION	988,697,347	(728,213,069)	260,484,278	8,369,146	268,853,423	9,605,851	278,459,274
122	330-336 / HYDRAULIC PRODUCTION	1,052,316,966	0	1,052,316,966	39,289,345	1,091,606,311	12,376,066	1,103,982,377
123	340-346 / OTHER PRODUCTION-BASELOAD	400,759,427	0	400,759,427	33,192,819	433,952,246	9,327,906	443,280,152
124	340-346 / OTHER PRODUCTION-PEAKERS	170,437,338	0	170,437,338	14,116,438	184,553,776	3,967,027	188,520,803
125								
126	TOTAL PRODUCTION PLANT	2,612,211,078	(728,213,069)	1,883,998,009	94,967,748	1,978,965,757	35,276,850	2,014,242,607
127								
128	TRANSMISSION PLANT							
129	350 / LAND & LAND RIGHTS - SYSTEM SERVICE	40,030,371	0	40,030,371	1,008,686	41,039,057	0	41,039,057
130	DIRECT ASSIGNMENT	0	0	0	0	0	0	0
131	TOTAL ACCOUNT 350	40,030,371	0	40,030,371	1,008,686	41,039,057	0	41,039,057
132								0
133	352 / STRUCTURES & IMPROVEMENTS - SYSTEM SERVICE	93,682,301	0	93,161,500	7,400,127	100,561,627	0	100,561,627
134	DIRECT ASSIGNMENT	658	0	658	(0)	658	0	658
135	TOTAL ACCOUNT 352	93,682,960	(520,801)	93,162,158	7,400,127	100,562,285	0	100,562,285
136								0
137	353 / STATION EQUIPMENT - SYSTEM SERVICE	470,105,655	0	461,345,415	7,043,183	468,388,599	0	468,388,599
138	DIRECT ASSIGNMENT	111,594	0	111,594	0	111,594	0	111,594
139	TOTAL ACCOUNT 353	470,217,248	(8,760,239)	461,457,009	7,043,183	468,500,193	0	468,500,193
140								0
141	354 / TOWERS & FIXTURES - SYSTEM SERVICE	231,735,124	0	231,735,124	5,423,152	237,158,275	0	237,158,275
142	DIRECT ASSIGNMENT	0	0	0	0	0	0	0
143	TOTAL ACCOUNT 354	231,735,124	0	231,735,124	5,423,152	237,158,275	0	237,158,275
144								
145	355 / POLES & FIXTURES - SYSTEM SERVICE	227,137,112	0	227,137,112	8,895,605	236,032,717	0	236,032,717
146	DIRECT ASSIGNMENT	33,842	0	33,842	0	33,842	0	33,842
147	TOTAL ACCOUNT 355	227,170,953	0	227,170,953	8,895,605	236,066,559	0	236,066,559
148								
149	356 / OVERHEAD CONDUCTORS & DEVICES - SYSTEM SERVICE	262,078,779	0	262,078,779	9,652,007	271,730,786	0	271,730,786
150	DIRECT ASSIGNMENT	26,495	0	26,495	(0)	26,495	0	26,495
151	TOTAL ACCOUNT 356	262,105,274	0	262,105,274	9,652,007	271,757,281	0	271,757,281
152								
153	359 / ROADS & TRAILS - SYSTEM SERVICE	390,266	0	390,266	0	390,266	0	390,266
154	DIRECT ASSIGNMENT	0	0	0	0	0	0	0
155	TOTAL ACCOUNT 359	390,266	0	390,266	0	390,266	0	390,266
156								
157	TOTAL TRANSMISSION PLANT	1,325,332,196	(9,281,041)	1,316,051,155	30,141,720	1,355,473,916	0	1,355,473,916

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
158	<b>TABLE 1-ELECTRIC PLANT IN SERVICE</b>							
159								
160	DISTRIBUTION PLANT							
161	360 / LAND & LAND RIGHTS - SYSTEM SERVICE	8,367,229	0	8,367,229	1,234,491	9,601,720	0	9,601,720
162	PLUS: ADJUSTMENT FOR CIAC	430,656	0	430,656	0	430,656	0	430,656
163	NET DISTRIBUTION PLANT + CIAC	8,797,885	0	8,797,885	1,234,491	10,032,376	0	10,032,376
164								
165	361 / STRUCTURES & IMPROVEMENTS - SYSTEM SERVICE	55,682,517	0	55,682,517	6,702,098	62,384,614	0	62,384,614
166	PLUS: ADJUSTMENT FOR CIAC	8,009,324	0	8,009,324	0	8,009,324	0	8,009,324
167	NET DISTRIBUTION PLANT + CIAC	63,691,841	0	63,691,841	6,702,098	70,393,938	0	70,393,938
168								
169	362 / STATION EQUIPMENT - SYSTEM SERVICE	312,968,241	0	312,968,241	30,108,254	343,076,495	0	343,076,495
170	PLUS: ADJUSTMENT FOR CIAC	38,463,951	0	38,463,951	0	38,463,951	0	38,463,951
171	NET DISTRIBUTION PLANT + CIAC	351,432,193	0	351,432,193	30,108,254	381,540,447	0	381,540,447
172								
173	363 / STORAGE BATTERY EQUIPMENT	0	0	0	64,977,034	64,977,034	109,823,501	174,800,536
174	TOTAL BATTERY STORAGE EQUIPMENT	0	0	0	64,977,034	64,977,034	109,823,501	174,800,536
175								
176	364 / POLES, TOWERS & FIXTURES	313,204,206	0	313,204,206	21,031,319	334,235,525	0	334,235,525
177	365 / OVERHEAD CONDUCTORS & DEVICES	155,253,318	0	155,253,318	7,505,273	162,758,591	0	162,758,591
178	366 / UNDERGROUND CONDUIT	52,785,315	0	52,785,315	2,062,798	54,848,113	0	54,848,113
179	367 / UNDERGROUND CONDUCTORS & DEVICES	318,155,073	0	318,155,073	20,722,845	338,877,918	0	338,877,918
180	368 / LINE TRANSFORMERS	704,959,938	0	704,959,938	40,684,879	745,644,817	0	745,644,817
181	369 / SERVICES	67,920,301	0	67,920,301	1,786,963	69,707,265	0	69,707,265
182	370 / METERS	112,940,727	0	112,940,727	3,562,492	116,503,219	0	116,503,219
183	371 / INSTALLATIONS ON CUSTOMER PREMISES	4,931,439	0	4,931,439	(284,580)	4,646,860	0	4,646,860
184	373 / STREET LIGHTING SYSTEMS	5,706,749	0	5,706,749	606,962	6,313,711	0	6,313,711
185								
186	TOTAL DISTRIBUTION PLANT	2,112,875,054	0	2,112,875,054	200,700,828	2,313,575,882	109,823,501	2,423,399,384
187								
188	GENERAL PLANT							
189	389 / LAND & LAND RIGHTS	20,795,674	0	20,795,674	145,123	20,940,797	0	20,940,797
190	390 / STRUCTURES & IMPROVEMENTS	150,450,720	0	150,450,720	10,729,331	161,180,051	16,334,160	177,514,211
191	391 / OFFICE FURNITURE & EQUIPMENT	41,508,346	0	41,508,346	(69,823)	41,438,522	0	41,438,522
192	392 / TRANSPORTATION EQUIPMENT	113,442,849	0	113,442,849	6,471,742	119,914,591	0	119,914,591
193	393 / STORES EQUIPMENT	4,776,648	0	4,776,648	700,209	5,476,857	0	5,476,857
194	394 / TOOLS, SHOP & GARAGE EQUIPMENT	13,003,651	0	13,003,651	2,376,827	15,380,479	0	15,380,479
195	395 / LABORATORY EQUIPMENT	14,904,043	0	14,904,043	9,991	14,914,034	0	14,914,034
196	396 / POWER OPERATED EQUIPMENT	24,983,094	0	24,983,094	2,604,998	27,588,092	0	27,588,092
197	397 / COMMUNICATIONS EQUIPMENT	81,681,573	0	81,681,573	988,969	82,670,542	0	82,670,542
198	398 / MISCELLANEOUS EQUIPMENT	10,603,726	0	10,603,726	802,641	11,406,368	0	11,406,368
199								
200	TOTAL GENERAL PLANT	476,150,325	0	476,150,325	24,760,007	500,910,332	16,334,160	517,244,492
201								
202	TOTAL ELECTRIC PLANT IN SERVICE	6,620,816,724	(737,494,110)	5,883,322,614	370,824,182	6,254,146,797	161,434,512	6,415,581,308

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
203	<b>TABLE 2-ACCUMULATED PROVISION FOR DEPRECIATION</b>							
204								
205	PRODUCTION PLANT							
206	310-316 / STEAM PRODUCTION	623,502,745	(479,095,034)	144,407,711	6,506,236	150,913,947	218,429	151,132,377
207	330-336 / HYDRAULIC PRODUCTION	488,914,925	0	488,914,925	21,283,505	510,198,431	135,645	510,334,076
208	340-346 / OTHER PRODUCTION-BASELOAD	91,850,187	0	91,850,187	4,041,884	95,892,071	96,942	95,989,012
209	340-346 / OTHER PRODUCTION-PEAKERS	64,863,838	0	64,863,838	2,854,345	67,718,183	68,459	67,786,643
210	TOTAL PRODUCTION PLANT	1,269,131,695	(479,095,034)	790,036,661	(444,409,063)	824,722,632	519,475	825,242,107
211								
212	TRANSMISSION PLANT							
213	350 / LAND & LAND RIGHTS	9,791,827	0	9,791,827	407,383	10,199,209	2,146	10,201,355
214	352 / STRUCTURES & IMPROVEMENTS	33,270,239	(440,425)	32,829,815	1,415,692	34,245,507	6,011	34,251,518
215	353 / STATION EQUIPMENT	124,151,809	(4,487,350)	119,664,459	3,558,295	123,222,754	47,178	123,269,932
216	354 / TOWERS & FIXTURES	77,744,499	0	77,744,499	2,678,088	80,422,588	25,226	80,447,813
217	355 / POLES & FIXTURES	76,949,162	0	76,949,162	3,571,160	80,520,322	62,717	80,583,039
218	356 / OVERHEAD CONDUCTORS & DEVICES	88,360,848	0	88,360,848	1,943,491	90,304,340	28,028	90,332,368
219	359 / ROADS & TRAILS	294,708	0	294,708	2,693	297,401	0	297,401
220	TOTAL TRANSMISSION PLANT	410,563,092	(4,927,775)	405,635,317	13,576,803	419,212,120	171,307	419,383,427
221								
222	DISTRIBUTION PLANT							
223	360 / LAND & LAND RIGHTS	209,604	0	209,604	29,362	238,966	476	239,442
224	361 / STRUCTURES & IMPROVEMENTS	15,872,260	0	15,872,260	874,274	16,746,534	32,368	16,778,902
225	362 / STATION EQUIPMENT	70,090,213	0	70,090,213	2,024,125	72,114,337	135,237	72,249,574
226	363 / STORAGE BATTERY EQUIPMENT	0	0	0	574,099	574,099	2,974,387	3,548,486
227	364 / POLES, TOWERS & FIXTURES	147,716,974	0	147,716,974	(3,061,639)	144,655,335	72,138	144,727,473
228	365 / OVERHEAD CONDUCTORS & DEVICES	57,720,036	0	57,720,036	(1,158,596)	56,561,440	32,556	56,593,997
229	366 / UNDERGROUND CONDUIT	18,655,459	0	18,655,459	209,737	18,865,196	15,514	18,880,710
230	367 / UNDERGROUND CONDUCTORS & DEVICES	101,743,223	0	101,743,223	3,651,254	105,394,477	132,496	105,526,973
231	368 / LINE TRANSFORMERS	196,632,795	0	196,632,795	3,028,561	199,661,355	136,382	199,797,737
232	369 / SERVICES	44,705,081	0	44,705,081	792,160	45,497,241	3,722	45,500,962
233	370 / METERS	38,331,595	0	38,331,595	(1,123,046)	37,208,549	73,028	37,281,576
234	371 / INSTALLATIONS ON CUSTOMER PREMISES	1,404,067	0	1,404,067	(218,331)	1,185,736	39	1,185,775
235	373 / STREET LIGHTING SYSTEMS	1,327,853	0	1,327,853	(1,299,129)	28,724	4,292	33,016
236	TOTAL DISTRIBUTION PLANT	694,409,158	0	694,409,158	4,322,831	698,731,989	3,612,634	702,344,623
237								

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
238	<b>TABLE 2-ACCUMULATED PROVISION FOR DEPRECIATION</b>							
239								
240	GENERAL PLANT							
241	389 / LAND & LAND RIGHTS	0	0	0	0	0	0	0
242	390 / STRUCTURES & IMPROVEMENTS	35,310,027	0	35,310,027	708,449	36,018,476	26,215	36,044,691
243	391 / OFFICE FURNITURE & EQUIPMENT	17,847,072	0	17,847,072	892,967	18,740,039	17,598	18,757,637
244	392 / TRANSPORTATION EQUIPMENT	23,370,984	0	23,370,984	604,738	23,975,721	0	23,975,721
245	393 / STORES EQUIPMENT	1,274,650	0	1,274,650	187,779	1,462,429	6,163	1,468,592
246	394 / TOOLS, SHOP & GARAGE EQUIPMENT	4,462,602	0	4,462,602	558,376	5,020,979	5,803	5,026,782
247	395 / LABORATORY EQUIPMENT	6,642,415	0	6,642,415	214,936	6,857,351	3,459	6,860,809
248	396 / POWER OPERATED EQUIPMENT	5,220,488	0	5,220,488	199,333	5,419,822	0	5,419,822
249	397 / COMMUNICATIONS EQUIPMENT	29,974,046	0	29,974,046	3,418,103	33,392,149	61,249	33,453,398
250	398 / MISCELLANEOUS EQUIPMENT	4,046,093	0	4,046,093	332,170	4,378,263	18,218	4,396,481
251	TOTAL GENERAL PLANT	128,148,377	0	128,148,377	7,116,850	135,265,227	138,706	135,403,933
252								
253	AMORTIZATION OF DISALLOWED COSTS	3,593,693	0	3,593,693	(296,299)	3,297,393	0	3,297,393
254								
255	TOTAL ACCUM PROVISION DEPRECIATION	2,505,846,014	(484,022,808)	2,021,823,206	59,406,156	2,081,229,362	4,442,122	2,085,671,484
256								
257	AMORTIZATION OF OTHER UTILITY PLANT							
258	302/FRANCHISES AND CONSENTS	17,415,328	0	17,415,328	1,336,488	18,751,817	26,258	18,778,074
259	303/MISCELLANEOUS INTANGIBLE PLANT	22,810,581	0	22,810,581	305,239	23,115,820	21,612	23,137,432
260								
261	TOTAL AMORT OF OTHER UTILITY PLANT	40,225,910	0	40,225,910	1,641,727	41,867,637	47,870	41,915,507
262								
263	TOTAL ACCUM PROVISION FOR DEPR							
264	& AMORTIZATION OF OTHER UTILITY PLANT	2,546,071,924	(484,022,808)	2,062,049,116	61,047,883	2,123,096,998	4,489,992	2,127,586,991
265								

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
266	<b>TABLE 3-ADDITIONS &amp; DEDUCTIONS TO RATEBASE</b>							0
267								0
268	NET ELECTRIC PLANT IN SERVICE	4,074,744,800	(253,471,301)	3,821,273,499	309,776,300	4,131,049,798	156,944,519	4,287,994,318
269	LESS:							0
270	252 CUSTOMER ADVANCES FOR CONSTRUCTION							
271	POWER SUPPLY	0	0	0	0	0	0	0
272	OTHER	13,139,360	0	13,139,360	(5,697,395)	7,441,965	0	7,441,965
273	TOTAL CUSTOMER ADV FOR CONSTRUCTION	13,139,360		13,139,360	(5,697,395)	7,441,965	0	7,441,965
274								
275	ACCUMULATED DEFERRED INCOME TAXES							
276	190 / ACCUMULATED DEFERRED INCOME TAXES							
277	CUSTOMER ADVANCES FOR CONSTRUCTION	(2,158,794)	0	(2,158,794)	352,116	(1,806,678)	0	(1,806,678)
278	OTHER	(16,595,876)	0	(16,595,876)	(1,512,704)	(18,108,580)	0	(18,108,580)
279	TOTAL ACCOUNT 190	(18,754,670)	0	(18,754,670)	(1,160,588)	(19,915,258)	0	(19,915,258)
280	281 / ACCELERATED AMORTIZATION	0		0	0	0	0	0
281	282 / OTHER PROPERTY	422,636,515	0	422,636,515	(26,846,041)	395,790,474	0	395,790,474
282	283 / OTHER	392,912	0	392,912	5,872,377	6,265,289	0	6,265,289
283	TOTAL ACCUM DEFERRED INCOME TAXES	404,274,757	0	404,274,757	(22,134,252)	382,140,505	0	382,140,505
284								
285	NET ELECTRIC PLANT IN SERVICE	3,657,330,683	(253,471,301)	3,403,859,382	337,607,947	3,741,467,328	156,944,519	3,898,411,848
286	ADD:							
287	WORKING CAPITAL							
288	151 / FUEL INVENTORY	15,140,640	7,238,579	22,379,219	2,325,470	24,704,689	0	24,704,689
289	154 & 163 / PLANT MATERIALS & SUPPLIES							
290	PRODUCTION - GENERAL	14,502,120	(172,390)	14,329,729	1,807,299	16,137,028	0	16,137,028
291	TRANSMISSION - GENERAL	13,205,628	(156,979)	13,048,650	1,645,726	14,694,376	0	14,694,376
292	DISTRIBUTION - GENERAL	49,850,143	(592,581)	49,257,562	6,212,478	55,470,039	0	55,470,039
293	OTHER - UNCLASSIFIED	3,850,079	(45,767)	3,804,312	479,809	4,284,121	0	4,284,121
294	TOTAL ACCOUNT 154 & 163	81,407,970	(967,717)	80,440,253	10,145,311	90,585,564	0	90,585,564
295	165 / PREPAID ITEMS							
296	AD VALOREM TAXES	2,887,242	(2,887,242)	0	0	0	0	0
297	OTHER PROD-RELATED PREPAYMENTS	1,846,273	(1,846,273)	0	0	0	0	0
298	INSURANCE	7,961,890	(7,961,890)	0	0	0	0	0
299	PENSION EXPENSE	0	0	0	0	0	0	0
300	PREPAID CONTRACTS	4,697,751	(4,697,751)	0	0	0	0	0
301	MISCELLANEOUS PREPAYMENTS	7,002,751	(7,002,751)	0	0	0	0	0
302	TOTAL ACCOUNT 165	24,395,907	(24,395,907)	0	0	0	0	0
303	WORKING CASH ALLOWANCE	0	0	0	0	0	0	0
304								
305	TOTAL WORKING CAPITAL	120,944,517	(18,125,045)	102,819,472	12,470,781	115,290,253	0	115,290,253
306								
307	NET ELECTRIC PLANT IN SERVICE	3,778,275,200	(271,596,346)	3,506,678,854	350,078,728	3,856,757,582	156,944,519	4,013,702,101



**IDAHO POWER COMPANY**  
**DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT**  
**FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
308	<b>TABLE 3-ADDITIONS &amp; DEDUCTIONS TO RATEBASE</b>							
309								
310	NET ELECTRIC PLANT IN SERVICE	3,778,275,200	(271,596,346)	3,506,678,854	350,078,728	3,856,757,582	156,944,519	4,013,702,101
311	ADD:							
312	105 / PLANT HELD FOR FUTURE USE							
313	HYDRAULIC PRODUCTION	104,155	(104,155)	0	0	0	0	0
314	TRANS LAND & LAND RIGHTS	2,658,989	93,517	2,752,506	0	2,752,506	0	2,752,506
315	TRANS STRUCTURES & IMPROVEMENTS	166,669	(166,669)	0	0	0	0	0
316	TRANS STATION EQUIPMENT	32,400	(32,400)	0	0	0	0	0
317	DIST LAND & LAND RIGHTS	3,669,456	206,203	3,875,659	1,622,140	5,497,799	0	5,497,799
318	DIST STRUCTURES & IMPROVEMENTS	498,106	(498,106)	0	0	0	0	0
319	DIST STATIONS EQUIPMENT	0	0	0	0	0	0	0
320	GEN LAND & LAND RIGHTS	0	0	0	0	0	0	0
321	GEN STRUCTURES & IMPROVEMENTS	0	0	0	0	0	0	0
322	COMMUNICATION	0	0	0	0	0	0	0
323	TOTAL PLANT HELD FOR FUTURE USE	7,129,775	(501,610)	6,628,165	1,622,140	8,250,305	0	8,250,305
324								
325	114/115 - ASSET EXCHANGE ACQUISITION ADJUSTMENT	643,265	0	643,265	(15,018)	628,247	0	628,247
326								
327	DEFERRED PROGRAMS:							
328	182 / CONSERVATION PROGRAMS							
329	IDAHO DEFERRED CONSERVATION PROGRAMS	0	0	0	0	0	0	0
330	OREGON DEFERRED CONSERVATION PROGRAMS	0	0	0	0	0	0	0
331	TOTAL CONSERVATION PROGRAMS	0	0	0	0	0	0	0
332	182&186 / MISC. OTHER REGULATORY ASSETS							
333	CUB FUND INTEREST (OPUC 15-399)	37,154	0	37,154	(37,154)	0	0	0
334	AM. FALLS BOND REFINANCING	135,528	0	135,528	(62,551)	72,977	0	72,977
335	SFAS 87 CAPITALIZED PENSION - OPUC ORDER 10-064	7,000,878	0	7,000,878	(219,697)	6,781,181	0	6,781,181
336	CLOUD COMPUTING - (IPUC Order 34707)	1,616,918	(409,326)	1,207,592	(201,265)	1,006,327	0	1,006,327
337	WILDFIRE MITIGATION (IPUC Order 35077)	27,078,227	(14,022,056)	13,056,171	0	13,056,171	0	13,056,171
338	SIEMENS LTP RATE BASE (IPUC Order 33420)	12,851,571	0	12,851,571	(643,866)	12,207,705	0	12,207,705
339	SIEMENS LTP DEFERRED RATE BASE (IPUC Order 33420)	8,612,494	0	8,612,494	(431,488)	8,181,006	0	8,181,006
340	SIEMENS LTP RATE BASE (OPUC ORDER 15-387)	511,105	0	511,105	(39,316)	471,789	0	471,789
341	SIEMENS LTP DEFERRED RATE BASE (OPUC ORDER 15-387)	138,550	0	138,550	(44,046)	94,504	0	94,504
342	TOTAL OTHER REGULATORY ASSETS	57,982,425	(14,431,382)	43,551,043	(1,679,383)	41,871,660	0	41,871,660
343	186 / MISC. OTHER DEFERRED PROGRAMS	0	0	0	0	0	0	0
344	254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC ORDER 12-296	(3,285,386)	0	(3,285,386)	0	(3,285,386)	0	(3,285,386)
345	RECONNECT FEES - (OPUC ADV 16-09)	(14,711)		(14,711)	0	(14,711)	0	(14,711)
346	TOTAL DEFERRED PROGRAMS	54,682,328	(14,431,382)	40,250,946	(1,679,383)	38,571,563	0	38,571,563
347					0			
348	DEVELOPMENT OF IERCO RATE BASE				0			
349	INVESTMENT IN IERCO	23,664,134	0	23,664,134	(8,086,296)	15,577,838	0	15,577,838
350	PREPAID COAL ROYALTIES	834,822	0	834,822	(237,052)	597,770	0	597,770
351	NOTES PAYABLE TO/RECEIVABLE FROM SUBSIDIARY	5,101,864	0	5,101,864	10,093,286	15,195,150	0	15,195,150
352	TOTAL SUBSIDIARY RATE BASE	29,600,820	0	29,600,820	1,769,938	31,370,758	0	31,370,758
353					0			
354	TOTAL COMBINED RATE BASE	3,870,331,388	(286,529,338)	3,583,802,050	351,776,405	3,935,578,455	156,944,519	4,092,522,974

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
355	<b>TABLE 4-OPERATING REVENUES</b>							
356	FIRM ENERGY SALES & OATT REFUNDS							
357	440-448 / RETAIL	1,372,758,056	(221,241,806)	1,151,516,250	18,316,923	1,169,833,173	0	1,169,833,173
358	442 / BASE REVENUE TRANSFER - PCA	0	0	0	173,368,953	173,368,953	0	173,368,953
359	442 / BASE REVENUE TRANSFER - EE RIDER	0	0	0	3,474,555	3,474,555	0	3,474,555
360	447 / SYSTEM OPPORTUNITY SALES	145,798,279	(94,063,126)	51,735,153	(32,559,873)	19,175,280	0	19,175,280
361	447.050 / SURPLUS SALES - TRANSMISSION LOSSES	0	0	0	9,859,900	9,859,900	0	9,859,900
362	TOTAL SALES OF ELECTRICITY	1,518,556,336	(315,304,933)	1,203,251,403	172,460,458	1,375,711,861	0	1,375,711,861
363								
364	OTHER OPERATING REVENUES							
365	415 / MERCHANDISING REVENUES	0	3,911,815	3,911,815	30,623	3,942,438	0	3,942,438
366								
367	449 / OATT TARIFF REFUND							
368	NETWORK	0	0	0	0	0	0	0
369	POINT-TO-POINT	0	0	0	0	0	0	0
370	TOTAL ACCOUNT 449	0	0	0	0	0	0	0
371								
372	451 / MISCELLANEOUS SERVICE REVENUES	4,936,204	0	4,936,204	1,271,884	6,208,088	0	6,208,088
373						0		
374	454 / RENTS FROM ELECTRIC PROPERTY					0		
375	SUBSTATION EQUIPMENT	3,215,758	0	3,215,758	0	3,215,758	0	3,215,758
376	TRANSFORMER RENTALS	17,330	0	17,330	0	17,330	0	17,330
377	LINE RENTALS	0	0	0	0	0	0	0
378	COGENERATION	1,832,348	0	1,832,348	60,186	1,892,534	0	1,892,534
379	DARK FIBER PROJECT	400,000	0	400,000	(400,000)	0	0	0
380	POLE ATTACHMENTS	1,634,179	0	1,634,179	0	1,634,179	0	1,634,179
381	FACILITIES CHARGES	10,470,031	0	10,470,031	(189,692)	10,280,339	0	10,280,339
382	OTHER RENTALS	1,072,002	0	1,072,002	0	1,072,002	0	1,072,002
383	WATER DISTRICT PAYMENTS	185,425	0	185,425	(101,177)	84,248	0	84,248
384	TOTAL ACCOUNT 454	18,827,074	0	18,827,074	(630,683)	18,196,391	0	18,196,391
385								
386	456 / OTHER ELECTRIC REVENUES							
387	TRANSMISSION NETWORK SERVICES - FIRM	10,337,634	0	10,337,634	743,001	11,080,635	0	11,080,635
388	TRANSMISSION NETWORK SERVICES - DIST FACILITIES	792,372	0	792,372	0	792,372	0	792,372
389	TRANSMISSION - POINT-TO-POINT & OTHER	49,667,827	0	49,667,827	(1,334,489)	48,333,338	0	48,333,338
390	PHOTOVOLTAIC STATION SERVICE	0	0	0	0	0	0	0
391	ENERGY EFFICIENCY RIDER	33,197,113	(33,197,113)	0	0	0	0	0
392	STANDBY SERVICE CHARGE	759,997	0	759,997	0	759,997	0	759,997
393	SIERRA PACIFIC USAGE CHARGE	51,764	0	51,764	0	51,764	0	51,764
394	ANTELOPE	0	0	0	0	0	0	0
395	MISCELLANEOUS	1,663	0	1,663	0	1,663	0	1,663
396	TOTAL ACCOUNT 456	94,808,370	(33,197,113)	61,611,257	(591,488)	61,019,769	0	61,019,769
397								
398	TOTAL OTHER OPERATING REVENUES	118,571,647	(29,285,298)	89,286,349	80,336	89,366,685	0	89,366,685
399								
400	TOTAL OPERATING REVENUES	1,637,127,982	(344,590,231)	1,292,537,752	172,540,794	1,465,078,546	0	1,465,078,546

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
401	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							
402	STEAM POWER GENERATION							
403	OPERATION							
404	500 / SUPERVISION & ENGINEERING	632,248	(725,308)	(93,060)	10,451	(82,609)	6,114	(76,495)
405	501 / FUEL	105,551,917	2,951,263	108,503,180	(42,980,180)	65,523,000	0	65,523,000
406	502 / STEAM EXPENSES							
407	LABOR	1,607,750	0	1,607,750	0	1,607,750	0	1,607,750
408	OTHER	7,690,737	(8,836,311)	(1,145,574)	0	(1,145,574)	0	(1,145,574)
409	TOTAL ACCOUNT 502	9,298,487	(8,836,311)	462,176	0	462,176	0	462,176
410	505 / ELECTRIC EXPENSES							
411	LABOR	626,112	0	626,112	0	626,112	0	626,112
412	OTHER	502,354	(1,072,607)	(570,253)	0	(570,253)	0	(570,253)
413	TOTAL ACCOUNT 505	1,128,466	(1,072,607)	55,859	0	55,859	0	55,859
414	506 / MISCELLANEOUS EXPENSES	8,586,280	(8,161,259)	425,021	13	425,034	7	425,042
415	507 / RENTS	229,461	(218,103)	11,358	0	11,358	0	11,358
416	STEAM OPERATION EXPENSES	125,426,860	(16,062,325)	109,364,535	(42,969,716)	66,394,819	6,121	66,400,940
417								
418	MAINTENANCE							
419	510 / SUPERVISION & ENGINEERING	(238,936)	(11,789)	(250,725)	0	(250,725)	0	(250,725)
420	511 / STRUCTURES	2,540,010	(2,414,279)	125,730	0	125,730	0	125,730
421	512 / BOILER PLANT							
422	LABOR	3,983,710	0	3,983,710	0	3,983,710	0	3,983,710
423	OTHER	4,790,370	(8,339,764)	(3,549,393)	0	(3,549,393)	0	(3,549,393)
424	TOTAL ACCOUNT 512	8,774,081	(8,339,764)	434,317	0	434,317	0	434,317
425	513 / ELECTRIC PLANT							
426	LABOR	1,522,637	0	1,522,637	0	1,522,637	0	1,522,637
427	OTHER	783,882	(2,192,346)	(1,408,464)	0	(1,408,464)	0	(1,408,464)
428	TOTAL ACCOUNT 513	2,306,519	(2,192,346)	114,173	0	114,173	0	114,173
429	514 / MISCELLANEOUS STEAM PLANT	9,592,111	(9,117,301)	474,809	0	474,809	0	474,809
430	STEAM MAINTENANCE EXPENSES	22,973,785	(22,075,479)	898,305	0	898,305	0	898,305
431	TOTAL STEAM GENERATION EXPENSES	148,400,644	(38,137,804)	110,262,840	(42,969,716)	67,293,124	6,121	67,299,245
432								

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
433	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							
434	HYDRAULIC POWER GENERATION							
435	OPERATION							
436	535 / SUPERVISION & ENGINEERING	5,758,397	0	5,758,397	455,619	6,214,016	262,711	6,476,728
437	536 / WATER FOR POWER						0	
438	WATER FOR POWER/WCLOUD SEEDING	6,637,301	0	6,637,301	(210,258)	6,427,043	54,646	6,481,689
439	WATER LEASE	(9,801)	2,390,398	2,380,597	(2,380,597)	0	0	0
440	TOTAL ACCOUNT 536	6,627,500	2,390,398	9,017,898	(2,590,855)	6,427,043	54,646	6,481,689
441	537 / HYDRAULIC EXPENSES	18,433,658	124,562	18,558,220	1,237,383	19,795,603	394,497	20,190,100
442	538 / ELECTRIC EXPENSES						0	
443	LABOR	1,510,454	0	1,510,454	0	1,510,454	95,472	1,605,926
444	OTHER	449,278	0	449,278	180,701	629,979	0	629,979
445	TOTAL ACCOUNT 538	1,959,732	0	1,959,732	180,701	2,140,433	95,472	2,235,905
446	539 / MISCELLANEOUS EXPENSES	5,131,195	(227)	5,130,968	386,324	5,517,292	213,191	5,730,483
447	540 / RENTS	303,402	0	303,402	0	303,402	0	303,402
448	HYDRAULIC OPERATION EXPENSES	38,213,885	2,514,733	40,728,618	(330,828)	40,397,790	1,020,517	41,418,307
449								
450	MAINTENANCE							
451	541 / SUPERVISION & ENGINEERING	110,982	0	110,982	9,442	120,425	5,514	125,939
452	542 / STRUCTURES	932,291	0	932,291	64,830	997,121	36,545	1,033,666
453	543 / RESERVOIRS, DAMS & WATERWAYS	454,092	0	454,092	38,359	492,451	16,036	508,487
454	544 / ELECTRIC PLANT						0	
455	LABOR	1,799,397	0	1,799,397	0	1,799,397	111,584	1,910,981
456	OTHER	812,446	0	812,446	198,915	1,011,361	0	1,011,361
457	TOTAL ACCOUNT 544	2,611,843	0	2,611,843	198,915	2,810,758	111,584	2,922,342
458	545 / MISCELLANEOUS HYDRAULIC PLANT	3,919,209	(108)	3,919,101	252,325	4,171,426	138,826	4,310,252
459	HYDRAULIC MAINTENANCE EXPENSES	8,028,417	(108)	8,028,309	563,871	8,592,180	308,505	8,900,686
460	TOTAL HYDRAULIC GENERATION EXPENSES	46,242,302	2,514,625	48,756,927	233,043	48,989,970	1,329,023	50,318,993

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
461	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							
462	OTHER POWER GENERATION							
463	OPERATION							
464	546 / SUPERVISION & ENGINEERING	627,106	0	627,106	55,260	682,366	32,326	714,692
465	547 / FUEL							
466	DIESEL FUEL	10,499	0	10,499	0	10,499	0	10,499
467	OTHER	124,647,878	(91,280,315)	33,367,563	86,286,112	119,653,675	0	119,653,675
468	TOTAL ACCOUNT 547	124,658,377	(91,280,315)	33,378,062	86,286,112	119,664,175	0	119,664,175
469	548 / GENERATING EXPENSES							
470	LABOR	3,234,939	0	3,234,939		3,234,939	198,160	3,433,099
471	OTHER	1,667,550	0	1,667,550	343,492	2,011,042	0	2,011,042
472	TOTAL ACCOUNT 548	4,902,489	0	4,902,489	343,492	5,245,981	198,160	5,444,141
473	549 / MISCELLANEOUS EXPENSES	9,124	0	9,124	43,934	53,058	22,895	75,953
474	550 / RENTS	0	0	0	0	0	0	0
475	OTHER POWER OPER EXPENSES	130,197,096	(91,280,315)	38,916,781	86,728,798	125,645,579	253,381	125,898,960
476								
477	MAINTENANCE							
478	551 / SUPERVISION & ENGINEERING	0	0	0	0	0	0	0
479	552 / STRUCTURES	159,030	0	159,030	5,316	164,346	2,832	167,178
480	553 / GENERATING & ELECTRIC PLANT							
481	LABOR	56,825	0	56,825	0	56,825	3,674	60,498
482	OTHER	870,985	0	870,985	6,648	877,633	0	877,633
483	TOTAL ACCOUNT 553	927,810	0	927,810	6,648	934,458	3,674	938,132
484	554 / MISCELLANEOUS EXPENSES	6,730,628	0	6,730,628	(3,372,657)	3,357,971	29,364	3,387,334
485	OTHER POWER MAINT EXPENSES	7,817,468	0	7,817,468	(3,360,693)	4,456,775	35,869	4,492,644
486	TOTAL OTHER POWER GENERATION EXP	138,014,564	(91,280,315)	46,734,249	83,368,105	130,102,354	289,250	130,391,604
487								
488	OTHER POWER SUPPLY EXPENSE							
489	555.0 / PURCHASED POWER							
490	POWER EXPENSE	332,661,556	(270,054,963)	62,606,593	36,858,428	99,465,021	0	99,465,021
491	OTHER	0	0	0	0	0	0	0
492	TRANSMISSION LOSSES	3,025,958	(3,025,958)	(0)	0	0	0	0
493	DEMAND RESPONSE INCENTIVE	8,311,328	2,940,937	11,252,265	(1,012,262)	10,240,003	0	10,240,003
494	TOTAL 555.0/PURCHASED POWER	343,998,842	(270,139,984)	73,858,858	35,846,166	109,705,024	0	109,705,024
495	555.1 / COGENERATION & SMALL POWER PROD	189,033,362	(55,179,493)	133,853,869	80,594,886	214,448,755	0	214,448,755
496	555/TOTAL	533,032,204	(325,319,477)	207,712,727	116,441,052	324,153,778	0	324,153,778
497	556 / LOAD CONTROL & DISPATCHING EXPENSES	0	0	0	0	0	0	0
498	557 / OTHER EXPENSES							
499	IDAHO POWER COST-RELATED EXPENSES	(99,392,327)	99,392,327	0	0	0	0	0
500	OREGON POWER COST-RELATED EXPENSES	(1,267,068)	1,267,068	0	0	0	0	0
501	OTHER	6,143,689	135,744	6,279,434	473,536	6,752,970	277,021	7,029,991
502	557/TOTAL	(94,515,705)	100,795,139	6,279,434	473,536	6,752,970	277,021	7,029,991
503	TOTAL OTHER POWER SUPPLY EXPENSES	438,516,499	(224,524,338)	213,992,161	116,914,588	330,906,748	277,021	331,183,769
504				0		0		0
505	TOTAL PRODUCTION EXPENSES	771,174,009	(351,427,832)	419,746,177	157,546,020	577,292,197	1,901,415	579,193,611
506	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							

**IDAHO POWER COMPANY  
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FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
507	TRANSMISSION EXPENSES							
508	OPERATION							
509	560 / SUPERVISION & ENGINEERING	3,193,933	(6)	3,193,927	251,886	3,445,814	147,211	3,593,025
510	561 / LOAD DISPATCHING	5,375,576	0	5,375,576	454,303	5,829,880	187,405	6,017,285
511	562 / STATION EXPENSES	2,788,678	(1,453)	2,787,225	214,444	3,001,669	120,418	3,122,087
512	563 / OVERHEAD LINE EXPENSES	1,121,678	0	1,121,678	57,232	1,178,910	26,779	1,205,690
513	565 / TRANSMISSION OF ELECTRICITY BY OTHERS	11,322,964	(5,867,009)	5,455,955	4,807,184	10,263,139	0	10,263,139
514	566 / MISCELLANEOUS EXPENSES	8	0	8	0	8	0	8
515	567 / RENTS	4,855,402	0	4,855,402	0	4,855,402	0	4,855,402
516	TOTAL TRANSMISSION OPERATION	28,658,239	(5,868,468)	22,789,771	5,785,050	28,574,821	481,814	29,056,635
517								
518	MAINTENANCE							
519	568 / SUPERVISION & ENGINEERING	206,814	0	206,814	9,586	216,400	5,608	222,008
520	569 / STRUCTURES	1,907,634	0	1,907,634	151,682	2,059,316	88,601	2,147,917
521	570 / STATION EQUIPMENT	2,611,391	(489)	2,610,902	297,615	2,908,517	144,194	3,052,711
522	571 / OVERHEAD LINES	2,274,243	805,534	3,079,777	116,824	3,196,601	55,564	3,252,166
523	573 / MISCELLANEOUS PLANT	5,113	0	5,113	442	5,555	226	5,781
524	TOTAL TRANSMISSION MAINTENANCE	7,005,196	805,045	7,810,241	576,149	8,386,390	294,193	8,680,583
525								
526	TOTAL TRANSMISSION EXPENSES	35,663,435	(5,063,423)	30,600,012	6,361,199	36,961,211	776,007	37,737,218
527								
528	REGIONAL MARKET EXPENSES							
529	OPERATION							
530	575 / OPER TRANS MKT ADMIN - EIM	686,880	0	686,880	0	686,880	0	686,880
531								
532	TOTAL REGIONAL MARKET EXPENSES	686,880	0	686,880	0	686,880	0	686,880
533								

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
534	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							
535	DISTRIBUTION EXPENSES							
536	OPERATION							
537	580 / SUPERVISION & ENGINEERING	5,911,141	3,912	5,915,054	326,853	6,241,907	186,671	6,428,578
538	581 / LOAD DISPATCHING	5,170,071	0	5,170,071	488,757	5,658,828	285,943	5,944,770
539	582 / STATION EXPENSES	1,862,473	(7)	1,862,466	114,459	1,976,925	60,977	2,037,902
540	583 / OVERHEAD LINE EXPENSES	5,421,238	104,989	5,526,227	477,721	6,003,948	214,267	6,218,215
541	584 / UNDERGROUND LINE EXPENSES	4,717,552	4,282	4,721,834	167,229	4,889,062	82,237	4,971,299
542	585 / STREET LIGHTING & SIGNAL SYSTEMS	44,756	0	44,756	2,724	47,479	1,309	48,788
543	586 / METER EXPENSES	5,719,569	(73)	5,719,496	535,125	6,254,621	256,699	6,511,320
544	587 / CUSTOMER INSTALLATIONS EXPENSE	1,095,297	0	1,095,297	88,874	1,184,170	45,823	1,229,993
545	588 / MISCELLANEOUS EXPENSES	4,687,904	(1,010)	4,686,894	323,082	5,009,975	181,825	5,191,800
546	589 / RENTS	741,341	0	741,341	0	741,341	0	741,341
547	TOTAL DISTRIBUTION OPERATION	35,371,341	112,093	35,483,435	2,524,822	38,008,257	1,315,749	39,324,006
548								
549	MAINTENANCE							
550	590 / SUPERVISION & ENGINEERING	11,968	0	11,968	997	12,965	583	13,548
551	591 / STRUCTURES	0	0	0	0	0	0	0
552	592 / STATION EQUIPMENT	4,120,742	(351)	4,120,391	328,264	4,448,655	167,728	4,616,383
553	593 / OVERHEAD LINES	21,931,803	12,695,311	34,627,115	684,800	35,311,914	330,675	35,642,590
554	594 / UNDERGROUND LINES	751,577	18,123	769,700	45,008	814,708	22,649	837,357
555	595 / LINE TRANSFORMERS	94,087	0	94,087	2,717	96,804	1,557	98,361
556	596 / STREET LIGHTING & SIGNAL SYSTEMS	204,924	3,043	207,967	16,003	223,970	7,856	231,826
557	597 / METERS	862,000	0	862,000	77,162	939,163	42,167	981,330
558	598 / MISCELLANEOUS PLANT	123,765	0	123,765	10,116	133,880	5,037	138,917
559	TOTAL DISTRIBUTION MAINTENANCE	28,100,867	12,716,126	40,816,993	1,165,066	41,982,059	578,252	42,560,311
560	TOTAL DISTRIBUTION EXPENSES	63,472,208	12,828,219	76,300,428	3,689,888	79,990,316	1,894,002	81,884,317
561								
562	CUSTOMER ACCOUNTING EXPENSES							
563	901 / SUPERVISION	845,854	0	845,854	75,609	921,463	44,217	965,680
564	902 / METER READING	1,819,788	0	1,819,788	142,617	1,962,406	79,111	2,041,516
565	903 / CUSTOMER RECORDS & COLLECTIONS	15,041,848	0	15,041,848	997,289	16,039,137	569,230	16,608,368
566	904 / UNCOLLECTIBLE ACCOUNTS	3,069,311	198,133	3,267,444	2,514,638	5,782,082	0	5,782,082
567	905 / MISC. EXPENSES	(3,031)	0	(3,031)	0	(3,031)	0	(3,031)
568	TOTAL CUSTOMER ACCOUNTING EXPENSES	20,773,771	198,133	20,971,903	3,730,154	24,702,057	692,558	25,394,615
569								
570	CUSTOMER SERVICES & INFORMATION EXPENSES							
571	907 / SUPERVISION	1,009,780	(15,995)	993,785	87,883	1,081,669	51,408	1,133,077
572	908 / CUSTOMER ASSISTANCE						0	
573	SYSTEM CONSERVATION	314,424	0	314,424	0	314,424	0	314,424
574	OTHER	40,168,748	(33,197,948)	6,970,800	4,110,142	11,080,942	291,521	11,372,463
575	TOTAL ACCOUNT 908	40,483,172	(33,197,948)	7,285,224	4,110,142	11,395,366	291,521	11,686,887
576	909 / INFORMATION & INSTRUCTIONAL	295,103	0	295,103	10	295,113	0	295,113
577	910 / MISCELLANEOUS EXPENSES	746,645	(3,166)	743,479	33,938	777,417	19,452	796,869
578	912 / DEMO AND SELLING EXPENSES	0	0	0	0	0	0	0
579	TOTAL CUST SERV & INFORMATN EXPENSES	42,534,700	(33,217,109)	9,317,591	4,231,973	13,549,564	362,381	13,911,945

**IDAHO POWER COMPANY  
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2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
580	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>							
581	ADMINISTRATIVE & GENERAL EXPENSES							
582	920 / ADMINISTRATIVE & GENERAL SALARIES	95,790,672	(26,598,671)	69,192,001	16,597,361	85,789,362	3,836,202	89,625,564
583	921 / OFFICE SUPPLIES	15,137,531	(28,774)	15,108,757	50,701	15,159,457	15,816	15,175,273
584	922 / ADMIN & GENERAL EXPENSES TRANSFERRED-CR	(35,131,943)	0	(35,131,943)	(3,326,773)	(38,458,716)	(1,946,297)	(40,405,013)
585	923 / OUTSIDE SERVICES	8,733,229	0	8,733,229	5	8,733,234	0	8,733,234
586	924 / PROPERTY INSURANCE							
587	PRODUCTION - STEAM	412,596	0	412,596	0	412,596	0	412,596
588	ALL RISK & MISCELLANEOUS	3,513,012	1,277,597	4,790,609	40,547	4,831,156	98,991	4,930,147
589	TOTAL ACCOUNT 924	3,925,608	1,277,597	5,203,205	40,547	5,243,752	98,991	5,342,743
590	925 / INJURIES & DAMAGES	6,544,597	5,309,456	11,854,054	14,295	11,868,349	8,363	11,876,713
591	926 / EMPLOYEE PENSIONS & BENEFITS	36,409,743	(16,837)	36,392,906	3,281,778	39,674,684	1,919,922	41,594,606
592	EMPLOYEE PENSIONS & BENEFITS - OREGON	880,053	0	880,053	0	880,053	0	880,053
593	EMPLOYEE PENSIONS & BENEFITS - IDAHO	17,153,713	0	17,153,713	18,028,665	35,182,378	0	35,182,378
594	EMPLOYEE PENSIONS AND BENEFITS - FERC	0	0	0	0	0	0	0
595	927 / FRANCHISE REQUIREMENTS	0	0	0	0	0	0	0
596	928 / REGULATORY COMMISSION EXPENSES							
597	928.101 / FERC ADMIN ASSESS & SECURITIES							
598	CAPACITY RELATED	2,826,830	0	2,826,830	0	2,826,830	0	2,826,830
599	ENERGY RELATED	963,911	0	963,911	0	963,911	0	963,911
600	FERC RATE CASE	0	0	0	0	0	0	0
601	FERC ORDER 472	963,867	0	963,867	0	963,867	0	963,867
602	FERC OTHER	109,055	0	109,055	0	109,055	0	109,055
603	FERC - OREGON HYDRO FEE	271,717	0	271,717	0	271,717	0	271,717
604	SEC EXPENSES	0	0	0	0	0	0	0
605	IDAHO PUC -RATE CASE	0	0	0	0	0	0	0
606	-OTHER	36,197	0	36,197	296,576	332,773	0	332,773
607	OREGON PUC -RATE CASE	0	0	0	0	0	0	0
608	-OTHER	1,374,230	(65,075)	1,309,155	0	1,309,155	0	1,309,155
609	TOTAL ACCOUNT 928	6,545,807	(65,075)	6,480,732	296,576	6,777,308	0	6,777,308
610	929 / DUPLICATE CHARGES	0	0	0	0	0	0	0
611	930.1 / GENERAL ADVERTISING	491,473	(491,473)	0	0	0	0	0
612	930.2 / MISCELLANEOUS EXPENSES	4,378,924	(365,067)	4,013,857	20,958	4,034,815	12,261	4,047,076
613	931 / RENTS	0	0	0	0	0	0	0
614	TOTAL ADM & GEN OPERATION	160,859,406	(20,978,844)	139,880,562	35,004,113	174,884,676	3,945,258	178,829,934
615	PLUS:			0		0		0
616	935 / GENERAL PLANT MAINTENANCE	7,877,237	(826)	7,876,411	132,761	8,009,173	65,032	8,074,205
617	416 / MERCHANDISING EXPENSE	0	4,701,875	4,701,875	0	4,701,875	0	4,701,875
618	TOTAL OPER & MAINT EXPENSES	1,103,041,646	(392,959,807)	710,081,839	210,696,109	920,777,948	9,636,652	930,414,600



**IDAHO POWER COMPANY  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
619	<b>TABLE 6-DEPRECIATION &amp; AMORTIZATION EXPENSE</b>							
620								
621	DEPRECIATION EXPENSE							
622	310-316 / STEAM PRODUCTION	33,503,186	(24,062,614)	9,440,573	(272,656)	9,167,916	436,859	9,604,775
623	330-336 / HYDRAULIC PRODUCTION	23,889,746	0	23,889,746	1,198,104	25,087,850	271,290	25,359,140
624	340-346 / OTHER PRODUCTION-BASELOAD	12,299,790	0	12,299,790	1,286,377	13,586,167	228,635	13,814,802
625	340-346 / OTHER PRODUCTION-PEAKERS	5,496,313	0	5,496,313	574,834	6,071,146	102,168	6,173,315
626	TOTAL PRODUCTION PLANT	75,189,035	(24,062,614)	51,126,421	2,786,659	53,913,080	1,038,951	54,952,032
627								
628	TRANSMISSION PLANT							
629	350 / LAND & LAND RIGHTS	402,759	0	402,759	9,304	412,063	4,292	416,355
630	352 / STRUCTURES & IMPROVEMENTS	1,774,142	(15,531)	1,758,611	150,258	1,908,869	12,023	1,920,891
631	353 / STATION EQUIPMENT	10,539,412	(506,744)	10,032,668	164,793	10,197,461	94,357	10,291,818
632	354 / TOWERS & FIXTURES	2,779,736	0	2,779,736	59,977	2,839,713	50,452	2,890,165
633	355 / POLES & FIXTURES	5,828,633	0	5,828,633	201,372	6,030,005	125,434	6,155,439
634	356 / OVERHEAD CONDUCTORS & DEVICES	3,898,386	0	3,898,386	143,934	4,042,321	56,057	4,098,377
635	359 / ROADS & TRAILS	2,693	0	2,693	(0)	2,693	0	2,693
636	TOTAL TRANSMISSION PLANT	25,225,761	(522,275)	24,703,487	729,638	25,433,125	342,614	25,775,739
637								
638	DISTRIBUTION PLANT							
639	360 / LAND & LAND RIGHTS	29,090	0	29,090	886	29,976	952	30,928
640	361 / STRUCTURES & IMPROVEMENTS	1,184,766	0	1,184,766	143,782	1,328,548	64,736	1,393,285
641	362 / STATION EQUIPMENT	5,922,824	0	5,922,824	568,630	6,491,454	270,474	6,761,927
642	363 / STORAGE BATTERY EQUIPMENT	0	0	0	2,791,254	2,791,254	5,948,773	8,740,027
643	364 / POLES, TOWERS & FIXTURES	6,052,387	0	6,052,387	455,842	6,508,229	144,277	6,652,506
644	365 / OVERHEAD CONDUCTORS & DEVICES	3,444,811	0	3,444,811	177,899	3,622,711	65,113	3,687,824
645	366 / UNDERGROUND CONDUIT	1,243,741	0	1,243,741	53,049	1,296,790	31,029	1,327,818
646	367 / UNDERGROUND CONDUCTORS & DEVICES	7,181,015	0	7,181,015	485,222	7,666,237	264,991	7,931,228
647	368 / LINE TRANSFORMERS	13,453,992	0	13,453,992	833,610	14,287,602	272,764	14,560,366
648	369 / SERVICES	1,123,543	0	1,123,543	32,824	1,156,367	7,443	1,163,810
649	370 / METERS	5,564,490	0	5,564,490	198,384	5,762,874	146,055	5,908,929
650	371 / INSTALLATIONS ON CUSTOMER PREMISES	206,196	0	206,196	(12,893)	193,303	77	193,380
651	373 / STREET LIGHTING SYSTEMS	188,574	0	188,574	20,297	208,871	8,584	217,455
652	TOTAL DISTRIBUTION PLANT	45,595,429	0	45,595,429	5,748,787	51,344,216	7,225,268	58,569,484

**IDAHO POWER COMPANY**  
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2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
653	<b>TABLE 6-DEPRECIATION &amp; AMORTIZATION EXPENSE</b>							
654								
655	GENERAL PLANT							
656	389 / LAND & LAND RIGHTS	0	0	0	0	0	0	0
657	390 / STRUCTURES & IMPROVEMENTS	3,110,207	0	3,110,207	204,165	3,314,372	52,430	3,366,802
658	391 / OFFICE FURNITURE & EQUIPMENT	6,842,286	0	6,842,286	114,792	6,957,077	35,197	6,992,274
659	392 / TRANSPORTATION EQUIPMENT	72,928	0	72,928	(484)	72,444	0	72,444
660	393 / STORES EQUIPMENT	187,311	0	187,311	27,781	215,091	12,326	227,417
661	394 / TOOLS, SHOP & GARAGE EQUIPMENT	672,473	0	672,473	124,566	797,039	11,606	808,645
662	395 / LABORATORY EQUIPMENT	775,044	0	775,044	(394)	774,650	6,918	781,567
663	396 / POWER OPERATED EQUIPMENT	0	0	0	0	0	0	0
664	397 / COMMUNICATIONS EQUIPMENT	5,434,341	0	5,434,341	58,229	5,492,570	122,498	5,615,068
665	398 / MISCELLANEOUS EQUIPMENT	772,904	0	772,904	51,452	824,356	36,437	860,793
666	TOTAL GENERAL PLANT	17,867,493	0	17,867,493	580,107	18,447,600	277,411	18,725,011
667								
668	TOTAL DEPRECIATION EXPENSE	163,877,718	(24,584,889)	139,292,829	9,845,191	149,138,020	8,884,245	158,022,265
669								
670	DEPRECIATION ON DISALLOWED COSTS	(296,299)	0	(296,299)	0	(296,299)	0	(296,299)
671	TOTAL DEPRECIATION EXPENSE	163,581,418	(24,584,889)	138,996,530	9,845,191	148,841,721	8,884,245	157,725,966
672								
673	AMORTIZATION EXPENSE							
674	302/FRANCHISES AND CONSENTS	1,271,927	0	1,271,927	219,101	1,491,028	52,515	1,543,543
675	303/MISCELLANEOUS INTANGIBLE PLANT	3,979,986	0	3,979,986	399,545	4,379,530	43,225	4,422,755
676	ADJUSTMENTS, GAINS & LOSSES	15,018	0	15,018	0	15,018	0	15,018
677	TOTAL AMORTIZATION EXPENSE	5,266,930	0	5,266,930	618,646	5,885,576	95,740	5,981,316
678								
679	TOTAL DEPRECIATION & AMORTIZATION EXP	168,848,348	(24,584,889)	144,263,460	10,463,837	154,727,297	8,979,985	163,707,282
680								

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
681	<b>TABLE 7-TAXES OTHER THAN INCOME TAXES</b>							
682								
683	TAXES OTHER THAN INCOME							
684	FEDERAL TAXES							
685	FICA	18,219,357	(18,219,357)	0	0	0	0	0
686	FUTA	94,333	(94,333)	0	0	0	0	0
687	LESS PAYROLL DEDUCTION	(18,558,238)	18,558,238	0	0	0	0	0
688								
689	STATE TAXES							
690	AD VALOREM TAXES							
691	JIM BRIDGER	1,282,348	(1,282,348)	0	0	0	0	0
692	VALMY	314,445	(314,445)	0	0	0	0	0
693	OTHER-PRODUCTION PLANT	6,670,284	0	6,670,284	1,036,086	7,706,370	454,948	8,161,318
694	OTHER-TRANSMISSION PLANT	5,986,892	0	5,986,892	839,735	6,826,628	0	6,826,628
695	OTHER-DISTRIBUTION PLANT	7,961,398	0	7,961,398	1,221,533	9,182,931	0	9,182,931
696	OTHER-GENERAL PLANT	1,522,499	0	1,522,499	248,508	1,771,006	43,286	1,814,292
697	SUB-TOTAL	23,737,866	(1,596,793)	22,141,073	3,345,862	25,486,936	498,234	25,985,170
698								
699	LICENSES - HYDRO PROJECTS	4,240	0	4,240	0	4,240	0	4,240
700								
701	REGULATORY COMMISSION FEES							
702	STATE OF IDAHO	2,616,251	0	2,616,251	0	2,616,251	0	2,616,251
703	STATE OF OREGON	290,260	0	290,260	95,251	385,511	0	385,511
704								
705	FRANCHISE TAXES							
706	STATE OF OREGON	890,161	0	890,161	62,839	953,000	0	953,000
707								
708	OTHER STATE TAXES							
709	UNEMPLOYMENT TAXES	244,547	(244,547)	0	0	0	0	0
710	HYDRO GENERATION KWH TAX	982,665	0	982,665	907,247	1,889,911	0	1,889,911
711	IRRIGATION-PIC	180,233	0	180,233	148,058	328,291	0	328,291
712								
713	TOTAL TAXES OTHER THAN INCOME	28,701,676	(1,596,793)	27,104,883	4,559,257	31,664,141	498,234	32,162,375

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
714	<b>TABLE 8-REGULATORY DEBITS &amp; CREDITS</b>							
715	REGULATORY DEBITS/CREDITS							
716	STATE OF IDAHO	1,450,259	(173,640)	1,276,619	1,865,167	3,141,786	0	3,141,786
717	STATE OF OREGON	303,059	0	303,059	0	303,059	0	303,059
718								
719	TOTAL REGULATORY DEBITS/CREDITS	1,753,318	(173,640)	1,579,678	1,865,167	3,444,845	0	3,444,845
720								
721								

**IDAHO POWER COMPANY**  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
722	<b>TABLE 9-INCOME TAXES</b>							
723								
724	410/411 NET PROVISION FOR DEFERRED INCOME TAXES							
725	ACCOUNT #282 - RELATED	(34,483,220)	0	(34,483,220)	17,879,031	(16,604,189)	0	(16,604,189)
726	ACCOUNT #190 & #283 - RELATED	23,654,934	0	23,654,934	(24,923,968)	(1,269,034)	0	(1,269,034)
727	TOTAL NET PROVISION FOR DEFERRED INCOME TAXES	(10,828,286)	0	(10,828,286)	(7,044,937)	(17,873,223)	0	(17,873,223)
728								
729	411.4 - INVESTMENT TAX CREDIT ADJUSTMENT	5,825,740	0	5,825,740	19,188,438	25,014,178	0	25,014,178
730								
731	SUMMARY OF INCOME TAXES							
732								
733	TOTAL FEDERAL INCOME TAX	32,209,533	4,643,860	36,853,393	6,099,210	42,952,604	(3,773,276)	39,179,328
734								
735	STATE INCOME TAX							
736	STATE OF IDAHO	10,909,865	1,317,407	12,227,272	(15,538,391)	(3,311,119)	(1,070,433)	(4,381,551)
737	STATE OF OREGON	882,355	70,575	952,930	(204,112)	748,818	(57,345)	691,473
738	OTHER STATES	26,941	23,525	50,466	204,705	255,172	(19,115)	236,057
739	TOTAL STATE INCOME TAXES	11,819,161	1,411,508	13,230,668	(15,537,797)	(2,307,129)	(1,146,892)	(3,454,021)

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	Description	Actual	Adjustments	Base	Adjustment	Test Year	Adjustment	Test Year
740	<b>TABLE 10-CALCULATION OF FEDERAL INCOME TAX</b>							0
741	OPERATING REVENUES	1,637,127,982	(344,590,231)	1,292,537,752	172,540,794	1,465,078,546	0	1,465,078,546
742						0		0
743	OPERATING EXPENSES					0		0
744	OPERATION & MAINTENANCE	1,103,041,646	(392,959,807)	710,081,839	210,696,109	920,777,948	9,636,652	930,414,600
745	DEPRECIATION EXPENSE	163,581,418	(24,584,889)	138,996,530	9,845,191	148,841,721	8,884,245	157,725,966
746	AMORTIZATION OF LIMITED TERM PLANT	5,266,930	0	5,266,930	618,646	5,885,576	95,740	5,981,316
747	TAXES OTHER THAN INCOME	28,701,676	(1,596,793)	27,104,883	4,559,257	31,664,141	498,234	32,162,375
748	REGULATORY DEBITS/CREDITS	1,753,318	(173,640)	1,579,678	1,865,167	3,444,845	0	3,444,845
749	TOTAL OPERATING EXPENSES	1,302,344,989	(419,315,129)	883,029,860	227,584,370	1,110,614,231	19,114,872	1,129,729,102
750								0
751	BOOK-TAX ADJUSTMENT	0	0	0	0	0	0	0
752								0
753	INCOME BEFORE TAX ADJUSTMENTS	334,782,994	74,724,898	409,507,891	(55,043,576)	354,464,315	(19,114,872)	335,349,443
754								
755	INCOME STATEMENT ADJUSTMENTS							
756	INTEREST EXPENSE / SYNCHRONIZATION	102,955,312	0	102,955,312	12,936,098	115,891,410	0	115,891,410
757								
758	NET OPERATING INCOME BEFORE TAXES	231,827,681	74,724,898	306,552,579	(67,979,674)	238,572,905	(19,114,872)	219,458,033
759								
760	TOTAL STATE INCOME TAXES (ALLOWED)	13,899,195	1,411,508	15,310,703	(17,617,832)	(2,307,129)	(1,146,892)	(3,454,021)
761								
762	NET FEDERAL INCOME AFTER STATE INCOME TAXES	217,928,486	73,313,390	291,241,876	(50,361,842)	240,880,034	(17,967,979)	222,912,055
763								
764	FEDERAL TAX AT 21 PERCENT	45,764,982	15,395,812	61,160,794	(10,575,987)	50,584,807	(3,773,276)	46,811,531
765	OTHER CURRENT TAX ADJUSTMENTS	(4,913,431)	0	(4,913,431)	4,913,431	0	0	0
766	PRIOR YEAR TAX ADJUSTMENT	(9,831,485)	0	(9,831,485)	9,831,485	0	0	0
767								
768	TOTAL FEDERAL INCOME TAX BEFORE OTHER ADJUSTMENTS	31,020,066	15,395,812	46,415,878	4,168,929	50,584,807	(3,773,276)	46,811,531
769								
770	OTHER TAX ADJUSTMENTS							
771	ALLOWANCE FOR AFUDC	51,199,770	(51,199,770)	0	0	0	0	0
772	FEDERAL INCOME TAX ADJUSTMENTS - PLANT	68,194,087	0	68,194,087	(64,742,865)	3,451,222	0	3,451,222
773	FEDERAL INCOME TAX ADJUSTMENTS - OTHER	(113,729,727)	0	(113,729,727)	123,877,537	10,147,810	0	10,147,810
774	SUM OF OTHER ADJUSTMENTS	5,664,130	(51,199,770)	(45,535,640)	59,134,672	13,599,032	0	13,599,032
775	FEDERAL TAX ON OTHER TAX ADJ AT 21 PERCENT	1,189,467	(10,751,952)	(9,562,484)	12,418,281	2,855,797	0	2,855,797
776	FEDERAL GENERAL BUSINESS CREDITS	0	0	0	10,488,000	10,488,000	0	10,488,000
777								
778	TOTAL FEDERAL INCOME TAX	32,209,533	4,643,860	36,853,393	6,099,210	42,952,604	(3,773,276)	39,179,328

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2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
779	<b>TABLE 11-OREGON STATE INCOME TAX</b>							
780								
781	NET OPERATING INCOME BEFORE TAXES - OREGON	231,827,681	74,724,898	306,552,579	(67,979,674)	238,572,905	(19,114,872)	219,458,033
782								
783	ALLOWANCE FOR AFUDC	51,199,770	(51,199,770)	0	0	0	0	0
784	STATE INCOME TAX ADJUSTMENTS - PLANT	68,194,087	0	68,194,087	(64,742,865)	3,451,222	0	3,451,222
785	STATE INCOME TAX ADJUSTMENTS - OTHER	(113,729,727)	0	(113,729,727)	123,877,537	10,147,810	0	10,147,810
786	ADD: OTHER DEDUCTION	0	0	0	0	0	0	0
787								
788	TOTAL STATE INCOME TAX ADJUSTMENTS - OREGON	5,664,130	(51,199,770)	(45,535,640)	59,134,672	13,599,032	0	13,599,032
789								
790	INCOME SUBJECT TO OREGON TAX	237,491,811	23,525,128	261,016,939	(8,845,002)	252,171,937	(19,114,872)	233,057,065
791								
792	IERCO TAXABLE INCOME	26,216,557	0	26,216,557	(23,216,557)	3,000,000	0	3,000,000
793	BONUS DEPRECIATION & OTHER OREGON ADJ	(5,767,076)	0	(5,767,076)	201,044	(5,566,032)	0	(5,566,032)
794	OTHER	0	0	0	0	0	0	0
795								
796	TOTAL STATE TAXABLE INCOME - OREGON	257,941,292	23,525,128	281,466,420	(31,860,515)	249,605,905	(19,114,872)	230,491,033
797	APPORTIONMENT FACTOR (0.045454550)	11,724,605	1,069,324	12,793,929	(1,448,205)	11,345,724	(868,858)	10,476,866
798	POST APPORTIONMENT M ITEMS	0	0	0	0	0	0	0
799	TOTAL TAXABLE INCOME - OREGON	11,724,605	1,069,324	12,793,929	(1,448,205)	11,345,724	(868,858)	10,476,866
800								
801	OREGON TAX AT 6.6 PERCENT	773,824	70,575	844,399	(95,582)	748,818	(57,345)	691,473
802	LESS: INVESTMENT TAX CREDIT	0	0	0	0	0	0	0
803								
804	STATE INCOME TAX ALLOWED - OREGON	773,824	70,575	844,399	(95,582)	748,818	(57,345)	691,473
805	ADD : OR CAT TAX	274,802	0	274,802	(274,802)	0	0	0
806	PRIOR YEARS' TAX ADJUSTMENT	(166,271)	0	(166,271)	166,271	0	0	0
807								
808	STATE INCOME TAX PAID - OREGON	882,355	70,575	952,930	(204,112)	748,818	(57,345)	691,473

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
809	<b>TABLE 12-IDAHO STATE INCOME TAX</b>							
810								0
811	NET OPERATING INCOME BEFORE TAXES - IDAHO	231,827,681	74,724,898	306,552,579	(67,979,674)	238,572,905	(19,114,872)	219,458,033
812								
813	ALLOWANCE FOR AFUDC	51,199,770	(51,199,770)	0	0	0	0	0
814	STATE INCOME TAX ADJUSTMENTS - PLANT	68,194,087	0	68,194,087	(64,742,865)	3,451,222	0	3,451,222
815	STATE INCOME TAX ADJUSTMENTS - OTHER	(113,729,727)	0	(113,729,727)	123,877,537	10,147,810	0	10,147,810
816								0
817	INCOME SUBJECT TO IDAHO TAX	237,491,811	23,525,128	261,016,939	(8,845,002)	252,171,937	(19,114,872)	233,057,065
818								0
819	IERCO TAXABLE INCOME	26,216,557	0	26,216,557	(23,216,557)	3,000,000	0	3,000,000
820	BONUS DEPRECIATION ADJUSTMENT	(34,035,818)	0	(34,035,818)	4,433,193	(29,602,625)	0	(29,602,625)
821	OTHER	0	0	0	0	0	0	0
822	TOTAL STATE TAXABLE INCOME - IDAHO	229,672,550	23,525,128	253,197,678	(27,628,366)	225,569,312	(19,114,872)	206,454,440
823	APPORTIONMENT FACTOR (.965517241)	221,752,807	22,713,917	244,466,724	(26,675,664)	217,791,060	(18,455,738)	199,335,322
824	POST APPORTIONMENT SCHEDULE M	0	0	0	0	0	0	0
825	TOTAL TAXABLE INCOME - IDAHO	221,752,807	22,713,917	244,466,724	(26,675,664)	217,791,060	(18,455,738)	199,335,322
826	IDAHO TAX AT 5.8 PERCENT	12,861,663	1,317,407	14,179,070	(1,547,189)	12,631,881	(1,070,433)	11,561,449
827	LESS: INVESTMENT TAX CREDIT	0	0	0	15,943,000	15,943,000	0	15,943,000
828								
829	STATE INCOME TAX ALLOWED - IDAHO	12,861,663	1,317,407	14,179,070	(17,490,189)	(3,311,119)	(1,070,433)	(4,381,551)
830	ADD : CURRENT TAX ADJUSTMENT	(1,951,798)	0	(1,951,798)	1,951,798	0	0	0
831	PRIOR YEARS' TAX ADJUSTMENT	0	0	0	0	0	0	0
832	STATE INCOME TAX PAID - IDAHO	10,909,865	1,317,407	12,227,272	(15,538,391)	(3,311,119)	(1,070,433)	(4,381,551)
833								
834	<b>OTHER STATE INCOME TAX</b>							
835	INCOME SUBJECT TO TAX	237,491,811	23,525,128	261,016,939	(8,845,002)	252,171,937	(19,114,872)	233,057,065
836								
837	IERCO TAXABLE INCOME	26,216,557	0	26,216,557	(23,216,557)	3,000,000	0	3,000,000
838	BONUS DEPRECIATION ADJUSTMENT	0	0	0	0	0	0	0
839	OTHER	0	0	0	0	0	0	0
840	TOTAL TAXABLE INCOME-OTHER STATES	263,708,368	23,525,128	287,233,496	(32,061,559)	255,171,937	(19,114,872)	236,057,065
841	APPORTIONMENT FACTOR (1.0)	263,708,368	23,525,128	287,233,496	(32,061,559)	255,171,937	(19,114,872)	236,057,065
842	POST APPORTIONMENT M	0	0	0	0	0	0	0
843	TAXABLE INCOME	263,708,368	23,525,128	287,233,496	(32,061,559)	255,171,937	(19,114,872)	236,057,065
844	OTHER TAX AT 0.1 PERCENT	263,708	23,525	287,233	(32,062)	255,172	(19,115)	236,057
845	ADD : CURRENT YEAR'S TAX DEFICIENCY	(236,767)	0	(236,767)	236,767	0	0	0
846	PRIOR YEARS' TAX ADJUSTMENT	0	0	0	0	0	0	0
847	OTHER STATES' INCOME TAX PAID	26,941	23,525	50,466	204,705	255,172	(19,115)	236,057



**IDAHO POWER COMPANY  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
848	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
849	STEAM POWER GENERATION							
850	OPERATION							
851	500 / SUPERVISION & ENGINEERING	266,133		266,133		266,133		266,133
852	501 / FUEL	2,559,614		2,559,614		2,559,614		2,559,614
853	502 / STEAM EXPENSES			0				0
854	LABOR	1,607,750		1,607,750		1,607,750		1,607,750
855	OTHER	0		0		0		0
856						1,607,750		1,607,750
857	505 / ELECTRIC EXPENSES			0				0
858	LABOR	626,112		626,112		626,112		626,112
859	OTHER	0		0		0		0
860						626,112		626,112
861	506 / MISCELLANEOUS EXPENSES	3,352,418		3,352,418		3,352,418		3,352,418
862	507 / RENTS	0		0		0		0
863	STEAM OPERATION EXPENSES	8,412,027		8,412,027		8,412,027		8,412,027
864								
865	MAINTENANCE							
866	510 / SUPERVISION & ENGINEERING	0		0		0		0
867	511 / STRUCTURES	658		658		658		658
868	512 / BOILER PLANT			0				0
869	LABOR	3,983,710		3,983,710		3,983,710		3,983,710
870	OTHER	0		0		0		0
871	TOTAL ACCOUNT 512					3,983,710		3,983,710
872	513 / ELECTRIC PLANT			0				0
873	LABOR	1,522,637		1,522,637		1,522,637		1,522,637
874	OTHER	0		0		0		0
875	TOTAL ACCOUNT 513					1,522,637		1,522,637
876	514 / MISCELLANEOUS STEAM PLANT	2,441,874		2,441,874		2,441,874		2,441,874
877	STEAM MAINTENANCE EXPENSES	7,948,879		7,948,879		7,948,879		7,948,879
878	TOTAL STEAM GENERATION EXPENSES	16,360,906		16,360,906		16,360,906	0	16,360,906
879								

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
880	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
881	HYDRAULIC POWER GENERATION							
882	OPERATION							
883	535 / SUPERVISION & ENGINEERING	4,235,258		4,235,258		4,235,258		4,235,258
884	536 / WATER FOR POWER	866,414		866,414		866,414		866,414
885	537 / HYDRAULIC EXPENSES	6,262,192		6,262,192		6,262,192		6,262,192
886	538 / ELECTRIC EXPENSES							
887	LABOR	1,510,454		1,510,454		1,510,454		1,510,454
888	OTHER	0		0		0		0
889	TOTAL ACCOUNT 538	1,510,454		1,510,454		1,510,454		1,510,454
890	539 / MISCELLANEOUS EXPENSES	3,401,219		3,401,219		3,401,219		3,401,219
891	540 / RENTS	0		0		0		0
892	HYDRAULIC OPERATION EXPENSES	17,785,991		17,785,991		16,275,537		16,275,537
893								
894	MAINTENANCE							
895	541 / SUPERVISION & ENGINEERING	90,192		90,192		90,192		90,192
896	542 / STRUCTURES	577,669		577,669		577,669		577,669
897	543 / RESERVOIRS, DAMS & WATERWAYS	254,872		254,872		254,872		254,872
898	544 / ELECTRIC PLANT			0				0
899	LABOR	1,799,397		1,799,397		1,799,397		1,799,397
900	OTHER	0		0		0		0
901	TOTAL ACCOUNT 544	1,799,397		1,799,397		1,799,397		1,799,397
902	545 / MISCELLANEOUS HYDRAULIC PLANT	2,163,612		2,163,612		2,163,612		2,163,612
903	HYDRAULIC MAINTENANCE EXPENSES	4,885,742		4,885,742		4,885,742		4,885,742
904	TOTAL HYDRAULIC GENERATION EXPENSES	22,671,733		22,671,733		21,161,279		21,161,279

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
905	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
906	OTHER POWER GENERATION							
907	OPERATION							
908	546 / SUPERVISION & ENGINEERING	516,722		516,722		516,722		516,722
909	547 / FUEL	0		0		0		0
910	548 / GENERATING EXPENSES			0				0
911	LABOR	3,234,939		3,234,939		3,234,939		3,234,939
912	OTHER	0		0		0		0
913	TOTAL ACCOUNT 548			0		3,234,939		3,234,939
914	549 / MISCELLANEOUS EXPENSES	370,607		370,607		370,607		370,607
915	550 / RENTS	0		0		0		0
916	OTHER POWER OPER EXPENSES	4,122,267		4,122,267		4,122,267		4,122,267
917								
918	MAINTENANCE							
919	551 / SUPERVISION & ENGINEERING	0		0		0		0
920	552 / STRUCTURES	43,046		43,046		43,046		43,046
921	553 / GENERATING & ELECTRIC PLANT			0				0
922	LABOR	56,825		56,825		56,825		56,825
923	OTHER			0		0		0
924	TOTAL ACCOUNT 553			0		56,825		56,825
925	554 / MISCELLANEOUS EXPENSES	690,424		690,424		690,424		690,424
926	OTHER POWER MAINT EXPENSES	790,295		790,295		790,295		790,295
927	TOTAL OTHER POWER GENERATION EXP	4,912,562		4,912,562		4,912,562		4,912,562
928								
929	OTHER POWER SUPPLY EXPENSE							
930	555.0 / PURCHASED POWER	0		0		0		0
931	555.1 / COGENERATION & SMALL POWER PROD			0				0
932	CAPACITY RELATED	0		0		0		0
933	ENERGY RELATED	0		0		0		0
934	TOTAL 555.1/CSPP							
935	555/TOTAL							
936	556 / LOAD CONTROL & DISPATCHING EXPENSES	0		0		0		0
937	557 / OTHER EXPENSES	4,495,330		4,495,330		4,495,330		4,495,330
938	TOTAL OTHER POWER SUPPLY EXPENSES	4,495,330		4,495,330		4,495,330		4,495,330
939				0				0
940	TOTAL PRODUCTION EXPENSES	48,440,532		48,440,532		46,930,078		46,930,078

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
941	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
942	TRANSMISSION EXPENSES							
943	OPERATION							
944	560 / SUPERVISION & ENGINEERING	2,380,639		2,380,639		2,380,639		2,380,639
945	561 / LOAD DISPATCHING	3,053,979		3,053,979		3,053,979		3,053,979
946	562 / STATION EXPENSES	1,883,621		1,883,621		1,883,621		1,883,621
947	563 / OVERHEAD LINE EXPENSES	428,401		428,401		428,401		428,401
948	565 / TRANSMISSION OF ELECTRICITY BY OTHERS	0		0		0		0
949	566 / MISCELLANEOUS EXPENSES	0		0		0		0
950	567 / RENTS	0		0		0		0
951	TOTAL TRANSMISSION OPERATION	7,746,639		7,746,639		7,746,639		7,746,639
952				0				0
953	MAINTENANCE			0				0
954	568 / SUPERVISION & ENGINEERING	90,949		90,949		90,949		90,949
955	569 / STRUCTURES	1,442,019		1,442,019		1,442,019		1,442,019
956	570 / STATION EQUIPMENT	2,327,169		2,327,169		2,327,169		2,327,169
957	571 / OVERHEAD LINES	865,811		865,811		865,811		865,811
958	573 / MISCELLANEOUS PLANT	3,520		3,520		3,520		3,520
959	TOTAL TRANSMISSION MAINTENANCE	4,729,468		4,729,468		4,729,468		4,729,468
960				0				0
961	TOTAL TRANSMISSION EXPENSES	12,476,107		12,476,107		12,476,107		12,476,107

**IDAHO POWER COMPANY  
DEVELOPMENT OF SYSTEM REVENUE REQUIREMENT  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
962	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
963	DISTRIBUTION EXPENSES							
964	OPERATION							
965	580 / SUPERVISION & ENGINEERING	2,995,909		2,995,909		2,995,909		2,995,909
966	581 / LOAD DISPATCHING	4,166,909		4,166,909		4,166,909		4,166,909
967	582 / STATION EXPENSES	983,432		983,432		983,432		983,432
968	583 / OVERHEAD LINE EXPENSES	3,611,849		3,611,849		3,611,849		3,611,849
969	584 / UNDERGROUND LINE EXPENSES	1,372,655		1,372,655		1,372,655		1,372,655
970	585 / STREET LIGHTING & SIGNAL SYSTEMS	20,365		20,365		20,365		20,365
971	586 / METER EXPENSES	4,176,379		4,176,379		4,176,379		4,176,379
972	587 / CUSTOMER INSTALLATIONS EXPENSE	736,676		736,676		736,676		736,676
973	588 / MISCELLANEOUS EXPENSES	2,911,186		2,911,186		2,911,186		2,911,186
974	589 / RENTS	0		0		0		0
975	TOTAL DISTRIBUTION OPERATION	20,975,360		20,975,360		20,975,360		20,975,360
976								
977	MAINTENANCE							
978	590 / SUPERVISION & ENGINEERING	9,353		9,353		9,353		9,353
979	591 / STRUCTURES	0		0		0		0
980	592 / STATION EQUIPMENT	2,716,642		2,716,642		2,716,642		2,716,642
981	593 / OVERHEAD LINES	5,201,009		5,201,009		5,201,009		5,201,009
982	594 / UNDERGROUND LINES	304,799		304,799		304,799		304,799
983	595 / LINE TRANSFORMERS	25,793		25,793		25,793		25,793
984	596 / STREET LIGHTING & SIGNAL SYSTEMS	123,794		123,794		123,794		123,794
985	597 / METERS	678,112		678,112		678,112		678,112
986	598 / MISCELLANEOUS PLANT	79,964		79,964		79,964		79,964
987	TOTAL DISTRIBUTION MAINTENANCE	9,139,466		9,139,466		9,139,466		9,139,466
988	TOTAL DISTRIBUTION EXPENSES	30,114,827		30,114,827		30,114,827		30,114,827
989								
990	CUSTOMER ACCOUNTING EXPENSES							
991	901 / SUPERVISION	705,017		705,017		705,017		705,017
992	902 / METER READING	1,267,888		1,267,888		1,267,888		1,267,888
993	903 / CUSTOMER RECORDS & COLLECTIONS	9,731,713		9,731,713		9,731,713		9,731,713
994	904 / UNCOLLECTIBLE ACCOUNTS	0		0		0		0
995	905 / MISC EXPENSES	0		0		0		0
996	TOTAL CUSTOMER ACCOUNTING EXPENSES	11,704,618		11,704,618		11,704,618		11,704,618
997								
998	CUSTOMER SERVICES & INFORMATION EXPENSES							
999	907 / SUPERVISION	828,671		828,671		828,671		828,671
1000	908 / CUSTOMER ASSISTANCE	4,679,331		4,679,331		4,679,331		4,679,331
1001	908 / DSM RIDER	0		0		0		0
1002	909 / INFORMATION & INSTRUCTIONAL	0		0		0		0
1003	910 / MISCELLANEOUS EXPENSES	308,799		308,799		308,799		308,799
1004	TOTAL CUST SERV & INFORMATN EXPENSES	5,816,801		5,816,801		5,816,801		5,816,801

**IDAHO POWER COMPANY**  
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2		2022	2022 Actual	2022	Forecast	2023 Unadjusted	Annualizing	2023
3	<u>Description</u>	<u>Actual</u>	<u>Adjustments</u>	<u>Base</u>	<u>Adjustment</u>	<u>Test Year</u>	<u>Adjustment</u>	<u>Test Year</u>
1005	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>							
1006	ADMINISTRATIVE & GENERAL EXPENSES							
1007	920 / ADMINISTRATIVE & GENERAL SALARIES	53,511,744		53,511,744		53,511,744		53,511,744
1008	921 / OFFICE SUPPLIES	228,890		228,890		228,890		228,890
1009	922 / ADMIN & GENERAL EXPENSES TRANSFERRED-CR	0		0		0		0
1010	923 / OUTSIDE SERVICES	0		0		0		0
1011	924 / PROPERTY INSURANCE			0				0
1012	PRODUCTION - STEAM	0		0		0		0
1013	ALL RISK & MISCELLANEOUS	378,934		378,934		378,934		378,934
1014	TOTAL ACCOUNT 924							
1015	925 / INJURIES & DAMAGES	132,355		132,355		132,355		132,355
1016	926 / EMPLOYEE PENSIONS & BENEFITS	0		0		0		0
1017	927 / FRANCHISE REQUIREMENTS	0		0		0		0
1018	928 / REGULATORY COMMISSION EXPENSES							
1019	928.101 / FERC ADMIN ASSESS & SECURITIES							
1020	CAPACITY RELATED	0		0		0		0
1021	ENERGY RELATED	0		0		0		0
1022	928.101 / FERC ORDER 472	0		0		0		0
1023	928.101 / FERC MISCELLANEOUS	0		0		0		0
1024	928.102 FERC RATE CASE	0		0		0		0
1025	928.104 / FERC OREGON HYDRO	0		0		0		0
1026	SEC EXPENSES	0		0		0		0
1027	928.202 / IDAHO PUC -RATE CASE	0		0		0		0
1028	928.203 / IDAHO PUC - OTHER	0		0		0		0
1029	928.301 / OREGON PUC - FILING FEES	0		0		0		0
1030	928.302 / OREGON PUC - RATE CASE	0		0		0		0
1031	928.303 / OREGON PUC - OTHER	0		0		0		0
1032	IPC/PUC JSS TRUE-UP ADJ	0		0		0		0
1033	TOTAL ACCOUNT 928							
1034	929 / DUPLICATE CHARGES	0		0		0		0
1035	930.1 / GENERAL ADVERTISING	0		0		0		0
1036	930.2 / MISCELLANEOUS EXPENSES	214,755		214,755		214,755		214,755
1037	931 / RENTS	0		0		0		0
1038	TOTAL ADM & GEN OPERATION	54,466,679		54,466,679		54,466,679	0	54,466,679
1039	PLUS:			0				0
1040	935 / GENERAL PLANT MAINTENANCE	1,038,440		1,038,440		1,038,440		1,038,440
1041	416 / MERCHANDISING EXPENSE	0		0		0		0
1042	TOTAL OPER & MAINT EXPENSES	164,058,004		164,058,004		162,547,550	0	162,547,550

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**NOE, DI  
TESTIMONY**

**EXHIBIT NO. 35**

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

<u>DESCRIPTION</u>	<u>ALLOC/ SOURCE</u>	<u>TOTAL SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
<b><u>SUMMARY OF RESULTS</u></b>				
<b><u>RATE OF RETURN UNDER PRESENT RATES</u></b>				
TOTAL COMBINED RATE BASE		4,092,522,974	3,912,569,823	179,953,152
OPERATING REVENUES				
FIRM JURISDICTIONAL SALES		1,346,676,681	1,293,009,840	53,666,841
SYSTEM OPPORTUNITY SALES		29,035,180	27,748,563	1,286,617
OTHER OPERATING REVENUES		89,366,685	85,891,627	3,475,058
TOTAL OPERATING REVENUES		1,465,078,546	1,406,650,030	58,428,516
OPERATING EXPENSES				
OPERATION & MAINTENANCE EXPENSES		930,414,600	888,823,963	41,590,637
DEPRECIATION EXPENSE		157,725,966	150,952,190	6,773,776
AMORTIZATION OF LIMITED TERM PLANT		5,981,316	5,725,400	255,916
TAXES OTHER THAN INCOME		32,162,375	29,601,331	2,561,044
REGULATORY DEBITS/CREDITS		3,444,845	3,141,786	303,059
PROVISION FOR DEFERRED INCOME TAXES		(17,873,223)	(17,124,938)	(748,285)
INVESTMENT TAX CREDIT ADJUSTMENT		25,014,178	23,926,476	1,087,702
FEDERAL INCOME TAXES		39,179,328	39,040,245	139,083
STATE INCOME TAXES		(3,454,021)	(2,828,435)	(625,586)
TOTAL OPERATING EXPENSES		1,172,595,364	1,121,258,018	51,337,346
OPERATING INCOME		292,483,181	285,392,012	7,091,169
ADD: IERCO OPERATING INCOME		1,841,118	1,759,534	81,584
CONSOLIDATED OPERATING INCOME		294,324,299	287,151,546	7,172,754
RATE OF RETURN UNDER PRESENT RATES		7.19%	7.34%	3.99%
<b><u>DEVELOPMENT OF REVENUE REQUIREMENTS</u></b>				
RATE OF RETURN @ 10.4% ROE		7.702%	7.702%	7.702%
RETURN		315,206,119	301,346,128	13,859,992
EARNINGS DEFICIENCY		20,881,820	14,194,582	6,687,238
ADD: CWIP (HELLS CANYON RELICENSING)	D10	6,815,472	6,537,444	278,028
EARNINGS DEFICIENCY WITH CWIP		27,697,292	20,732,026	6,965,266
NET-TO-GROSS TAX MULTIPLIER		1.347	1.347	1.347
REVENUE DEFICIENCY		37,297,728	27,918,161	9,379,567
ADD: VALMY REVENUE REQUIREMENT	CIDA	36,957,501	36,957,501	0
ADD: BRIDGER REVENUE REQUIREMENT	CIDA	67,579,174	67,579,174	0
LESS: BATTERY ADITC MITIGATION	CIDA	21,149,854	21,149,854	0
REVENUE DEFICIENCY WITH VALMY AND BRIDGER		120,684,548	111,304,981	9,379,567
FIRM JURISDICTIONAL RETAIL REVENUES		1,346,676,681	1,293,009,840	53,666,841
PERCENT INCREASE REQUIRED			8.61%	
SALES AND WHEELING REVENUES REQUIRED		1,467,361,229	1,404,314,821	63,046,408



**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

	ALLOD/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	IDAHO <u>RETAIL</u>	<u>OTHER</u>
2				
3	<u>DESCRIPTION</u>			
49	<b>SUMMARY OF RESULTS</b>			
50	<b>DEVELOPMENT OF RATE BASE COMPONENTS</b>			
51	ELECTRIC PLANT IN SERVICE			
52	INTANGIBLE PLANT	105,220,910	100,787,269	4,433,641
53	PRODUCTION PLANT	2,014,242,607	1,932,074,232	82,168,375
54	TRANSMISSION PLANT	1,355,473,916	1,300,089,883	55,384,033
55	DISTRIBUTION PLANT	2,423,399,384	2,309,047,394	114,351,990
56	GENERAL PLANT	517,244,492	494,752,941	22,491,551
57	TOTAL ELECTRIC PLANT IN SERVICE	6,415,581,308	6,136,751,718	278,829,591
58	LESS: ACCUM PROVISION FOR DEPRECIATION	2,085,671,484	1,994,366,693	91,304,791
59	AMORT OF OTHER UTILITY PLANT	41,915,507	40,143,386	1,772,121
60	NET ELECTRIC PLANT IN SERVICE	4,287,994,318	4,102,241,639	185,752,678
61	LESS: CUSTOMER ADV FOR CONSTRUCTION	7,441,965	7,387,459	54,505
62	LESS: ACCUM DEFERRED INCOME TAXES	382,140,505	365,461,375	16,679,130
63	ADD : PLT HLD FOR FUTURE+ACQUIS ADJ	8,878,552	8,585,072	293,480
64	ADD : WORKING CAPITAL	115,290,253	110,090,091	5,200,163
65	ADD : CONSERVATION+OTHER DFRD PROG.	38,571,563	34,521,209	4,050,354
66	ADD : SUBSIDIARY RATE BASE	31,370,758	29,980,646	1,390,112
67	TOTAL COMBINED RATE BASE	4,092,522,974	3,912,569,823	179,953,152
68				
69	<b>DEVELOPMENT OF NET INCOME COMPONENTS</b>			
70	OPERATING REVENUES			
71	SALES REVENUES	1,375,711,861	1,320,758,403	54,953,458
72	OTHER OPERATING REVENUES	89,366,685	85,891,627	3,475,058
73	TOTAL OPERATING REVENUES	1,465,078,546	1,406,650,030	58,428,516
74	OPERATING EXPENSES			
75	OPERATION & MAINTENANCE EXPENSES	930,414,600	888,823,963	41,590,637
76	DEPRECIATION EXPENSE	157,725,966	150,952,190	6,773,776
77	AMORTIZATION OF LIMITED TERM PLANT	5,981,316	5,725,400	255,916
78	TAXES OTHER THAN INCOME	32,162,375	29,601,331	2,561,044
79	REGULATORY DEBITS/CREDITS	3,444,845	3,141,786	303,059
80	PROVISION FOR DEFERRED INCOME TAXES	(17,873,223)	(17,124,938)	(748,285)
81	INVESTMENT TAX CREDIT ADJUSTMENT	25,014,178	23,926,476	1,087,702
82	FEDERAL INCOME TAXES	39,179,328	39,040,245	139,083
83	STATE INCOME TAXES	(3,454,021)	(2,828,435)	(625,586)
84	TOTAL OPERATING EXPENSES	1,172,595,364	1,121,258,018	51,337,346
85	OPERATING INCOME	292,483,181	285,392,012	7,091,169
86	ADD: IERCO OPERATING INCOME	E10 1,841,118	1,759,534	81,584
87	CONSOLIDATED OPERATING INCOME	294,324,299	287,151,546	7,172,754
88				
89	<b>NET POWER SUPPLY COSTS:</b>			
90	ACCT 447/SURPLUS SALES	(29,035,180)	(27,748,563)	(1,286,617)
91	ACCT 501/FUEL-THERMAL PLANTS	65,523,000	62,619,523	2,903,477
92	ACCT 547/FUEL-OTHER	119,653,675	114,351,541	5,302,134
93	ACCT 555/NON-FIRM PURCHASES	99,465,021	95,057,493	4,407,528
94	ACCT 555/DEMAND RESPONSE INCENTIVE	10,240,003	10,240,003	0
95	ACCT 555/CSPP PURCHASES	214,448,755	204,946,028	9,502,726
96	SUBTOTAL	480,295,274	459,466,025	20,829,249
97	ACCT 536/WATER FOR POWER (PCA & OTHER)	0	0	0
98	ACCT 565/TRANS OF ELECTRICTY BY OTHERS	10,263,139	9,808,355	454,784
99	TOTAL NET POWER SUPPLY COSTS	490,558,413	469,274,380	21,284,033
100	<b>OTHER O&amp;M</b>			
101	TOTAL O&M EXPENSES	930,414,600	888,823,963	41,590,637
102	LESS: ACCT 501/FUEL - THERMAL PLANTS	(65,523,000)	(62,619,523)	(2,903,477)
	FINAL			

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	IDAHO <u>RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
3					
103	ACCT 547/FUEL - OTHER		(119,653,675)	(114,351,541)	(5,302,134)
104	ACCT 555/NON-FIRM PURCHASES		(99,465,021)	(95,057,493)	(4,407,528)
105	ACCT 555/DEMAND RESPONSE INCENTIVE		(10,240,003)	(10,240,003)	0
106	ACCT 555/CSPP PURCHASES		(214,448,755)	(204,946,028)	(9,502,726)
107	SUBTOTAL		421,084,146	401,609,375	19,474,771
108	ACCT 536/WATER FOR POWER (PCA & OTHER)		0	0	0
109	ACCT 565/TRANS OF ELECTRICTY BY OTHERS		(10,263,139)	(9,808,355)	(454,784)
110	ACCT 416/MERCHANDISING EXPENSE		<u>(4,701,875)</u>	<u>(4,523,796)</u>	<u>(178,079)</u>
111	NET OTHER O&M		406,119,132	387,277,224	18,841,908

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
2					
3	<b><u>DESCRIPTION</u></b>				
112	<b>TABLE 1-ELECTRIC PLANT IN SERVICE</b>		541,565		
113	INTANGIBLE PLANT				
114	301 - ORGANIZATION	P101P	\$ 5,703	5,455	248
115	302 - FRANCHISES & CONSENTS	D10	52,690,324	50,540,892	2,149,432
116	303 - MISCELLANEOUS	P101P	52,524,883	50,240,922	2,283,961
117					
118	TOTAL INTANGIBLE PLANT		105,220,910	100,787,269	4,433,641
119					
120	PRODUCTION PLANT				
121	310-316 / STEAM PRODUCTION	D10	278,459,274	267,099,895	11,359,379
122	330-336 / HYDRAULIC PRODUCTION	D10	1,103,982,377	1,058,946,870	45,035,508
123	340-346 / OTHER PRODUCTION - BASE LOAD	D10	443,280,152	425,197,122	18,083,030
124	340-346 / OTHER PRODUCTION-PEAKERS	D10	188,520,803	180,830,345	7,690,458
125					
126	TOTAL PRODUCTION PLANT		2,014,242,607	1,932,074,232	82,168,375
127					
128	TRANSMISSION PLANT				
129	350 / LAND & LAND RIGHTS - SYSTEM SERVICE	D11	41,039,057	39,364,923	1,674,134
130	DIRECT ASSIGNMENT	DA350	0	0	0
131	TOTAL ACCOUNT 350		41,039,057	39,364,923	1,674,134
132					
133	352 / STRUCTURES & IMPROVEMENTS - SYSTEM SERVICE	D11	100,561,627	96,459,348	4,102,279
134	DIRECT ASSIGNMENT	DA352	658	0	658
135	TOTAL ACCOUNT 352		100,562,285	96,459,348	4,102,937
136					
137	353 / STATION EQUIPMENT - SYSTEM SERVICE	D11	468,388,599	449,281,302	19,107,296
138	DIRECT ASSIGNMENT	DA353	111,594	75,100	36,494
139	TOTAL ACCOUNT 353		468,500,193	449,356,402	19,143,790
140					
141	354 / TOWERS & FIXTURES - SYSTEM SERVICE	D11	237,158,275	227,483,716	9,674,560
142	DIRECT ASSIGNMENT	DA354	0	0	0
143	TOTAL ACCOUNT 354		237,158,275	227,483,716	9,674,560
144					
145	355 / POLES & FIXTURES - SYSTEM SERVICE	D11	236,032,717	226,404,073	9,628,644
146	DIRECT ASSIGNMENT	DA355	33,842	0	33,842
147	TOTAL ACCOUNT 355		236,066,559	226,404,073	9,662,486
148					
149	356 / OVERHEAD CONDUCTORS & DEVICES - SYSTEM SERVICE	D11	271,730,786	260,645,887	11,084,900
150	DIRECT ASSIGNMENT	DA356	26,495	1,189	25,306
151	TOTAL ACCOUNT 356		271,757,281	260,647,076	11,110,206
152					
153	359 / ROADS & TRAILS - SYSTEM SERVICE	D11	390,266	374,346	15,920
154	DIRECT ASSIGNMENT	DA359	0	0	0
155	TOTAL ACCOUNT 359		390,266	374,346	15,920
156					
157	TOTAL TRANSMISSION PLANT		1,355,473,916	1,300,089,883	55,384,033

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

	ALLOD/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
<u>DESCRIPTION</u>				
<b>TABLE 1-ELECTRIC PLANT IN SERVICE</b>				
DISTRIBUTION PLANT				
360 / LAND & LAND RIGHTS - SYSTEM SERVICE	ACCT360	9,601,720	<b>9,271,376</b>	330,344
PLUS: ADJUSTMENT FOR CIAC	ACCT360CIAC	430,656	<b>430,355</b>	301
DISTRIBUTION PLANT + CIAC		10,032,376	<b>9,701,731</b>	330,645
361 / STRUCTURES & IMPROVEMENTS - SYSTEM SERVICE	ACCT361	62,384,614	<b>59,436,491</b>	2,948,123
PLUS: ADJUSTMENT FOR CIAC	ACCT361CIAC	8,009,324	<b>7,447,616</b>	561,708
DISTRIBUTION PLANT + CIAC		70,393,938	<b>66,884,107</b>	3,509,831
362 / STATION EQUIPMENT - SYSTEM SERVICE	ACCT362	343,076,495	<b>328,626,219</b>	14,450,276
PLUS: ADJUSTMENT FOR CIAC	ACCT362CIAC	38,463,951	<b>34,892,876</b>	3,571,075
DISTRIBUTION PLANT + CIAC		381,540,447	<b>363,519,096</b>	18,021,351
363 / STORAGE BATTERY EQUIPMENT	D10	174,800,536	<b>167,669,778</b>	7,130,758
TOTAL BATTERY STORAGE EQUIPMENT		174,800,536	<b>167,669,778</b>	7,130,758
364 / POLES, TOWERS & FIXTURES	DA364	334,235,525	<b>308,137,437</b>	26,098,088
365 / OVERHEAD CONDUCTORS & DEVICES	DA365	162,758,591	<b>153,461,377</b>	9,297,214
366 / UNDERGROUND CONDUIT	DA366	54,848,113	<b>53,988,992</b>	859,120
367 / UNDERGROUND CONDUCTORS & DEVICES	DA367	338,877,918	<b>333,844,506</b>	5,033,412
368 / LINE TRANSFORMERS	DA368	745,644,817	<b>704,503,661</b>	41,141,155
369 / SERVICES	DA369	69,707,265	<b>66,979,720</b>	2,727,544
370 / METERS	DA370	116,503,219	<b>112,739,963</b>	3,763,256
371 / INSTALLATIONS ON CUSTOMER PREMISES	DA371	4,646,860	<b>4,326,265</b>	320,595
373 / STREET LIGHTING SYSTEMS	DA373	6,313,711	<b>6,061,607</b>	252,104
TOTAL DISTRIBUTION PLANT (without CIAC)		2,423,399,384	<b>2,309,047,394</b>	114,351,990
GENERAL PLANT				
389 / LAND & LAND RIGHTS	PTD	20,940,797	<b>20,030,220</b>	910,577
390 / STRUCTURES & IMPROVEMENTS	PTD	177,514,211	<b>169,795,289</b>	7,718,922
391 / OFFICE FURNITURE & EQUIPMENT	PTD	41,438,522	<b>39,636,634</b>	1,801,888
392 / TRANSPORTATION EQUIPMENT	PTD	119,914,591	<b>114,700,297</b>	5,214,295
393 / STORES EQUIPMENT	PTD	5,476,857	<b>5,238,705</b>	238,152
394 / TOOLS, SHOP & GARAGE EQUIPMENT	PTD	15,380,479	<b>14,711,683</b>	668,796
395 / LABORATORY EQUIPMENT	PTD	14,914,034	<b>14,265,521</b>	648,513
396 / POWER OPERATED EQUIPMENT	PTD	27,588,092	<b>26,388,468</b>	1,199,624
397 / COMMUNICATIONS EQUIPMENT	PTD	82,670,542	<b>79,075,745</b>	3,594,797
398 / MISCELLANEOUS EQUIPMENT	PTD	11,406,368	<b>10,910,380</b>	495,988
TOTAL GENERAL PLANT		517,244,492	<b>494,752,941</b>	22,491,551
TOTAL ELECTRIC PLANT IN SERVICE (without CIAC)		6,415,581,308	<b>6,136,751,718</b>	278,829,591

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO</u> <u>RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
203	<b>TABLE 2-ACCUMULATED PROVISION FOR DEPRECIATION</b>				
204					
205	PRODUCTION PLANT				
206	310-316 / STEAM PRODUCTION	L 121	151,132,377	<b>144,967,130</b>	6,165,246
207	330-336 / HYDRAULIC PRODUCTION	L 122	510,334,076	<b>489,515,669</b>	20,818,407
208	340-346 / OTHER PRODUCTION - BASE LOAD	L 123	95,989,012	<b>92,073,267</b>	3,915,745
209	340-346 / OTHER PRODUCTION-PEAKERS	L 124	67,786,643	<b>65,021,376</b>	2,765,267
210	TOTAL PRODUCTION PLANT		825,242,107	<b>791,577,442</b>	33,664,665
211					
212	TRANSMISSION PLANT				
213	350 / LAND & LAND RIGHTS	L 131	10,201,355	<b>9,785,205</b>	416,151
214	352 / STRUCTURES & IMPROVEMENTS	L 135	34,251,518	<b>32,854,058</b>	1,397,461
215	353 / STATION EQUIPMENT	L 139	123,269,932	<b>118,232,894</b>	5,037,039
216	354 / TOWERS & FIXTURES	L 143	80,447,813	<b>77,166,051</b>	3,281,763
217	355 / POLES & FIXTURES	L 147	80,583,039	<b>77,284,679</b>	3,298,360
218	356 / OVERHEAD CONDUCTORS & DEVICES	L 151	90,332,368	<b>86,639,325</b>	3,693,042
219	359 / ROADS & TRAILS	L 155	297,401	<b>285,269</b>	12,132
220	TOTAL TRANSMISSION PLANT		419,383,427	<b>402,247,480</b>	17,135,948
221					
222	DISTRIBUTION PLANT				
223	360 / LAND & LAND RIGHTS	L 161	239,442	<b>231,204</b>	8,238
224	361 / STRUCTURES & IMPROVEMENTS	L 165	16,778,902	<b>15,985,978</b>	792,924
225	362 / STATION EQUIPMENT	L 169	72,249,574	<b>69,206,444</b>	3,043,130
226	363 / STORAGE BATTERY EQUIPMENT	L 173	3,548,486	<b>3,403,730</b>	144,756
227	364 / POLES, TOWERS & FIXTURES	L 176	144,727,473	<b>133,426,728</b>	11,300,745
228	365 / OVERHEAD CONDUCTORS & DEVICES	L 177	56,593,997	<b>53,361,193</b>	3,232,803
229	366 / UNDERGROUND CONDUIT	L 178	18,880,710	<b>18,584,970</b>	295,740
230	367 / UNDERGROUND CONDUCTORS & DEVICES	L 179	105,526,973	<b>103,959,562</b>	1,567,410
231	368 / LINE TRANSFORMERS	L 180	199,797,737	<b>188,773,843</b>	11,023,894
232	369 / SERVICES	L 181	45,500,962	<b>43,720,575</b>	1,780,387
233	370 / METERS	L 182	37,281,576	<b>36,077,317</b>	1,204,260
234	371 / INSTALLATIONS ON CUSTOMER PREMISES	L 183	1,185,775	<b>1,103,966</b>	81,809
235	373 / STREET LIGHTING SYSTEMS	L 184	33,016	<b>31,698</b>	1,318
236	TOTAL DISTRIBUTION PLANT		702,344,623	<b>667,867,210</b>	34,477,414
237					

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO</u> <u>RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
3					
238	<b>TABLE 2-ACCUMULATED PROVISION FOR DEPRECIATION</b>				
239					
240	GENERAL PLANT				
241	389 / LAND & LAND RIGHTS	L 189	0	0	0
242	390 / STRUCTURES & IMPROVEMENTS	L 190	36,044,691	34,477,345	1,567,346
243	391 / OFFICE FURNITURE & EQUIPMENT	L 191	18,757,637	17,941,991	815,646
244	392 / TRANSPORTATION EQUIPMENT	L 192	23,975,721	22,933,175	1,042,546
245	393 / STORES EQUIPMENT	L 193	1,468,592	1,404,733	63,859
246	394 / TOOLS, SHOP & GARAGE EQUIPMENT	L 194	5,026,782	4,808,200	218,582
247	395 / LABORATORY EQUIPMENT	L 195	6,860,809	6,562,478	298,331
248	396 / POWER OPERATED EQUIPMENT	L 196	5,419,822	5,184,149	235,672
249	397 / COMMUNICATIONS EQUIPMENT	L 197	33,453,398	31,998,730	1,454,668
250	398 / MISCELLANEOUS EQUIPMENT	L 198	4,396,481	4,205,307	191,174
251	TOTAL GENERAL PLANT		135,403,933	129,516,109	5,887,824
252					
253	AMORTIZATION OF DISALLOWED COSTS	L 118	3,297,393	3,158,453	138,941
254					
255	TOTAL ACCUM PROVISION DEPRECIATION		2,085,671,484	1,994,366,693	91,304,791
256					
257	AMORTIZATION OF OTHER UTILITY PLANT				
258	302/FRANCHISES AND CONSENTS	L 115	18,778,074	18,012,048	766,027
259	303/MISCELLANEOUS INTANGIBLE PLANT	L 116	23,137,432	22,131,338	1,006,094
260					
261	TOTAL AMORT OF OTHER UTILITY PLANT		41,915,507	40,143,386	1,772,121
262					
263	TOTAL ACCUM PROVISION FOR DEPR				
264	& AMORTIZATION OF OTHER UTILITY PLANT		2,127,586,991	2,034,510,078	93,076,912
265					

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
266	<b>TABLE 3-ADDITIONS &amp; DEDUCTIONS TO RATEBASE</b>				
267					
268	NET ELECTRIC PLANT IN SERVICE		4,287,994,318	<b>4,102,241,639</b>	185,752,678
269	LESS:				
270	252 CUSTOMER ADVANCES FOR CONSTRUCTION				
271	POWER SUPPLY	D10	0	<b>0</b>	0
272	OTHER	DA252	7,441,965	<b>7,387,459</b>	54,505
273	TOTAL CUSTOMER ADV FOR CONSTRUCTION		7,441,965	<b>7,387,459</b>	54,505
274					
275	ACCUMULATED DEFERRED INCOME TAXES				
276	190 / ACCUMULATED DEFERRED INCOME TAXES				
277	CUSTOMER ADVANCES FOR CONSTRUCTION	DA252	(1,806,678)	<b>(1,793,446)</b>	(13,232)
278	OTHER	LABOR	(18,108,580)	<b>(17,318,189)</b>	(790,391)
279	TOTAL ACCOUNT 190		(19,915,258)	<b>(19,111,635)</b>	(803,623)
280	281 / ACCELERATED AMORTIZATION	P101P	0	<b>0</b>	0
281	282 / OTHER PROPERTY	P101P	395,790,474	<b>378,580,157</b>	17,210,317
282	283 / OTHER	P101P	6,265,289	<b>5,992,853</b>	272,436
283	TOTAL ACCUM DEFERRED INCOME TAXES		382,140,505	<b>365,461,375</b>	<b>16,679,130</b>
284					
285	NET ELECTRIC PLANT IN SERVICE		3,898,411,848	<b>3,729,392,805</b>	169,019,043
286	ADD:				
287	WORKING CAPITAL				
288	151 / FUEL INVENTORY	E10	24,704,689	<b>23,609,967</b>	1,094,723
289	154 & 163 / PLANT MATERIALS & SUPPLIES				
290	PRODUCTION - GENERAL	L 126	16,137,028	<b>15,478,739</b>	658,289
291	TRANSMISSION - GENERAL	L 157	14,694,376	<b>14,093,970</b>	600,405
292	DISTRIBUTION - GENERAL	L 186+CIAC	55,470,039	<b>52,809,487</b>	2,660,553
293	OTHER - UNCLASSIFIED	L 202	4,284,121	<b>4,097,928</b>	186,194
294	TOTAL ACCOUNT 154 & 163		90,585,564	<b>86,480,124</b>	4,105,440
295	165 / PREPAID ITEMS				
296	AD VALOREM TAXES	L 697	0	<b>0</b>	0
297	OTHER PROD-RELATED PREPAYMENTS	D10	0	<b>0</b>	0
298	INSURANCE	L 126	0	<b>0</b>	0
299	PENSION EXPENSE	L 1039	0	<b>0</b>	0
300	PREPAID RETIREE BENEFITS	L 1039	0	<b>0</b>	0
301	MISCELLANEOUS PREPAYMENTS	P101P	0	<b>0</b>	0
302	TOTAL ACCOUNT 165		0	<b>0</b>	0
303	WORKING CASH ALLOWANCE	L 618	0	<b>0</b>	0
304					
305	TOTAL WORKING CAPITAL		115,290,253	<b>110,090,091</b>	5,200,163
306					
307	NET ELECTRIC PLANT IN SERVICE		4,013,702,101	<b>3,839,482,895</b>	174,219,206

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
308	<b>TABLE 3-ADDITIONS &amp; DEDUCTIONS TO RATEBASE</b>				
309					
310	NET ELECTRIC PLANT IN SERVICE		4,013,702,101	3,839,482,895	174,219,206
311	ADD:				
312	105 / PLANT HELD FOR FUTURE USE				
313	HYDRAULIC PRODUCTION	L 122	0	0	0
314	TRANS LAND & LAND RIGHTS	L 131	2,752,506	2,640,221	112,285
315	TRANS STRUCTURES & IMPROVEMENTS	L 135	0	0	0
316	TRANS STATION EQUIPMENT	L 139	0	0	0
317	DIST LAND & LAND RIGHTS	L 163	5,497,799	5,316,603	181,196
318	DIST STRUCTURES & IMPROVEMENTS	L 167	0	0	0
319	DIST STATIONS EQUIPMENT		0		
320	GEN LAND & LAND RIGHTS	L 189	0	0	0
321	GEN STRUCTURES & IMPROVEMENTS	L 190	0	0	0
322	COMMUNICATION	L 192	0	0	0
323	TOTAL PLANT HELD FOR FUTURE USE		8,250,305	7,956,825	293,480
324					
325	114/115 - ASSET EXCHANGE ACQUISITION ADJUSTMENT	CIDA	628,247	628,247	0
326					
327	DEFERRED PROGRAMS:				
328	182 / CONSERVATION PROGRAMS				
329	IDAHO DEFERRED CONSERVATION PROGRAMS	CIDA	0	0	0
330	OREGON DEFERRED CONSERVATION PROGRAMS	CODA	0	0	0
331	TOTAL CONSERVATION PROGRAMS		0	0	0
332	182&186 / MISC. OTHER REGULATORY ASSETS				
333	CUB FUND INTEREST (OPUC 15-399)	CODA	0	0	0
334	AM. FALLS BOND REFINANCING	D10	72,977	70,000	2,977
335	SFAS 87 CAPITALIZED PENSION - OPUC ORDER 10-064	CODA	6,781,181	0	6,781,181
336	CLOUD COMPUTING - (IPUC Order 34707)	CIDA	1,006,327	1,006,327	0
337	WILDFIRE MITIGATION (IPUC Order 35077)	CIDA	13,056,171	13,056,171	0
338	SIEMENS LTP RATE BASE (IPUC Order 33420)	CIDA	12,207,705	12,207,705	0
339	SIEMENS LTP DEFERRED RATE BASE (IPUC Order 33420)	CIDA	8,181,006	8,181,006	0
340	SIEMENS LTP RATE BASE (OPUC ORDER 15-387)	CODA	471,789	0	471,789
341	SIEMENS LTP DEFERRED RATE BASE (OPUC ORDER 15-387)	CODA	94,504	0	94,504
342	TOTAL OTHER REGULATORY ASSETS		41,871,660	34,521,209	7,350,451
343	186 / MISC. OTHER DEFERRED PROGRAMS		0	0	0
344	254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC ORD 12-296	CODA	(3,285,386)	0	(3,285,386)
345	RECONNECT FEES - (OPUC ADV 16-09)	CODA	(14,711)	0	(14,711)
346	TOTAL DEFERRED PROGRAMS		38,571,563	34,521,209	4,050,354
347					
348	DEVELOPMENT OF IERCO RATE BASE				
349	INVESTMENT IN IERCO	E10	15,577,838	14,887,547	690,290
350	PREPAID COAL ROYALTIES	E10	597,770	571,281	26,489
351	NOTES PAYABLE TO/RECEIVABLE FROM SUBSIDIARY	E10	15,195,150	14,521,817	673,333
352	TOTAL SUBSIDIARY RATE BASE		31,370,758	29,980,646	1,390,112
353					
354	TOTAL COMBINED RATE BASE		4,092,522,974	3,912,569,823	179,953,152



**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
2					
3	<b><u>DESCRIPTION</u></b>				
355	<b>TABLE 4-OPERATING REVENUES</b>				
356	FIRM ENERGY SALES				
357	440-448 / RETAIL	RETREV	1,169,833,173	<b>1,116,166,332</b>	53,666,841
358	442 / BASE REVENUE TRANSFER - PCA	CIDA	173,368,953	<b>173,368,953</b>	0
359	442 / BASE REVENUE TRANSFER - EE RIDER	CIDA	3,474,555	<b>3,474,555</b>	0
360	447 / SYSTEM OPPORTUNITY SALES	E10	19,175,280	<b>18,325,578</b>	849,702
361	447.050 / FINANCIAL LOSSES	E10	9,859,900	<b>9,422,985</b>	436,915
362	TOTAL SALES OF ELECTRICITY		1,375,711,861	<b>1,320,758,403</b>	54,953,458
363					
364	OTHER OPERATING REVENUES				
365	415 / MERCHANDISING REVENUES	D60	3,942,438	<b>3,793,122</b>	149,316
366					
367	449 / OATT TARIFF REFUND				
368	NETWORK	D11	0	<b>0</b>	0
369	POINT-TO-POINT	D11	0	<b>0</b>	0
370	TOTAL ACCOUNT 449		0	<b>0</b>	0
371					
372	451 / MISCELLANEOUS SERVICE REVENUES	DA451	6,208,088	<b>6,150,427</b>	57,660
373					
374	454 / RENTS FROM ELECTRIC PROPERTY				
375	SUBSTATION EQUIPMENT	L 139	3,215,758	<b>3,084,356</b>	131,402
376	TRANSFORMER RENTALS	D11	17,330	<b>16,623</b>	707
377	LINE RENTALS	D11	0	<b>0</b>	0
378	COGENERATION	L 495	1,892,534	<b>1,808,672</b>	<b>83,863</b>
379	DARK FIBER PROJECT	CIDA	0	<b>0</b>	0
380	POLE ATTACHMENTS	L 176	1,634,179	<b>1,506,578</b>	127,601
381	FACILITIES CHARGES	DA454	10,280,339	<b>9,859,316</b>	421,023
382	OTHER RENTALS	L 122	1,072,002	<b>1,028,271</b>	43,731
383	MISCELLANEOUS	PTD	84,248	<b>80,584</b>	<b>3,663</b>
384	TOTAL ACCOUNT 454		18,196,391	<b>17,384,400</b>	811,990
385					
386	456 / OTHER ELECTRIC REVENUES				
387	TRANSMISSION NETWORK SERVICES- FIRM DA	D11	11,080,635	<b>10,628,615</b>	452,020
388	TRANSMISSION NETWORK SERVICES - DIST FACILITIES	D60	792,372	<b>762,362</b>	30,010
389	TRANSMISSION POINT-TO-POINT	D11	48,333,338	<b>46,361,643</b>	1,971,695
390	PHOTOVOLTAIC STATION SERVICE	L 186+CIAC	0	<b>0</b>	0
391	ENERGY EFFICIENCY RIDER	CIDA	0	<b>0</b>	0
392	STAND-BY SERVICE	DASTNBY	759,997	<b>759,997</b>	0
393	SIERRA PACIFIC USAGE CHARGE	E10	51,764	<b>49,471</b>	2,294
394	ANTELOPE	L 515	0	<b>0</b>	0
395	MISCELLANEOUS	PTD	1,663	<b>1,590</b>	<b>72</b>
396	TOTAL ACCOUNT 456		61,019,769	<b>58,563,677</b>	2,456,091
397					
398	TOTAL OTHER OPERATING REVENUES		89,366,685	<b>85,891,627</b>	3,475,058
399					
400	TOTAL OPERATING REVENUES		1,465,078,546	<b>1,406,650,030</b>	58,428,516

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO</u> <u>RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
3					
401	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>				
402	STEAM POWER GENERATION				
403	OPERATION				
404	500 / SUPERVISION & ENGINEERING	D10	(76,495)	<b>(73,374)</b>	(3,120)
405	501 / FUEL	E10	65,523,000	<b>62,619,523</b>	2,903,477
406	502 / STEAM EXPENSES				
407	LABOR	D10	1,607,750	<b>1,542,164</b>	65,586
408	OTHER	E10	(1,145,574)	<b>(1,094,811)</b>	(50,763)
409	TOTAL ACCOUNT 502		462,176	<b>447,353</b>	14,823
410	505 / ELECTRIC EXPENSES				
411	LABOR	D10	626,112	<b>600,571</b>	25,541
412	OTHER	E10	(570,253)	<b>(544,984)</b>	(25,269)
413	TOTAL ACCOUNT 505		55,859	<b>55,587</b>	272
414	506 / MISCELLANEOUS EXPENSES	D10	425,042	<b>407,703</b>	17,339
415	507 / RENTS	L 121	11,358	<b>10,895</b>	463
416	STEAM OPERATION EXPENSES		66,400,940	<b>63,467,686</b>	2,933,254
417					
418	MAINTENANCE				
419	510 / SUPERVISION & ENGINEERING	D10	(250,725)	<b>(240,497)</b>	(10,228)
420	511 / STRUCTURES	D10	125,730	<b>120,601</b>	5,129
421	512 / BOILER PLANT				
422	LABOR	D10	3,983,710	<b>3,821,200</b>	162,510
423	OTHER	E10	(3,549,393)	<b>(3,392,111)</b>	(157,282)
424	TOTAL ACCOUNT 512		434,317	<b>429,089</b>	5,228
425	513 / ELECTRIC PLANT				
426	LABOR	D10	1,522,637	<b>1,460,523</b>	62,114
427	OTHER	E10	(1,408,464)	<b>(1,346,052)</b>	(62,412)
428	TOTAL ACCOUNT 513		114,173	<b>114,471</b>	(298)
429	514 / MISCELLANEOUS STEAM PLANT	D10	474,809	<b>455,440</b>	19,369
430	STEAM MAINTENANCE EXPENSES		898,305	<b>879,105</b>	19,200
431	TOTAL STEAM GENERATION EXPENSES		67,299,245	<b>64,346,791</b>	2,952,455
432					

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO</u> <u>RETAIL</u>	<u>OTHER</u>
2					
3	<b><u>DESCRIPTION</u></b>				
433	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>				
434	HYDRAULIC POWER GENERATION				
435	OPERATION				
436	535 / SUPERVISION & ENGINEERING	L 892	6,476,728	<b>6,210,878</b>	265,850
437	536 / WATER FOR POWER				
438	WATER FOR POWER/WCLOUD SEEDING	D10	6,481,689	<b>6,217,277</b>	264,412
439	WATER LEASE	D10	0	<b>0</b>	0
440	536 TOTAL ACCOUNT 536		6,481,689	<b>6,217,277</b>	264,412
441	537 / HYDRAULIC EXPENSES	D10	20,190,100	<b>19,366,472</b>	823,629
442	538 / ELECTRIC EXPENSES				
443	LABOR	D10	1,605,926	<b>1,540,414</b>	65,512
444	OTHER	E10	629,979	<b>602,063</b>	27,916
445	TOTAL ACCOUNT 538		2,235,905	<b>2,142,477</b>	93,427
446	539 / MISCELLANEOUS EXPENSES	D10	5,730,483	<b>5,496,716</b>	233,768
447	540 / RENTS	D10	303,402	<b>291,025</b>	12,377
448	HYDRAULIC OPERATION EXPENSES		41,418,307	<b>39,724,845</b>	<b>1,693,462</b>
449					
450	MAINTENANCE				
451	541 / SUPERVISION & ENGINEERING	L 903	125,939	<b>120,801</b>	5,138
452	542 / STRUCTURES	D10	1,033,666	<b>991,499</b>	42,167
453	543 / RESERVOIRS, DAMS & WATERWAYS	D10	508,487	<b>487,743</b>	20,743
454	544 / ELECTRIC PLANT				
455	LABOR	D10	1,910,981	<b>1,833,025</b>	77,956
456	OTHER	E10	1,011,361	<b>966,545</b>	44,816
457	TOTAL ACCOUNT 544		2,922,342	<b>2,799,570</b>	122,772
458	545 / MISCELLANEOUS HYDRAULIC PLANT	L 122	4,310,252	<b>4,134,421</b>	175,831
459	HYDRAULIC MAINTENANCE EXPENSES		8,900,686	<b>8,534,035</b>	366,650
460	TOTAL HYDRAULIC GENERATION EXPENSES		50,318,993	<b>48,258,881</b>	2,060,112

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ SOURCE	TOTAL SYSTEM	IDAHO RETAIL	OTHER
2	3	DESCRIPTION			
461		<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>			
462		OTHER POWER GENERATION			
463		OPERATION			
464		546 / SUPERVISION & ENGINEERING	L 916 714,692	685,537	29,155
465		547 / FUEL			
466		DIESEL FUEL	E10 10,499	10,034	465
467		OTHER	E10 119,653,675	114,351,541	5,302,134
468		TOTAL ACCOUNT 547	119,664,175	114,361,575	5,302,600
469		548 / GENERATING EXPENSES			
470		LABOR	D10 3,433,099	3,293,050	140,049
471		OTHER	E10 2,011,042	1,921,928	89,114
472		TOTAL ACCOUNT 548	5,444,141	5,214,978	229,163
473		549 / MISCELLANEOUS EXPENSES	D10 75,953	72,854	3,098
474		550 / RENTS	D10 0	0	0
475		OTHER POWER OPER EXPENSES	125,898,960	120,334,945	5,564,016
476					
477		MAINTENANCE			
478		551 / SUPERVISION & ENGINEERING	L 926 0	0	0
479		552 / STRUCTURES	D10 167,178	160,358	6,820
480		553 / GENERATING & ELECTRIC PLANT			
481		LABOR	D10 60,498	58,030	2,468
482		OTHER	E10 877,633	838,743	38,890
483		TOTAL ACCOUNT 553	938,132	896,774	41,358
484		554 / MISCELLANEOUS EXPENSES	L 124 3,387,334	3,249,153	138,182
485		OTHER POWER MAINT EXPENSES	4,492,644	4,306,284	186,360
486		TOTAL OTHER POWER GENERATION EXP	130,391,604	124,641,229	5,750,375
487					
488		OTHER POWER SUPPLY EXPENSE			
489		555.0 / PURCHASED POWER			
490		POWER EXPENSE	E10 99,465,021	95,057,493	4,407,528
491		OTHER	CIDA 0	0	0
492		TRANSMISSION LOSSES	E10 0	0	0
493		DEMAND RESPONSE INCENTIVE	CIDA 10,240,003	10,240,003	0
494		TOTAL 555.0/PURCHASED POWER	109,705,024	105,297,496	4,407,528
495		555.1 / COGENERATION & SMALL POWER PROD	E10 214,448,755	204,946,028	9,502,726
496		555/TOTAL	324,153,778	310,243,524	13,910,254
497		556 / LOAD CONTROL & DISPATCHING EXPENSES	D10 0	0	0
498		557 / OTHER EXPENSES			
499		PCA/ EPC ACCOUNTS	CIDA 0	0	0
500		OREGON POWER COST-RELATED EXPENSES	CODA 0	0	0
501		OTHER	D10 7,029,991	6,743,211	286,779
502		557/TOTAL	7,029,991	6,743,211	286,779
503		TOTAL OTHER POWER SUPPLY EXPENSES	331,183,769	316,986,736	14,197,033
504					
505		TOTAL PRODUCTION EXPENSES	579,193,611	554,233,636	24,959,975

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
506	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>				
507	TRANSMISSION EXPENSES				
508	OPERATION				
509	560 / SUPERVISION & ENGINEERING	L 157	3,593,025	<b>3,446,215</b>	146,809
510	561 / LOAD DISPATCHING	D12	6,017,285	<b>5,771,817</b>	245,467
511	562 / STATION EXPENSES	L 139	3,122,087	<b>2,994,513</b>	127,574
512	563 / OVERHEAD LINE EXPENSES	L 143+147+151	1,205,690	<b>1,156,414</b>	49,276
513	565 / TRANSMISSION OF ELECTRICITY BY OTHERS	E10	10,263,139	<b>9,808,355</b>	454,784
514	566 / MISCELLANEOUS EXPENSES	L 157	8	<b>7</b>	0
515	567 / RENTS	L 157	4,855,402	<b>4,657,012</b>	198,389
516	TOTAL TRANSMISSION OPERATION		29,056,635	<b>27,834,335</b>	1,222,301
517					
518	MAINTENANCE				
519	568 / SUPERVISION & ENGINEERING	L 157	222,008	<b>212,937</b>	9,071
520	569 / STRUCTURES	L 135	2,147,917	<b>2,060,282</b>	87,635
521	570 / STATION EQUIPMENT	L 139	3,052,711	<b>2,927,971</b>	124,739
522	571 / OVERHEAD LINES	L 143+147+151	3,252,166	<b>3,119,250</b>	132,915
523	573 / MISCELLANEOUS PLANT	L 157	5,781	<b>5,545</b>	236
524	TOTAL TRANSMISSION MAINTENANCE		8,680,583	<b>8,325,986</b>	354,597
525					
526	TOTAL TRANSMISSION EXPENSES		37,737,218	<b>36,160,321</b>	1,576,898
527					
528	REGIONAL MARKET EXPENSES				
529	OPERATION				
530	575 / OPER TRANS MKT ADMIN - EIM	L 157	686,880	<b>658,814</b>	28,066
531					
532	TOTAL REGIONAL MARKET EXPENSES		686,880	<b>658,814</b>	28,066
533					

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
534	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>				
535	DISTRIBUTION EXPENSES				
536	OPERATION				
537	580 / SUPERVISION & ENGINEERING	L 186	6,428,578	<b>6,125,235</b>	303,343
538	581 / LOAD DISPATCHING	D60	5,944,770	<b>5,719,617</b>	225,153
539	582 / STATION EXPENSES	L 171	2,037,902	<b>1,941,646</b>	96,257
540	583 / OVERHEAD LINE EXPENSES	L 176+177	6,218,215	<b>5,775,361</b>	442,854
541	584 / UNDERGROUND LINE EXPENSES	L 178+179	4,971,299	<b>4,896,899</b>	74,401
542	585 / STREET LIGHTING & SIGNAL SYSTEMS	L 184	48,788	<b>46,840</b>	1,948
543	586 / METER EXPENSES	L 182	6,511,320	<b>6,300,993</b>	210,327
544	587 / CUSTOMER INSTALLATIONS EXPENSE	L 183	1,229,993	<b>1,145,133</b>	84,859
545	588 / MISCELLANEOUS EXPENSES	L 186	5,191,800	<b>4,946,817</b>	244,983
546	589 / RENTS	L 186	741,341	<b>706,360</b>	34,981
547	TOTAL DISTRIBUTION OPERATION		39,324,006	<b>37,604,900</b>	1,719,105
548					
549	MAINTENANCE				
550	590 / SUPERVISION & ENGINEERING	L 186	13,548	<b>12,909</b>	639
551	591 / STRUCTURES	L 167	0	<b>0</b>	0
552	592 / STATION EQUIPMENT	L 171	4,616,383	<b>4,398,336</b>	218,046
553	593 / OVERHEAD LINES	L 176+177	35,642,590	<b>33,104,169</b>	2,538,421
554	594 / UNDERGROUND LINES	L 178+179	837,357	<b>824,825</b>	12,532
555	595 / LINE TRANSFORMERS	L 180	98,361	<b>92,933</b>	5,427
556	596 / STREET LIGHTING & SIGNAL SYSTEMS	L 184	231,826	<b>222,570</b>	9,257
557	597 / METERS	L 182	981,330	<b>949,631</b>	31,699
558	598 / MISCELLANEOUS PLANT	L 186	138,917	<b>132,362</b>	6,555
559	TOTAL DISTRIBUTION MAINTENANCE		42,560,311	<b>39,737,736</b>	2,822,576
560	TOTAL DISTRIBUTION EXPENSES		81,884,317	<b>77,342,636</b>	4,541,681
561					
562	CUSTOMER ACCOUNTING EXPENSES				
563	901 / SUPERVISION	L 996	965,680	<b>917,533</b>	48,148
564	902 / METER READING	CW902	2,041,516	<b>1,768,247</b>	273,270
565	903 / CUSTOMER RECORDS & COLLECTIONS	CW903	16,608,368	<b>16,063,116</b>	545,252
566	904 / UNCOLLECTIBLE ACCOUNTS	CW904	5,782,082	<b>5,389,398</b>	392,683
567	905 / MISC EXPENSES	L 564+565+566	(3,031)	<b>(2,881)</b>	(150)
568	TOTAL CUSTOMER ACCOUNTING EXPENSES		25,394,615	<b>24,135,413</b>	1,259,202
569					
570	CUSTOMER SERVICES & INFORMATION EXPENSES				
571	907 / SUPERVISION	L 1004	1,133,077	<b>1,103,115</b>	29,962
572	908 / CUSTOMER ASSISTANCE				
573	SYSTEM CONSERVATION	E10	314,424	<b>300,491</b>	13,933
574	OTHER CUSTOMER ASSISTANCE	DA908	11,372,463	<b>11,077,363</b>	295,100
575	TOTAL ACCOUNT 908		11,686,887	<b>11,377,854</b>	309,033
576	909 / INFORMATION & INSTRUCTIONAL	DA909	295,113	<b>285,588</b>	9,524
577	910 / MISCELLANEOUS EXPENSES	L 575+576	796,869	<b>775,684</b>	21,186
578	912 / DEMO AND SELLING EXPENSES	E10	0	<b>0</b>	0
579	TOTAL CUST SERV & INFORMATN EXPENSES		13,911,945	<b>13,542,241</b>	369,704

**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
580	<b>TABLE 5-OPERATION &amp; MAINTENANCE EXPENSES</b>				
581	ADMINISTRATIVE & GENERAL EXPENSES				
582	920 / ADMINISTRATIVE & GENERAL SALARIES	LABOR	89,625,564	<b>85,713,649</b>	3,911,915
583	921 / OFFICE SUPPLIES	LABOR	15,175,273	<b>14,512,913</b>	662,360
584	922 / ADMIN & GENERAL EXPENSES TRANSFERRED-CR	LABOR	(40,405,013)	<b>(38,641,443)</b>	(1,763,570)
585	923 / OUTSIDE SERVICES	LABOR	8,733,234	<b>8,352,051</b>	381,182
586	924 / PROPERTY INSURANCE				
587	PRODUCTION - STEAM	D10	412,596	<b>395,764</b>	16,831
588	ALL RISK & MISCELLANEOUS	P110P	4,930,147	<b>4,725,542</b>	204,605
589	TOTAL ACCOUNT 924		5,342,743	<b>5,121,307</b>	221,436
590	925 / INJURIES & DAMAGES	LABOR	11,876,713	<b>11,358,326</b>	518,387
591	926 / EMPLOYEE PENSIONS & BENEFITS	LABOR	41,594,606	<b>39,779,114</b>	1,815,493
592	EMPLOYEE PENSIONS & BENEFITS - OREGON	CODA	880,053	<b>0</b>	880,053
593	EMPLOYEE PENSIONS & BENEFITS - IDAHO	CIDA	35,182,378	<b>35,182,378</b>	0
594	EMPLOYEE PENSIONS & BENEFITS -CAPITALIZED OREGON	CODA	0	<b>0</b>	0
595	927 / FRANCHISE REQUIREMENTS	CIDA	0	<b>0</b>	0
596	928 / REGULATORY COMMISSION EXPENSES				
597	928.101 / FERC ADMIN ASSESS & SECURITIES				
598	CAPACITY RELATED	D10	2,826,830	<b>2,711,513</b>	115,317
599	ENERGY RELATED	E10	963,911	<b>921,198</b>	42,713
600	FERC RATE CASE	E99	0	<b>0</b>	0
601	FERC ORDER 472	D11	963,867	<b>924,547</b>	39,320
602	FERC OTHER	D11	109,055	<b>104,606</b>	4,449
603	FERC - OREGON HYDRO FEE	D11	271,717	<b>260,632</b>	11,084
604	SEC EXPENSES	CIDA	0	<b>0</b>	0
605	IDAHO PUC -RATE CASE	CIDA	0	<b>0</b>	0
606	-OTHER	CIDA	332,773	<b>332,773</b>	0
607	OREGON PUC -RATE CASE	CODA	0	<b>0</b>	0
608	-OTHER	CODA	1,309,155	<b>0</b>	1,309,155
609	TOTAL ACCOUNT 928		6,777,308	<b>5,255,269</b>	1,522,038
610	929 / DUPLICATE CHARGES	LABOR	0	<b>0</b>	0
611	930.1 / GENERAL ADVERTISING	LABOR	0	<b>0</b>	0
612	930.2 / MISCELLANEOUS EXPENSES	LABOR	4,047,076	<b>3,870,432</b>	176,644
613	931 / RENTS	L 200	0	<b>0</b>	0
614	TOTAL ADM & GEN OPERATION		178,829,934	<b>170,503,996</b>	8,325,937
615	PLUS:				
616	935 / GENERAL PLANT MAINTENANCE	L 200	8,074,205	<b>7,723,111</b>	351,094
617	416 / MERCHANDISING EXPENSE	D60	4,701,875	<b>4,523,796</b>	178,079
618	TOTAL OPER & MAINT EXPENSES		930,414,600	<b>888,823,963</b>	41,590,637

**IDAHO POWER COMPANY  
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		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	IDAHO <u>RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
3					
619	<b>TABLE 6-DEPRECIATION &amp; AMORTIZATION EXPENSE</b>				
620					
621	DEPRECIATION EXPENSE				
622	310-316 / STEAM PRODUCTION	L 121	9,604,775	<b>9,212,961</b>	391,814
623	330-336 / HYDRAULIC PRODUCTION	L 122	25,359,140	<b>24,324,647</b>	1,034,493
624	340-346 / OTHER PRODUCTION-BASELOAD	L 123	13,814,802	<b>13,251,245</b>	563,557
625	340-346 / OTHER PRODUCTION-PEAKERS	L 124	6,173,315	<b>5,921,482</b>	251,832
626	TOTAL PRODUCTION PLANT		54,952,032	<b>52,710,336</b>	2,241,696
627					
628	TRANSMISSION PLANT				
629	350 / LAND & LAND RIGHTS	L 131	416,355	<b>399,371</b>	16,985
630	352 / STRUCTURES & IMPROVEMENTS	L 135	1,920,891	<b>1,842,519</b>	78,372
631	353 / STATION EQUIPMENT	L 139	10,291,818	<b>9,871,275</b>	420,543
632	354 / TOWERS & FIXTURES	L 143	2,890,165	<b>2,772,265</b>	117,900
633	355 / POLES & FIXTURES	L 147	6,155,439	<b>5,903,489</b>	251,949
634	356 / OVERHEAD CONDUCTORS & DEVICES	L 151	4,098,377	<b>3,930,824</b>	167,553
635	359 / ROADS & TRAILS	L 155	2,693	<b>2,583</b>	110
636	TOTAL TRANSMISSION PLANT		25,775,739	<b>24,722,326</b>	1,053,413
637					
638	DISTRIBUTION PLANT				
639	360 / LAND & LAND RIGHTS	L 163	30,928	<b>29,909</b>	1,019
640	361 / STRUCTURES & IMPROVEMENTS	L 167	1,393,285	<b>1,323,816</b>	69,469
641	362 / STATION EQUIPMENT	L 171	6,761,927	<b>6,442,540</b>	319,387
642	363 / STORAGE BATTERY EQUIPMENT	L 173	8,740,027	<b>8,383,489</b>	356,538
643	364 / POLES, TOWERS & FIXTURES	L 176	6,652,506	<b>6,133,059</b>	519,447
644	365 / OVERHEAD CONDUCTORS & DEVICES	L 177	3,687,824	<b>3,477,165</b>	210,659
645	366 / UNDERGROUND CONDUIT	L 178	1,327,818	<b>1,307,020</b>	20,798
646	367 / UNDERGROUND CONDUCTORS & DEVICES	L 179	7,931,228	<b>7,813,424</b>	117,804
647	368 / LINE TRANSFORMERS	L 180	14,560,366	<b>13,756,994</b>	803,372
648	369 / SERVICES	L 181	1,163,810	<b>1,118,272</b>	45,538
649	370 / METERS	L 182	5,908,929	<b>5,718,060</b>	190,869
650	371 / INSTALLATIONS ON CUSTOMER PREMISES	L 183	193,380	<b>180,039</b>	13,342
651	373 / STREET LIGHTING SYSTEMS	L 184	217,455	<b>208,773</b>	8,683
652	TOTAL DISTRIBUTION PLANT		58,569,484	<b>55,892,559</b>	2,676,925



**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
653	<b>TABLE 6-DEPRECIATION &amp; AMORTIZATION EXPENSE</b>				
654					
655	GENERAL PLANT				
656	389 / LAND & LAND RIGHTS	L 189	0	0	0
657	390 / STRUCTURES & IMPROVEMENTS	L 190	3,366,802	3,220,402	146,400
658	391 / OFFICE FURNITURE & EQUIPMENT	L 191	6,992,274	6,688,226	304,048
659	392 / TRANSPORTATION EQUIPMENT	L 192	72,444	69,294	3,150
660	393 / STORES EQUIPMENT	L 193	227,417	217,528	9,889
661	394 / TOOLS, SHOP & GARAGE EQUIPMENT	L 194	808,645	773,482	35,163
662	395 / LABORATORY EQUIPMENT	L 195	781,567	747,582	33,985
663	396 / POWER OPERATED EQUIPMENT	L 196	0	0	0
664	397 / COMMUNICATIONS EQUIPMENT	L 197	5,615,068	5,370,906	244,162
665	398 / MISCELLANEOUS EQUIPMENT	L 198	860,793	823,363	37,430
666	TOTAL GENERAL PLANT		18,725,011	17,910,784	814,227
667					
668	TOTAL DEPRECIATION EXPENSE		158,022,265	151,236,005	6,786,261
669					
670	DEPRECIATION ON DISALLOWED COSTS	L 118	(296,299)	(283,814)	(12,485)
671	TOTAL DEPRECIATION EXPENSE		157,725,966	150,952,190	6,773,776
672					
673	AMORTIZATION EXPENSE				
674	302/FRANCHISES AND CONSENTS	L 115	1,543,543	1,480,576	62,967
675	303/MISCELLANEOUS INTANGIBLE PLANT	L 116	4,422,755	4,230,438	192,316
676	ADJUSTMENTS, GAINS & LOSSES	L 118	15,018	14,385	633
677	TOTAL AMORTIZATION EXPENSE		5,981,316	5,725,400	255,916
678					
679	TOTAL DEPRECIATION & AMORTIZATION EXP		163,707,282	156,677,590	7,029,692
680					

**IDAHO POWER COMPANY  
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	<u>DESCRIPTION</u>	<u>ALLOC/ SOURCE</u>	<u>TOTAL SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
2					
3					
681	<b>TABLE 7-TAXES OTHER THAN INCOME TAXES</b>				
682					
683	TAXES OTHER THAN INCOME				
684	FEDERAL TAXES				
685	FICA	LABOR	0	0	0
686	FUTA	LABOR	0	0	0
687	LESS PAYROLL DEDUCTION	LABOR	0	0	0
688					
689	STATE TAXES				
690	AD VALOREM TAXES				
691	JIM BRIDGER STATION	L 121	0	0	0
692	VALMY	L 121	0	0	0
693	OTHER-PRODUCTION PLANT	L 126	8,161,318	7,828,388	332,930
694	OTHER-TRANSMISSION PLANT	L 157	6,826,628	6,547,695	278,933
695	OTHER-DISTRIBUTION PLANT	L 186	9,182,931	8,749,620	433,311
696	OTHER-GENERAL PLANT	L 200	1,814,292	1,735,401	78,892
697	SUB-TOTAL		25,985,170	24,861,103	1,124,066
698					
699	LICENSES - HYDRO PROJECTS	L 122	4,240	4,067	173
700					
701	REGULATORY COMMISSION FEES				
702	STATE OF IDAHO	CIDA	2,616,251	2,616,251	0
703	STATE OF OREGON	CODA	385,511	0	385,511
704					
705	FRANCHISE TAXES				
706	STATE OF OREGON	CODA	953,000	0	953,000
707					
708	OTHER STATE TAXES				
709	UNEMPLOYMENT TAXES	LABOR	0	0	0
710	HYDRO GENERATION KWH TAX	E10	1,889,911	1,806,165	83,746
711	IRRIGATION-PIC	E10	328,291	313,744	14,547
712					
713	TOTAL TAXES OTHER THAN INCOME		32,162,375	29,601,331	2,561,044

**IDAHO POWER COMPANY  
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	<u>DESCRIPTION</u>	<u>ALLOC/ SOURCE</u>	<u>TOTAL SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
714	<b>TABLE 8-REGULATORY DEBITS &amp; CREDITS</b>				
715	REGULATORY DEBITS/CREDITS				
716	STATE OF IDAHO	CIDA	3,141,786	<b>3,141,786</b>	0
717	STATE OF OREGON	CODA	303,059	<b>0</b>	303,059
718					
719	TOTAL REGULATORY DEBITS/CREDITS		3,444,845	<b>3,141,786</b>	303,059
720					
721					

**IDAHO POWER COMPANY  
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	<u>DESCRIPTION</u>	<u>ALLOC/ SOURCE</u>	<u>TOTAL SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
722	<b>TABLE 9-INCOME TAXES</b>				
723					
724	410/411 NET PROVISION FOR DEFERRED INCOME TAXES				
725	ACCOUNT #282 - RELATED	P101P	(16,604,189)	<b>(15,882,182)</b>	(722,007)
726	ACCOUNTS #190 & #283 - RELATED	L 753	(1,269,034)	<b>(1,242,756)</b>	(26,278)
727	TOTAL NET PROVISION FOR DEFERRED INCOME TAXES		(17,873,223)	<b>(17,124,938)</b>	(748,285)
728					
729	411.4 - INVESTMENT TAX CREDIT ADJUSTMENT	P101P	25,014,178	<b>23,926,476</b>	1,087,702
730					
731	SUMMARY OF INCOME TAXES				
732					
733	TOTAL FEDERAL INCOME TAX		39,179,328	<b>39,040,245</b>	139,083
734					
735	STATE INCOME TAX				
736	STATE OF IDAHO		(4,381,551)	<b>(3,747,326)</b>	(634,225)
737	STATE OF OREGON		691,473	<b>685,175</b>	6,298
738	OTHER STATES		236,057	<b>233,716</b>	2,341
739	TOTAL STATE INCOME TAXES		(3,454,021)	<b>(2,828,435)</b>	(625,586)

**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
740	<b>TABLE 10-CALCULATION OF FEDERAL INCOME TAX</b>				
741	OPERATING REVENUES		1,465,078,546	<b>1,406,650,030</b>	58,428,516
742					
743	OPERATING EXPENSES				
744	OPERATION & MAINTENANCE		930,414,600	<b>888,823,963</b>	41,590,637
745	DEPRECIATION EXPENSE		157,725,966	<b>150,952,190</b>	6,773,776
746	AMORTIZATION OF LIMITED TERM PLANT		5,981,316	<b>5,725,400</b>	255,916
747	TAXES OTHER THAN INCOME		32,162,375	<b>29,601,331</b>	2,561,044
748	REGULATORY DEBITS/CREDITS		3,444,845	<b>3,141,786</b>	303,059
749	TOTAL OPERATING EXPENSES		1,129,729,102	<b>1,078,244,670</b>	51,484,432
750					
751	BOOK-TAX ADJUSTMENT	L 749	0	<b>0</b>	0
752					
753	INCOME BEFORE TAX ADJUSTMENTS (NOI Before Interest)		335,349,443	<b>328,405,360</b>	6,944,084
754					
755	INCOME STATEMENT ADJUSTMENTS				
756	INTEREST EXPENSE SYNCHRONIZATION	L 354	115,891,410	<b>110,795,525</b>	5,095,885
757					
758	NET OPERATING INCOME BEFORE TAXES		219,458,033	<b>217,609,834</b>	1,848,199
759					
760	TOTAL STATE INCOME TAXES (ALLOWED)		(3,454,021)	<b>(2,828,435)</b>	(625,586)
761					
762	NET FEDERAL INCOME AFTER STATE INCOME TAXES		222,912,055	<b>220,438,269</b>	2,473,785
763					
764	FEDERAL TAX AT 21 PERCENT	@ 21%	46,811,531	<b>46,292,037</b>	519,495
765	OTHER CURRENT TAX ADJUSTMENTS	L 764	0	<b>0</b>	0
766	PRIOR YEAR TAX ADJUSTMENT	L 764	0	<b>0</b>	0
767					
768	TOTAL FEDERAL INCOME TAX BEFORE OTHER ADJUSTMENTS		46,811,531	<b>46,292,037</b>	519,495
769					
770	OTHER TAX ADJUSTMENTS				
771	ALLOWANCE FOR AFUDC	P101P	0	<b>0</b>	0
772	FEDERAL INCOME TAX ADJUSTMENTS - PLANT	P101P	3,451,222	<b>3,301,151</b>	150,071
773	FEDERAL INCOME TAX ADJUSTMENTS - OTHER	L 753	10,147,810	<b>9,937,679</b>	210,131
774	SUM OF OTHER ADJUSTMENTS		13,599,032	<b>13,238,830</b>	360,202
775	FEDERAL TAX ON OTHER TAX ADJ AT 21 PERCENT	@ 21%	2,855,797	<b>2,780,154</b>	75,642
776	FEDERAL GENERAL BUSINESS CREDITS	P101P	10,488,000	<b>10,031,946</b>	456,054
777					
778	TOTAL FEDERAL INCOME TAX		39,179,328	<b>39,040,245</b>	139,083

**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
779	<b>TABLE 11-OREGON STATE INCOME TAX</b>				
780					
781	NET OPERATING INCOME BEFORE TAXES - OREGON	L 758	219,458,033	<b>217,609,834</b>	<i>1,848,199</i>
782					
783	ALLOWANCE FOR AFUDC	P101P	0	<b>0</b>	<i>0</i>
784	STATE INCOME TAX ADJUSTMENTS - PLANT	P101P	3,451,222	<b>3,301,151</b>	<i>150,071</i>
785	STATE INCOME TAX ADJUSTMENTS - OTHER	L 753	10,147,810	<b>9,937,679</b>	<i>210,131</i>
786	ADD: OTHER	L 753	0	<b>0</b>	<i>0</i>
787					
788	TOTAL STATE INCOME TAX ADJUSTMENTS - OREGON		13,599,032	<b>13,238,830</b>	<i>360,202</i>
789					
790	INCOME SUBJECT TO OREGON TAX		233,057,065	<b>230,848,665</b>	<i>2,208,401</i>
791					
792	IERCO TAXABLE INCOME	E10	3,000,000	<b>2,867,063</b>	<i>132,937</i>
793	BONUS DEPRECIATION & OTHER OREGON ADJ	P101P	(5,566,032)	<b>(5,324,002)</b>	<i>(242,030)</i>
794	OTHER	L 753	0	<b>0</b>	<i>0</i>
795					
796	TOTAL STATE TAXABLE INCOME - OREGON		230,491,033	<b>228,391,726</b>	<i>2,099,308</i>
797	APPORTIONMENT FACTOR (0.045454550)	@ 0.045454550	10,476,866	<b>10,381,443</b>	<i>95,423</i>
798	POST APPORTIONMENT M ITEMS	L 753	0	<b>0</b>	<i>0</i>
799	TOTAL TAXABLE INCOME - OREGON		10,476,866	<b>10,381,443</b>	<i>95,423</i>
800					
801	OREGON TAX AT 6.6 PERCENT	@ 6.60%	691,473	<b>685,175</b>	<i>6,298</i>
802	LESS: INVESTMENT TAX CREDIT	P101P	0	<b>0</b>	<i>0</i>
803					
804	STATE INCOME TAX ALLOWED - OREGON		691,473	<b>685,175</b>	<i>6,298</i>
805	ADD : OR CAT TAX	L 785	0	<b>0</b>	<i>0</i>
806	PRIOR YEARS' TAX ADJUSTMENT	L 785	0	<b>0</b>	<i>0</i>
807					
808	STATE INCOME TAX PAID - OREGON		691,473	<b>685,175</b>	<i>6,298</i>

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
809	<b>TABLE 12-IDAHO STATE INCOME TAX</b>				
810					
811	NET OPERATING INCOME BEFORE TAXES - IDAHO	L 744	219,458,033	<b>217,609,834</b>	<i>1,848,199</i>
812					
813	ALLOWANCE FOR AFUDC	P101P	0	<b>0</b>	<i>0</i>
814	STATE INCOME TAX ADJUSTMENTS - PLANT	P101P	3,451,222	<b>3,301,151</b>	<i>150,071</i>
815	STATE INCOME TAX ADJUSTMENTS - OTHER	L 753	10,147,810	<b>9,937,679</b>	<i>210,131</i>
816					
817	INCOME SUBJECT TO IDAHO TAX		233,057,065	<b>230,848,665</b>	<i>2,208,401</i>
818					
819	IERCO TAXABLE INCOME	E10	3,000,000	<b>2,867,063</b>	<i>132,937</i>
820	BONUS DEPRECIATION ADJUSTMENT	P101P	(29,602,625)	<b>(28,315,402)</b>	<i>(1,287,223)</i>
821	OTHER	L 753	0	<b>0</b>	<i>0</i>
822	TOTAL STATE TAXABLE INCOME - IDAHO		206,454,440	<b>205,400,326</b>	<i>1,054,115</i>
823	APPORTIONMENT FACTOR (.965517241)	@ 0.965517241	199,335,322	<b>198,317,556</b>	<i>1,017,766</i>
824	POST APPORTIONMENT SCHEDULE M	L 753	0	<b>0</b>	<i>0</i>
825	TOTAL TAXABLE INCOME - IDAHO		199,335,322	<b>198,317,556</b>	<i>1,017,766</i>
826	IDAHO TAX AT 5.8 PERCENT	@ 5.80%	11,561,449	<b>11,502,418</b>	<i>59,030</i>
827	LESS: INVESTMENT TAX CREDIT	P101P	15,943,000	<b>15,249,744</b>	<i>693,256</i>
828					
829	STATE INCOME TAX ALLOWED - IDAHO		(4,381,551)	<b>(3,747,326)</b>	<i>(634,225)</i>
830	ADD : CURRENT TAX ADJUSTMENT	L 826	0	<b>0</b>	<i>0</i>
831	PRIOR YEARS' TAX ADJUSTMENT	826	0	<b>0</b>	<i>0</i>
832	STATE INCOME TAX PAID - IDAHO		(4,381,551)	<b>(3,747,326)</b>	<i>(634,225)</i>
833					
834	<b>OTHER STATE INCOME TAX</b>				
835	INCOME SUBJECT TO TAX		233,057,065	<b>230,848,665</b>	<i>2,208,401</i>
836					
837	IERCO TAXABLE INCOME	E10	3,000,000	<b>2,867,063</b>	<i>132,937</i>
838	BONUS DEPRECIATION ADJUSTMENT	P101P	0	<b>0</b>	<i>0</i>
839	OTHER	L 753	0	<b>0</b>	<i>0</i>
840	TOTAL TAXABLE INCOME-OTHER STATES		236,057,065	<b>233,715,728</b>	<i>2,341,338</i>
841	APPORTIONMENT FACTOR (1.0)		236,057,065	<b>233,715,728</b>	<i>2,341,338</i>
842	POST APPORTIONMENT SCHEDULE M	L 756	0	<b>0</b>	<i>0</i>
843	TAXABLE INCOME		236,057,065	<b>233,715,728</b>	<i>2,341,338</i>
844	OTHER TAX AT 0.1 PERCENT		236,057	<b>233,716</b>	<i>2,341</i>
845	ADD : CURRENT YEAR'S TAX DEFICIENCY	L 829	0	<b>0</b>	<i>0</i>
846	PRIOR YEARS' TAX ADJUSTMENT	L 829	0	<b>0</b>	<i>0</i>
847	OTHER STATES' INCOME TAX PAID		236,057	<b>233,716</b>	<i>2,341</i>

**IDAHO POWER COMPANY  
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2			ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>		<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
848	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>					
849	STEAM POWER GENERATION					
850	OPERATION					
851	500 / SUPERVISION & ENGINEERING	L 852-862		266,133	<b>255,277</b>	10,857
852	501 / FUEL	D10		2,559,614	<b>2,455,198</b>	104,416
853	502 / STEAM EXPENSES					
854	LABOR	D10		1,607,750	<b>1,542,164</b>	65,586
855	OTHER	D10		0	<b>0</b>	0
856	TOTAL ACCOUNT 502			1,607,750	<b>1,542,164</b>	65,586
857	505 / ELECTRIC EXPENSES					
858	LABOR	D10		626,112	<b>600,571</b>	25,541
859	OTHER	D10		0	<b>0</b>	0
860	TOTAL ACCOUNT 505			626,112	<b>600,571</b>	25,541
861	506 / MISCELLANEOUS EXPENSES	D10		3,352,418	<b>3,215,661</b>	136,757
862	507 / RENTS	D10		0	<b>0</b>	0
863	STEAM OPERATION EXPENSES			8,412,027	<b>8,068,870</b>	343,158
864						
865	MAINTENANCE					
866	510 / SUPERVISION & ENGINEERING	L 867-876		0	<b>0</b>	0
867	511 / STRUCTURES	D10		658	<b>631</b>	27
868	512 / BOILER PLANT					
869	LABOR	D10		3,983,710	<b>3,821,200</b>	162,510
870	OTHER	D10		0	<b>0</b>	0
871	TOTAL ACCOUNT 512			3,983,710	<b>3,821,200</b>	162,510
872	513 / ELECTRIC PLANT					
873	LABOR	D10		1,522,637	<b>1,460,523</b>	62,114
874	OTHER	D10		0	<b>0</b>	0
875	TOTAL ACCOUNT 513			1,522,637	<b>1,460,523</b>	62,114
876	514 / MISCELLANEOUS STEAM PLANT	D10		2,441,874	<b>2,342,261</b>	99,613
877	STEAM MAINTENANCE EXPENSES			7,948,879	<b>7,624,615</b>	324,264
878	TOTAL STEAM GENERATION EXPENSES			16,360,906	<b>15,693,485</b>	667,422
879						



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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
880	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>				
881	HYDRAULIC POWER GENERATION				
882	OPERATION				
883	535 / SUPERVISION & ENGINEERING	L 884-891	4,235,258	<b>4,061,414</b>	173,844
884	536 / WATER FOR POWER	E10	866,414	<b>828,021</b>	38,393
885	537 / HYDRAULIC EXPENSES	D10	6,262,192	<b>6,006,734</b>	255,458
886	538 / ELECTRIC EXPENSES				
887	LABOR	D10	1,510,454	<b>1,448,837</b>	61,617
888	OTHER	D10	0	<b>0</b>	0
889	TOTAL ACCOUNT 538		1,510,454	<b>1,448,837</b>	61,617
890	539 / MISCELLANEOUS EXPENSES	D10	3,401,219	<b>3,262,471</b>	138,748
891	540 / RENTS	D10	0	<b>0</b>	0
892	HYDRAULIC OPERATION EXPENSES		16,275,537	<b>15,607,477</b>	668,060
893					
894	MAINTENANCE				
895	541 / SUPERVISION & ENGINEERING	L 896-902	90,192	<b>86,513</b>	3,679
896	542 / STRUCTURES	D10	577,669	<b>554,103</b>	23,565
897	543 / RESERVOIRS, DAMS & WATERWAYS	D10	254,872	<b>244,475</b>	10,397
898	544 / ELECTRIC PLANT				
899	LABOR	D10	1,799,397	<b>1,725,993</b>	73,404
900	OTHER	D10	0	<b>0</b>	0
901	TOTAL ACCOUNT 544		1,799,397	<b>1,725,993</b>	73,404
902	545 / MISCELLANEOUS HYDRAULIC PLANT	D10	2,163,612	<b>2,075,350</b>	88,262
903	HYDRAULIC MAINTENANCE EXPENSES		4,885,742	<b>4,686,434</b>	199,307
904	TOTAL HYDRAULIC GENERATION EXPENSES		21,161,279	<b>20,293,911</b>	867,367

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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
905	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>				
906	OTHER POWER GENERATION				
907	OPERATION				
908	546 / SUPERVISION & ENGINEERING	L 909-915	516,722	<b>495,643</b>	21,079
909	547 / FUEL	E10	0	<b>0</b>	0
910	548 / GENERATING EXPENSES				
911	LABOR	D10	3,234,939	<b>3,102,974</b>	131,965
912	OTHER	D10	0	<b>0</b>	0
913	TOTAL ACCOUNT 548		3,234,939	<b>3,102,974</b>	131,965
914	549 / MISCELLANEOUS EXPENSES	D10	370,607	<b>355,488</b>	15,118
915	550 / RENTS	D10	0	<b>0</b>	0
916	OTHER POWER OPER EXPENSES		4,122,267	<b>3,954,105</b>	168,162
917					
918	MAINTENANCE				
919	551 / SUPERVISION & ENGINEERING	L 920-925	0	<b>0</b>	0
920	552 / STRUCTURES	D10	43,046	<b>41,290</b>	1,756
921	553 / GENERATING & ELECTRIC PLANT				
922	LABOR	D10	56,825	<b>54,507</b>	2,318
923	OTHER	D10	0	<b>0</b>	0
924	TOTAL ACCOUNT 553		56,825	<b>54,507</b>	2,318
925	554 / MISCELLANEOUS EXPENSES	D10	690,424	<b>662,259</b>	28,165
926	OTHER POWER MAINT EXPENSES		790,295	<b>758,056</b>	32,239
927	TOTAL OTHER POWER GENERATION EXP		4,912,562	<b>4,712,161</b>	200,402
928					
929	OTHER POWER SUPPLY EXPENSE				
930	555.0 / PURCHASED POWER	E10	0	<b>0</b>	0
931	555.1 / COGENERATION & SMALL POWER PROD				
932	CAPACITY RELATED	D10	0	<b>0</b>	0
933	ENERGY RELATED	E10	0	<b>0</b>	0
934	TOTAL 555.1/CSPP			<b>0</b>	0
935	555/TOTAL			<b>0</b>	0
936	556 / LOAD CONTROL & DISPATCHING EXPENSES	D10	0	<b>0</b>	0
937	557 / OTHER EXPENSES	D10	4,495,330	<b>4,311,949</b>	183,381
938	TOTAL OTHER POWER SUPPLY EXPENSES		4,495,330	<b>4,311,949</b>	183,381
939					
940	TOTAL PRODUCTION EXPENSES		46,930,078	<b>45,011,506</b>	1,918,572

**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
941	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>				
942	TRANSMISSION EXPENSES				
943	OPERATION				
944	560 / SUPERVISION & ENGINEERING	L 157	2,380,639	<b>2,283,367</b>	97,272
945	561 / LOAD DISPATCHING	D12	3,053,979	<b>2,929,396</b>	124,583
946	562 / STATION EXPENSES	L 139	1,883,621	<b>1,806,653</b>	76,968
947	563 / OVERHEAD LINE EXPENSES	L 143+147+151	428,401	<b>410,892</b>	17,509
948	565 / TRANSMISSION OF ELECTRICITY BY OTHERS	E10	0	<b>0</b>	0
949	566 / MISCELLANEOUS EXPENSES	L 526	0	<b>0</b>	0
950	567 / RENTS	L 157	0	<b>0</b>	0
951	TOTAL TRANSMISSION OPERATION		7,746,639	<b>7,430,307</b>	316,332
952					
953	MAINTENANCE				
954	568 / SUPERVISION & ENGINEERING	L 157	90,949	<b>87,233</b>	3,716
955	569 / STRUCTURES	L 135	1,442,019	<b>1,383,185</b>	58,834
956	570 / STATION EQUIPMENT	L 139	2,327,169	<b>2,232,077</b>	95,092
957	571 / OVERHEAD LINES	L 143+147+151	865,811	<b>830,425</b>	35,385
958	573 / MISCELLANEOUS PLANT	L 157	3,520	<b>3,376</b>	144
959	TOTAL TRANSMISSION MAINTENANCE		4,729,468	<b>4,536,296</b>	193,172
960					
961	TOTAL TRANSMISSION EXPENSES		12,476,107	<b>11,966,603</b>	509,504

**IDAHO POWER COMPANY  
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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
962	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>				
963	DISTRIBUTION EXPENSES				
964	OPERATION				
965	580 / SUPERVISION & ENGINEERING	L 186	2,995,909	<b>2,854,543</b>	141,367
966	581 / LOAD DISPATCHING	D60	4,166,909	<b>4,009,091</b>	157,818
967	582 / STATION EXPENSES	L 171	983,432	<b>936,981</b>	46,451
968	583 / OVERHEAD LINE EXPENSES	L 176+177	3,611,849	<b>3,354,617</b>	257,231
969	584 / UNDERGROUND LINE EXPENSES	L 178+179	1,372,655	<b>1,352,112</b>	20,543
970	585 / STREET LIGHTING & SIGNAL SYSTEMS	L 184	20,365	<b>19,552</b>	813
971	586 / METER EXPENSES	L 182	4,176,379	<b>4,041,475</b>	134,904
972	587 / CUSTOMER INSTALLATIONS EXPENSE	L 183	736,676	<b>685,851</b>	50,825
973	588 / MISCELLANEOUS EXPENSES	L 560	2,911,186	<b>2,749,719</b>	161,468
974	589 / RENTS	L 186	0	<b>0</b>	0
975	TOTAL DISTRIBUTION OPERATION		20,975,360	<b>20,003,940</b>	971,420
976					
977	MAINTENANCE				
978	590 / SUPERVISION & ENGINEERING	L 186	9,353	<b>8,912</b>	441
979	591 / STRUCTURES	L 167	0	<b>0</b>	0
980	592 / STATION EQUIPMENT	L 171	2,716,642	<b>2,588,326</b>	128,316
981	593 / OVERHEAD LINES	L 176+177	5,201,009	<b>4,830,600</b>	370,409
982	594 / UNDERGROUND LINES	L 178+179	304,799	<b>300,238</b>	4,562
983	595 / LINE TRANSFORMERS	L 180	25,793	<b>24,370</b>	1,423
984	596 / STREET LIGHTING & SIGNAL SYSTEMS	L 184	123,794	<b>118,851</b>	4,943
985	597 / METERS	L 182	678,112	<b>656,208</b>	21,904
986	598 / MISCELLANEOUS PLANT	L 186	79,964	<b>76,191</b>	3,773
987	TOTAL DISTRIBUTION MAINTENANCE		9,139,466	<b>8,603,695</b>	535,771
988	TOTAL DISTRIBUTION EXPENSES		30,114,827	<b>28,607,635</b>	1,507,191
989					
990	CUSTOMER ACCOUNTING EXPENSES				
991	901 / SUPERVISION	L 992	705,017	<b>610,646</b>	94,371
992	902 / METER READING	CW902	1,267,888	<b>1,098,173</b>	169,715
993	903 / CUSTOMER RECORDS & COLLECTIONS	CW903	9,731,713	<b>9,412,221</b>	319,492
994	904 / UNCOLLECTIBLE ACCOUNTS	CW904	0	<b>0</b>	0
995	905 / MISC EXPENSES	L 992-994	0	<b>0</b>	0
996	TOTAL CUSTOMER ACCOUNTING EXPENSES		11,704,618	<b>11,121,040</b>	583,577
997					
998	CUSTOMER SERVICES & INFORMATION EXPENSES				
999	907 / SUPERVISION	L 1003	828,671	<b>806,758</b>	21,912
1000	908 / CUSTOMER ASSISTANCE	L 572	4,679,331	<b>4,555,597</b>	123,734
1001	908 / ENERGY EFFICIENCY RIDER	CIDA	0	<b>0</b>	0
1002	909 / INFORMATION & INSTRUCTIONAL	L 576	0	<b>0</b>	0
1003	910 / MISCELLANEOUS EXPENSES	L 1000+1002	308,799	<b>300,634</b>	8,165
1004	TOTAL CUST SERV & INFORMATN EXPENSES		5,816,801	<b>5,662,989</b>	153,812

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2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1005	<b>TABLE 13-DEVELOPMENT OF LABOR RELATED ALLOCATOR</b>				
1006	ADMINISTRATIVE & GENERAL EXPENSES				
1007	920 / ADMINISTRATIVE & GENERAL SALARIES	PTDCAS	53,511,744	51,175,830	2,335,915
1008	921 / OFFICE SUPPLIES	PTDCAS	228,890	218,898	9,992
1009	922 / ADMIN & GENERAL EXPENSES TRANSFERRED-CR	SUBEX	0	0	0
1010	923 / OUTSIDE SERVICES	PTDCAS	0	0	0
1011	924 / PROPERTY INSURANCE		0		
1012	PRODUCTION - STEAM	L 121	0	0	0
1013	ALL RISK & MISCELLANEOUS	P110P	378,934	363,208	15,726
1014					
1015	925 / INJURIES & DAMAGES	LABOR	132,355	126,578	5,777
1016	926 / EMPLOYEE PENSIONS & BENEFITS	LABOR	0	0	0
1017	927 / FRANCHISE REQUIREMENTS	CIDA	0	0	0
1018	928 / REGULATORY COMMISSION EXPENSES				
1019	928.101 / FERC ADMIN ASSESS & SECURITIES				
1020	CAPACITY RELATED	D10	0	0	0
1021	ENERGY RELATED	E10	0	0	0
1022	928.101 / FERC ORDER 472	E99	0	0	0
1023	928.101 / FERC MISCELLANIOUS	L RESREV	0	0	0
1024	928.102 FERC RATE CASE	RESREV	0	0	0
1025	928.104 / FERC OREGON HYDRO	RESREV	0	0	0
1026	SEC EXPENSES	L 202	0	0	0
1027	928.202 / IDAHO PUC -RATE CASE	CIDA	0	0	0
1028	928.203 / IDAHO PUC - OTHER	CIDA	0	0	0
1029	928.301 / OREGON PUC - FILING FEES	CODA	0	0	0
1030	928.302 / OREGON PUC - RATE CASE	CODA	0	0	0
1031	928.303 / OREGON PUC - OTHER	CODA	0	0	0
1032	IPC/PUC JSS TRUE-UP ADJ	PTD	0	0	0
1033	TOTAL ACCOUNT 928			0	0
1034	929 / DUPLICATE CHARGES	SUBEX	0	0	0
1035	930.1 / GENERAL ADVERTISING	RELAB	0	0	0
1036	930.2 / MISCELLANEOUS EXPENSES	PTDCAS	214,755	205,380	9,375
1037	931 / RENTS	L 200	0	0	0
1038	TOTAL ADM & GEN OPERATION		54,466,679	52,089,895	2,376,784
1039	PLUS:				
1040	935 / GENERAL PLANT MAINTENANCE	P3908	1,038,440	993,286	45,155
1041	416 / MERCHANDISING EXPENSE	E10	0	0	0
1042	TOTAL OPER & MAINT EXPENSES		162,547,550	155,452,955	7,094,595
1043	<b>TOTAL LABOR - RATIO (%)</b>		100.00%	95.64%	4.36%
1044					

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

		ALLOC/ <u>SOURCE</u>	TOTAL <u>SYSTEM</u>	<u>IDAHO RETAIL</u>	<u>OTHER</u>
2	<u>DESCRIPTION</u>				
3					
1045	<b>TABLE 14-ALLOCATION FACTORS</b>				
1046					
1047	CAPACITY RELATED KW				
1048	PRODUCTION RELATED COINCIDENT PEAKS @ GEN LEVEL	D10	2,585,316	<b>2,479,852</b>	105,465
1049	SYSTEM TRANSMISSION SERVICE @ GENERATION LEVEL	D11	2,585,316	<b>2,479,852</b>	105,465
1050	RETAIL TRANSMISSION SERVICE @ GENERATION LEVEL	D12	2,585,316	<b>2,479,852</b>	105,465
1051	DISTRIBUTION SERVICE @ GENERATION LEVEL	D60	2,431,714	<b>2,339,615</b>	92,099
1052					
1053	ENERGY RELATED MWH				
1054	GENERATION LEVEL (PSP)	E10	16,783,429	<b>16,039,716</b>	743,713
1055	CUSTOMER LEVEL	E99	15,740,718	<b>15,039,426</b>	701,292
1056					
1057	CUSTOMER RELATED FACTORS				
1058	902-CUSTOMER WEIGHTED	CW902	1,819,788	<b>1,576,198</b>	243,590
1059	903-CUSTOMER WEIGHTED	CW903	15,041,849	<b>14,548,026</b>	493,823
1060	904-CUSTOMER WEIGHTED	CW904	2,751,851	<b>2,564,962</b>	186,889
1061	909-DIRECT ASSIGN-AVG.NO.CUST.	DA909	610,567	<b>590,862</b>	19,705

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1062	<b>TABLE 14-ALLOCATION FACTORS</b>				
1063					
1064	DIRECT ASSIGNMENTS (red font denotes allocator comes from Plant f				
1065	252-CUSTOMER ADVANCES	DA252	13,139,360	<b>13,043,126</b>	96,234
1066	350-LAND & LAND RIGHTS	DA350	0	<b>0</b>	0
1067	352-STRUCTURES & IMPROVEMENTS	DA352	658	<b>0</b>	658
1068	353-STATION EQUIPMENT	DA353	111,594	<b>75,100</b>	36,494
1069	354-TOWERS & FIXTURES	DA354	0	<b>0</b>	0
1070	355-POLES & FIXTURES	DA355	33,842	<b>0</b>	33,842
1071	356-OVERHEAD CONDUCTORS & DEVICES	DA356	26,495	<b>1,189</b>	25,306
1072	359-ROADS & TRAILS	DA359	0	<b>0</b>	0
1073	360LAND & LAND RIGHTS	ACCT360	7,818,143	<b>7,549,162</b>	268,981
1074	360LAND & LAND RIGHTS-CIAC	ACCT360CIAC	430,656	<b>430,355</b>	301
1075	361-STRUCTURES & IMPROVEMENTS	ACCT361	52,245,201	<b>49,776,238</b>	2,468,963
1076	361-STRUCTURES & IMPROVEMENTS-CIAC	ACCT361CIAC	8,009,324	<b>7,447,616</b>	561,708
1077	362-STATION EQUIPMENT	ACCT362	300,357,806	<b>287,706,828</b>	12,650,978
1078	362-STATION EQUIPMENT-CIAC	ACCT362CIAC	38,463,951	<b>34,892,876</b>	3,571,075
1079	364-POLES, TOWERS & FIXTURES-NET	DA364	313,204,206	<b>288,748,305</b>	24,455,901
1080	365-OVERHEAD CONDUCTORS & DEVICES-NET	DA365	155,253,318	<b>146,384,826</b>	8,868,492
1081	366-UNDERGROUND CONDUIT-NET	DA366	52,785,315	<b>51,958,505</b>	826,810
1082	367-UNDERGROUND CONDUCTORS & DEVICES-NET	DA367	318,155,073	<b>313,429,461</b>	4,725,612
1083	368- LINE TRANSFORMERS	DA368	704,959,938	<b>666,063,582</b>	38,896,356
1084	369-DIRECT ASSIGNMENT	DA369	67,920,301	<b>65,262,678</b>	2,657,623
1085	370-METERS	DA370	112,940,727	<b>109,292,546</b>	3,648,181
1086	371-INSTALLATIONS ON CUSTOMER PREMISES-NET	DA371	4,931,439	<b>4,591,211</b>	340,228
1087	373-STREET LIGHTING SYSTEMS-NET	DA373	5,706,749	<b>5,478,881</b>	227,868
1088	451-REVENUE - MISCELLANEOUS SERVICE	DA451	4,936,204	<b>4,890,357</b>	45,847
1089	454-REVENUE - FACILITIES CHARGE	DA454	10,470,031	<b>10,041,240</b>	428,792
1090	908-OTHER CUSTOMER ASSISTANCE	DA908	6,971,635	<b>6,790,730</b>	180,904
1091	440-RETAIL SALES REVENUE	RETREV	1,169,833,173	<b>1,116,166,332</b>	53,666,841
1092	447-WHOLESALE SALES REVENUE	RESREV	0	<b>0</b>	0
1093	456-REVENUE - STANDBY SERVICE	DASTNBY	1	<b>1</b>	0
1094	440-REVENUE OFFSET FOR PLANT ADDITIONS	DAREV	1	<b>1</b>	0
1095	IDAHO	CIDA	1	<b>1</b>	0
1096	OREGON	CODA	1	<b>0</b>	1
1097	NET TO GROSS TAX MULTIPLIER	DA990	1.347	<b>1.347</b>	1.347

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1098	<b>TABLE 14-ALLOCATION FACTORS</b>				
1099					
1100	INTERNALLY DEVELOPED ALLOCATION FACTORS				
1101	PLANT - PROD,TRANS&DIST	PTD	5,793,115,906	<b>5,541,211,508</b>	251,904,398
1102	LAB - PROD,TRANS,DIST,CUST ACCT&CSIS	PTDCAS	107,042,430	<b>102,369,774</b>	4,672,656
1103	PLANT - HYDRO,OTHER,TSUBS,DSUBS&GP	P110P	3,227,551,412	<b>3,093,605,738</b>	133,945,674
1104	PLANT - GEN PLT (390,391,397&398)	P3908	313,029,643	<b>299,418,048</b>	13,611,594
1105	PLANT - PROD,TRANS,DIST&GEN	P101P	6,310,360,398	<b>6,035,964,449</b>	274,395,950
1106	O&M - PROD,TRANS,DIST,CUST ACCT&CSIS	SUBEX	738,121,707	<b>705,414,246</b>	32,707,461
1107	LAB - PROD,TRANS,DIST,CUST ACCT&CSIS	RELAB	3,227,551,412	<b>3,093,605,738</b>	133,945,674
1108	LAB - ALL LABOR WITHOUT 925-6 "CIRC"	LABOR	161,161,999	<b>154,127,711</b>	7,034,288



**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1109	<b>TABLE 15-ALLOCATION FACTORS-RATIOS</b>				
1110					
1111	CAPACITY RELATED KW				
1112	PRODUCTION RELATED COINCIDENT PEAKS @ GEN LEVEL	D10	100.00%	<b>95.92%</b>	4.08%
1113	SYSTEM TRANSMISSION SERVICE @ GENERATION LEVEL	D11	100.00%	<b>95.92%</b>	4.08%
1114	RETAIL TRANSMISSION SERVICE @ GENERATION LEVEL	D12	100.00%	<b>95.92%</b>	4.08%
1115	DISTRIBUTION SERVICE @ GENERATION LEVEL	D60	100.00%	<b>96.21%</b>	3.79%
1116					
1117	ENERGY RELATED MWH				
1118	GENERATION LEVEL (PSP)	E10	100.00%	<b>95.57%</b>	4.43%
1119	CUSTOMER LEVEL	E99	100.00%	<b>95.54%</b>	4.46%
1120					
1121	CUSTOMER RELATED FACTORS				
1122	369-DIRECT ASSIGNMENT	DA369	100.00%	<b>96.09%</b>	3.91%
1123	370-METERS	DA370	100.00%	<b>96.77%</b>	3.23%
1124	902-CUSTOMER WEIGHTED	CW902	100.00%	<b>86.61%</b>	13.39%
1125	903-CUSTOMER WEIGHTED	CW903	100.00%	<b>96.72%</b>	3.28%
1126	904-CUSTOMER WEIGHTED	CW904	100.00%	<b>93.21%</b>	6.79%
1127	909-DIRECT ASSIGN-AVG.NO.CUST.	DA909	100.00%	<b>96.77%</b>	3.23%

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1128	<b>TABLE 15-ALLOCATION FACTORS-RATIOS</b>				
1129					
1130	DIRECT ASSIGNMENTS				
1131	252-CUSTOMER ADVANCES	DA252	100.00%	99.27%	0.73%
1132	350-LAND & LAND RIGHTS	DA350	#DIV/0!	#DIV/0!	#DIV/0!
1133	352-STRUCTURES & IMPROVEMENTS	DA352	100.00%	0.00%	100.00%
1134	353-STATION EQUIPMENT	DA353	100.00%	67.30%	32.70%
1135	354-TOWERS & FIXTURES	DA354	#DIV/0!	#DIV/0!	#DIV/0!
1136	355-POLES & FIXTURES	DA355	100.00%	0.00%	100.00%
1137	356-OVERHEAD CONDUCTORS & DEVICES	DA356	100.00%	4.49%	95.51%
1138	359-ROADS & TRAILS	DA359	#DIV/0!	#DIV/0!	#DIV/0!
1139	360LAND & LAND RIGHTS-DA	DA360	100.00%	96.56%	3.44%
1140	360LAND & LAND RIGHTS-CIAC	DA360C	100.00%	99.93%	0.07%
1141	361-STRUCTURES & IMPROVEMENTS-DA	DA361	100.00%	95.27%	4.73%
1142	361-STRUCTURES & IMPROVEMENTS-CIAC	DA361C	100.00%	92.99%	7.01%
1143	362-STATION EQUIPMENT-DA	DA362	100.00%	95.79%	4.21%
1144	362-STATION EQUIPMENT-CIAC	DA362C	100.00%	90.72%	9.28%
1145	364-POLES, TOWERS & FIXTURES-NET	DA364	100.00%	92.19%	7.81%
1146	365-OVERHEAD CONDUCTORS & DEVICES-NET	DA365	100.00%	94.29%	5.71%
1147	366-UNDERGROUND CONDUIT-NET	DA366	100.00%	98.43%	1.57%
1148	367-UNDERGROUND CONDUCTORS & DEVICES-NET	DA367	100.00%	98.51%	1.49%
1149	368- LINE TRANSFORMERS	DA368	100.00%	94.48%	5.52%
1150	371-INSTALLATIONS ON CUSTOMER PREMISES-NET	DA371	100.00%	93.10%	6.90%
1151	373-STREET LIGHTING SYSTEMS-NET	DA373	100.00%	96.01%	3.99%
1152	451-REVENUE - MISCELLANEOUS SERVICE	DA451	100.00%	99.07%	0.93%
1153	454-REVENUE - FACILITIES CHARGE	DA454	100.00%	95.90%	4.10%
1154	908-OTHER CUSTOMER ASSISTANCE	DA908	100.00%	97.41%	2.59%
1155	440-RETAIL SALES REVENUE	RETRV	100.00%	95.41%	4.59%
1156	447-WHOLESALE SALES REVENUE	RESREV	#DIV/0!	#DIV/0!	#DIV/0!
1157	456-REVENUE - STANDBY SERVICE	DASTNBY	100.00%	100.00%	0.00%
1158	440-REVENUE OFFSET FOR PLANT ADDITIONS	DAREV	100.00%	100.00%	0.00%
1159	IDAHO	CIDA	100.00%	100.00%	0.00%
1160	OREGON	CODA	100.00%	0.00%	100.00%
1161	NET TO GROSS TAX MULTIPLIER	DA990	1.347	1.347	1.347

**IDAHO POWER COMPANY  
JURISDICTIONAL SEPARATION STUDY  
IDAHO REVENUE REQUIREMENT  
FOR THE TEST YEAR ENDING DECEMBER 31, 2023**

2		ALLOC/	TOTAL	IDAHO	
3	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>SYSTEM</u>	<u>RETAIL</u>	<u>OTHER</u>
1162	<b>TABLE 15-ALLOCATION FACTORS-RATIOS</b>				
1163					
1164	INTERNALLY DEVELOPED ALLOCATION FACTORS				
1165	PLANT - PROD,TRANS&DIST	PTD	100.00%	<b>95.65%</b>	4.35%
1166	LAB - PROD,TRANS,DIST,CUST ACCT&CSIS	PTDCAS	100.00%	<b>95.63%</b>	4.37%
1167	PLANT - HYDRO,OTHER,TSUBS,DSUBS&GP	P110P	100.00%	<b>95.85%</b>	4.15%
1168	PLANT - GEN PLT (390,391,397&398)	P3908	100.00%	<b>95.65%</b>	4.35%
1169	PLANT - PROD,TRANS,DIST&GEN	P101P	100.00%	<b>95.65%</b>	4.35%
1170	O&M - PROD,TRANS,DIST,CUST ACCT&CSIS	SUBEX	100.00%	<b>95.57%</b>	4.43%
1171	LAB - PROD,TRANS,DIST,CUST ACCT&CSIS	RELAB	100.00%	<b>95.85%</b>	4.15%
1172	LAB - ALL LABOR WITHOUT 925-6 "CIRC"	LABOR	100.00%	<b>95.64%</b>	4.36%

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
	)	

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

CONNIE G. ASCHENBRENNER

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Connie G. Aschenbrenner. My  
5 business address is 1221 West Idaho Street, Boise, Idaho  
6 83702. I am employed by Idaho Power as the Rate Design  
7 Senior Manager in the Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     In May of 2006, I received a Bachelor of  
10 Business Administration degree in Finance from Boise State  
11 University in Boise, Idaho. In December of 2011, I earned a  
12 Master of Business Administration degree from Boise State  
13 University. In addition, I have attended the electric  
14 utility ratemaking course The Basics: Practical Regulatory  
15 Training for the Electric Industry, a course offered  
16 through New Mexico State University's Center for Public  
17 Utilities.

18          Q.     Please describe your work experience with  
19 Idaho Power.

20          A.     In 2012, I was hired as a Regulatory Analyst  
21 in the Company's Regulatory Affairs Department. My primary  
22 responsibilities included support of the Company's  
23 Commercial and Industrial customer class's rate design and  
24 general support of tariff rules and regulations. In my time  
25 as a Regulatory Analyst, I also provided support for

1 Residential and Small General Service rate design, as well  
2 as regulatory support associated with demand-side  
3 management ("DSM") activities. In 2017, I was promoted to  
4 Rate Design Manager for Idaho Power, and in 2019 I was  
5 promoted to my current role as Rate Design Senior Manager.  
6 I am currently responsible for the management of the rate  
7 design strategies of the Company, as well as oversight of  
8 all tariff administration. In my current role, I am also  
9 one of the Company representatives at its Energy Efficiency  
10 Advisory Group ("EEAG") meetings.

11 Q. What is the purpose of your testimony in this  
12 matter?

13 A. In my testimony, I will describe generally how  
14 customer rates are developed and the Company's approach to  
15 rate design strategy as well as the policy basis for the  
16 rate design proposals being made in this case. I will also  
17 describe the overall objectives I provided to the  
18 Regulatory Consultants and Analysts for the development of  
19 the Company's proposed rate designs and general tariff  
20 updates. I will also present an overview of the Company's  
21 approach to developing pricing for its on-site generation  
22 customers, specifically considering interdependencies  
23 between this case and Case No. IPC-E-23-14, which is  
24 currently pending before the Idaho Public Utilities  
25 Commission ("Commission"). Finally, I will describe the

1 approach the Company took to updating its tariff schedules  
2 and rules to ensure the language in the tariff reflects  
3 current business practices.

4 Q. Please provide a witness overview for the  
5 Company's CCOS, rate design, and general tariff revision  
6 proposals.

7 A. Company Witness Mr. Paul Goralski will present  
8 the Company's recommendation as it relates to class cost-  
9 of-service ("CCOS") in this case and will also present rate  
10 design recommendations for the Company's existing Special  
11 Contract customers (Micron, Simplot - Pocatello, and INL)  
12 as well as pending and prospective Special Contract  
13 customers (Brisbie, Lamb Weston, and Simplot - Caldwell).  
14 Mr. Goralski will also present the rate design proposal for  
15 Schedule 20, Speculative High-Density Load as well as the  
16 proposed Fixed Cost Adjustment rates and the corresponding  
17 modifications to Schedule 54.

18 Company Witness Mr. Grant Anderson will explain the  
19 proposed rate design and resulting prices for the  
20 residential classes, including standard service (Schedule  
21 1), time-of-use ("TOU") (Schedule 5), and residential on-  
22 site generation (Schedule 6) and will explain the Company's  
23 Residential Price Modernization Plan. Mr. Anderson will  
24 also present the rate design proposals for Small General  
25 Service On-Site Generation (Schedule 8), Large General

1 Service - Primary and Transmission (Schedule 9P/T) and  
2 Large Power customers (Schedule 19).

3 Company Witness Mr. Zack Thompson will present the  
4 rate design proposals for Small General Service (Schedule  
5 7), Large General Service - Secondary (Schedule 9S),  
6 Agricultural Irrigation Service (Schedule 24), Dusk to Dawn  
7 Customer Lighting (Schedule 15), Street Lighting Service  
8 (Schedule 41), Traffic Control Signal Lighting Service  
9 (Schedule 42), and Non-Metered General Service (Schedule  
10 40).

11 Finally, Company Witness Mr. Riley Maloney will  
12 present the recommendation for the Company's Standby  
13 Service schedules (Schedules 31 and 45) and Alternate  
14 Distribution Service schedule (Schedule 46). Mr. Maloney  
15 will also present several proposed modifications to the  
16 Company's tariff.

17 **I. RATE DESIGN OVERVIEW AND OBJECTIVES**

18 Q. How are customer rates developed?

19 A. After the Idaho jurisdictional revenue  
20 requirement is determined, the Company develops a class  
21 cost-of-service study ("CCOS Study") whereby it allocates  
22 the revenue requirement to each customer class based on  
23 their specific utilization of the system. The methodology  
24 for separating costs among classes consists of a three-step  
25 process generally referred to as classification,



1 functionalization, and allocation. In all three steps,  
2 recognition is given to the way in which the costs are  
3 incurred by relating these costs to the way in which the  
4 utility is operated to provide electrical service. Once  
5 individual costs have been allocated to the various classes  
6 of service, it is possible to total these costs as  
7 allocated and arrive at a breakdown of functionalized and  
8 classified unit costs which can be relied on to inform rate  
9 design.

10 Q. Please describe the objectives underlying the  
11 Company's rate design strategy.

12 A. The Company's primary rate design objective is  
13 to establish rate structures and prices that will recover  
14 the revenue requirement targets for each customer class.  
15 Additionally, the Company seeks to design rates that assign  
16 costs to those customers that cause the Company to incur  
17 the costs, a principle known as "cost causation," and to  
18 incorporate price signals to encourage wise and efficient  
19 use of energy.

20 Q. How can rate design influence customer  
21 behavior?

22 A. The rate design itself - or structure - and  
23 the prices set by these designs can impact the amount of  
24 electricity customers consume and either encourage or  
25 discourage usage at certain times. The Company believes

1 that rates should be designed in a manner such that changes  
2 in a customer's consumption (both the timing or quantity of  
3 usage) will result in decreases or increases to the  
4 customer's bill that track with overall decreases or  
5 increases in costs incurred by the utility to provide  
6 service.

7 Q. How effective are the Company's current rate  
8 structures in achieving its rate design objectives?

9 A. Current rate structures fall short of  
10 achieving the Company's long-term objectives in a number of  
11 key areas. A large portion of the fixed costs to serve  
12 customers is collected through volumetric energy charges.  
13 In other words, the rate structure does not align well with  
14 how costs are incurred, and as a result, the price signals  
15 sent to these customers are inconsistent with the nature of  
16 the costs of providing electricity. Further, the rates  
17 offer little incentive for customers to use electricity  
18 cost-effectively.

19 Q. Why does the Company believe it is important  
20 to align prices with the underlying cost structure?

21 A. Customers respond to price signals. If the  
22 Company's rate structures are not aligned with the  
23 underlying cost drivers, customers do not have access to  
24 information that will allow them to make decisions based on  
25 the economics from their perspective or for the broader

1 utility system. This dynamic is increasingly important to  
2 Idaho Power's system. Over the last several years,  
3 advancements in technology have influenced customer  
4 adoption of several behind-the-meter energy solutions,  
5 including energy efficiency, smart appliances, on-site  
6 generation, and energy storage systems. The Company  
7 believes that structuring rates in a manner that will more  
8 equitably collect fixed costs, while also sending price  
9 signals to promote efficiencies, is important to the long-  
10 term management of system costs.

11 In addition to sending the right price signal to  
12 influence behavior, cost-informed rates help to limit cross  
13 subsidies within a given class.

14 Q. Are there any other policy objectives to  
15 consider regarding rate design?

16 A. Yes. There are several other important  
17 ratemaking objectives the Commission has historically  
18 relied upon when ultimately establishing rates. These  
19 include evaluating customers' ability to pay,  
20 understandability of the rate structure and rates  
21 themselves, and to what extent the rates provide some  
22 stability for customers. While the Company believes each of  
23 these objectives is important and should factor into an  
24 ultimate decision, it also believes that the best starting  
25 point for Commission deliberations is an economic one.

1                                   **II. RATE DESIGN RECOMMENDATIONS**

2                   Q.       Has the Company identified opportunities for  
3   improving the current rate design applicable to its major  
4   customer classes?

5                   A.       Yes. Generally, the Company is proposing to  
6   adjust each of the billing components within its existing  
7   structures to move incrementally closer to their cost-of-  
8   service, while targeting collection of the revenue assigned  
9   to each class. Accordingly, I have directed each of the  
10   Company witnesses who have prepared rate design  
11   recommendations to prioritize movements in collection  
12   towards cost-of-service, which includes moving away from  
13   tiered rate designs and shifting fixed cost collection into  
14   the appropriate charges, while balancing the magnitude of  
15   those changes with the resulting customer impacts. Table 1  
16   shows a summary of the requested rate design changes for  
17   the Company's existing service schedules and identifies the  
18   Company witness who developed the proposed rates.

19   //

1 **Table 1**

2 Summary of Existing Rate Designs & Proposed Modifications

	Current Structure	Proposed Modifications	Witness
<b>Residential (Schedules 1 &amp; 6)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• 3 Inclining Block Tiers</li> </ul>	<ul style="list-style-type: none"> <li>• Increase fixed cost collection through the Service Charge</li> <li>• Flatten the tiers</li> </ul>	Anderson
<b>Residential Time-of-Use (“TOU”) (Schedule 5)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• Summer On &amp; Off-Peak</li> <li>• Non-Summer Mid &amp; Off-Peak</li> </ul>	<ul style="list-style-type: none"> <li>• Shorten on-peak hours to align with IRP-informed hours of highest risk</li> <li>• Introduce larger differentials</li> </ul>	Anderson
<b>Small Commercial (Schedules 7 &amp; 8)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• 2 Inclining Block Tiers</li> </ul>	<ul style="list-style-type: none"> <li>• Increase fixed cost collection through the Service Charge and flatten tiers</li> </ul>	Thompson; Anderson
<b>Large Commercial Secondary (Schedule 9S)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• Two-Block Demand/BLC</li> <li>• 2 Declining Block Tiers</li> </ul>	<ul style="list-style-type: none"> <li>• Increase fixed cost collection through the Service Charge</li> <li>• Replace Two-Block Demand/BLC and Declining Tiers with a seasonal, flat rate</li> <li>• Introduce an optional TOU offering</li> </ul>	Thompson
<b>Irrigation (Schedule 24)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• In-Season Demand</li> <li>• Load-Factor Pricing</li> </ul>	<ul style="list-style-type: none"> <li>• Increase fixed cost collection through the Service Charge</li> <li>• Replace Load-Factor Pricing with a flat energy rate</li> </ul>	Thompson
<b>Large Commercial Primary &amp; Transmission (Schedules 9P/T)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• Demand, BLC, and On-Peak Demand</li> <li>• TOU Energy Rates</li> </ul>	<ul style="list-style-type: none"> <li>• Better align existing elements with underlying cost drivers as informed by CCOS</li> </ul>	Anderson
<b>Large Power (Schedule 19)</b>	<ul style="list-style-type: none"> <li>• Service Charge</li> <li>• Demand, BLC, and On-Peak Demand</li> <li>• TOU Energy Rates</li> </ul>	<ul style="list-style-type: none"> <li>• Better align existing elements with underlying cost drivers as informed by CCOS</li> </ul>	Anderson
<b>Special Contracts (Schedules 26, 29, 30, &amp; 32)</b>	<ul style="list-style-type: none"> <li>• Varied</li> </ul>	<ul style="list-style-type: none"> <li>• Better align existing elements with underlying cost drivers as informed by CCOS</li> </ul>	Goralski

1           Q.     Please describe the Company's general  
2 goals/strategies for addressing the weaknesses in existing  
3 rate designs in this case.

4           A.     In this case, the Company intends to establish  
5 rate structures that are more in line with cost causation,  
6 while balancing customer understandability and bill impact.  
7 Overall, the Company is seeking to implement changes that  
8 will take a step towards correcting a long-standing  
9 inequity within the residential class by implementing a  
10 plan to establish better price signals within that class.  
11 Further, the Company's proposal will continue to better  
12 align the commercial and irrigation rate designs with cost-  
13 causation, providing for more economic price signals to  
14 those customer classes.

15 **A.     Eliminate Tiered Rate Design**

16           Q.     What rate classes currently rely on some form  
17 of tiered rates?

18           A.     Schedules 1, 6, 7, 8, 9S and 24 all rely on a  
19 form of tiered rates. Currently, Idaho Power's tiered rates  
20 include inclining block rates, whereby the prices  
21 associated with each defined block of energy usage is  
22 higher than the proceeding block, and declining block  
23 rates, whereby the prices associated with each block of  
24 energy usage is lower than the proceeding block.

1    ***Inclining Block Rates***

2           Q.     What rate classes currently have an inclining-  
3 block tiered rate design?

4           A.     Schedules 1, 6, 7, and 8. Schedules 1 and 6  
5 rely on a three-tiered inclining block structure while  
6 Schedules 7 and 8 rely on a two-tiered inclining block  
7 structure.

8           Q.     What is the purpose of an inclining-block  
9 rate?

10          A.     A primary goal of an inclining tiered  
11 structure is to encourage conservation by charging a higher  
12 rate as energy consumption increases over a billing period.  
13 Once a threshold of energy consumption is exceeded within a  
14 billing period, the rate becomes higher to send a price  
15 signal intended to encourage efficiency and/or  
16 conservation. Historically, the inclining block rate  
17 structure has been used as a tool for encouraging customers  
18 to use less energy. The theory underlying this concept is  
19 that the first block covers some basic level of usage at a  
20 lower rate to help keep the overall bill affordable for  
21 customers and sequential blocks with higher rates make  
22 incremental energy usage more expensive to encourage energy  
23 efficiency.

24          Q.     Are there downsides to this type of a rate  
25 design?

1           A.       Yes. The tiered rate structure has potential  
2   to unfavorably impact bills of customers who reside in  
3   older, less efficient homes, or those homes with all-  
4   electric heat. These customers may be unable to safely  
5   reduce their energy beyond a certain threshold or may not  
6   be able to efficiently reduce their energy usage in  
7   response to the established price signals. The most  
8   significant downside is that the tiered rate structure does  
9   not reflect how costs are incurred throughout the billing  
10  period and therefore does not send a price signal related  
11  to the differing costs to produce or procure energy  
12  throughout the billing period.

13           Proponents of inclining block rates believe they  
14  provide customers with greater control over their electric  
15  charges. However, it is important to note that high-end  
16  energy use is often electric heating and cooling, and while  
17  customers can elect to turn off or lower their heating  
18  requirements to lower their bill, this could compromise  
19  basic health and safety. The Company does not believe an  
20  inclining block structure is the right way to promote  
21  energy efficiency for residential customers over the long-  
22  term, and, as explained more fully below, proposes to  
23  transition to a rate design that will better enable  
24  efficiencies on its system.



1           In short, tiered rates are not cost-based and serve  
2   to penalize higher usage customers.

3           Q.     Why are tiered rates not cost-based?

4           A.     There is no cost-based reason why after using  
5   800 kilowatt hours ("kWh") or 2,000 kWh in a billing period  
6   the next kWh consumed by a customer should cost more.  
7   Conversely, the timing of energy consumption, both  
8   seasonally and during different hours, can affect the  
9   utility's cost of providing service to the customer. The  
10   load factor or the effective utilization of kWh consumption  
11   relative to peak kilowatt ("kW") demand can also change the  
12   average cost of providing energy. However, additional  
13   overall usage in a customer's billing period does not make  
14   it incrementally more expensive for the utility to produce  
15   the next kWh of electricity when both fixed and variable  
16   costs are considered.

17          Q.     Why do tiered rates unduly penalize customers?

18          A.     Charging higher prices for greater usage in  
19   each billing period generally causes large users to  
20   subsidize smaller users. Under a tiered rate structure,  
21   customers who heat their homes with natural gas benefit and  
22   those who use electric heat are penalized. A household with  
23   several people living under one roof will be more likely to  
24   have usage in the higher second and third block rate than a  
25   person living alone. Effectively, inclining block rates

1 unfairly reward some customers and penalize others, often  
2 for reasons outside the customer's control. For those  
3 reasons, the Company is proposing to eliminate this type of  
4 rate structure for its residential customers over time.

5 Q. Are there any other reasons why the Company  
6 believes that eliminating tiers from Schedule 1 is  
7 advantageous?

8 A. Yes. Eliminating tiers for Schedule 1 makes  
9 the comparison to Schedule 5, which does not have tiers,  
10 easier for customers to assess regarding the potential  
11 benefits of time-variant pricing.

12 Additionally, moving away from an inclining block  
13 tiered structure to a seasonally flat structure would  
14 better position residential customers for future pricing  
15 structure changes. For example, a change from a seasonal  
16 flat rate to an introductory or mandatory TOU rate would  
17 cause less customer confusion - whereas a change from the  
18 existing inclining block structure to TOU rates may be more  
19 volatile and cause a varying degree of bill impacts to  
20 individual customers.

21 ***Declining Block Rates***

22 Q. What rate classes currently have a declining -  
23 block tiered rate design?

24 A. Schedules 9S and 24.

1           Q.       Please describe the details of the declining  
2 block tiered rate that applies to Schedule 9S.

3           A.       The Schedule 9S rate design includes a two-  
4 tier declining block energy charge and a two-block demand  
5 and basic load capacity ("BLC") charge. In this rate  
6 design, the first block of kWh consumption is billed at a  
7 higher rate than all other consumption.

8           Q.       Is the Company proposing changes to the  
9 Schedule 9S rate design?

10          A.       Yes. Under the Schedule 9S rate design, the  
11 higher first block energy charge is intended to collect  
12 costs that are classified as demand and would otherwise be  
13 collected through a demand charge. As described by Mr.  
14 Thompson in this case, the Company is proposing to "unwind"  
15 the declining block Schedule 9S rate design and replace it  
16 with a rate structure more in line with other large general  
17 service customers, containing a billing demand and BLC  
18 applied to all kW and seasonal energy charges.

19          Q.       Please explain the considerations in  
20 evaluating the change to Schedule 9S.

21          A.       The Schedule 9S rate design was initially  
22 implemented in the 2005 general rate case<sup>1</sup> primarily to ease  
23 impacts on customer bills as a customer's usage made them

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<sup>1</sup> *In the Matter of the Application of Idaho Power Company for Authority to Increase its Base Rates and Charges for Electric Service in the State of Idaho*, Case No. IPC-E-05-28, Order No. 30035 (May 12, 2006).

1 ineligible for Schedule 7 service and where they instead  
2 qualified for service under Schedule 9S. At that time,  
3 customers were experiencing a "pain point" when they  
4 transitioned back and forth between Schedule 7 and Schedule  
5 9 due to the differences in the rate designs. Several  
6 changes were made to the address that pain point, including  
7 modifying the eligibility criteria so that once a customer  
8 qualifies for Schedule 9 service, they will continue to  
9 take service under that schedule. At the time, the Company  
10 signaled that combining the Schedule 7 and Schedule 9S  
11 class may be most appropriate in the long term.

12 Q. Did the Company consider providing additional  
13 customer options to help improve understandability or  
14 provide a price signal to promote system efficiency?

15 A. Yes. As more fully described below, the  
16 Company is proposing to implement an optional TOU rate  
17 structure where time-differentiated volumetric energy rates  
18 would give a better price signal to prioritize the more  
19 critical times when customers could shift load. It costs  
20 more to serve load during summer and non-summer peak times  
21 and an on-peak summer rate encourages more efficient use of  
22 the system as well as fairly charging customers based on  
23 their load profiles.

24 Q. Is the Company proposing to combine the small  
25 and large general secondary rate classes in this case?

1           A.       No. In this case, the Company is proposing to  
2   slightly modify the Schedule 7 design, as more fully  
3   described in the Direct Testimony of Mr. Thompson, to  
4   collect more fixed costs through the Service Charge and  
5   commensurately reduce the reliance on volumetric rates for  
6   fixed cost collection. The Schedule 7 class has a  
7   disproportionate number of small users (nearly 60 percent  
8   of the class uses less than 300 kWh per month), and the  
9   Company determined that, at this point, it would not  
10   propose combining the classes.

11           However, in evaluating its proposed rates, the  
12   Company did consider how Schedule 7 customers transitioning  
13   onto Schedule 9 would be impacted, which in part influenced  
14   the proposed level of collection through the Service Charge  
15   for both Schedules 7 and 9S.

16           Q.       What rate design currently applies to Schedule  
17   24?

18           A.       Schedule 24 relies on "load factor pricing"  
19   which is like a declining block, where the price of the  
20   first tier is higher than that of the second tier. The  
21   first block charges irrigation customers a monthly rate per  
22   kWh for the first 164 kWh per kW of demand, where the  
23   second block charges customers a lower monthly energy rate  
24   per kWh of all other energy use.

25           Q.       Is this rate design cost based?

1           A.       No. Like the Schedule 9S rate design, this  
2 rate design collects costs otherwise classified as demand  
3 through the first block; however, unlike the Schedule 9S  
4 design, customers are charged for all units of billing  
5 demand during the in-season time period. The Company has  
6 found this rate design tends to be complex to explain to  
7 customers. As a result, and as described in the Direct  
8 Testimony of Mr. Thompson, the Company is proposing to move  
9 the demand-classified costs out of the first tier and  
10 collect those costs through the demand charge, which the  
11 Company believes would be a more straightforward rate  
12 design for Schedule 24 customers to understand.

13 **B.       Expanded Summer Season & TOU Rates**

14           Q.       Do the Company's current rate structures  
15 reflect the time-variant nature of electricity?

16           A.       Only to an extent. The rate designs applicable  
17 to most of the Company's service schedules include a  
18 seasonal component. Additionally, the large users,  
19 Schedules 9 P/T and 19, have mandatory time-differentiated  
20 energy charges.

21           Q.       What is the Company's view on seasonal rates?

22           A.       The cost to provide service to customers  
23 varies throughout different times of the year. For Idaho  
24 Power's system, it is generally more expensive to meet  
25 customer energy requirements in the summer and seasonal

1 rates are an effective tool to promote reduced consumption  
2 during those higher cost months. Acknowledging this, the  
3 Company implemented seasonal rates for Schedules 1, 7, 9,  
4 and 19 in its 2003 General Rate Case ("GRC"). Since that  
5 time, the summer season for purposes of ratemaking has  
6 remained unchanged - that is, for most customers, the  
7 summer season is defined as June 1 through August 31.

8 Q. What is the Company's proposed summer season  
9 in this case and how did it develop that recommendation?

10 A. The Company is proposing to expand the summer  
11 season by one month to include September. Over the last  
12 several years, the Company's Integrated Resource Plan  
13 ("IRP") has identified high-risk hours are more frequently  
14 occurring later in the summer, often showing up in  
15 September. Shifting to a four-month summer season better  
16 aligns with current and future high-risk hours.

17 Q. What is the Company's view on TOU rates?

18 A. TOU rates can be an effective way to send a  
19 price signal to customers to encourage them to shift energy  
20 usage to specific hours in the day that are less costly to  
21 serve. This price signal can be effective to promote energy  
22 efficiency and system efficiency rather than strictly a  
23 conservation signal, as the tiered rates do. As more fully  
24 described by Mr. Anderson and Mr. Thompson, the Company is  
25 proposing to expand its TOU offerings for both residential

1 and commercial customers and to establish a basis for  
2 potential opt-out or mandatory TOU rates for those classes.

3 ***Residential TOU***

4  
5 Q. Is the Company proposing to expand its TOU  
6 offering for residential customers as part of this GRC?

7 A. Yes. The Company has had an optional TOU  
8 offering in place for its residential customers since 2005;  
9 however, only a small number of customers (currently less  
10 than 1,000) opt to take that service from Idaho Power. The  
11 Company is proposing to redesign its optional residential  
12 TOU offering in a few ways: (1) modify and shorten the on-  
13 peak windows to align with the Company's highest risk hours  
14 as informed by the 2023 IRP and (2) introduce a larger  
15 differential between on- and off-peak times.

16 Q. Please generally describe how the TOU offering  
17 was designed.

18 A. First, the Company relied on the analysis  
19 performed by the power supply planning team in preparation  
20 of the 2023 IRP to determine which hours are currently  
21 considered highest risk. These hours were used to inform  
22 the summer and non-summer on- and off-peak price periods  
23 utilized in the Schedule 5 rate design. I then directed Mr.  
24 Anderson to rely on the results of that analysis to inform  
25 his rate proposal.



1           Q.     How is the Company proposing to set the  
2 differentials between on-, mid-, and off-peak?

3           A.     The Company's approach varied slightly by  
4 customer class. For Schedule 5 customers, I directed Mr.  
5 Anderson to develop the offering in a manner that would be  
6 most effective at promoting a response to the price signal.

7           Q.     Please describe how system efficiencies may be  
8 gained under this type of a rate structure.

9           A.     TOU pricing (including Critical Peak Pricing)  
10 was identified as having the potential to manage customer  
11 demand in a recently completed Demand Response Potential  
12 Study, which will be relied on in the 2023 IRP. For the  
13 residential class, the total potential from TOU pricing  
14 programs amounted to approximately 8 MW. To the extent  
15 customers respond to this type of a rate design, the  
16 Company may be able to delay building traditional supply-  
17 side resources.

18          Q.     Did the Company consider making TOU a default  
19 or mandatory rate offering for residential customers?

20          A.     Yes, however, while the Company believes TOU  
21 is a more efficient and effective way to send energy and  
22 system efficiency price signals, it is aware that a change  
23 in a single year – from the current tiered rate structure  
24 to a mandatory or even a default TOU program – would be a  
25 significant impact to many of its residential customers

1 that may be unfamiliar with this type of rate design, or  
2 who are otherwise unable to respond to the price signal.

3 Based on these considerations, in this case, the  
4 Company is proposing a three-year transition whereby it  
5 will gradually increase the Service Charge while  
6 eliminating the inclining block tier rates, which, at the  
7 end of the transition period, will better position the  
8 Company to consider proposing mandatory or default TOU for  
9 all customers in the future. This will also provide the  
10 Company an opportunity to evaluate the impacts and  
11 effectiveness of the on-peak to off-peak price ratio of  
12 4.0x proposed in this case.

13 ***Commercial and Industrial TOU***  
14

15 Q. Is the Company proposing to modify or expand  
16 TOU for its commercial and industrial customers?

17 A. Yes. Schedules 19 and 9P/T already have TOU  
18 rates in place. The Company is aware that many of its  
19 Schedule 9S customers would like to take service under a  
20 time-differentiated rate design as this type of a design  
21 will better enable customers with discretionary load to  
22 manage their energy bills.

23 Q. Why is the Company proposing only an optional  
24 TOU service offering for Schedule 9S customers as opposed  
25 to making it a mandatory service?

1           A.       The Company is proposing the optional Schedule  
2   9S TOU offering at this time to incentivize customers, who  
3   have the ability, to shift load to off-peak periods by  
4   sending cost-based price signals informed by the Company's  
5   high-risk hours identified in preparation of the 2023 IRP.  
6   This encourages customers to use the system more  
7   efficiently and economically based on both how the Company  
8   incurs cost and the high-risk time periods.

9           For example, if a customer with electric vehicle  
10   charging stations selected the TOU offering, they would be  
11   encouraged to charge their vehicles during off-peak hours.  
12   This would lessen the burden on the system during on-peak  
13   time periods as well as save the customer money compared to  
14   if they were on the standard service offering.

15          Q.       How is the Company proposing to set the  
16   differentials between on- and off-peak?

17          A.       I directed both Mr. Anderson and Mr. Thompson  
18   to develop a proposal to isolate both the variable and  
19   fixed cost components of the volumetric charge and only  
20   apply a differential to the energy classified portion of  
21   the rate. By developing the rates this way and having the  
22   fixed cost component of the volumetric rate remain constant  
23   for all kWh within a given season, the principles of cost-  
24   causation are maintained. That is, when a customer shifts

1 usage to another time period, the underlying costs are  
2 expected to increase or decrease commensurately.

3 **C. Residential Price Modernization Plan**

4 Q. Please explain the Company's Residential Price  
5 Modernization Plan.

6 A. As more fully described in the Direct  
7 Testimony of Mr. Anderson, the Company is proposing a  
8 three-year transition period to modify the structure of its  
9 residential rates whereby it will increase the Service  
10 Charge and lower the energy charges commensurately over  
11 that period.

12 Q. Why is Idaho Power requesting to implement the  
13 Residential Price Modernization Plan?

14 A. The current residential rate structure does  
15 not align with Idaho Power's embedded cost structure.  
16 Providing electric service requires a significant amount of  
17 capital infrastructure, which is largely a fixed cost once  
18 infrastructure goes into service. The current residential  
19 rate structure is comprised of the Service Charge, which is  
20 a monthly fixed charge, and Energy Charges, which are  
21 usage-based or volumetric charges.

22 The Service Charge does not cover the fixed costs  
23 incurred by residential customers and those fixed costs are  
24 instead recovered through the volumetric Energy Charges. As  
25 I explained above, the Energy Charges in Schedule 1 are

1 also tiered, so that usage over a specific threshold in a  
2 billing period are priced at a higher rate.

3 Q. What is the downside to this rate structure?

4 A. The Company's current rate structure for  
5 residential customers recovers a high proportion of fixed  
6 costs through the volumetric Energy Charges instead of  
7 through fixed charges. This relationship results in higher  
8 energy use customers subsidizing lower energy use customers  
9 and generally leads to customers believing the value of a  
10 kWh of energy is much higher than it is.

11 Q. What costs does the Company propose are  
12 reasonably recovered through the Service Charge?

13 A. The Company proposes to recover all costs  
14 related to the distribution system and customer-related  
15 costs like metering, billing, and customer service through  
16 the Service Charge. It is appropriate to include these  
17 costs in the fixed monthly charges that residential  
18 customers pay because they represent the fixed costs to  
19 deliver power over the distribution system and provide  
20 customer service and billing functions. These costs are  
21 fixed in nature and do not vary with changes in volumetric  
22 energy usage. If a residential customer uses less energy,  
23 the fixed costs of distribution facilities that have been  
24 installed to serve that customer do not decrease. These  
25 costs are therefore appropriately recovered through the

1 fixed Service Charge. The Company proposes to continue to  
2 recover all other costs - fixed generation and transmission  
3 costs as well as variable energy costs - through Energy  
4 Charges.

5 Q. Will this structure remove the energy  
6 efficiency price signal?

7 A. No. As I mentioned, the Company is proposing  
8 to continue to collect fixed charges associated with  
9 generation and transmission through seasonal energy  
10 charges, which will continue to promote energy efficiency.  
11 As shown in Tables 6 and 7 of the Direct Testimony of Mr.  
12 Anderson, in the first year of the change, the energy rates  
13 are higher than they currently are - by the end of the  
14 transition plan, the energy charges remain seasonally  
15 differentiated, ensuring an efficiency signal remains.

16 Q. Did the Company consider the impact this rate  
17 design would have on low-income customers?

18 A. Yes. As discussed in greater detail in the  
19 Direct Testimony of Mr. Anderson, the Company evaluated the  
20 impact of this rate design on those customers in its  
21 service area known to be eligible for income-qualified  
22 energy assistance and found the proposed rate design would  
23 not disproportionately impact those customers in a negative  
24 way. In fact, at the end of the transition period, these

1 customers are more likely to see a *savings* when compared to  
2 the residential customer class in total.

3 Q. Why is the Company proposing that these  
4 changes occur over a three-year transition?

5 A. Essentially, the Company is mindful of the  
6 impacts this type of a rate design will have on lower-usage  
7 customers and with gradualism in mind, has proposed a  
8 multi-year timeframe to moderate bill impacts on individual  
9 customers. The three-year transition provides a mechanism  
10 to make changes that better align rates with cost-of-  
11 service while also balancing how these changes affect some  
12 customers. Mr. Anderson presents a bill impact analysis to  
13 show the bill impact for customers once the plan is  
14 implemented.

15 **III. ON-SITE GENERATION**

16 Q. Please summarize the Company's request  
17 presented in Case No. IPC-E-23-14.

18 A. On May 1, 2023, Idaho Power filed Case No.  
19 IPC-E-23-14 ("ECR Case").<sup>2</sup> The Company filed the case in  
20 response to Commission Order No. 35631 directing the  
21 Company to file a new case to implement changes to its on-

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<sup>2</sup> *In the Matter of Idaho Power's Application for Authority to Implement Changes to the Compensation Structure Applicable to Customer On-Site Generation Under Schedules 6, 8, and 84 and to Establish an Export Credit Rate Methodology*, Case No. IPC-E-23-14 (filed May 1, 2023).

1 site generation offering. Specifically, the Company  
2 requested the Commission implement: (1) real-time net  
3 billing with an avoided cost-based financial credit rate  
4 for exported energy, (2) a methodology for determining  
5 annual updates to the ECR, (3) a modified project  
6 eligibility cap for commercial, industrial, and irrigation  
7 ("CI&I") customers, (4) related changes to the accounting  
8 for and transferability of excess net energy financial  
9 credits, and (5) updated tariff schedules necessary to  
10 administer the modified on-site generation offering.

11 Q. Are there any interdependencies between the  
12 General Rate Case and Case No. IPC-E-23-14?

13 A. Yes. The Company is addressing a variety of  
14 issues related to Idaho Power's on-site generation offering  
15 in the ECR Case. However, because a GRC is an appropriate  
16 venue to address CCOS and rate design, the Company did not  
17 present any recommendations related to those items in Case  
18 No. IPC-E-23-14. Rather, those topics have been addressed  
19 within this case. Further, the Company believes it is  
20 appropriate to address transitional considerations in the  
21 context of rates and rate design within this docket as this  
22 GRC is the first opportunity to evaluate how closely  
23 revenue collection for the on-site generation customers  
24 aligns with the allocation of costs to those classes.



1           Q.     How did the Company approach CCOS cost-  
2 allocation for on-site generation customers?

3           A.     I requested load research statistics be  
4 developed based on on-site generation customers'  
5 utilization of the system. I then directed Mr. Goralski to  
6 rely on those statistics to complete cost-allocation to the  
7 on-site generation customers. This required relying on only  
8 a "delivered channel" of meter data for allocating  
9 generation, transmission, and energy related costs and  
10 looking at the maximum of both the "delivered channel" and  
11 "received channel" in determining the allocation of  
12 distribution plant. This is consistent with the real-time  
13 measurement interval presented in the ECR Case.

14          Q.     Did legacy status<sup>3</sup> impact cost allocation?

15          A.     No; the Company evaluated the cost to serve  
16 all customers with on-site generation in the same manner,  
17 regardless of legacy status. The type of compensation  
18 structure applied to the billings for customers has no  
19 bearing on measuring those customer's utilization of the  
20 system. In all cases, for all classes, the Company assessed  
21 the classes' energy and demand requirements in determining  
22 cost allocation. The approach I described ensures on-site

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<sup>3</sup> The Company uses the term legacy to refer to those systems that the Commission has previously determined would continue to take NEM, under certain conditions, for a period of 25 years (also known as "grandfathered" systems).

1 generation customers are not treated any different than  
2 standard service customers.

3 Q. Are there any other areas related to on-site  
4 generation that are being addressed in this docket rather  
5 than in the ECR Case?

6 A. Yes. In Order No. 34046, the Commission  
7 directed Idaho Power to evaluate rate design and  
8 specifically "transitional rates." In the ECR Case, the  
9 Company proposed that any transitional considerations be  
10 better addressed when evaluating the reasonableness of  
11 pricing proposals in the GRC versus the ECR Case, which is  
12 focused on the modification of the measurement interval  
13 applied to excess net energy and the valuation of that  
14 excess energy.

15 Q. What were the results of the CCOS for  
16 Schedules 6 and 8?

17 A. The study, prior to the cap and spread process  
18 described by Mr. Goralski, showed that the Schedule 6 and 8  
19 classes should receive a 52 percent and 111 percent  
20 increase, respectively, in their class revenue requirement.  
21 These results demonstrate a large revenue deficiency for  
22 Schedules 6 and 8 under current rates, relative to other  
23 classes.

24 Q. Is the Company proposing rates for those  
25 classes to target the CCOS revenue requirement?

1           A.     No. The Company believes it is reasonable to  
2 consider transitioning Schedule 6 and 8 customers to cost  
3 of service over a period of time. If the Company were to  
4 rely on the underlying CCOS as a basis for revenue  
5 allocation, those customers would experience relatively  
6 large increases in this case.

7           Q.     How did the Company establish revenue targets  
8 for Schedules 6 and 8 for rate design purposes?

9           A.     As a mitigation measure, the Company combined  
10 the Schedule 6 class with all residential customers (and  
11 Schedule 8 with all small general service customers) to  
12 complete both the cap and spread and the rate design  
13 process. That is, in this case Idaho Power proposes that  
14 on-site generation customers take service from Idaho Power  
15 under the same rates that all standard service customers  
16 pay.

17          Q.     Will this result in a subsidy?

18          A.     Yes. Any class whose assigned revenue  
19 requirement is more than the amount authorized will be  
20 subsidized by other customer classes.

21          Q.     Does the Company believe its proposal results  
22 provides a reasonable and fair transition period for  
23 Schedule 6 and 8 customers?

24          A.     Yes. The Company believes this approach  
25 results in a reasonable transition period for on-site

1 generation customers and aligns with prior Commission  
2 orders where the Commission has directed the Company to  
3 evaluate transitional considerations as it proposes changes  
4 that will impact on-site generation customers.

5 Q. How will Schedule 6 customers be impacted by  
6 the Residential Price Modernization Plan?

7 A. Schedule 6 customers were included in the  
8 determination of the revenue neutral rates developed as  
9 part of the Residential Price Modernization Plan. It is  
10 important to note that even at the end of the three-year  
11 plan, Schedule 6 customers will still be contributing well  
12 below their cost to serve. Idaho Power is not recommending  
13 future changes be approved as part of this case, rather,  
14 the Company will evaluate further rate design  
15 considerations for on-site generation customers, as may be  
16 necessary, in future rate proceedings.

17 **IV. TARIFF ADMINISTRATION**

18 Q. Is the Company proposing changes to its tariff  
19 as part of this case?

20 A. Yes. The Company is requesting several  
21 administrative and housekeeping edits to many of the rules  
22 and schedules contained within its tariff. Additionally, I  
23 directed Mr. Maloney to work with field and customer-facing  
24 representatives to develop recommendations for updates and  
25 additions necessary to administer the tariff in a manner

1 that ensures equitable treatment and is transparent to  
2 customers.

3 Attachment Nos. 1 and 2 to the application contains  
4 the legislative and clean versions of the requested tariff.

5 **V. CONCLUSION**

6 Q. Does this conclude your direct testimony in  
7 this case?

8 A. Yes, it does.

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**DECLARATION OF CONNIE G. ASCHENBRENNER**

I, Connie G. Aschenbrenner, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Connie G. Aschenbrenner. I am employed by Idaho Power Company as the Senior Manager of Rate Design in the Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.



Signed: \_\_\_\_\_  
CONNIE G. ASCHENBRENNER

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

PAWEL P. GORALSKI

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Pawel ("Paul") P. Goralski. My  
5 business address is 1221 West Idaho Street, Boise, Idaho  
6 83702. I am employed by Idaho Power as a Regulatory  
7 Consultant in the Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     In May of 2007, I received a Bachelor of  
10 Business Administration degree in Finance from Boise State  
11 University in Boise, Idaho. I have also attended "The  
12 Basics: Practical Regulatory Training for the Electric  
13 Industry," an electric utility ratemaking course offered  
14 through the New Mexico State University's Center for Public  
15 Utilities, "Electric Utility Fundamentals and Insights," an  
16 electric utility course offered by Western Energy  
17 Institute, and "Electric Rates Advanced Course," an  
18 electric utility ratemaking course offered through the  
19 Edison Electric Institute.

20          Q.     Please describe your work experience with  
21 Idaho Power.

22          A.     In 2017, I was hired as a Regulatory Analyst  
23 in the Company's Regulatory Affairs Department, and in 2020  
24 I was promoted to my current position of Regulatory



1 Consultant. My primary responsibilities include supporting  
2 the Company's class cost-of-service ("CCOS") activities,  
3 developing pricing for special contract customers and other  
4 large load pricing analysis, supporting the Company's  
5 annual Fixed Cost Adjustment ("FCA") calculation, and  
6 serving as the Company witness in that matter. I have also  
7 been its witness for the Company's annual Demand-Side  
8 Management ("DSM") prudency filings.

9 Q. What is the purpose of your testimony in  
10 this matter?

11 A. My testimony will address derivation of the  
12 Company's 2023 CCOS study and the resulting recommendations  
13 for customer pricing components. Specifically, my testimony  
14 covers the following six areas: 1) CCOS - overview,  
15 proposed modifications to methodology, description, and  
16 study results, 2) allocation of CCOS-informed revenue  
17 requirement to customer classes, 3) computation of the  
18 Sales Based Adjustment Rate ("SBAR") consistent with the  
19 methodology described in the Settlement Agreement in Case  
20 No. IPC-E-15-15,<sup>1</sup> 4) update to FCA components as informed by  
21 the 2023 CCOS study and related rate design proposals, 5)  
22 Special Contract pricing and rate design, and, 6) Schedule

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<sup>1</sup> *In the Matter of Idaho Power Company's Application for Approval of Computational Modifications to the True-Up Portion of the Power Cost Adjustment*, Case No. IPC-E-15-15 (filed April 28, 2015; Final Order No. 33307 issued May 28, 2015).

1 20 - High-Density Load ("Schedule 20") pricing and update  
2 on Schedule 20 customers and interruption compensation.

3 **I. CLASS COST-OF-SERVICE OVERVIEW**

4 Q. Please describe in general terms the process  
5 used to prepare the class cost-of-service study.

6 A. There are two general steps used in  
7 preparing a class cost-of-service study. The first step is  
8 to determine the total costs of providing electric service,  
9 adjusted for normal weather and water conditions. These  
10 costs have been provided to me by Company Witness Ms.  
11 Kelley Noe on Exhibit No. 35. The next step is to establish  
12 a methodology for the separation of those costs among  
13 customer classes.

14 Q. What methodology is used to separate costs  
15 among customer classes?

16 A. The methodology for separating costs among  
17 classes consists of a three-step process generally referred  
18 to as functionalization, classification, and allocation. In  
19 all three steps, recognition is given to the way in which  
20 the costs are incurred by relating these costs to the way  
21 in which the utility is operated to provide electrical  
22 service.

23 Q. Please explain the meaning of  
24 functionalization.

1           A.       Costs must be functionalized; that is,  
2 identified with utility operating functions. Operating  
3 functions recognize the different roles played by the  
4 various facilities in the electric utility system. In the  
5 Company's accounts, these various roles are already  
6 recognized to some degree, particularly in the recording of  
7 plant costs as production-, transmission-, or distribution-  
8 related. However, this functional breakdown is not  
9 sufficiently detailed for cost-of-service purposes.  
10 Individual plant items are examined and, where possible,  
11 the associated investment costs are assigned to one or more  
12 operating functions, such as substations, primary lines,  
13 secondary lines, and meters. This level of  
14 functionalization allows costs to be more equitably  
15 allocated among classes of customers.

16           Q.       Please explain the meaning of  
17 classification.

18           A.       In addition to functionalization,  
19 classification refers to the identification of a cost as  
20 being either customer-related, demand-related, or energy-  
21 related. These three cost components are used to reflect  
22 the fact that an electric utility makes service available  
23 to customers on a continuous basis, provides as much  
24 service, or capacity, as the customer desires at any point  
25 in time, and supplies energy, which provides the customer

1 the ability to do useful work over an extended period of  
2 time. These three concepts of availability, capacity, and  
3 energy are related to the three components of cost  
4 designated as customer, demand, and energy, respectively.  
5 In order to classify a particular cost by component,  
6 primary attention is given to whether the cost varies as a  
7 result of changes in the number of customers, changes in  
8 demand imposed by the customers, or changes in energy used  
9 by the customers.

10 Q. What are some examples of customer-, demand-  
11 and energy-related costs?

12 A. Examples of customer-related costs are the  
13 plant investments and expenses that are associated with  
14 meters and service drops, meter reading, billing and  
15 collection, and customer information and services, as well  
16 as a portion of the investment in the distribution system.  
17 These investments and expenses are made and incurred based  
18 on the number of customers, regardless of the amount of  
19 energy used, and are, therefore, generally considered to be  
20 fixed costs. Demand-related costs are the fixed costs  
21 associated with investments in generation, transmission,  
22 and a portion of the distribution plant and the associated  
23 operation and maintenance expenses necessary to accommodate  
24 the maximum demand imposed on the Company's system. Energy-

1 related costs are generally the variable costs associated  
2 with the operation of the generating plants, such as fuel.

3 Q. What did you use as your primary guide in  
4 classifying costs as either customer-, demand-, or energy-  
5 related?

6 A. I used the *Electric Utility Cost Allocation*  
7 *Manual*, published January 1992, by the National Association  
8 of Regulatory Utility Commissioners as my primary guide to  
9 the classification of customer-, demand-, and energy-  
10 related costs.

11 Q. Please explain the process of allocation.

12 A. The process of allocation is one of  
13 apportioning the total jurisdictional cost among classes by  
14 introducing allocation factors into the process. An  
15 allocation factor is nothing more than an array of numbers  
16 that specifies the class value or share of a total  
17 jurisdictional quantity.

18 Once individual costs have been allocated to the  
19 various classes of service, it is possible to total these  
20 costs as allocated and arrive at a breakdown of utility  
21 rate base and expenses by class. The results are stated in  
22 a summary form to measure adequacy of revenues for each  
23 class. The measure of adequacy is typically the rate of  
24 return earned on rate base compared to the requested rate  
25 of return.

Q. Have you provided separate documentation describing in detail the methodology used to prepare the Company's class cost-of-service study?

A. Yes. Exhibit No. 36, the Class Cost-of-Service Process Guide, describes in detail the methodology used in the preparation of the Company's class cost-of-service study.

II. PROPOSED MODIFICATIONS TO THE COMPANY'S COST-OF-SERVICE METHODOLOGY

Q. Is the Company proposing modifications to the CCOS study methodology most recently approved by the Idaho Public Utilities Commission ("Commission") in the 2008 general rate case ("GRC") and that was also utilized in the 2011 GRC?

A. Yes. I am proposing two modifications to the CCOS methodology most recently approved by the Commission. However, much of the study's methodology remains consistent with the 2008 and 2011 GRC CCOS studies.<sup>2</sup>

Q. Please describe the primary elements that remain consistent between the 2023 CCOS and the study prepared for the 2011 GRC.

<sup>2</sup> *In the Matter of the Application of Idaho Power Company for Authority to Increase its Rates and Charges for Electric Service to its Customers in the State of Idaho*, Case No. IPC-E-11-08, Larkin DI (filed June 1, 2011).

*In the Matter of the Application of Idaho Power Company for Authority to Increase its Rates and Charges for Electric Service, Case No. IPC-E-08-10, Tatum DI (filed June 27, 2008).*

1           A.           Generally, the 2023 CCOS remains consistent  
2 with the 2011 CCOS study, including, but not limited to:

- 3           • Demand-classified base-load serving generation  
4           plant is allocated based on a monthly system  
5           coincidence peak ("12CP") allocator;
- 6           • The Company's hydro and coal-fueled generation  
7           plants are functionalized as base-load serving  
8           generation resources, while the Danskin and  
9           Bennett Mountain natural gas-fueled generation  
10          plants are functionalized as peak-load serving  
11          generation resources;
- 12          • Transmission plant is 100 percent demand-  
13          classified and allocated based on a 12CP,  
14          marginal-cost weighted allocator;
- 15          • Energy-related cost allocators continue to be  
16          derived based on an averaging approach  
17          inclusive of marginal-cost weighting;
- 18          • The Company's 12CP values, and each class's  
19          share of that value, is adjusted to add back  
20          the impact of Demand Response, that is, system  
21          load is representative of load as if no Demand  
22          Response events had been called; and
- 23          • Classification of distribution plant between  
24          demand and customer is based on a three-year  
25          load duration curve.

1           Q.       Please describe the first modification made  
2 to CCOS methodology.

3           A.       As described by Company Witness Ms.  
4 Aschenbrenner, analysis completed in support of the  
5 Company's upcoming 2023 Integrated Resource Plan indicates  
6 there is a probability that high-risk hours occur into the  
7 month of September. As a result, I recommend allocation of  
8 peak-load serving resources be based on a summer period  
9 June through September 4CP allocator, updated from the June  
10 through August 3CP allocator utilized in the 2011 CCOS. The  
11 four-month summer season better aligns with current and  
12 future high-risk hours and the need to rely on peak-load  
13 serving resources to meet those high-risk hours.

14          Q.       Did the CCOS modification to extend the  
15 summer season to include September impact all customer  
16 classes?

17          A.       No. Idaho Power's Irrigation class service  
18 schedule, Schedule 24, has previously utilized a different  
19 seasonal definition than other rate schedules. While all  
20 other Idaho Power rate schedules with seasonal rates have  
21 previously defined the summer season as June through  
22 August, the Irrigation customer class has historically  
23 received a portion of cost allocation and rates based on a  
24 summer period definition including September. The proposed  
25 CCOS modification for summer-season baseload serving



1 generation resources to be allocated on a June through  
2 September period aligns cost allocation for the summer  
3 season for all customer classes.

4 Q. Please describe the second recommended CCOS  
5 modification.

6 A. In past studies, classification of Idaho  
7 Power's cost of generation - with respect to base-load  
8 serving generation plant rate base, expenses, and power  
9 supply expenses - has included both energy and demand  
10 classification based on a jurisdictional load factor. That  
11 is, if the Idaho jurisdictional load factor was 55 percent,  
12 55 percent of baseload generation plant was classified as  
13 energy, with amounts exceeding the jurisdictional load  
14 factor classified as demand-related.

15 Idaho Power proposes to change classification  
16 methodology such that energy and demand classification  
17 follow a more "accounting-like" fixed cost versus variable  
18 cost approach. All base-load serving generation fixed  
19 accounting costs would be 100 percent demand classified,  
20 and all variable expenses, such as fuel and purchased power  
21 expenses, would be 100 percent energy classified.

22 Q. How does this impact the classification of  
23 generation and power supply by FERC account?

24 A. Please see Table 1 for a comparison of main  
25 FERC account classification under the recommended

1 methodology and the Company's previous methodology. Peak-  
2 load generation plant continues to be 100 percent demand-  
3 classified and fuel expense continues to be 100 percent  
4 energy classified. For base-load serving generation plant:  
5 hydro, steam, and natural-gas fueled, 100 percent of  
6 generation plant is demand-classified. Power supply  
7 expense, including account 555.0 purchased power, and 555.1  
8 - PURPA are 100 percent energy classified. It should be  
9 noted that while Table 1 is not a comprehensive list of  
10 impacted FERC accounts (there are also impacts to composite  
11 allocators that include the FERC accounts below), the list  
12 identifies the primary accounts that drive changes in cost  
13 assignment.

14 **Table 1**  
15 Primary Production & Power Supply Expense FERC Account  
16 Classification Comparison

<u>FERC</u> <u>Account</u>	<u>Description</u>	<u>Prior</u> <u>Classification</u>	<u>Recommended</u> <u>Classification</u>
501	Steam Plant - Fuel	100% Energy	100% Energy
<b>536</b>	<b>Water lease &amp; Other</b>	<b>Demand/Energy</b>	<b>100% Energy</b>
547	Other Generation - Diesel	100% Energy	100% Energy
547	Other Generation - Other Fuel	100% Energy	100% Energy
<b>555.1</b>	<b>Purchased Power</b>	<b>Demand/Energy</b>	<b>100% Energy</b>
555.1	Purchased Power - Demand Response Incentives	100% Demand	100% Demand
<b>555.2</b>	<b>Purchased Power - PURPA</b>	<b>Demand/Energy</b>	<b>100% Energy</b>
<b>310-316</b>	<b>Steam Production</b>	<b>Demand/Energy</b>	<b>100% Demand</b>
<b>330-336</b>	<b>Hydraulic Production</b>	<b>Demand/Energy</b>	<b>100% Demand</b>
<b>340-346</b>	<b>Other Production - Langley</b>	<b>Demand/Energy</b>	<b>100% Demand</b>

17

18 Q. Why is the Company proposing this change in  
19 classifying costs?

1           A.           Idaho Power has used, and the Commission has  
2 approved, the use of a jurisdictional load factor to  
3 classify base-load generation expense since the early  
4 1980s. As explained by Ms. Aschenbrenner, the Company seeks  
5 to modernize rate design to better align cost-causation  
6 with fixed and variable components of Idaho Power's cost  
7 structures. Because the results of classification are used  
8 to inform rate design, I am proposing a method to align  
9 with the Company's rate design objectives.

10           Q.           What additional changes are incorporated in  
11 the 2023 CCOS study?

12           A.           There are several cost categories that are  
13 new to the CCOS study since the Company's 2011 GRC. The  
14 more recent cost categories are described in detail in Mr.  
15 Larkin's testimony, and are allocated in the CCOS study in  
16 the following manner:

- 17           • Other Production - Langley: base-load serving  
18           generation; 100 percent demand-classified;
- 19           • 120 megawatt ("MW") battery storage: base-load  
20           generation; 100 percent demand-classified;
- 21           • Jackpot Power Purchase Agreement ("PPA"):<sup>3</sup> 100  
22           percent energy classified;

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<sup>3</sup> The Jackpot PPA is described in the Direct Testimony of Company Witness Ms. Jessica Brady.

- 1           • Energy Imbalance Market expenses: follows  
2           transmission plant allocation as the ability for  
3           Idaho Power to access the market is determined by  
4           transmission capacity;
- 5           • Western Resource Adequacy Program: also follows  
6           transmission plant allocation for FERC account  
7           561 - Transmission - Load Dispatching;
- 8           • Wildfire mitigation: wildfire mitigation supports  
9           the Company's overall electrical system and is  
10          allocated based on a composite allocator for  
11          generation, transmission, and distribution plant.

12          Q.       Are there any other major changes to the  
13          2023 CCOS study from the CCOS filed in the 2011 GRC?

14          A.       Yes, the 2023 CCOS study separately  
15          allocates costs to the on-site generation class for  
16          Residential, Schedule 6, and Small-General service,  
17          Schedule 8, as independent rate classes for cost  
18          assignment. The Commission approved the creation of  
19          Schedule 6 and 8 in 2018.<sup>4</sup> These load statistics were  
20          developed by the Company's Load Research and Forecasting  
21          Department and are described in workpapers filed by Mr.  
22          Larkin.

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<sup>4</sup> *In the Matter of the Application of Idaho Power Company for Authority to Establish New Schedules for Residential and Small General Service Customers with On-Site Generation*, Case No. IPC-E-17-13, Order No. 34046 (May 9, 2018).

1           Q.       How are the clean energy aspects of Micron's  
2 Special Contract accounted for in the CCOS?

3           A.       As described in Mr. Larkin's testimony,  
4 because costs and revenues from Micron's payment for the  
5 Black Mesa PPA are offsetting, they are excluded from the  
6 Idaho jurisdictional revenue requirement, and are also  
7 excluded from CCOS. While costs and revenues were excluded  
8 from CCOS, derivation of the energy-allocator for Micron  
9 was adjusted to exclude energy met by the Black Mesa  
10 resource. That is, the energy service Micron requires from  
11 Idaho Power is reduced by the forecast generation of the  
12 Black Mesa PPA, consistent with the Special Contract  
13 billing construct. This modification ensures Micron  
14 receives its fair, allocable share of power supply expense  
15 for the portion of load met by Idaho Power.

16                   **III.    COST-OF-SERVICE STUDY DESCRIPTION**

17           Q.       Have you prepared a table that summarizes  
18 the basis by which each of the major functionalized cost  
19 categories has been classified and subsequently allocated  
20 to customer classes under the CCOS?

21           A.       Yes. The Table 2 summarizes the basis by  
22 which each of the major functionalized cost categories is  
23 classified and subsequently allocated to customer classes  
24 under the CCOS:

1 **Table 2**

2 CCOS Classification and Functionalization Summary

<b>Cost Category</b>	<b>Classification Basis</b>
<b>Generation Plant</b>	
Hydro and Steam Production	Demand
Other Production (Langley & Peaking Units)	Demand
<b>Transmission Plant</b>	Demand
<b>Distribution Plant</b>	Demand and Customer
<b>Other Expenses</b>	
Fuel	Energy
Purchased Power	Energy
Demand Response Incentive Payments	Demand
<b>Cost Category</b>	<b>Allocation Basis</b>
<b>Generation Demand</b>	
Hydro and Steam Production	12CP without Marginal Generation Cost Weighting
Other Production (Langley)	12CP without Marginal Generation Cost Weighting
Other Production (Peaking Units)	4CP without Marginal Generation Cost Weighting
Demand Response Incentive Payments	4CP without Marginal Generation Cost Weighting
<b>Generation Energy</b>	12 Months Energy with Marginal Energy Cost Weighting (averaged w/ un-weighted values)
<b>Transmission</b>	12CP with Marginal Transmission Cost Weighting
<b>Distribution</b>	1NCP / No. of Customers / Direct Assignment

3

4 Q. Please identify the exhibits that comprise  
5 the cost-of-service study.

1           A.       The cost-of-service study is comprised of  
2 the following exhibits:

- 3           1. Exhibit No. 37, Functionalization and  
4           Classification of Costs;
- 5           2. Exhibit No. 38, Summary of Functionalized  
6           Costs;
- 7           3. Exhibit No. 39, Allocation to Classes;
- 8           4. Exhibit No. 40, Summary of Class Allocations;
- 9           5. Exhibit No. 41, Transfer Adjustment;
- 10          6. Exhibit No. 42, Revenue Requirement Summary;
- 11          7. Exhibit No. 43, Class Cost-of-Service Unit  
12          Costs;
- 13          8. Exhibit No. 44, Marginal Cost Study
- 14          9. Exhibit No. 45, Development of Weighted Demand  
15          and Energy Allocators;
- 16          10. Exhibit No. 46, Revenue Requirement  
17          Adjustments.

18          Q.       Please describe Exhibit No. 37.

19          A.       Exhibit No. 37 contains 145 pages and  
20 consists of 11 Cost Functionalization and Classification  
21 Tables. The functionalization and classification of each  
22 component of rate base, operating revenue, and expense are  
23 treated in detail in these tables. The tables are shown in  
24 the following sequence:

- 25           • Table 1 - Electric Plant in Service;

- 1                   • Table 2 - Accumulated Provision for
- 2                   Depreciation;
- 3
- 4                   • Table 3 - Additions and Deletions to Rate
- 5                   Base;
- 6
- 7                   • Table 4 - Operating Revenues;
- 8
- 9                   • Table 5 - Operation and Maintenance
- 10                  Expenses;
- 11                  • Table 6 - Depreciation and Amortization
- 12                  Expense;
- 13
- 14                  • Table 7 - Taxes Other Than Income Taxes;
- 15
- 16                  • Table 8 - Regulatory Debits/Credits;
- 17
- 18                  • Table 9 - Income Taxes;
- 19
- 20                  • Table 10 - Development of Labor-Related
- 21                  Allocator; and
- 22
- 23                  • Table 11 - Functionalization Allocators.

21           Q.     What is the significance of the column header

22 "Allocator" on Exhibit No. 37?

23           A.     This column identifies, by symbol, the basis

24 for each allocation. For example, for Accounts 310 through

25 316, Steam Production, shown at line 20 on page 1, the

26 constant "PI-S" is used to allocate the total investment in

27 steam production plant to the production function and to

28 the demand cost classifications. The resultant

29 functionalization of costs may itself serve as a basis for

30 subsequent allocations. This use is illustrated at line 119

31 on page 21 where the accumulated depreciation for steam



1 production plant is allocated according to the same  
2 allocator "PI-S" used at line 20.

3 Q. Please describe Exhibit No. 38.

4 A. Exhibit No. 38 summarizes in row format the  
5 functionalized costs for each component of rate base and  
6 expenses shown across the columns on Exhibit No. 37.

7 Q. Please describe Exhibit No. 39.

8 A. Exhibit No. 39 details the allocation of the  
9 summarized costs shown on Exhibit No. 38 to each customer  
10 class, including the Special Contract customers. The  
11 exhibit also includes a summary of results showing the  
12 actual rate of return earned for each customer class and  
13 Special Contract customer. The exhibit includes the  
14 following tables:

- 15 • Table 1 - Plant in Service;
- 16 • Table 2 - Accumulated Reserve for  
17 Depreciation;
- 18
- 19 • Table 3 - Amortization Reserve;
- 20 • Table 4 - Substation Contributions in Aid  
21 of Construction;
- 22 • Table 5 - Customer Advances for  
23 Construction;
- 24
- 25 • Table 6 - Accumulated Deferred Income  
26 Taxes;
- 27
- 28 • Table 7 - Acquisition Adjustment;
- 29 • Table 8 - Working Capital;

- 1                   • Table 9 - Deferred Programs;
- 2                   • Table 10 - Subsidiary Rate Base;
- 3                   • Table 11 - Plant Held for Future Use;
- 4                   • Table 12 - Other Revenues;
- 5                   • Table 13 - Operation & Maintenance
- 6                   Expenses;
- 7
- 8                   • Table 14 - Depreciation Expense;
- 9                   • Table 15 - Amortization of Limited Term
- 10                  Plant;
- 11
- 12                  • Table 16 - Taxes Other Than Income;
- 13                  • Table 17 - Regulatory Debits/Credits;
- 14                  • Table 18 - Provisions for Deferred Income
- 15                  Taxes;
- 16
- 17                  • Table 19 - Investment Tax Credit
- 18                  Adjustment;
- 19
- 20                  • Table 20 - Construction Work In Progress;
- 21                  • Table 21 - State Income Taxes;
- 22                  • Table 22 - Federal Income Taxes; and
- 23                  • Table 23 - Allocation Factor Summary.

24               Q.     Does the Class Cost-of-Service Process Guide,  
25 Exhibit No. 36, detail the manner in which you allocated  
26 the summarized costs shown on Exhibit No. 38 to each class  
27 of service as shown on Tables 1 through 22 of Exhibit No.  
28 39?

29               A.     Yes. Exhibit No. 36, the Class Cost-of-Service  
30 Process Guide, details the majority of the allocation

1 methodology that was applied to produce the results shown  
2 on Tables 1 through 22 of Exhibit No. 39.

3 Q. What additional allocation methodology was  
4 included in the CCOS to produce the summarized costs shown  
5 on Exhibit No. 42?

6 A. As described by Mr. Larkin, the Jurisdictional  
7 Separation Study includes three additional revenue  
8 requirement line items: 1) Bridger revenue requirement, 2)  
9 Valmy revenue requirement, and 3) revenue requirement  
10 offset for battery projects to be installed in 2023.  
11 Revenue requirements for those three items were allocated  
12 to customer classes consistent with other base-load serving  
13 generation plant. Please see Exhibit No. 46 Revenue  
14 Requirement Adjustments for each class's calculated  
15 allocable share. The result of that class allocation for  
16 the three revenue requirement items is listed by customer  
17 class on row 45 of Exhibit No. 42 Revenue Requirement  
18 Summary.

19 A second allocation was included to spread to  
20 customer classes the transfer adjustment described by Mr.  
21 Larkin. The total value of the Energy Efficiency Rider  
22 labor adjustment and update to Power Cost Adjustment  
23 ("PCA")-related items were allocated to customer classes in  
24 the same manner as they would be incurred. Exhibit No. 41,

1     Transfer Adjustment, computes the base revenue transfer for  
2     each customer class.

3             Q.     Does Exhibit No. 39 include a listing of the  
4     allocation factors used to allocate to classes the various  
5     costs shown on Tables 1 through 22?

6             A.     Yes. Table 23 of Exhibit No. 39 includes a  
7     listing of each allocation factor.

8             Q.     Have you included information regarding the  
9     derivation of the Company's updated marginal costs with  
10    your testimony?

11            A.     Yes. I have included a copy of the Company's  
12    2023 Marginal Cost Analysis Study as Exhibit No. 44.

13            Q.     Have the marginal costs been used to develop  
14    the Company's revenue requirement?

15            A.     No. The marginal costs have been used solely  
16    for purposes of developing allocation factors and not for  
17    purposes of developing the Company's revenue requirement.

18            Q.     Have you prepared an exhibit that details the  
19    derivation of the demand and energy allocation factors used  
20    in the cost-of-service study?

21            A.     Yes. Exhibit No. 45 details the derivation of  
22    the allocation factors D10S, D10NS, D10P, D13, E10S, and  
23    E10NS used in the CCOS.

1                                    **IV.    COST-OF-SERVICE STUDY RESULTS**

2                    Q.            Please describe Exhibit No. 42.

3                    A.            Exhibit No. 42 is the revenue requirement  
4 summary based on the results of the proposed CCOS study.  
5 The section headed "Revenue Requirement for Rate Design"  
6 details the sales revenue required from each customer class  
7 and special contract customer. The sales revenue required  
8 includes return on rate base, total operating expenses, and  
9 incremental taxes computed using the net-to-gross  
10 multiplier of 1.347 provided by Ms. Noe.

11                  Q.            Have you prepared an exhibit quantifying the  
12 impact from the recommended CCOS modifications?

13                  A.            Yes, Exhibit No. 47 to my testimony includes  
14 the results of the 2023 CCOS study and the three  
15 supplemental CCOS studies. The exhibit is presented with  
16 the first section representing a CCOS study consistent with  
17 the 2011 GRC methodology; the two subsequent sections  
18 independently list the incremental change to revenue  
19 requirement by class from that respective modification.  
20 Finally, the combined impact of the modifications and the  
21 2023 CCOS class revenue requirement results are listed in  
22 the fourth section.

23                  Q.            Please summarize the major impacts to  
24 customer classes from the recommendations.

1           A.       The greatest impact is to the Irrigation  
2 customer class, which is primarily driven by shifting to a  
3 four-month summer season for all customer classes, and  
4 results in a reduction in revenue deficiency of \$3.7  
5 million (as compared to the 2011 GRC methodology) from this  
6 modification. However, while each class experiences a  
7 slight change to revenue requirement from the two proposed  
8 changes, the greatest percentage total impact is a 2.65  
9 percent reduction in revenue deficiency for the Irrigation  
10 class, nearly all due to the four-month summer season, with  
11 almost all other classes experiencing less than 1 percent  
12 impact to revenue requirement from the proposed methodology  
13 changes.

14           Q.       Please summarize the results of the class  
15 cost-of-service study that are detailed on Exhibit No. 42.

16           A.       The results shown on Exhibit No. 42 indicate  
17 that the Residential ("Schedule 1"), Residential On-Site  
18 Generation ("Schedule 6"), Small General Service ("Schedule  
19 7"), Small General Service On-Site Generation ("Schedule  
20 8") Irrigation Service ("Schedule 24"), and Traffic Control  
21 Lighting Service ("Schedule 42") should have an increase in  
22 rates that is greater than the overall average increase  
23 requested by the Company. In addition, the results indicate  
24 that Large General Service - Primary & Transmission  
25 ("Schedules 9P and 9T"), Dusk to Dawn Lighting ("Schedule

1 15"), Municipal Street Lighting ("Schedule 41"), and  
2 Special Contract customer J. R. Simplot Company Pocatello,  
3 Idaho ("Simplot Pocatello") ("Schedule 29") should have a  
4 decrease in rates from the current level.

5 **V. REVENUE REQUIREMENT ALLOCATION**

6 Q. What is the Company's general ratemaking  
7 philosophy on determining class-specific revenue  
8 requirement and the resulting customer rates?

9 A. The Company's primary approach to ratemaking  
10 in the last several GRCs has been to establish rates that  
11 reflect costs as accurately as possible. Accordingly, the  
12 Company's ratemaking proposals usually advocate movement  
13 toward cost-of-service results, which assign costs to those  
14 customer classes that cause the Company to incur the costs.

15 Q. Are there other objectives that may be  
16 considered in the ratemaking process?

17 A. Yes. The Commission may consider a number of  
18 other objectives, such as rate stability, in the  
19 determination of rates.

20 Q. How did you approach the determination of  
21 the revenue requirement for each customer class?

22 A. As I described above, a pure cost-of-service  
23 revenue requirement spread would result in larger increases  
24 for certain classes relative to the overall average  
25 increase. In order to mitigate the magnitude of the maximum

1 rate increase any class would experience, the Company is  
2 proposing to cap the percentage increase to any customer  
3 class at one and one-half times the overall average  
4 requested increase, or 12.91 percent (8.61 percent X 1.5 =  
5 12.91 percent). As proposed, Large General Service -  
6 Primary & Secondary, Dusk to Dawn Lighting, Municipal  
7 Street Lighting and the Simplot Pocatello Special Contract  
8 receive neither a decrease nor an increase in rates.

9 Q. Did you discuss the results of the CCOS  
10 study internally before deciding to apply the 12.91 percent  
11 caps to the specified customer classes?

12 A. Yes. I discussed the results of the CCOS and  
13 potential rate spread scenarios with Company Witness Mr.  
14 Timothy Tatum, who is responsible for the overall  
15 preparation of this case. My revenue allocation is the  
16 result of those discussions.

17 Q. Was the revenue allocation process affected  
18 by the clean energy aspects of Micron's Special Contract?

19 A. No. Micron's revenue targets were developed  
20 for the portion of service Idaho Power provides.

21 Q. Does the overall 12.91 percent cap also  
22 apply to new customer classes Schedule 6 and 8?

23 A. Not explicitly. However, consistent with the  
24 direction provided by Ms. Aschenbrenner, the Residential  
25 and Residential On-Site Generation customer classes were



1 combined prior to determining the revenue target. The same  
2 occurred for Small General Service and its On-Site  
3 Generation counterpart. As further discussed in the Direct  
4 Testimony of Company Witness Mr. Grant Anderson and Company  
5 Witness Mr. Zack Thompson, respectively, rate design was  
6 developed such that Schedule 1 and Schedule 6 share the  
7 same service charge and energy rates, with that also being  
8 the case for Schedule 7 and Schedule 8.

9 Q. Do you have an exhibit that details the  
10 class revenue requirement determination?

11 A. Yes. Exhibit No. 48 is a five-page exhibit  
12 that steps through the revenue requirement allocation  
13 process from the CCOS results to the ultimate proposal for  
14 each customer class. Page 1 of Exhibit No. 48 presents the  
15 proformed normalized test year sales and revenues and  
16 transfer adjustment by customer class. Page 2 details the  
17 results from the CCOS study and illustrates the revenue  
18 changes that would be made to each customer class to obtain  
19 the CCOS results. Page 3 shows the revenue shortfall that  
20 resulted by applying the 12.91 percent cap to combined  
21 Small General Service classes, Irrigation, and Traffic  
22 Control Lighting, and no decrease to Large General Service  
23 - Primary & Secondary, Dusk to Dawn Lighting, Municipal  
24 Street Lighting, or Simplot Pocatello Special Contract.

25 Page 5 shows the final proposed increase to customer

1 classes that resulted from spreading the revenue shortfall  
2 created by the 12.91 percent cap, no increase or decrease  
3 to Large General Service - Primary & Secondary, Dusk to  
4 Dawn Lighting, Municipal Street Lighting, or Simplot  
5 Pocatello Special Contract. The results from page 5 were  
6 utilized in determining the individual rates for the  
7 Company's general tariff and special contract customers.

8 Q. Did you also provide the results of the CCOS  
9 to the Company's rate design witnesses for use in the  
10 Company's rate design proposals along with the revenue  
11 targets from Exhibit No. 48?

12 A. Yes. I provided the CCOS unit costs,  
13 detailed on Exhibit No. 43, to Mr. Anderson, Mr. Thompson,  
14 and Company Witness Mr. Riley Maloney for use in  
15 determining the rates for their respective service  
16 schedules.

17 Q. Please describe Exhibit No. 43.

18 A. Exhibit No. 43 shows the unit cost for each  
19 function for metered service schedules as determined  
20 through the CCOS study. The billing units shown in the  
21 column labeled "(F)" reflect the billing demands,  
22 normalized billing energy, basic load capacity, and number  
23 of billings.

24 Q. Are you proposing any other changes to cost  
25 recovery?

1           A.       Yes, As discussed by Mr. Tatum, the Company  
2 is proposing to reduce the Energy Efficiency Rider  
3 ("Rider") collection percentage to 2.25 percent from 3.10  
4 percent. Exhibit No. 41 includes derivation of the proposed  
5 2.25 percent Rider collection percentage, with Rider  
6 collection projected to be \$31.6 million, just slightly  
7 above the current funding level when also considering the  
8 \$3.5 million of labor-related cost that will be collected  
9 in base rates.

10                   **VI.   SALES BASED ADJUSTMENT RATE**

11           Q.       Please describe in general terms the purpose  
12 of the SBAR?

13           A.       The SBAR is a part of the PCA mechanism that  
14 is intended to eliminate recovery of power supply expenses  
15 associated with load growth resulting from changing weather  
16 conditions, a growing customer base, or changing customer  
17 use patterns.

18           Q.       Please describe the SBAR methodology  
19 approved by the Commission in Order No. 33307.

20           A.       Commission Order No. 33307 directs the  
21 Company to calculate the SBAR based on the energy  
22 classified portion of embedded production revenue  
23 requirement as established in the CCOS. The final SBAR is  
24 calculated by dividing this portion of revenue requirement  
25 by the Idaho kilowatt-hour ("kWh") sales for the test year.

1

2           Q.       Are any additional modifications to  
3 calculate the SBAR necessary as part of the 2023 CCOS  
4 determination?

5           A.       Yes. The Commission's Order adopted  
6 Commission Staff's ("Staff") recommendations for the PCA  
7 treatment of the renewable portion of Micron's billing  
8 construct,<sup>5</sup> which accepted the proposed treatment described  
9 in Ms. Aschenbrenner's testimony filed in Case No. IPC-E-  
10 22-06:<sup>6</sup>

11                   Further, any energy requirements met by the  
12 Renewable Resource will not be included in the PCA  
13 sales based adjustment (SBA) and will not be used  
14 in the derivation of the future PCA rates. All  
15 Supplemental Energy supplied to Micron will be  
16 included in the PCA, SBA and used for PCA rate  
17 derivation purposes.

18  
19           Accordingly, the Black Mesa PPA power supply expense  
20 is excluded as part of the SBAR energy-related generation  
21 function revenue requirement, and the portion of Micron's  
22 energy that Black Mesa meets under the Special Contract  
23 billing construct is also excluded from test year retail  
24 sales.

25           Q.       What is the resulting SBAR?

26           A.       By applying the methodology established by

---

<sup>5</sup> *In the Matter of Idaho Power Company's Application for Approval of a Replacement Special Contract with Micron Technology, Inc. and a Power Purchase Agreement with Black Mesa Energy, LLC.*, Case No. IPC-E-22-06, Order No. 35482 (August 1, 2022); Staff Comments pg. 18.

<sup>6</sup> Case No. IPC-E-22-06, Aschenbrenner DI, pg. 20.

1 Commission Order No. 33307 in Case No. IPC-E-15-15, and for  
2 the Micron clean energy component of their Special Contract  
3 components by Order No. 35482, the SBAR should be increased  
4 from the requested level of \$26.72 in Case No. IPC-E-15-15  
5 to \$31.29 per megawatt-hour.

6 Q. Have you prepared an exhibit that details  
7 the derivation of the revised SBAR?

8 A. Yes. Exhibit No. 49, details the derivation  
9 of the \$31.29 SBAR amount.

10 VII. FIXED COST ADJUSTMENT RATES

11 Q. Please describe the FCA mechanism.

12 A. The FCA is a rate mechanism that is designed  
13 to remove the financial disincentive to utility acquisition  
14 of demand-side management resources. The mechanism  
15 accomplishes this goal by severing the link between energy  
16 sales and the recovery of fixed costs. The FCA applies to  
17 customer classes that only include energy and service  
18 charges in their retail billing components, Residential  
19 Service (Schedules 1, 3, 5, and 6) and Small General  
20 Service (Schedule 7, and 8). The annual FCA amount is  
21 determined according to the following formula:

22 
$$FCA = (CUST \times FCC) - (ACTUAL \times FCE)$$

23 Where:

24 FCA = Fixed Cost Adjustment;

25 CUST = Actual number of customers, by class;

1           FCC = Fixed Cost per Customer, by class;  
2           ACTUAL = Actual Billed kWh Energy Sales, by  
3           class; and  
4           FCE = Fixed Cost per Energy, by class.

5           Q.       What values are required to calculate the  
6 FCA amount annually?

7           A.       As outlined in the above formula, for each  
8 class (Residential Service and Small General Service), the  
9 actual number of customers ("CUST"), the fixed cost per  
10 customer ("FCC"), actual energy ("ACTUAL"), and the Fixed  
11 Cost per Energy ("FCE") are required to determine the FCA  
12 amount. Two of these variables (CUST and ACTUAL) are  
13 determined at the end of each year based upon the Company's  
14 actual billing records. The other two variables (FCC and  
15 FCE) are updated each time the Company files a GRC and are  
16 based on the results of the CCOS study.

17          Q.       Since granting permanency for the FCA  
18 mechanism in Order No. 32505 in 2012,<sup>7</sup> has the Commission  
19 authorized any additional changes?

20          A.       Yes. First, the Commission approved a  
21 Settlement Stipulation in 2015 that replaced the use of  
22 weather-normalized data with actual sales in determination

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<sup>7</sup> *In the Matter of the Application of Idaho Power Company for Authority to Convert Schedule 54 - Fixed Cost Adjustment - from a Pilot Schedule to an Ongoing Schedule*, Case No. IPC-E-11-19, Order No. 32505 (March 30, 2012).

1 of the FCA deferral.<sup>8</sup> Second, in 2021 the Commission  
2 approved separate, and reduced fixed cost tracking for  
3 customers considered "new," defined in the Order to be  
4 customers added after January 1, 2022.<sup>9</sup> The Commission's  
5 rationale stated that the modification "eliminates fixed  
6 cost recovery due to new customer growth for investments  
7 best determined in a general rate case."<sup>10</sup>

8 Q. Beginning with the 2024 FCA deferral, who  
9 will be considered a "new" customer?

10 A. The FCC and FCE rates will be reset based on  
11 outcomes of this GRC, as such, "new" customers will also be  
12 reset to be those customers added starting January 1, 2024,  
13 when proposed GRC rates go into effect.

14 Q. Are you proposing any additional  
15 modifications to the FCA as part of this proceeding?

16 A. Yes, I am proposing two additional  
17 modifications. First, because Schedule 6 and Schedule 8 are  
18 now separate rate classes in the CCOS study with individual  
19 cost assignment and independent class statistics, I  
20 recommend separate determination of use per customer  
21 ("UPC"), FCC, and FCE for these customer classes.

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<sup>8</sup> *In the Matter of the Commission's Inquiry into Idaho Power Company's Fixed Cost Adjustment Mechanism*, Case No. IPC-E-14-17, Order No. 33295 (May 6, 2015).

<sup>9</sup> *Idaho Power Company's Application for Modification of the Fixed Power Cost Adjustment*, Case No. IPC-E-21-39, Order No. 35273 (Dec. 28, 2021).

<sup>10</sup> Order No. 35273, pg. 4.

1           Next, I am proposing separate determination for the  
2   UPC and FCE applied to customers taking service under the  
3   Proposed Schedule 5, Residential Service Time-of-Use Plan  
4   ("Schedule 5"). Cost assignment for Residential customers  
5   is completed on a composite group including Schedule 1, 3,  
6   and 5 customers and the FCC is calculated based on class  
7   statistics from this composite group. However, UPC for  
8   Schedule 5 is approximately 50 percent higher than the  
9   average Residential Service (Schedule 1) standard service  
10   customer. To appropriately track actual sales against a UPC  
11   basis, a class-specific UPC basis should be utilized.

12           For the FCE, derivation independent from composite  
13   Residential FCE rates should be utilized because of the  
14   proposed Schedule 5 rate design. As detailed in Mr.  
15   Anderson's testimony, the Company is pursuing an update to  
16   Schedule 5 time-of-use rates such that on- and off-peak  
17   energy rates maintain a four-to-one price differential in  
18   the summer season, and 1.5-to-one price differential in the  
19   non-summer season. That is, the summer on-peak energy rate  
20   will be four times the summer off-peak energy rate, and the  
21   non-summer on-peak energy rate will be 1.5 times the non-  
22   summer off-peak energy rate. Neither differential aligns  
23   with CCOS-informed rates, thus the FCE for Schedule 5  
24   incorporates a matching four-to-one differential for  
25   summer, and 1.5-to-one differential for non-summer



1 consumption, such that changes to Schedule 5 energy  
2 consumption in response to price signals between on- and  
3 off-peak periods recognize the embedded level of fixed  
4 costs in each time period. Schedule 5 customers who shift  
5 use from the on-peak period to the off-peak period do not  
6 receive an under- or over-collection of fixed costs between  
7 energy rates and the FCA mechanism because the FCE includes  
8 a four-to-one, and 1.5-to-one differential, respectively.

9 Q. Is the Company proposing changes to how  
10 annual FCA rates that recover the FCA deferral are set and  
11 applied to customer classes?

12 A. No. Annually, the FCA deferral will be  
13 tracked for five customer segments: Schedule 1 & 3,  
14 Schedule 5, Schedule 6, Schedule 7, and Schedule 8. The  
15 determination of annual FCA rates combines the Residential  
16 and Small General Service customer segments first, and sets  
17 the percentage change on an overall basis, not on a class-  
18 segment basis. FCA rates will continue to be set only at  
19 the total Residential (Schedule 1, 3, 5, and 6) segment,  
20 and Small General Service (Schedule 7, and 8) segment.

21 Q. Have you updated the FCC and FCE rates as  
22 part of this GRC proceeding?

23 A. Yes. I have updated the new and existing  
24 customer FCC and the FCE rates using the functionalized and  
25 classified revenue requirement from the 2023 CCOS, and

1 proposed Service Charge collection effective January 1,  
2 2024. The updated FCC and FCE rates have been included in  
3 the revised Schedule 54, Fixed Cost Adjustment.

4 Q. Please describe the process used to  
5 determine the FCC and FCE rates for the FCA mechanism,  
6 which have been submitted as part of this GRC proceeding.

7 A. The FCC and FCE rates submitted as part of  
8 this GRC proceeding are based upon the 2023 test year.  
9 These rates most accurately represent the Company's current  
10 fixed costs. Exhibit No. 50, Tables I, II, III, IV, and the  
11 Schedule 5 FCE derivation detail the computational process  
12 that was used to determine these class-specific fixed-cost  
13 amounts.

14 The first step in this process is a determination of  
15 the 2023 test year fixed cost recovery embedded in the  
16 energy charges for Residential Service and Small General  
17 Service customers. As can be seen on Exhibit No. 50, Table  
18 III, column J, for Residential Service, \$367,032,962 of  
19 fixed costs are to be recovered from residential customers  
20 through energy charges, and \$8,715,991 for Residential On-  
21 Site Generation customers. For Small General Service,  
22 \$8,266,319 of fixed costs are to be recovered from the  
23 energy charges, and \$27,218 for Small General Service On-  
24 Site Generation customers.

25 Q. Do these fixed cost amounts for the

1 Residential class include more than their actual class cost  
2 of service?

3 A. Yes. There is a difference between the class  
4 cost of service numbers and the amount of requested revenue  
5 requirement. This difference is a result of the cross-class  
6 subsidies that are currently present in the Company's rate  
7 structure. The total cross-class subsidies, as well as the  
8 fixed cost portion of those subsidies, are identified on  
9 Exhibit No. 50, Table II.

10 Q. Why is it important to include these fixed  
11 cost subsidies for the Residential class?

12 A. When fixed costs are recovered through a  
13 volumetric rate, the effects of any energy efficiency  
14 program that reduces energy consumption result in lost  
15 recovery of those fixed costs. In the case of the  
16 Residential classes, the reduction of energy consumption  
17 through energy efficiency not only prevents the Company  
18 from recovering the fixed costs associated with those  
19 classes, but in addition, prevents the fixed cost recovery  
20 of the other inter-class subsidies that are embedded in  
21 Residential energy rates.

22 Q. How are the class-specific fixed cost  
23 amounts established in the initial step used to derive the  
24 updated FCC rates?

25 A. The determination of the FCC rate utilizes

1 the annual average number of customers for the Residential  
2 customer class and Small General Service customer class.  
3 As can be seen on Exhibit No. 50, Table III, column A, the  
4 2023 average number of customers are 492,481 for the  
5 Residential customer class, 13,288 for the Residential On-  
6 Site Generation class, 30,401 for the Small General Service  
7 customer class, and 88 for the Small General Service On-  
8 Site Generation class.

9 With these two principal base level values, the FCC  
10 rate can be determined. The annual fixed costs recovered  
11 through the energy charges divided by the 2023 average  
12 number of customers results in an annual fixed cost  
13 recovery per customer, or the FCC rate, shown on Exhibit  
14 No. 50, Table III, column K. For the Residential class, the  
15 annual fixed cost recovery per customer is \$745.27  
16 ( $\$367,032,692 / 492,481$ ), and \$655.94 for the Residential  
17 On-Site Generation class ( $\$8,715,991 / 13,288$ ). For the  
18 Small General Service class, the annual fixed cost recovery  
19 per customer is \$271.91 ( $\$8,266,319 / 30,401$ ), and \$311.07  
20 for the Small General Service On-Site Generation class  
21 ( $\$27,218 / 88$ ).

22 For new customers, those added starting January 1,  
23 2024, the Fixed Cost per Customer - Distribution ("FCC-  
24 DIST") only includes distribution function fixed costs. The  
25 table below lists the corresponding FCC-DIST for each of

1 the FCA classes.

2 **Table 3**

3 New Customer FCC-DIST

<u>Customer Group</u>	<u>Total Distribution &amp; Customer Fixed Cost Revenue from Energy Charges</u>	<u>2023 Avg. Customers</u>	<u>FCC-DIST</u>
Residential	125,476,059	492,481	\$254.78
Residential On-Site Generation	3,620,717	13,288	\$272.49
Small General Service	3,257,318	30,401	\$107.15
Small General Service On-Site Generation	12,337	88	\$140.99

4

5 Q. How are the class-specific fixed cost  
6 amounts established in the initial step used to derive the  
7 updated FCE values?

8 A. The determination of the FCE rate utilizes  
9 the Residential and Small General Service weather-  
10 normalized energy consumption for the 2023 test year. As  
11 can be seen on Exhibit No. 50, Table III, column B, the  
12 2023 weather-normalized annual energy consumption for the  
13 Residential customer class is 5,425,559,433 kWh,  
14 122,912,496 kWh for Residential On-Site Generation  
15 customers, 138,285,160 kWh for the Small General Service  
16 class, and 370,708 kWh for the Small General Service On-  
17 Site Generation class.

18 The annual fixed cost recovered through the energy  
19 charges divided by the normalized energy results in an  
20 annual fixed cost recovery per kWh, or the FCE rate, shown  
21 on Exhibit No. 50, Table III, column L. Matching FCC-DIST  
22 determination for new customers, the FCE-DIST determination

1 for new customers added starting January 1, 2024, only  
2 includes distribution-related fixed costs. Existing  
3 customer FCE and new customer FCE-DIST are listed in Table  
4 No. 4 for each of the FCA classes. Derivation of FCE-DIST  
5 is shown on Exhibit No. 50, Table IV.

6 **Table 4**  
7 FCE and FCE-DIST

<u>Total Fixed Cost Revenue from</u>			
<u>Customer Group</u>	<u>Energy Charges</u>	<u>2023 kWh</u>	<u>FCE</u>
Residential (Schedule 1, and 3)	367,032,962	5,425,559,433	\$0.067649
Residential On-Site Generation	8,715,991	122,912,496	\$0.070912
Small General Service	8,266,319	138,285,160	\$0.059777
Small General Service On-Site Generation	27,218	370,708	\$0.073423
	<u>Total Distribution &amp; Customer Fixed Cost Revenue from</u>		
<u>Customer Group</u>	<u>Energy Charges</u>	<u>2023 kWh</u>	<u>FCE-DIST</u>
Residential (Schedule 1, and 3)	125,476,059	5,425,559,433	\$0.023127
Residential On-Site Generation	3,620,717	122,912,496	\$0.029458
Small General Service	3,257,318	138,285,160	\$0.023555
Small General Service On-Site Generation	12,337	370,708	\$0.033278

8

9 Q. Please describe Schedule 5 FCE and FCE-DIST  
10 derivation.

11 A. The kWh sales forecast for Schedule 5  
12 customers is multiplied by the Residential FCE to determine  
13 the actual fixed cost collection through the energy charge  
14 in the forecast. That resulting value is removed from the  
15 amount of energy sales revenue forecast for Schedule 5,  
16 with the amount remaining considered to be the energy cost  
17 in energy revenue. Energy cost in energy revenue is  
18 seasonalized based on CCOS-informed summer/non-summer

1 energy cost ratio. Finally, the energy cost in energy  
2 revenue for that season is allocated to the on-peak and  
3 off-peak period based on the time-of-use billing  
4 determinants, with the per-energy unit cost retaining a  
5 four-to-one differential in the summer, and 1.5-to-one  
6 differential in the non-summer season. The proposed energy  
7 rates from Mr. Anderson's workpapers are reduced for the  
8 corresponding per-energy unit seasonal energy cost in  
9 energy revenue to calculate a matching differential  
10 Schedule 5 FCE rate. The process is replicated for the FCE-  
11 DIST for new Schedule 5 customers. Page 5 of Exhibit No. 50  
12 is the workpaper supporting derivation of Schedule 5 FCE  
13 and FCE-DIST rates.

14 Q. How do the FCC and FCE computed in this  
15 filing compare to the FCC and FCE established in the  
16 Company's last general rate case, IPC-E-11-08?

17 A. Both the FCC and FCE rates are greater than  
18 those currently in effect, which were established using the  
19 functionalized classified revenue requirement data in the  
20 Company's last filed general rate case, Case No. IPC-E-11-  
21 08. The Company has made significant investments in its  
22 infrastructure since that time, and the newly calculated  
23 FCC and FCE rates reflect those fixed costs that are being  
24 recovered through the Residential and Small General Service  
25 energy charges.

1                                   **VIII.    SPECIAL CONTRACT CUSTOMERS**

2                   Q.       Please provide an overview of the Company's  
3 Special Contract customers and how rate design was  
4 developed.

5                   A.       There are six Special Contract customers and  
6 associated rate design proposals included in my testimony.  
7 First, I will review rate design proposals for Idaho  
8 Power's three long-standing Special Contract customers,  
9 Micron, Simplot Pocatello (Schedule 29), and the United  
10 States Department of Energy ("DOE"). Second, I will discuss  
11 development of rates for J. R. Simplot Company Caldwell,  
12 Idaho ("Simplot Caldwell") (Schedule 32), whose 2015  
13 Special Contract became active at the end of April 2023  
14 when it exceeded the 20 MW threshold for it to become  
15 effective. Finally, I will describe CCOS methodology and  
16 rate design for future Special Contract customers Brisbie,  
17 LLC ("Brisbie") and Lamb Weston.

18                  Q.       What are the Company's rate design proposals  
19 for the long-standing Special Contract customers, Micron,  
20 Simplot Pocatello, and the DOE?

21                  A.       The Company is proposing to maintain the  
22 current rate structures for the active Special Contract  
23 customers Micron, Simplot Pocatello, and DOE, but move the  
24 rate design components toward CCOS-informed amounts when  
25 increasing forecast collections to recover the revenue



1 requirement shown on Exhibit No. 48. This includes  
2 reestablishing the Contract Demand charge for Micron and  
3 Simplot Pocatello based on the same methodology the Company  
4 recently included in the Brisbie<sup>11</sup> and Lamb Weston  
5 contracts.

6 Q. Please describe the derivation of Micron's  
7 and Simplot's Pocatello Contract Demand rates.

8 A. Consistent with the method most-recently  
9 reviewed by the Commission as a reasonable basis for  
10 Contract Demand rates approved for Brisbie, and proposed  
11 for new Special Contract customer Lamb Weston, I propose  
12 Micron and Simplot Pocatello's Contract Demand rate is  
13 based on costs derived from the Company's Open Access  
14 Transmission Tariff ("OATT") rate effective October 1,  
15 2022. The OATT-based Contract Demand reflects the  
16 reservation cost that any other customer would pay on Idaho  
17 Power's system. To account for collection of costs by the  
18 Contract Demand charge, the Billing Demand rate is adjusted  
19 to collect any remaining fixed costs not collected through  
20 the Contract Demand charge.

21 Q. What other rate design elements for Micron,  
22 Simplot Pocatello, and DOE are proposed to be updated based  
23 on CCOS results?

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<sup>11</sup> *In the Matter of Idaho Power's Application for Approval of Special Contract and Tariff Schedule 33 to Provide Electric Service to Brisbie, LLC's Data Center Facility*, Case No. IPC-E-21-42, Goralski DI, p. 13.

1           A.       I propose that the energy rate for Micron,  
2   Simplot Pocatello, and DOE match the CCOS-informed energy  
3   rate. This proposed change aligns rate design with cost  
4   causation by recovering only variable costs through the  
5   energy charge.

6           Q.       Have you included rate design workpapers for  
7   Micron, Simplot Pocatello, and DOE?

8           A.       Yes, Exhibit No. 51 includes rate design  
9   workpapers for all six Special Contract customers, current  
10   and future.

11          Q.       Please describe the Simplot Caldwell Special  
12   Contract pricing and CCOS analysis.

13          A.       As noted earlier, in late April 2023 Simplot  
14   Caldwell crossed the 20 MW customer load threshold to  
15   activate their Special Contract. Idaho Power endeavors that  
16   the GRC test year uses the best information available to  
17   the Company at the time of development. For Simplot  
18   Caldwell, while their Special Contract was approved in  
19   2015, prior to April, Simplot Caldwell had not previously  
20   exceeded the threshold to begin taking service under their  
21   Special Contract rates. Because historical customer usage  
22   has remained slightly below their forecast usage and they  
23   remained a Schedule 19 customer since approval of the  
24   Special Contract, Idaho Power included Simplot Caldwell as  
25   part of the Schedule 19 customer class in the 2023 GRC test

1 year load forecast, consistent with customer load until  
2 late April 2023.

3 For Simplot Caldwell, I completed pricing analysis  
4 by first removing their Schedule 19 load statistics from  
5 the CCOS study, and then added back their customer-provided  
6 Special Contract forecast load as an individual customer to  
7 complete cost assignment. This is similar to the approach  
8 Idaho Power has utilized when pricing new Special Contract  
9 customers between GRC, which is in alignment with the  
10 Commission's direction provided in Case No. IPC-E-13-23.<sup>12</sup>

11 Q. Was additional consideration required as  
12 part of developing Simplot Caldwell's proposed rate design?

13 A. Yes. It's important to distinguish the rates  
14 and revenue collection forecast for Simplot Caldwell in the  
15 2023 GRC test year, which are based on Schedule 19 rates  
16 and a lower, historical usage profile, versus the higher  
17 load forecast assumptions for cost assignment as a Special  
18 Contract. In the CCOS analysis, the historical basis  
19 Simplot Caldwell collections under Schedule 19 are  
20 approximately \$6.7 million, while the revenue requirement  
21 based on their higher, Special Contract load forecast is

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<sup>12</sup> *In the Matter of the Application of Idaho Power Company for Approval of a Special Contract with J.R. Simplot Company, Case No. IPC-E-13-23, Order No. 33038 at 12 (May 19, 2014) ("... we find that a rate utilizing cost-of-service as a starting point for negotiation is consistent with prior Commission Orders and is fair, just and reasonable.")*

1 \$9.97 million. However, because Simplot Caldwell has  
2 existing Schedule 32 rates, rate design was evaluated by  
3 using current Schedule 32 rates applied to the higher,  
4 Simplot Caldwell load forecast used in the completion of  
5 the Special Contract CCOS cost assignment.

6 Q. What is the resulting revenue requirement  
7 change and proposed rate design for Simplot Caldwell?

8 A. I propose to increase Simplot Caldwell's  
9 revenue requirement by \$6,518 to bring them up to CCOS  
10 results, as revenue collection under existing Schedule 32  
11 rates and the forecast Special Contract load are nearly  
12 aligned with Simplot Caldwell's cost assignment. Consistent  
13 with rate design proposed for Micron and Simplot Pocatello,  
14 I propose to update Simplot Caldwell's Contract Demand rate  
15 to be OATT-based, and for the energy rate to match CCOS.

16 Q. How was pricing developed for future Special  
17 Contract customer Lamb Weston, which is an Idaho Power  
18 tariff Schedule 19P customer today?

19 A. Idaho Power recently filed an application to  
20 enter into a Special Contract with Lamb Weston in  
21 recognition of their forecast load exceeding 20 MW in July  
22 2023.<sup>13</sup> However, Lamb Weston's current load is less than 20  
23 MW, and the 2023 CCOS test year data includes Lamb Weston

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<sup>13</sup> *In the Matter of Idaho Power's Application for Approval of Special Contract and Tariff Schedule 34 to Provide Electric Service to Lamb Weston, Inc.*, Case No. IPC-E-23-18, filed May 23, 2023.

1 as part of Schedule 19 load statistics, consistent with the  
2 level of service they currently receive from Idaho Power.

3 Similar to Simplot Caldwell, I completed pricing  
4 analysis by first removing Lamb Weston's Schedule 19 load  
5 statistics from the CCOS study, and then added back their  
6 future, customer-provided Special Contract steady-state  
7 forecast load as an individual customer to complete cost  
8 assignment.

9 Q. Why didn't the Company include Lamb Weston  
10 as a Special Contract customer in the GRC test year to  
11 develop rates?

12 A. Lamb Weston is in the process of a plant  
13 expansion at its facility in American Falls and is forecast  
14 to exceed the Schedule 19 service eligibility threshold in  
15 the second half of 2023 but not complete expansion until  
16 mid-2024. Due to uncertainty associated with the exact  
17 timing of that expansion, it is appropriate to include Lamb  
18 Weston's forecast Special Contract system utilization in a  
19 future GRC test year once that usage has been achieved.

20 If Lamb Weston was removed from the Schedule 19 test  
21 year load statistics but remained a Schedule 19 customer  
22 after the GRC, the total Schedule 19 class would be under-  
23 assigned costs, which would instead be allocated to all  
24 other Idaho Power customer classes. There is inherent  
25 regulatory lag when pricing new, proposed Special Contract

1 customers and the future point in time when all customer  
2 rates are re-balanced. The process Idaho Power followed to  
3 price Lamb Weston's Special Contract rates incorporates the  
4 best-known, historical information for this customer at the  
5 time of GRC filing.

6 Q. Please describe Lamb Weston's rate design  
7 components.

8 A. As described in more detail in the Company's  
9 recent filing for Commission approval of the Lamb Weston  
10 Special Contract, Case No. IPC-E-23-18, Lamb Weston's  
11 Special Contract rates incorporate a two-block, embedded  
12 and marginal-cost-based pricing structure. Block 1  
13 represents the first 20 MW of Lamb Weston's load and is  
14 priced at Schedule 19 - Primary retail rates, and Lamb  
15 Weston' load exceeding 20 MW is priced on an embedded cost  
16 basis for capacity and marginal cost basis for energy.  
17 Because block 1 references Schedule 19 rates, I propose  
18 mirroring the rates proposed by Mr. Anderson for Schedule  
19 19. The marginal energy cost portion of Lamb Weston's  
20 second block is based on an annual power supply cost  
21 forecast consistent with the PCA test year, with proposed  
22 marginal cost rate updates to occur at an annual interval  
23 in the spring with updated effective marginal energy rate  
24 each June 1<sup>st</sup>. My rate design focuses on the block 2 demand  
25 charge, which is the sole component that is determined by

1 CCOS for Lamb Weston as a class of one.

2 Q. What is the resulting proposed block 2  
3 Billing Demand Charge for Lamb Weston?

4 A. Lamb Weston's block 2 Billing Demand is  
5 proposed to be \$23.80 per kW. This represents recovery of  
6 Lamb Weston's CCOS revenue requirement, which will not be  
7 recovered under either block 1 rate components or the  
8 Contract Demand charge.

9 Q. How was pricing for Brisbie developed for  
10 their Special Contract rates?

11 A. Brisbie is forecast to come online beyond  
12 the test year period and as a result, no 2023 CCOS customer  
13 class adjustment was necessary to remove test year load for  
14 Brisbie. Similar to the methodology described in my  
15 testimony in the case to establish the current Brisbie,  
16 Schedule 33 rates,<sup>14</sup> for the loads that fall under the  
17 embedded portion of Brisbie's second block, Brisbie  
18 received their load ratio share of embedded capacity costs  
19 for a 30 MW steady-state operation assumption.

20 Brisbie's block 1 rates are fully-embedded and based  
21 on Schedule 19 - Transmission retail rates, which have been  
22 updated to match the proposed rates for Schedule 19

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<sup>14</sup> *In the Matter of Idaho Power's Application for Approval of Special Contract and Tariff Schedule 33 to Provide Electric Service to Brisbie, LLC's Data Center Facility*, Case No. IPC-E-21-42, Goralski DI, p. 21-42.

1 provided by Mr. Anderson. Following the terms of the  
2 Brisbie Special Contract, the Contract Demand Charge, and  
3 Daily Excess Demand Charge have been updated based on the  
4 OATT rates in effect October 1, 2022. The remainder of  
5 Brisbie's block 2 rates are contractually established in  
6 the Brisbie Special Contract and follow an update schedule  
7 independent of updates to the Company's CCOS study.

8 Q. What is the resulting proposed block 2  
9 Billing Demand Charge for Brisbie?

10 A. Brisbie's block 2 Billing Demand is proposed  
11 to be \$22.07 per kW. This represents recovery of Brisbie's  
12 CCOS revenue requirement which will not be recovered under  
13 either block 1 rate components or the Contract Demand  
14 charge.

15 **IX. SCHEDULE 20 PRICING**

16 Q. Does the Company currently have any Schedule  
17 20 customers, or are any included in the 2023 test year?

18 A. No. While Idaho Power continues to respond  
19 to prospective customers that are exploring service under  
20 Schedule 20, there are no active customers taking service  
21 under Schedule 20, thus none were included in the 2023 test  
22 year.

23 Q. Please provide an update on any Schedule 20-  
24 related active Commission proceedings.

25 A. As directed by the Commission, on December



1 28, 2022, Idaho Power filed an Application recommending two  
2 proposals for the Commission's consideration on what, if  
3 any, compensation for mandatory interruption should be  
4 applicable to Schedule 20 customers.<sup>15</sup> The case is currently  
5 ongoing with a deadline for Staff and public comments of  
6 June 7, 2023, and a June 21, 2023, Company Reply Comment  
7 deadline.

8 Q. Is the Company proposing any changes to  
9 Schedule 20 rates as part of this GRC?

10 A. Yes. While the Company believes embedded  
11 rate components should remain based on underlying Schedule  
12 9 and 19 rates as designed until sufficient Schedule 20  
13 customers have joined Idaho Power's system to complete  
14 class-specific cost assignment, Idaho Power recommends  
15 updating the marginal energy component basis of Schedule  
16 20, and aligning to the time-of-use periods with those  
17 proposed for Schedule 9 and 19.

18 As recommended by Staff,<sup>16</sup> and adopted by the  
19 Commission,<sup>17</sup> the Company agreed<sup>18</sup> that evaluation and  
20 comparison of methods other than DSM Avoided Cost Averages

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<sup>15</sup> *In the Matter of Idaho Power's Application for Authority to Establish Compensation for the Mandatory Interruption Requirement of Schedule 20 – Speculative High-Density Load*, Case No. IPC-E-22-30.

<sup>16</sup> *In the Matter of the Application of Idaho Power Company for Authority to Establish a New Schedule to Serve Speculative High-Density Load Customers*, Case No. 21-37, Staff Comments, p. 6.

<sup>17</sup> Case No. IPC-E-21-37, Order 35428, p. 7.

<sup>18</sup> Case No. IPC-E-21-37, Idaho Power Reply Comments, p. 5.

1 for setting the Schedule 20 energy rates should be  
2 completed prior to filing the Company's next (this) GRC. An  
3 evaluation is critical to ensure that referenced marginal  
4 prices best reflect costs the Company is actually incurring  
5 and are recovered through the PCA, which would not be  
6 collectable from Schedule 20 as the PCA rate does not apply  
7 to Schedule 20 energy sales priced at a marginal rate.

8 Idaho Power met with Staff on January 20, 2023, and  
9 again on February 2, 2023, to discuss the results of Idaho  
10 Power's evaluation and to solicit Staff's feedback.

11 Subsequent to the two discussions, Staff provided a memo,  
12 included as Exhibit No. 52, outlining five general criteria  
13 that should be considered when developing marginal cost-  
14 based customer energy rates:

- 15 • The resources used in a model for determining  
16 marginal cost should be based on the resources  
17 that are highly likely to exist during the rate  
18 period.
- 19 • The amount of incremental load used to  
20 determine the marginal cost rate should reflect  
21 the amount of incremental load for the portion  
22 of load that will be priced at marginal cost.
- 23 • The marginal cost rates should have enough  
24 granularity to reflect time difference (e.g.  
25 seasonality, time of day) value of Marginal

1           Cost within the Company's system to provide  
2           accurate price signals.

3           • If the marginal cost rates are based on a  
4           forecast, due to the lack of marginal costs  
5           being trued-up in the PCA, they should be  
6           updated often enough that they reflect current  
7           conditions or find a way to true up the  
8           marginal cost to actual marginal cost.

9           • If market costs are used, cost of transmission  
10          transaction and wheeling costs should be  
11          included.

12          Q.       What marginal cost basis does Idaho Power  
13          propose for Schedule 20's energy rates?

14          A.       In replacement of the current DSM Avoided  
15          Cost Average-based marginal rates, the Company proposes to  
16          use an AURORA-based method. This achieves several of the  
17          criteria noted in Staff's memo including granularity to  
18          reflect time differences, costs based on resources likely  
19          to exist during the rate period, and more frequent updates  
20          to reflect more current market conditions than DSM Avoided  
21          Cost Averages.

22          The marginal cost of energy is determined from the  
23          simulated hourly operation of the Company's power supply  
24          system over forecast hydro conditions. Net power supply  
25          expenses are first quantified using the Company's expected

1 load for the test year, then an incremental load increase  
2 is added to determine the resulting increase in power  
3 supply expenses and generation. The difference in monthly  
4 power supply expenses between the initial and subsequent  
5 simulation is divided by the difference in generation to  
6 produce a marginal cost per kWh.

7 Q. What are the resulting marginal energy  
8 rates, and at what interval does the Company propose to  
9 make updates?

10 A. The proposed seasonal, time-of-use marginal  
11 rates are as follows:

12 **TABLE 6**

13 Proposed Seasonal - Time of use Marginal Rates

SONP (\$/kWh)	\$ 0.068108
SMP (\$/kWh)	\$ 0.095308
SOFP (\$/kWh)	\$ 0.050374
NSONP (\$/kWh)	\$ 0.048629
NSMP (\$/kWh)	\$ 0.068321
NSOFP (\$/kWh)	\$ 0.057180

14

15 The Company proposes Schedule 20 energy rates be updated  
16 annually on June 1 using a forward test year consisting of  
17 the 12-month period April through the subsequent March,  
18 consistent with power cost spring filings.

19 Q. Does this conclude your direct testimony in  
20 this case?

21 A. Yes, it does.

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**DECLARATION OF PAWEL P. GORALSKI**

I, Pawel P. Goralski, declare under penalty of perjury under the laws of the state of Idaho:


1. My name is Pawel P. Goralski. I am employed by Idaho Power Company as a Regulatory Consultant in the Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 36 through 52 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
PAWEL P. GORALSKI

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 36**

# Class Cost-of-Service Process Guide

The following document is a technical description of Idaho Power Company's Class Cost-of-Service study. The methodology for separating costs among classes consists of three steps, generally referred to as classification, functionalization, and allocation. In all three steps, recognition is given to how costs are incurred by relating these costs to how the utility operates to provide electrical service.

## I. PROCESS OVERVIEW

### A. Classification

The *Electric Utility Cost Allocation Manual*, published in January 1992 by the National Association of Regulatory Utility Commissioners, serves as the basis for the company's classification process. Classification refers to identifying a cost as being either customer-related, demand-related, or energy-related. These three cost components are used to reflect that an electric utility makes service available to customers continuously; provides as much service, or capacity, as the customer desires at any point in time; and supplies energy to provide customers the ability to do useful work over an extended period of time. These three concepts of availability, capacity, and energy are related to the three components of cost, designated as customer, demand, and energy components, respectively. To classify a particular cost by component, focus is given to whether the cost varies because of changes in the number of customers, changes in demand imposed by the customers, or changes in energy used by the customers.

Examples of customer-related costs include the following:

- Plant investments and expenses associated with meters and service drops
- Meter reading
- Billing and collection
- Customer information and services
- Investment in the distribution system

These cost are based on the number of customers, regardless of the amount of energy used, and are generally considered to be fixed costs.

Demand-related costs are investments in generation, transmission, and a portion of the distribution plant and the associated operation and maintenance (O&M) expenses necessary to accommodate the maximum demand imposed on the company's system.

Energy-related costs are generally the variable costs associated with operating generating plants, such as fuel.

### B. Functionalization

In addition to classification, costs must be functionalized; that is, identified with utility operating functions. Operating functions recognize different roles played by various facilities in the electric utility system. In the company's accounts, these roles are recognized to some degree, particularly in recording plant costs as production-, transmission-, or distribution-related. However, this functional breakdown is

not sufficient for cost-of-service purposes. Individual plant items are examined and, where possible, associated investment costs are assigned to one or more operating functions, such as substations, primary lines, secondary lines, and meters. This level of functionalization allows costs to be more equitably allocated among classes of customers.

### C. Allocation and Summarization of Results

Once costs are classified and functionalized, they are allocated to rate classes based on the appropriate allocation factors. After individual costs are allocated to the various classes of service, to the company totals these costs as allocated and arrive at a breakdown of utility rate base and expenses by class. The results are summarized to measure adequacy of revenues for each class. The measure of adequacy is typically the rate of return earned on rate base compared to the requested rate of return.

## II. ASSIGN MODULE AND FUNCTIONALIZED COST MODULE

The class cost-of-service model is made of two separate Microsoft® Excel workbooks. The first workbook, called the Assign Module (AS Module), performs the previously described classification and functionalization processes. This module categorizes the Idaho jurisdictional costs identified by the Federal Energy Regulatory Commission (FERC) account into operating functions, such as production, transmission, distribution, metering, customer service, etc. It also categorizes the functional costs into demand-, energy-, and customer-related classifications. For example, the AS Module categorizes the company's investment in steam plant into the production function and the demand- and energy-related classifications.

The second workbook, called the Functionalized Cost Module (FC Module), performs the class allocation process. This module allocates the classified and functionalized costs developed in the AS Module to various customer classes. For example, the FC Module allocates the demand- and energy-related production costs identified in the AS Module to each of the company's customer classes and special contract customers. Each operation performed by this module is shown as a separate worksheet to make the allocation process transparent and easier to understand.

## III. CLASSIFICATION

### A. Steam and Hydro Production

In this Class Cost-of-Service study all production plants (steam, hydro, other [including natural-gas fueled and battery-storage capacity], and diesel) have been classified as 100% demand-related, as capital investment in production plants may be considered *fixed* from a traditional accounting definition. Transmission plants are also classified as demand-related, which is consistent with prior cost-of-service studies.



## **B. PURPA and Purchased-Power Expenses**

PURPA and purchased-power expenses booked to FERC Account 555 are classified as 100% energy-related as costs may be considered variable from a traditional accounting definition as they vary based on the amount of energy provided.

## **C. Distribution Plant**

Distribution substation plant accounts 360, 361, and 362 are classified as demand-related. Distribution plant accounts 364, 365, 366, 367, and 368 are classified as either demand-related or customer-related using the same fixed and variable ratio computation method used in the company's prior general rate case proceedings. The fixed-to-variable ratio is updated according to a system capacity utilization measurement based on a three-year average load duration curve.

# **IV. FUNCTIONALIZATION**

## **A. General Plant**

General plant is functionalized based on total production, transmission, and distribution plant. As a result, a portion of general plant is assigned to each production, transmission, and distribution function based on each function's proportion to the total.

## **B. Accumulated Provision for Depreciation**

The accumulated provision for depreciation is functionalized using the resulting functionalization of costs for the appropriate plant item. For example, the accumulated depreciation for steam production plant shown is functionalized based on the functionalization of steam production plant in service.

## **C. Additions to and Reductions from Rate Base**

Deductions from rate base include customer advances for construction and accumulated deferred income taxes. Customer advances are functionalized based on the distribution plant investment against which the advances apply. Accumulated deferred taxes are functionalized based on total plant investment. Additions to rate base consist of 1) fuel inventory, which is functionalized based on energy production and 2) materials and supplies, which are functionalized based on the appropriate plant function. Energy efficiency program expenses are functionalized consistent with baseload production resources as demand-side management may be considered similar to a supply-side resource.

## **D. Other Operating Revenue**

Other operating revenue is functionalized based on either the functionalization of the related rate base item or, in the situation where a particular revenue item may be identified with a specific service, the functionalization of the specific service item.

## **E. O&M Expense**

In general, the basis for the functionalization of O&M expense is the same as that for the associated plant.

## **F. Labor Components**

For each applicable expense account in each functional group, the labor component is separately functionalized. For example, for Account 535 the labor-related supervision and engineering expense is functionalized based on the cumulative labor as functionalized for accounts 536 through 540. Similarly, the allocation of supervision and engineering associated with hydraulic maintenance expense, Account 541, is based on the composite labor expense for accounts 542 through 545. Total functionalized labor expense serves the additional purpose of functionalizing employee pensions and other labor-related taxes and expenses.

## **G. Depreciation Expense, Taxes Other than Income, and Income Taxes**

Depreciation expense is functionalized based on the function of the associated plant. Taxes, other than income, are also functionalized based on the function of the source of the tax. Deferred income taxes are functionalized based on plant investment. The functionalization of federal and state income taxes is based on the functionalization of total rate base and expenses.

# **V. ALLOCATION**

## **A. Derivation of Peak Demands**

For customers taking service through Advanced Metering Infrastructure (AMI) and interval meters, system coincident demands are taken directly from their meter read data, as this represents 99.8% of Idaho Power's customers it is significant enough to average and apply to any non-AMI or non-interval customer. Coincident demands are estimated through the use of system coincident demand factors. These factors are defined as the ratio of the system coincident demand to the population's average demand. To determine the monthly system coincident peak demands by rate class, each class's monthly system coincident demand factors from load research are applied to the test-year monthly average demand values for each class. Similarly, a non-coincident (group) demand factor is defined as the ratio of a population's non-coincident peak demand to the population's average demand. To determine the monthly non-coincident peak demands by rate class, each class's monthly non-coincident demand factors from load research are applied to the test-year monthly average demand values for each class.

Customers are billed throughout each month and billing periods (cycles). These cycles typically include portions of more than one calendar month. Billing period data is converted into calendar month data using a nonlinear method based on load research data that uses actual daily usage patterns. Total daily consumption is assumed to fluctuate in proportion to the fluctuations in the daily consumption of the load research customers. This methodology captures the effects of weather on energy consumption and improves the process of determining coincident peak demand responsibility.

To account for the partial requirement nature of on-site generation customers, measurement of the energy delivered to customers is the basis of energy and system coincident load statistics. On-site generation exports are independently valued outside the Class Cost-of-Service study.

## B. Marginal Cost Usage

While the four coincident peak demands (4CP)/12 monthly coincident demands (12CP) methodology eliminates the need for marginal cost weighting in the allocation of production plant costs, this weighting is necessary to properly seasonalize energy- and transmission-related costs. The use of marginal cost weighting balances costs already incurred and costs to be incurred in the future, and injects into the allocation process recognition of the influence seasonal load profiles have on cost causation.

The marginal costs associated with new resource integration are seasonalized based on the monthly peak-hour generation deficiencies that the company expects to encounter during the next five years of the planning period based on the 50<sup>th</sup> percentile water plus and 50<sup>th</sup> percentile plus 15.5% reserve margin load criteria used for planning purposes. The relative sizes of the five-year average monthly peak-hour deficiencies identified in the *2021 Integrated Resource Report* (IRP) are used to define the share of the annual capacity cost assigned to each month. The marginal costs associated with planned system expansions are seasonalized based on the monthly share of projected peak-hour load growth. The total demand-related transmission marginal costs for each month are then derived by adding the monthly values for both categories of transmission costs.

Updated marginal energy costs are calculated by quantifying the difference in net power supply costs resulting from the addition of 50 megawatts (MW) of load to all hours of the company's base case system simulation run for the five-year planning period. It should be noted that the marginal costs have been used solely for purposes of developing allocation factors and not for purposes of developing the company's revenue requirement.

## C. Production Plant Cost Allocation

The class cost-of-service study allocates the costs of the company's generation peaking facilities differently than its base-load resources. Rather than allocating all production plant based on the same allocation factor, this method allocates production plant costs based on the nature of the load being served. Under this approach, production plant costs associated with serving summer peak load are allocated separately from costs associated with serving the base and intermediate load. That is, the costs associated with building and operating the simple cycle combustion turbines, which are used primarily to serve summer peak loads, have been allocated to customers differently than the costs associated with the company's other generation resources, including the Langley Gulch combined-cycle combustion plant (CCCP). This method allocates production plant costs associated with serving base and intermediate load using an average of 12CP, without marginal cost weighting. Using an un-weighted 12CP allocator is appropriate in this case given that fixed base and intermediate generation costs do not vary greatly between the summer and non-summer seasons. Furthermore, the study allocates fixed generation costs associated with serving peak load using an average of the 4CP occurring in June, July, August, and September. This method of allocation isolates the costs associated with peaking resources and allocates those costs according to the load that is causing the investment.

The cost allocation method used in the study is based on the concept that the costs associated with each of the company's generation resources can be categorized according to the type of loads being served. Utilities typically experience three distinct time-based production costing periods that are driven by customer loads. The costing periods are normally identified as base, intermediate, and peak. The base

period is equivalent to a low load or off-peak time period where loads are at the lowest, normally during the nighttime hours. The intermediate time period represents the shoulder hours which are driven by the mid-peak loads that typically occur throughout the winter daytime and in the early morning and late evening during the summer months. The peak category is driven by the peak loads that occur during summer afternoons and evenings. The base and intermediate loads on the company's system are typically served by the same generation resources. Those two categories have been combined for cost allocation purposes. The generation resources that serve the peak loads (i.e., combustion turbines) are normally only used for that purpose. Consistent with that concept, the costs associated with peak-related resources have been segmented into a second category for cost-allocation purposes. Using this methodology, there is no need for marginal cost weighting because the seasonal nature of the loads is reflected in the allocation factors.

The production plant costs that have been classified as serving base and intermediate load are captured in accounts 310 through 316, Steam Production and accounts 330 through 336, Hydraulic Production. Accounts 340-346, Other Production, for the Langley Gulch CCCP, and the Account 363 where the company's battery storage system is recorded. The costs identified under the Steam Production category represent the company's investment in coal-fired generation facilities, and the costs identified under the Hydraulic Production category represent the company's investment in its hydroelectric generation facilities. The majority of costs associated with the company's coal-fired facilities have been removed from the test year as there are cost recovery mechanisms in place based on the announcement of upcoming retirement.

Utilities typically use generation resources to serve customer loads by operating the resources with the lowest operating cost first, and as demand grows, more costly resources are then dispatched. This is no different for Idaho Power. However, since hydroelectric generation is such a significant portion of the company's resource stack, stream-flow conditions and economics can influence the proportionate share of output provided by steam and hydro resources throughout the year. Since hydroelectric output is highly dependent on stream flows, steam production is ramped up or down according to the production capability of hydro generation. Therefore, throughout the year, hydro- and steam-production plants are used at varying proportions to serve base and intermediate loads according to the production capabilities of the hydro plants. However, the combined monthly output of these two resources does not vary significantly between the summer and non-summer months as does the output of the combustion turbines.

Accounts 340 through 346, Other Production, contain the company's investment in gas-fueled production plant. The production plant investment captured in accounts 340 through 346 represents both the company's investment in simple-cycle combustion plants (SCCP), and CCCPs. Because these resources are dispatched to meet different types of customer load, they are listed independently between the Langley Gulch CCCP that serves base and intermediate load, while Bennett Mountain and Danksin SCCPs are peak-load serving resources. The investment identified as peaking plant is the investment in combustion-turbine generation resources that were constructed specifically to meet the summer peak loads.

In the Functionalized Cost Module, D10BS and D10BNS describe the factors used to allocate the production plant associated with serving the base and intermediate loads. D10P describes the allocation factor used to allocate the production plant associated with serving the peak loads. The D10BS and

D10BNS represent the non-weighted average 12 coincident peak demands for the summer and non-summer seasons respectively. D10P represents the non-weighted average four coincident peak demands for June, July, August and September.

## **D. Transmission and Distribution Cost Allocation**

The company's approach to cost allocation for transmission and distribution facilities is an effective method for equitably assigning costs to customer classes. Under this method, transmission and distribution (T&D) costs are properly segmented according how costs are imposed on the system. As a result, the cost responsibility of each class can be effectively identified through a combination of direct cost assignment and cost allocation based on the appropriate demand- or customer-based factors.

D13 is used to allocate transmission costs to customer classes. The first step in deriving this factor is to calculate ratios based on the sum of the actual coincident peak demands for each customer class. Second, weighted coincident peak demand values are derived by multiplying the actual monthly coincident peak demands by the monthly transmission marginal costs. Corresponding weighted ratios are then calculated for each customer class. Finally, the actual ratios are averaged with the weighted ratios to derive the non-seasonalized transmission allocation factor D13. The company applies this averaging approach as a rate stability measure intended to mitigate any extreme impacts that the marginal costs may have on cost allocation.

The capacity components of distribution plant, both primary and secondary, are allocated by the non-coincident group peak demands for each customer class identified as demand allocation factors D20, D30, D50, and D60.

The customer components of distribution plant, both primary and secondary, are allocated by the average number of customers identified as customer allocation factors C20, C30, C50 and C60.

## **E. Energy-Related Cost Allocation**

The energy-related cost allocators, E10S and E10NS, are derived by averaging the normalized energy values for each customer class with the normalized energy values weighted by the marginal energy costs. First, summer and non-summer ratios based on each class's proportionate share of the total normalized energy usage for the test year are determined. Next, summer and non-summer ratios based on the monthly normalized energy usage for each customer class weighted by the monthly marginal cost are calculated. Finally, these two values are averaged, resulting in the E10S and E10NS allocators used in this study. This averaging approach is consistent with the methodology used in the derivation of the demand-related allocation factor D13.

The principal customer accounting expenses which require allocation are meter reading expenses, customer records and collections, and uncollectible accounts. The meter reading and customer records and collection expenses are allocated based upon a review of actual practices of the company in reading meters and preparing monthly bills. The allocation of uncollectible amounts is similarly based upon a review of actual company data. Customer assistance expenses are allocated based on the average number of customers in each class.

## **F. State and Federal Income Tax Allocation**

The state and federal income taxes for the Idaho jurisdiction are allocated to each customer class and special contract customer according to each class's allocated share of rate base. Once the state and federal income taxes are allocated to each customer class, they are functionalized based on the functionalization of total rate base and expenses for each class.

# **VI. REVENUE REQUIREMENT AND APPLICATION**

Once all costs have been properly functionalized, classified, and allocated, the company is able to determine the revenue requirement for each customer class. The sales revenue required includes return on rate base, total operating expenses, and incremental taxes computed using the net-to-gross multiplier.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 37**

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
7		TOTALS	* * PRODUCTION FUNCTION * *				----- TRANSMISSION FUNCTION -----			
8	ALLOCATOR		DEMAND			ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
9			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
10	*** <b>TABLE 1 - ELECTRIC PLANT IN SERVICE</b> ***									
11										
12	INTANGIBLE PLANT									
13	301 ORGANIZATION	P101P	5,455	1,875	177			1,270		0
14	302 FRANCHISES & CONSENTS	P101P	50,540,892	17,368,179	1,636,704			11,766,485		690
15	303 MISCELLANEOUS	P101P	50,240,922	17,265,096	1,626,990			11,696,649		686
16										
17	TOTAL INTANGIBLE PLANT		100,787,269							
18										
19	PRODUCTION PLANT									
20	310-316 STEAM PRODUCTION	PI-S	267,099,895	267,099,895						
21	330-336 HYDRAULIC PRODUCTION	PI-H	1,058,946,870	1,058,946,870						
22	340-346 / OTHER PRODUCTION-BASELOAD	PI-S	425,197,122	425,197,122						
23	340-346 / OTHER PRODUCTION-PEAKERS	PI-O	180,830,345	180,830,345						
24										
25	TOTAL PRODUCTION PLANT		1,932,074,232							
26										
27	TRANSMISSION PLANT									
28	350 LAND & LAND RIGHTS									
29	TRANSMISSION SERVICE	T-100	39,364,923						39,364,923	
30	DIRECT ASSIGNMENT	T-Direct								
31	TOTAL ACCOUNT 350		39,364,923							
32										
33	352 STRUCTURES & IMPROVEMENTS									
34	TRANSMISSION SERVICE	T-100	96,459,348						96,459,348	
35	DIRECT ASSIGNMENT	T-Direct								
36	TOTAL ACCOUNT 352		96,459,348							



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	* * * * * DISTRIBUTION FUNCTION * * * * *										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
10 ***TABLE 1 - ELECTRIC PLANT IN SERVICE ***											
11											
12 INTANGIBLE PLANT											
13 301 ORGANIZATION	P101P	411	19		502	249	31	113	56	31	326
14 302 FRANCHISES & CONSENTS	P101P	3,805,916	177,495		4,648,412	2,303,818	290,482	1,045,627	518,227	289,784	3,024,081
15 303 MISCELLANEOUS	P101P	3,783,327	176,442		4,620,823	2,290,145	288,758	1,039,421	515,152	288,064	3,006,133
16											
17 TOTAL INTANGIBLE PLANT											
18											
19 PRODUCTION PLANT											
20 310-316 STEAM PRODUCTION	PI-S										
21 330-336 HYDRAULIC PRODUCTION	PI-H										
22 340-346 / OTHER PRODUCTION-BASELOAD	PI-S										
23 340-346 / OTHER PRODUCTION-PEAKERS	PI-O										
24											
25 TOTAL PRODUCTION PLANT											
26											
27 TRANSMISSION PLANT											
28 350 LAND & LAND RIGHTS											
29 TRANSMISSION SERVICE	T-100										
30 DIRECT ASSIGNMENT	T-Direct										
31 TOTAL ACCOUNT 350											
32											
33 352 STRUCTURES & IMPROVEMENTS											
34 TRANSMISSION SERVICE	T-100										
35 DIRECT ASSIGNMENT	T-Direct										
36 TOTAL ACCOUNT 352											

1	IDAHO POWER COMPANY										
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION										
3	CLASS COST OF SERVICE STUDY										
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023										
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS										
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)			
7	* * * * * DISTRIBUTION FUNCTION * * * * *										
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION			
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM			
10	***TABLE 1 - ELECTRIC PLANT IN SERVICE***										
11											
12	INTANGIBLE PLANT										
13	301	ORGANIZATION	P101P	162	32	16	65	110	6	4	
14	302	FRANCHISES & CONSENTS	P101P	1,498,777	297,898	147,642	606,237	1,020,415	54,864	39,157	
15	303	MISCELLANEOUS	P101P	1,489,881	296,130	146,766	602,639	1,014,358	54,538	38,925	
16											
17	TOTAL INTANGIBLE PLANT										
18											
19	PRODUCTION PLANT										
20	310-316	STEAM PRODUCTION	PI-S								
21	330-336	HYDRAULIC PRODUCTION	PI-H								
22	340-346 /	OTHER PRODUCTION-BASELOAD	PI-S								
23	340-346 /	OTHER PRODUCTION-PEAKERS	PI-O								
24											
25	TOTAL PRODUCTION PLANT										
26											
27	TRANSMISSION PLANT										
28	350	LAND & LAND RIGHTS									
29		TRANSMISSION SERVICE	T-100								
30		DIRECT ASSIGNMENT	T-Direct								
31	TOTAL ACCOUNT 350										
32											
33	352	STRUCTURES & IMPROVEMENTS									
34		TRANSMISSION SERVICE	T-100								
35		DIRECT ASSIGNMENT	T-Direct								
36	TOTAL ACCOUNT 352										

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7	- - - CUSTOMER ACCOUNTING FUNCTION				- - - ***** CUSTOMER INFORMATION FUNCTION *****					
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER					
9		READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
10	***TABLE 1 - ELECTRIC PLANT IN SERVICE***									
11										
12	INTANGIBLE PLANT									
13	301	ORGANIZATION	P101P							
14	302	FRANCHISES & CONSENTS	P101P							
15	303	MISCELLANEOUS	P101P							
16										
17	TOTAL INTANGIBLE PLANT									
18										
19	PRODUCTION PLANT									
20	310-316	STEAM PRODUCTION	PI-S							
21	330-336	HYDRAULIC PRODUCTION	PI-H							
22	340-346 /	OTHER PRODUCTION-BASELOAD	PI-S							
23	340-346 /	OTHER PRODUCTION-PEAKERS	PI-O							
24										
25	TOTAL PRODUCTION PLANT									
26										
27	TRANSMISSION PLANT									
28	350	LAND & LAND RIGHTS								
29		TRANSMISSION SERVICE	T-100							
30		DIRECT ASSIGNMENT	T-Direct							
31	TOTAL ACCOUNT 350									
32										
33	352	STRUCTURES & IMPROVEMENTS								
34		TRANSMISSION SERVICE	T-100							
35		DIRECT ASSIGNMENT	T-Direct							
36	TOTAL ACCOUNT 352									

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

6		(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
7		-	-	-	-	-	-	-
8		ALLOCATOR			MISCELLANEOUS			INC TAXES
9			DEMAND	ENERGY		REVENUE	OTHER	& REVENUES
10	***TABLE 1 - ELECTRIC PLANT IN SERVICE***							
11								
12	INTANGIBLE PLANT							
13	301	ORGANIZATION	P101P					
14	302	FRANCHISES & CONSENTS	P101P					
15	303	MISCELLANEOUS	P101P					
16								
17	TOTAL INTANGIBLE PLANT							
18								
19	PRODUCTION PLANT							
20	310-316	STEAM PRODUCTION	PI-S					
21	330-336	HYDRAULIC PRODUCTION	PI-H					
22	340-346 /	OTHER PRODUCTION-BASELOAD	PI-S					
23	340-346 /	OTHER PRODUCTION-PEAKERS	PI-O					
24								
25	TOTAL PRODUCTION PLANT							
26								
27	TRANSMISSION PLANT							
28	350	LAND & LAND RIGHTS						
29		TRANSMISSION SERVICE	T-100					
30		DIRECT ASSIGNMENT	T-Direct					
31	TOTAL ACCOUNT 350							
32								
33	352	STRUCTURES & IMPROVEMENTS						
34		TRANSMISSION SERVICE	T-100					
35		DIRECT ASSIGNMENT	T-Direct					
36	TOTAL ACCOUNT 352							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

		(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
		ALLOCATOR	TOTALS	Demand	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
				Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
								POWER SUP	TRANS	SUBTRANS	DIRECT
37											
38	353	STATION EQUIPMENT									
39		TRANSMISSION SERVICE	T-100	449,281,302					449,281,302		
40		DIRECT ASSIGNMENT	T-Direct	75,100							75,100
41		TOTAL ACCOUNT 353		449,356,402							
42											
43											
44	354	TOWERS & FIXTURES									
45		TRANSMISSION SERVICE	T-100	227,483,716					227,483,716		
46		DIRECT ASSIGNMENT	T-Direct								
47		TOTAL ACCOUNT 354		227,483,716							
48											
49	355	POLES & FIXTURES									
50		TRANSMISSION SERVICE	T-100	226,404,073					226,404,073		
51		DIRECT ASSIGNMENT	T-Direct								
52		TOTAL ACCOUNT 355		226,404,073							
53											
54	356	OVERHEAD CONDUCTORS & DEVICES									
55		TRANSMISSION SERVICE	T-100	260,645,887					260,645,887		
56		DIRECT ASSIGNMENT	T-Direct	1,189							1,189
57		TOTAL ACCOUNT 356		260,647,076							

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		***** DISTRIBUTION FUNCTION *****										
		ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
			GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
37												
38	353	STATION EQUIPMENT										
39		TRANSMISSION SERVICE	T-100									
40		DIRECT ASSIGNMENT	T-Direct									
41		TOTAL ACCOUNT 353										
42												
43												
44	354	TOWERS & FIXTURES										
45		TRANSMISSION SERVICE	T-100									
46		DIRECT ASSIGNMENT	T-Direct									
47		TOTAL ACCOUNT 354										
48												
49	355	POLES & FIXTURES										
50		TRANSMISSION SERVICE	T-100									
51		DIRECT ASSIGNMENT	T-Direct									
52		TOTAL ACCOUNT 355										
53												
54	356	OVERHEAD CONDUCTORS & DEVICES										
55		TRANSMISSION SERVICE	T-100									
56		DIRECT ASSIGNMENT	T-Direct									
57		TOTAL ACCOUNT 356										

	<b>IDAHO POWER COMPANY</b>															
	<b>BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION</b>															
	<b>CLASS COST OF SERVICE STUDY</b>															
	<b>FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023</b>															
	<b>FUNCTIONALIZATION AND CLASSIFICATION OF COSTS</b>															
	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)								
	***** DISTRIBUTION FUNCTION *****															
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET LIGHTS	INSTALLATION								
	SEC CUST	DEMAND	CUSTOMER													

Exhibit No.37  
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1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6		(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
7		-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	***** CUSTOMER INFORMATION FUNCTION *****	
8		ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
9			READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER
37										
38 353	STATION EQUIPMENT									
39	TRANSMISSION SERVICE									
40	DIRECT ASSIGNMENT									
41	TOTAL ACCOUNT 353									
42										
43										
44 354	TOWERS & FIXTURES									
45	TRANSMISSION SERVICE									
46	DIRECT ASSIGNMENT									
47	TOTAL ACCOUNT 354									
48										
49 355	POLES & FIXTURES									
50	TRANSMISSION SERVICE									
51	DIRECT ASSIGNMENT									
52	TOTAL ACCOUNT 355									
53										
54 356	OVERHEAD CONDUCTORS & DEVICES									
55	TRANSMISSION SERVICE									
56	DIRECT ASSIGNMENT									
57	TOTAL ACCOUNT 356									



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
		ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
			DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
37								
38 353	STATION EQUIPMENT							
39	TRANSMISSION SERVICE	T-100						
40	DIRECT ASSIGNMENT	T-Direct						
41	TOTAL ACCOUNT 353							
42								
43								
44 354	TOWERS & FIXTURES							
45	TRANSMISSION SERVICE	T-100						
46	DIRECT ASSIGNMENT	T-Direct						
47	TOTAL ACCOUNT 354							
48								
49 355	POLES & FIXTURES							
50	TRANSMISSION SERVICE	T-100						
51	DIRECT ASSIGNMENT	T-Direct						
52	TOTAL ACCOUNT 355							
53								
54 356	OVERHEAD CONDUCTORS & DEVICES							
55	TRANSMISSION SERVICE	T-100						
56	DIRECT ASSIGNMENT	T-Direct						
57	TOTAL ACCOUNT 356							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND POWER SUP	DEMAND TRANS	DEMAND SUBTRANS	DEMAND DIRECT
58	<b>*** TABLE 1 - ELECTRIC PLANT IN SERVICE ***</b>									
59										
60	359	ROADS & TRAILS								
61		TRANSMISSION SERVICE	T-100		374,346			374,346		
62		DIRECT ASSIGNMENT	T-Direct							
63		TOTAL ACCOUNT 359			374,346					
64		TOTAL TRANSMISSION PLANT			1,300,089,883					
65										
66										
67		DISTRIBUTION PLANT								
68	360	LAND & LAND RIGHTS								
69		DISTRIBUTION FUNCTION	D360		9,701,731					
70		LESS CIAC	CIAC		(430,355)					
71		TOTAL ACCOUNT 360			9,271,376					
72										
73	361	STRUCTURES & IMPROVEMENTS								
74		DISTRIBUTION FUNCTION	D361		66,884,107					
75		LESS CIAC	CIAC		(7,447,616)					
76		TOTAL ACCOUNT 361			59,436,491					
77										
78	362	STATION EQUIPMENT								
79		DISTRIBUTION FUNCTION	D362		363,519,096					
80		LESS CIAC	CIAC		(34,892,876)					
81		TOTAL ACCOUNT 362			328,626,219					
82										
83	363	STORAGE BATTERY EQUIPMENT								
84		TOTAL BATTERY STORAGE EQUIPMENT	PI-S		167,669,778	167,669,778				
85										
86										
87	364	POLES, TOWERS & FIXTURES	D364		308,137,437					
88	365	OVERHEAD CONDUCTORS & DEVICES	D365		153,461,377					
89	366	UNDERGROUND CONDUIT	D366		53,988,992					
90	367	UNDERGROUND CONDUCTORS & DEVICES	D367		333,844,506					
91	368	LINE TRANSFORMERS	D368		704,503,661					
92	369	SERVICES	SERVICE		66,979,720					
93	370	METERS	METER		112,739,963					
94	371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST		4,326,265					
95	373	STREET LIGHTING SYSTEMS	STLIGHT		6,061,607					
96										
97		TOTAL DISTRIBUTION PLANT			2,309,047,394					

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
58 *** TABLE 1 - ELECTRIC PLANT IN SERVICE ***											
59											
60 359	ROADS & TRAILS										
61	TRANSMISSION SERVICE	T-100									
62	DIRECT ASSIGNMENT	T-Direct									
63	TOTAL ACCOUNT 359										
64	TOTAL TRANSMISSION PLANT										
65											
66											
67	DISTRIBUTION PLANT										
68 360	LAND & LAND RIGHTS										
69	DISTRIBUTION FUNCTION	D360	9,701,676	55							
70	LESS CIAC	CIAC		(430,355)							
71	TOTAL ACCOUNT 360										
72											
73 361	STRUCTURES & IMPROVEMENTS										
74	DISTRIBUTION FUNCTION	D361	62,888,583	3,995,524							
75	LESS CIAC	CIAC		(7,447,616)							
76	TOTAL ACCOUNT 361										
77											
78 362	STATION EQUIPMENT										
79	DISTRIBUTION FUNCTION	D362	347,904,235	15,614,861							
80	LESS CIAC	CIAC		(34,892,876)							
81	TOTAL ACCOUNT 362										
82											
83 363	STORAGE BATTERY EQUIPMENT										
84	TOTAL BATTERY STORAGE EQUIPMENT	PI-S									
85											
86											
87 364	POLES, TOWERS & FIXTURES	D364			192,956,701	95,632,049	2,148,004				
88 365	OVERHEAD CONDUCTORS & DEVICES	D365			92,154,627	45,673,126	1,417,325				
89 366	UNDERGROUND CONDUIT	D366			25,677,526	12,726,142	6,542,372				
90 367	UNDERGROUND CONDUCTORS & DEVICES	D367			202,788,361	100,504,758	21,986,065				
91 368	LINE TRANSFORMERS	D368						115,525,520	57,256,069	32,016,611	334,113,916
92 369	SERVICES	SERVICE									
93 370	METERS	METER									
94 371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST									
95 373	STREET LIGHTING SYSTEMS	STLIGHT									
96											
97	TOTAL DISTRIBUTION PLANT										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
	SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM

58 \*\*\* TABLE 1 - ELECTRIC PLANT IN SERVICE \*\*\*

59							
60 359	ROADS & TRAILS						
61	TRANSMISSION SERVICE	T-100					
62	DIRECT ASSIGNMENT	T-Direct					
63	TOTAL ACCOUNT 359						
64	TOTAL TRANSMISSION PLANT						
65							
66							
67	DISTRIBUTION PLANT						
68 360	LAND & LAND RIGHTS						
69	DISTRIBUTION FUNCTION	D360					
70	LESS CIAC	CIAC					
71	TOTAL ACCOUNT 360						
72							
73 361	STRUCTURES & IMPROVEMENTS						
74	DISTRIBUTION FUNCTION	D361					
75	LESS CIAC	CIAC					
76	TOTAL ACCOUNT 361						
77							
78 362	STATION EQUIPMENT						
79	DISTRIBUTION FUNCTION	D362					
80	LESS CIAC	CIAC					
81	TOTAL ACCOUNT 362						
82							
83	363 STORAGE BATTERY EQUIPMENT						
84	TOTAL BATTERY STORAGE EQUIPMENT	PI-S					
85							
86							
87 364	POLES, TOWERS & FIXTURES	D364	11,634,473	5,766,208			
88 365	OVERHEAD CONDUCTORS & DEVICES	D365	9,505,326	4,710,973			
89 366	UNDERGROUND CONDUIT	D366	6,046,314	2,996,638			
90 367	UNDERGROUND CONDUCTORS & DEVICES	D367	5,726,960	2,838,362			
91 368	LINE TRANSFORMERS	D368	165,591,546				
92 369	SERVICES	SERVICE		66,979,720			
93 370	METERS	METER			112,739,963		
94 371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST					4,326,265
95 373	STREET LIGHTING SYSTEMS	STLIGHT				6,061,607	
96							
97	TOTAL DISTRIBUTION PLANT						

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
		- - - CUSTOMER ACCOUNTING FUNCTION			- - - ***** CUSTOMER INFORMATION FUNCTION *****			
ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER				
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

58 \*\*\* TABLE 1 - ELECTRIC PLANT IN SERVICE \*\*\*

59			
60 359	ROADS & TRAILS		
61	TRANSMISSION SERVICE	T-100	
62	DIRECT ASSIGNMENT	T-Direct	
63	TOTAL ACCOUNT 359		
64	TOTAL TRANSMISSION PLANT		
65			
66			
67	DISTRIBUTION PLANT		
68 360	LAND & LAND RIGHTS		
69	DISTRIBUTION FUNCTION	D360	
70	LESS CIAC	CIAC	
71	TOTAL ACCOUNT 360		
72			
73 361	STRUCTURES & IMPROVEMENTS		
74	DISTRIBUTION FUNCTION	D361	
75	LESS CIAC	CIAC	
76	TOTAL ACCOUNT 361		
77			
78 362	STATION EQUIPMENT		
79	DISTRIBUTION FUNCTION	D362	
80	LESS CIAC	CIAC	
81	TOTAL ACCOUNT 362		
82			
83	363 STORAGE BATTERY EQUIPMENT		
84	TOTAL BATTERY STORAGE EQUIPMENT	PI-S	
85			
86			
87 364	POLES, TOWERS & FIXTURES	D364	
88 365	OVERHEAD CONDUCTORS & DEVICES	D365	
89 366	UNDERGROUND CONDUIT	D366	
90 367	UNDERGROUND CONDUCTORS & DEVICES	D367	
91 368	LINE TRANSFORMERS	D368	
92 369	SERVICES	SERVICE	
93 370	METERS	METER	
94 371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST	
95 373	STREET LIGHTING SYSTEMS	STLIGHT	
96			
97	TOTAL DISTRIBUTION PLANT		

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
58 *** TABLE 1 - ELECTRIC PLANT IN SERVICE ***							
59							
60 359	ROADS & TRAILS						
61	TRANSMISSION SERVICE	T-100					
62	DIRECT ASSIGNMENT	T-Direct					
63	TOTAL ACCOUNT 359						
64	TOTAL TRANSMISSION PLANT						
65							
66							
67	DISTRIBUTION PLANT						
68 360	LAND & LAND RIGHTS						
69	DISTRIBUTION FUNCTION	D360					
70	LESS CIAC	CIAC					
71	TOTAL ACCOUNT 360						
72							
73 361	STRUCTURES & IMPROVEMENTS						
74	DISTRIBUTION FUNCTION	D361					
75	LESS CIAC	CIAC					
76	TOTAL ACCOUNT 361						
77							
78 362	STATION EQUIPMENT						
79	DISTRIBUTION FUNCTION	D362					
80	LESS CIAC	CIAC					
81	TOTAL ACCOUNT 362						
82							
83 363	STORAGE BATTERY EQUIPMENT						
84	TOTAL BATTERY STORAGE EQUIPMENT	PI-S					
85							
86							
87 364	POLES, TOWERS & FIXTURES	D364					
88 365	OVERHEAD CONDUCTORS & DEVICES	D365					
89 366	UNDERGROUND CONDUIT	D366					
90 367	UNDERGROUND CONDUCTORS & DEVICES	D367					
91 368	LINE TRANSFORMERS	D368					
92 369	SERVICES	SERVICE					
93 370	METERS	METER					
94 371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST					
95 373	STREET LIGHTING SYSTEMS	STLIGHT					
96							
97	TOTAL DISTRIBUTION PLANT						

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND POWER SUP	DEMAND TRANS	DEMAND SUBTRANS	DEMAND DIRECT
98 *** TABLE 1 - ELECTRIC PLANT IN SERVICE ***										
99										
100 GENERAL PLANT										
101 389 LAND & LAND RIGHTS	P-PTD	20,030,220	6,883,307	648,654			4,663,259			274
102 390 STRUCTURES & IMPROVEMENTS	P-PTD	169,795,289	58,349,486	5,498,610			39,530,244			2,320
103 391 OFFICE FURNITURE & EQUIPMENT	P-PTD	39,636,634	13,620,974	1,283,583			9,227,852			542
104 392 TRANSPORTATION EQUIPMENT	P-PTD	114,700,297	39,416,308	3,714,427			26,703,513			1,567
105 393 STORES EQUIPMENT	P-PTD	5,238,705	1,800,260	169,649			1,219,629			72
106 394 TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	14,711,683	5,055,612	476,420			3,425,045			201
107 395 LABORATORY EQUIPMENT	P-PTD	14,265,521	4,902,290	461,971			3,321,173			195
108 396 POWER OPERATED EQUIPMENT	P-PTD	26,388,468	9,068,294	854,558			6,143,531			361
109 397 COMMUNICATIONS EQUIPMENT	P-PTD	79,075,745	27,174,070	2,560,770			18,409,719			1,080
110 398 MISCELLANEOUS EQUIPMENT	P-PTD	10,910,380	3,749,309	353,319			2,540,059			149
111										
112 TOTAL GENERAL PLANT		494,752,941								
113										
114 TOTAL ELECTRIC PLANT IN SERVICE		6,136,751,718	2,123,568,725	200,116,177			1,438,662,020			84,425
115										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	* * * * * DISTRIBUTION FUNCTION * * * * *										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
98 *** TABLE 1 - ELECTRIC PLANT IN SERVICE ***											
99											
100 GENERAL PLANT											
101 389 LAND & LAND RIGHTS	P-PTD	1,508,350	70,344		1,842,245	913,043	115,123	414,400	205,382	114,846	1,198,495
102 390 STRUCTURES & IMPROVEMENTS	P-PTD	12,786,212	596,306		15,616,631	7,739,821	975,893	3,512,849	1,741,017	973,547	10,159,590
103 391 OFFICE FURNITURE & EQUIPMENT	P-PTD	2,984,785	139,200		3,645,512	1,806,767	227,810	820,032	406,419	227,263	2,371,632
104 392 TRANSPORTATION EQUIPMENT	P-PTD	8,637,356	402,817		10,549,363	5,228,413	659,236	2,373,004	1,176,094	657,652	6,863,017
105 393 STORES EQUIPMENT	P-PTD	394,494	18,398		481,821	238,797	30,109	108,382	53,716	30,037	313,454
106 394 TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	1,107,844	51,666		1,353,082	670,606	84,555	304,366	150,848	84,352	880,264
107 395 LABORATORY EQUIPMENT	P-PTD	1,074,246	50,099		1,312,047	650,269	81,991	295,136	146,273	81,794	853,568
108 396 POWER OPERATED EQUIPMENT	P-PTD	1,987,149	92,674		2,427,034	1,202,872	151,667	545,944	270,577	151,302	1,578,937
109 397 COMMUNICATIONS EQUIPMENT	P-PTD	5,954,696	277,707		7,272,856	3,604,530	454,485	1,635,977	810,813	453,393	4,731,445
110 398 MISCELLANEOUS EQUIPMENT	P-PTD	821,592	38,316		1,003,464	497,331	62,707	225,722	111,871	62,556	652,815
111											
112 TOTAL GENERAL PLANT											
113											
114 TOTAL ELECTRIC PLANT IN SERVICE		465,340,871	21,701,923	(42,770,847)	568,351,006	281,682,735	35,516,616	127,846,492	63,362,516	35,431,232	369,747,673
115											



1	IDAHO POWER COMPANY								
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION								
3	CLASS COST OF SERVICE STUDY								
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023								
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS								
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
7	* * * * * DISTRIBUTION FUNCTION * * * * *								
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION	
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM	
98	*** TABLE 1 - ELECTRIC PLANT IN SERVICE ***								
99									
100	GENERAL PLANT								
101 389	LAND & LAND RIGHTS	P-PTD	593,991	118,062	58,513	240,262	404,408	21,744	15,519
102 390	STRUCTURES & IMPROVEMENTS	P-PTD	5,035,235	1,000,806	496,014	2,036,690	3,428,147	184,319	131,551
103 391	OFFICE FURNITURE & EQUIPMENT	P-PTD	1,175,414	233,626	115,788	475,440	800,259	43,027	30,709
104 392	TRANSPORTATION EQUIPMENT	P-PTD	3,401,407	676,066	335,068	1,375,827	2,315,786	124,511	88,866
105 393	STORES EQUIPMENT	P-PTD	155,352	30,878	15,304	62,838	105,769	5,687	4,059
106 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	436,271	86,714	42,976	176,466	297,027	15,970	11,398
107 395	LABORATORY EQUIPMENT	P-PTD	423,040	84,084	41,673	171,115	288,019	15,486	11,052
108 396	POWER OPERATED EQUIPMENT	P-PTD	782,543	155,539	77,087	316,529	532,780	28,646	20,445
109 397	COMMUNICATIONS EQUIPMENT	P-PTD	2,344,971	466,088	231,000	948,511	1,596,530	85,839	61,265
110 398	MISCELLANEOUS EQUIPMENT	P-PTD	323,544	64,308	31,872	130,870	220,279	11,844	8,453
111									
112	TOTAL GENERAL PLANT								
113									
114	TOTAL ELECTRIC PLANT IN SERVICE		183,252,136	36,423,303	18,051,900	74,123,210	124,763,852	6,708,087	4,787,668
115									

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7		- - -	CUSTOMER	ACCOUNTING FUNCTION	- - -	*****	CUSTOMER INFORMATION FUNCTION	*****		
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT			CUSTOMER			
9		READING	RECORDS	ACCOUNTS	OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER		

99

101 389	LAND & LAND RIGHTS	P-PTD
102 390	STRUCTURES & IMPROVEMENTS	P-PTD
103 391	OFFICE FURNITURE & EQUIPMENT	P-PTD
104 392	TRANSPORTATION EQUIPMENT	P-PTD
105 393	STORES EQUIPMENT	P-PTD
106 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD
107 395	LABORATORY EQUIPMENT	P-PTD
108 396	POWER OPERATED EQUIPMENT	P-PTD
109 397	COMMUNICATIONS EQUIPMENT	P-PTD
110 398	MISCELLANEOUS EQUIPMENT	P-PTD

112 TOTAL GENERAL PLANT

## 114 TOTAL ELECTRIC PLANT IN SERVICE

IDAHO POWER COMPANY  
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CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
		- - - - -		MISCELLANEOUS	- - - - -	- - -	INC TAXES & REVENUES
ALLOCATOR							TRANSFER
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	

98 \*\*\* TABLE 1 - ELECTRIC PLANT IN SERVICE \*\*\*

99

100 GENERAL PLANT

101 389	LAND & LAND RIGHTS	P-PTD
102 390	STRUCTURES & IMPROVEMENTS	P-PTD
103 391	OFFICE FURNITURE & EQUIPMENT	P-PTD
104 392	TRANSPORTATION EQUIPMENT	P-PTD
105 393	STORES EQUIPMENT	P-PTD
106 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD
107 395	LABORATORY EQUIPMENT	P-PTD
108 396	POWER OPERATED EQUIPMENT	P-PTD
109 397	COMMUNICATIONS EQUIPMENT	P-PTD
110 398	MISCELLANEOUS EQUIPMENT	P-PTD

111

112 TOTAL GENERAL PLANT

113

114 TOTAL ELECTRIC PLANT IN SERVICE

115

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
116	<b>***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIATION***</b>									
117										
118	PRODUCTION PLANT									
119	310-316	STEAM PRODUCTION	PI-S	144,967,130	144,967,130					
120	330-336	HYDRAULIC PRODUCTION	PI-H	489,515,669	489,515,669					
121	340-346	OTHER PRODUCTION (BASELOAD)	PI-S	92,073,267	92,073,267					
122	340-346	OTHER PRODUCTION (PEAKERS)	PI-O	65,021,376	65,021,376					
123		TOTAL PRODUCTION PLANT		791,577,442						
124										
125	TRANSMISSION PLANT									
126	350	LAND & LAND RIGHTS	T-350	9,785,205				9,785,205		
127	352	STRUCTURES & IMPROVEMENTS	T-352	32,854,058				32,854,058		
128	353	STATION EQUIPMENT	T-353	118,232,894				118,213,134		19,760
129	354	TOWERS & FIXTURES	T-354	77,166,051				77,166,051		
130	355	POLES & FIXTURES	T-355	77,284,679				77,284,679		
131	356	OVERHEAD CONDUCTORS & DEVICES	T-356	86,639,325				86,638,930		395
132	359	ROADS & TRAILS	T-359	285,269				285,269		
133		TOTAL TRANSMISSION PLANT		402,247,480						
134										
135	DISTRIBUTION PLANT									
136	360	LAND & LAND RIGHTS	D360N	231,204						
137	361	STRUCTURES & IMPROVEMENTS	D361N	15,985,978						
138	362	STATION EQUIPMENT	D362N	69,206,444						
139	363	STORAGE BATTERY EQUIPMENT	PI-S	3,403,730	3,403,730					
140	364	POLES, TOWERS & FIXTURES	D364	133,426,728						
141	365	OVERHEAD CONDUCTORS & DEVICES	D365	53,361,193						
142	366	UNDERGROUND CONDUIT	D366	18,584,970						
143	367	UNDERGROUND CONDUCTORS & DEVIC	D367	103,959,562						
144	368	LINE TRANSFORMERS	D368	188,773,843						
145	369	SERVICES	SERVICE	43,720,575						
146	370	METERS	METER	36,077,317						
147	371	INSTALLATIONS ON CUSTOMER PREMIS	CUSTINST	1,103,966						
148	373	STREET LIGHTING SYSTEMS	STLIGHT	31,698						
149		TOTAL DISTRIBUTION PLANT		667,867,210						
150										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
116	***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIAT										
117											
118	PRODUCTION PLANT										
119	310-316	STEAM PRODUCTION	PI-S								
120	330-336	HYDRAULIC PRODUCTION	PI-H								
121	340-346	OTHER PRODUCTION (BASELOAD)	PI-S								
122	340-346	OTHER PRODUCTION (PEAKERS)	PI-O								
123	TOTAL PRODUCTION PLANT										
124											
125	TRANSMISSION PLANT										
126	350	LAND & LAND RIGHTS	T-350								
127	352	STRUCTURES & IMPROVEMENTS	T-352								
128	353	STATION EQUIPMENT	T-353								
129	354	TOWERS & FIXTURES	T-354								
130	355	POLES & FIXTURES	T-355								
131	356	OVERHEAD CONDUCTORS & DEVICES	T-356								
132	359	ROADS & TRAILS	T-359								
133	TOTAL TRANSMISSION PLANT										
134											
135	DISTRIBUTION PLANT										
136	360	LAND & LAND RIGHTS	D360N	231,203	1						
137	361	STRUCTURES & IMPROVEMENTS	D361N	15,835,296	150,682						
138	362	STATION EQUIPMENT	D362N	68,442,087	764,358						
139	363	STORAGE BATTERY EQUIPMENT	PI-S								
140	364	POLES, TOWERS & FIXTURES	D364		83,552,267	41,409,676	930,108				
141	365	OVERHEAD CONDUCTORS & DEVICES	D365		32,043,769	15,881,341	492,829				
142	366	UNDERGROUND CONDUIT	D366		8,839,136	4,380,800	2,252,122				
143	367	UNDERGROUND CONDUCTORS & DEVIC	D367		63,148,528	31,297,297	6,846,486				
144	368	LINE TRANSFORMERS	D368					30,955,405	15,341,933	8,578,946	89,526,813
145	369	SERVICES	SERVICE								
146	370	METERS	METER								
147	371	INSTALLATIONS ON CUSTOMER PREMIS	CUSTINST								
148	373	STREET LIGHTING SYSTEMS	STLIGHT								
149	TOTAL DISTRIBUTION PLANT										
150											

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET LIGHTS	INSTALLATION CUST PREM

116 \*\*\*TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIAT

117										
118	PRODUCTION PLANT									
119	310-316	STEAM PRODUCTION	PI-S							
120	330-336	HYDRAULIC PRODUCTION	PI-H							
121	340-346	OTHER PRODUCTION (BASELOAD)	PI-S							
122	340-346	OTHER PRODUCTION (PEAKERS)	PI-O							
123	TOTAL PRODUCTION PLANT									
124										
125	TRANSMISSION PLANT									
126	350	LAND & LAND RIGHTS	T-350							
127	352	STRUCTURES & IMPROVEMENTS	T-352							
128	353	STATION EQUIPMENT	T-353							
129	354	TOWERS & FIXTURES	T-354							
130	355	POLES & FIXTURES	T-355							
131	356	OVERHEAD CONDUCTORS & DEVICES	T-356							
132	359	ROADS & TRAILS	T-359							
133	TOTAL TRANSMISSION PLANT									
134										
135	DISTRIBUTION PLANT									
136	360	LAND & LAND RIGHTS	D360N							
137	361	STRUCTURES & IMPROVEMENTS	D361N							
138	362	STATION EQUIPMENT	D362N							
139	363	STORAGE BATTERY EQUIPMENT	PI-S							
140	364	POLES, TOWERS & FIXTURES	D364	5,037,848	2,496,828					
141	365	OVERHEAD CONDUCTORS & DEVICES	D365	3,305,167	1,638,087					
142	366	UNDERGROUND CONDUIT	D366	2,081,361	1,031,552					
143	367	UNDERGROUND CONDUCTORS & DEVIC	D367	1,783,382	883,869					
144	368	LINE TRANSFORMERS	D368	44,370,745						
145	369	SERVICES	SERVICE			43,720,575				
146	370	METERS	METER			36,077,317				
147	371	INSTALLATIONS ON CUSTOMER PREMISE	CUSTINST				1,103,966			
148	373	STREET LIGHTING SYSTEMS	STLIGHT			31,698				
149	TOTAL DISTRIBUTION PLANT									
150										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

116 \*\*\*TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIAT

117

118 PRODUCTION PLANT

119 310-316	STEAM PRODUCTION	PI-S
120 330-336	HYDRAULIC PRODUCTION	PI-H
121 340-346	OTHER PRODUCTION (BASELOAD)	PI-S
122 340-346	OTHER PRODUCTION (PEAKERS)	PI-O
123	TOTAL PRODUCTION PLANT	

124

125 TRANSMISSION PLANT

126 350	LAND & LAND RIGHTS	T-350
127 352	STRUCTURES & IMPROVEMENTS	T-352
128 353	STATION EQUIPMENT	T-353
129 354	TOWERS & FIXTURES	T-354
130 355	POLES & FIXTURES	T-355
131 356	OVERHEAD CONDUCTORS & DEVICES	T-356
132 359	ROADS & TRAILS	T-359
133	TOTAL TRANSMISSION PLANT	

134

135 DISTRIBUTION PLANT

136 360	LAND & LAND RIGHTS	D360N
137 361	STRUCTURES & IMPROVEMENTS	D361N
138 362	STATION EQUIPMENT	D362N
139 363	STORAGE BATTERY EQUIPMENT	PI-S
140 364	POLES, TOWERS & FIXTURES	D364
141 365	OVERHEAD CONDUCTORS & DEVICES	D365
142 366	UNDERGROUND CONDUIT	D366
143 367	UNDERGROUND CONDUCTORS & DEVIC	D367
144 368	LINE TRANSFORMERS	D368
145 369	SERVICES	SERVICE
146 370	METERS	METER
147 371	INSTALLATIONS ON CUSTOMER PREMISE	CUSTINST
148 373	STREET LIGHTING SYSTEMS	STLIGHT
149	TOTAL DISTRIBUTION PLANT	

150

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
116	<b>***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIATION</b>						
117							
118	PRODUCTION PLANT						
119	310-316	STEAM PRODUCTION	PI-S				
120	330-336	HYDRAULIC PRODUCTION	PI-H				
121	340-346	OTHER PRODUCTION (BASELOAD)	PI-S				
122	340-346	OTHER PRODUCTION (PEAKERS)	PI-O				
123	TOTAL PRODUCTION PLANT						
124							
125	TRANSMISSION PLANT						
126	350	LAND & LAND RIGHTS	T-350				
127	352	STRUCTURES & IMPROVEMENTS	T-352				
128	353	STATION EQUIPMENT	T-353				
129	354	TOWERS & FIXTURES	T-354				
130	355	POLES & FIXTURES	T-355				
131	356	OVERHEAD CONDUCTORS & DEVICES	T-356				
132	359	ROADS & TRAILS	T-359				
133	TOTAL TRANSMISSION PLANT						
134							
135	DISTRIBUTION PLANT						
136	360	LAND & LAND RIGHTS	D360N				
137	361	STRUCTURES & IMPROVEMENTS	D361N				
138	362	STATION EQUIPMENT	D362N				
139	363	STORAGE BATTERY EQUIPMENT	PI-S				
140	364	POLES, TOWERS & FIXTURES	D364				
141	365	OVERHEAD CONDUCTORS & DEVICES	D365				
142	366	UNDERGROUND CONDUIT	D366				
143	367	UNDERGROUND CONDUCTORS & DEVICES	D367				
144	368	LINE TRANSFORMERS	D368				
145	369	SERVICES	SERVICE				
146	370	METERS	METER				
147	371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST				
148	373	STREET LIGHTING SYSTEMS	STLIGHT				
149	TOTAL DISTRIBUTION PLANT						
150							



**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
151	<b>*** TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIATION ***</b>									
152										
153	GENERAL PLANT									
154 389	LAND & LAND RIGHTS	P-PTD								
155 390	STRUCTURES & IMPROVEMENTS	P-PTD	34,477,345	11,848,004	1,116,506		8,026,712			471
156 391	OFFICE FURNITURE & EQUIPMENT	P-PTD	17,941,991	6,165,695	581,029		4,177,096			245
157 392	TRANSPORTATION EQUIPMENT	P-PTD	22,933,175	7,880,896	742,662		5,339,100			313
158 393	STORES EQUIPMENT	P-PTD	1,404,733	482,731	45,491		327,038			19
159 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	4,808,200	1,652,319	155,708		1,119,403			66
160 395	LABORATORY EQUIPMENT	P-PTD	6,562,478	2,255,170	212,518		1,527,818			90
161 396	POWER OPERATED EQUIPMENT	P-PTD	5,184,149	1,781,513	167,882		1,206,928			71
162 397	COMMUNICATIONS EQUIPMENT	P-PTD	31,998,730	10,996,238	1,036,239		7,449,663			437
163 398	MISCELLANEOUS EQUIPMENT	P-PTD	4,205,307	1,445,137	136,184		979,043			57
164	TOTAL GENERAL PLANT		129,516,109							
165										
166	AMORTIZATION OF DISALLOWED COSTS	P101P	3,158,453	1,085,390	102,283		735,323			43
167										
168	TOTAL ACCUM PROVISION DEPRECIATION		1,994,366,693	775,552,890	69,317,877		433,115,447			21,968
169										
170	AMORTIZATION OF OTHER UTILITY PLANT									
171	302/FRANCHISES AND CONSENTS	P101P	18,012,048	6,189,770	583,298		4,193,406			246
172	303/MISCELLANEOUS INTANGIBLE PLAN	PI-H	22,131,338	22,131,338						
173										
174	TOTAL AMORT OF OTHER UTILITY PLANT		40,143,386	28,321,108	583,298		4,193,406			246
175										
176	TOTAL ACCUM PROVISION FOR DEPR									
177	& AMORTIZATION OF OTHER UTILITY PLANT		2,034,510,078	803,873,997	69,901,175		437,308,854			22,214
178										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	
		* * * * *	* * * * *	* * * * *	* * * * *	DISTRIBUTION FUNCTION				* * * * *	* * * * *	* * * * *
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS	
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
151	***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIAT											
152												
153	GENERAL PLANT											
154	389	LAND & LAND RIGHTS	P-PTD									
155	390	STRUCTURES & IMPROVEMENTS	P-PTD	2,596,271	121,081	3,170,995	1,571,589	198,157	713,293	353,518	197,681	2,062,929
156	391	OFFICE FURNITURE & EQUIPMENT	P-PTD	1,351,098	63,011	1,650,184	817,854	103,121	371,197	183,970	102,873	1,073,547
157	392	TRANSPORTATION EQUIPMENT	P-PTD	1,726,953	80,539	2,109,240	1,045,369	131,808	474,458	235,148	131,491	1,372,191
158	393	STORES EQUIPMENT	P-PTD	105,782	4,933	129,198	64,032	8,074	29,062	14,404	8,054	84,051
159	394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	362,075	16,886	442,226	219,173	27,635	99,476	49,301	27,569	287,695
160	395	LABORATORY EQUIPMENT	P-PTD	494,179	23,047	603,573	299,139	37,718	135,769	67,289	37,627	392,662
161	396	POWER OPERATED EQUIPMENT	P-PTD	390,386	18,206	476,803	236,310	29,796	107,253	53,156	29,724	310,190
162	397	COMMUNICATIONS EQUIPMENT	P-PTD	2,409,623	112,377	2,943,028	1,458,606	183,912	662,013	328,103	183,470	1,914,623
163	398	MISCELLANEOUS EQUIPMENT	P-PTD	316,675	14,769	386,776	191,692	24,170	87,002	43,120	24,112	251,622
164	TOTAL GENERAL PLANT											
165												
166	AMORTIZATION OF DISALLOWED COSTS		P101P	237,843	11,092	290,493	143,973	18,153	65,344	32,386	18,109	188,984
167												
168	TOTAL ACCUM PROVISION DEPRECIATION			94,499,470	1,380,982	199,786,215	99,016,852	11,284,088	33,700,274	16,702,329	9,339,656	97,465,309
169												
170	AMORTIZATION OF OTHER UTILITY PLANT											
171	302/FRANCHISES AND CONSENTS		P101P	1,356,374	63,257	1,656,627	821,048	103,524	372,646	184,689	103,275	1,077,739
172	303/MISCELLANEOUS INTANGIBLE PLAN		PI-H									
173												
174	TOTAL AMORT OF OTHER UTILITY PLANT			1,356,374	63,257	1,656,627	821,048	103,524	372,646	184,689	103,275	1,077,739
175												
176	TOTAL ACCUM PROVISION FOR DEPR											
177	& AMORTIZATION OF OTHER UTILITY PLANT			95,855,844	1,444,239	201,442,843	99,837,900	11,387,611	34,072,920	16,887,017	9,442,930	98,543,048
178												

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM
151	***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIATION							
152								
153	GENERAL PLANT							
154 389	LAND & LAND RIGHTS	P-PTD						
155 390	STRUCTURES & IMPROVEMENTS	P-PTD	1,022,417	203,216	100,717	413,555	696,094	26,712
156 391	OFFICE FURNITURE & EQUIPMENT	P-PTD	532,065	105,754	52,413	215,214	362,247	13,901
157 392	TRANSPORTATION EQUIPMENT	P-PTD	680,077	135,173	66,993	275,083	463,018	17,768
158 393	STORES EQUIPMENT	P-PTD	41,657	8,280	4,104	16,850	28,361	1,088
159 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	142,586	28,340	14,046	57,674	97,077	3,725
160 395	LABORATORY EQUIPMENT	P-PTD	194,609	38,681	19,171	78,717	132,496	5,084
161 396	POWER OPERATED EQUIPMENT	P-PTD	153,735	30,556	15,144	62,184	104,667	4,016
162 397	COMMUNICATIONS EQUIPMENT	P-PTD	948,914	188,607	93,476	383,824	646,051	24,791
163 398	MISCELLANEOUS EQUIPMENT	P-PTD	124,707	24,787	12,285	50,443	84,905	3,258
164	TOTAL GENERAL PLANT							
165								
166	AMORTIZATION OF DISALLOWED COSTS	P101P	93,663	18,617	9,227	37,886	63,769	2,447
167								
168	TOTAL ACCUM PROVISION DEPRECIATION		48,305,175	12,989,768	6,437,911	45,312,003	38,756,001	1,206,758
169								
170	AMORTIZATION OF OTHER UTILITY PLANT							
171	302/FRANCHISES AND CONSENTS	P101P	534,143	106,166	52,618	216,054	363,661	13,955
172	303/MISCELLANEOUS INTANGIBLE PLANT	PI-H						
173								
174	TOTAL AMORT OF OTHER UTILITY PLANT		534,143	106,166	52,618	216,054	363,661	13,955
175								
176	TOTAL ACCUM PROVISION FOR DEPR							
177	& AMORTIZATION OF OTHER UTILITY PLANT		48,839,317	13,095,935	6,490,529	45,528,057	39,119,662	1,220,713
178								

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7		-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	*****	CUSTOMER INFORMATION FUNCTION *****
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER				
9		READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
151	***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIAT									
152										
153	GENERAL PLANT									
154	389	LAND & LAND RIGHTS		P-PTD						
155	390	STRUCTURES & IMPROVEMENTS		P-PTD						
156	391	OFFICE FURNITURE & EQUIPMENT		P-PTD						
157	392	TRANSPORTATION EQUIPMENT		P-PTD						
158	393	STORES EQUIPMENT		P-PTD						
159	394	TOOLS, SHOP & GARAGE EQUIPMENT		P-PTD						
160	395	LABORATORY EQUIPMENT		P-PTD						
161	396	POWER OPERATED EQUIPMENT		P-PTD						
162	397	COMMUNICATIONS EQUIPMENT		P-PTD						
163	398	MISCELLANEOUS EQUIPMENT		P-PTD						
164		TOTAL GENERAL PLANT								
165										
166	AMORTIZATION OF DISALLOWED COSTS			P101P						
167										
168	TOTAL ACCUM PROVISION DEPRECIATION									
169										
170	AMORTIZATION OF OTHER UTILITY PLANT									
171		302/FRANCHISES AND CONSENTS		P101P						
172		303/MISCELLANEOUS INTANGIBLE PLAN		PI-H						
173										
174	TOTAL AMORT OF OTHER UTILITY PLANT									
175										
176	TOTAL ACCUM PROVISION FOR DEPR									
177	& AMORTIZATION OF OTHER UTILITY PLANT									
178										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
				MISCELLANEOUS			INC TAXES
	ALLOCATOR						& REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
151	<b>***TABLE 2 - ACCUMULATED PROVISION FOR DEPRECIATION</b>						
152							
153	GENERAL PLANT						
154 389	LAND & LAND RIGHTS	P-PTD					
155 390	STRUCTURES & IMPROVEMENTS	P-PTD					
156 391	OFFICE FURNITURE & EQUIPMENT	P-PTD					
157 392	TRANSPORTATION EQUIPMENT	P-PTD					
158 393	STORES EQUIPMENT	P-PTD					
159 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD					
160 395	LABORATORY EQUIPMENT	P-PTD					
161 396	POWER OPERATED EQUIPMENT	P-PTD					
162 397	COMMUNICATIONS EQUIPMENT	P-PTD					
163 398	MISCELLANEOUS EQUIPMENT	P-PTD					
164	TOTAL GENERAL PLANT						
165							
166	AMORTIZATION OF DISALLOWED COSTS	P101P					
167							
168	TOTAL ACCUM PROVISION DEPRECIATION						
169							
170	AMORTIZATION OF OTHER UTILITY PLANT						
171	302/FRANCHISES AND CONSENTS	P101P					
172	303/MISCELLANEOUS INTANGIBLE PLANT	PI-H					
173							
174	TOTAL AMORT OF OTHER UTILITY PLANT						
175							
176	TOTAL ACCUM PROVISION FOR DEPR						
177	& AMORTIZATION OF OTHER UTILITY PLANT						
178							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	TRANSMISSION	FUNCTION	
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
<b>*** TABLE 3 - ADDITIONS &amp; DELETIONS TO RATE BASE ***</b>										
181	NET ELECTRIC PLANT IN SERVICE	4,102,241,639	1,319,694,727	130,215,002				1,001,353,167		62,211
182	LESS:									
183	252 CUSTOMER ADVANCES FOR CONSTRUCTION									
184	POWER SUPPLY	PI-SHO								
185	OTHER	CUSTADV	7,387,459							
186	TOTAL CUST ADV FOR CONSTRUCTION		7,387,459							
187										
188	ACCUMULATED DEFERRED INCOME TAXES									
189	ADIT - CUST ADVANCE RELATED	CUSTADV	(1,793,446)							
190	ADIT - OTHER	P111P	(17,318,189)	(6,010,954)	(566,447)			(4,072,263)		(239)
191 281	ACCELERATED AMORTIZATION	P111P								
192 282	OTHER PROPERTY	P111P	378,580,157	131,401,024	12,382,679			89,020,742		5,224
193 283	OTHER	P111P	5,992,853	2,080,054	196,015			1,409,182		83
194	TOTAL ACCUMULATED DEFERRED INCOME TAXES		365,461,375	127,470,124	12,012,248			86,357,660		5,068
195										
196	NET ELECTRIC PLANT IN SERVICE		3,729,392,805	1,192,224,603	118,202,754			914,995,506		57,144
197	ADD:									
198	WORKING CAPITAL									
199 151	FUEL INVENTORY	KWH-S	23,609,967			23,609,967				
200 154	PLANT MATERIALS & SUPPLIES									
201	PRODUCTION - GENERAL	PI-SHO	15,478,739	14,145,707	1,333,032					
202	TRANSMISSION - GENERAL	T-PLT	14,093,970					14,093,143		827
203	DISTRIBUTION - GENERAL	D3601	52,809,487							
204	OTHER-UNCLASSIFIED	P110P	4,097,928	1,408,237	132,706			954,043		56
205	TOTAL ACCOUNT 154		86,480,124							
206 165	PREPAID ITEMS									
207	AD VALOREM TAXES	LABOR								
208	OTHER PROD-RELATED PP	LABOR								
209	INSURANCE	LABOR								
210	PENSION EXPENSE	LABOR								
211	PREPAID RETIREE BENEFITS	LABOR								
212	MISC PREPAYMENTS	LABOR								
213	TOTAL ACCOUNT 165	LABOR								
214	WORKING CASH ALLOWANCE	O&M-T	0	0	0	0		0		0
215										
216	TOTAL WORKING CAPITAL		110,090,091	15,553,944	1,465,738	23,609,967		15,047,187		883
217										
218	NET ELECTRIC PLANT IN SERVICE		3,839,482,895	1,207,778,547	119,668,492	23,609,967		930,042,693		58,027

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
179	<b>***TABLE 3 - ADDITIONS &amp; DELETIONS TO RATE BASE***</b>										
180											
181	NET ELECTRIC PLANT IN SERVICE	369,485,027	20,257,685	(42,770,847)	366,908,163	181,844,835	24,129,005	93,773,572	46,475,498	25,988,301	271,204,625
182	LESS:										
183	252 CUSTOMER ADVANCES FOR CONSTRUCTION										
184	POWER SUPPLY	PI-SHO									
185	OTHER	CUSTADV			3,181,235	1,576,665		128,427	63,650		395,224
186	TOTAL CUST ADV FOR CONSTRUCTION				3,181,235	1,576,665		128,427	63,650		395,224
187											
188	ACCUMULATED DEFERRED INCOME TAXES										
189	ADIT - CUST ADVANCE RELATED	CUSTADV			(772,305)	(382,765)		(31,178)	(15,452)		(95,948)
190	ADIT - OTHER	P111P	(1,188,578)	(16,532)	(1,608,769)	(797,329)	(100,533)	(361,881)	(179,353)	(100,291)	(1,046,604)
191 281	ACCELERATED AMORTIZATION	P111P									
192 282	OTHER PROPERTY	P111P	25,982,622	361,384	35,168,113	17,429,810	2,197,678	7,910,815	3,920,711	2,192,394	22,879,044
193 283	OTHER	P111P	411,300	5,721	556,705	275,911	34,789	125,227	62,064	34,705	362,171
194	TOTAL ACCUMULATED DEFERRED INCOME TAXES		25,205,345	350,573	33,343,743	16,525,627	2,131,934	7,642,983	3,787,970	2,126,808	22,098,663
195											
196	NET ELECTRIC PLANT IN SERVICE		344,279,682	19,907,111	(42,770,847)	330,383,185	163,742,544	21,997,071	86,002,162	42,623,878	23,861,493
197	ADD:										
198	WORKING CAPITAL										
199 151	FUEL INVENTORY	KWH-S									
200 154	PLANT MATERIALS & SUPPLIES										
201	PRODUCTION - GENERAL	PI-SHO									
202	TRANSMISSION - GENERAL	T-PLT									
203	DISTRIBUTION - GENERAL	D3601	10,166,936	474,152	12,417,539	6,154,307	775,980	2,793,237	1,384,367	774,114	8,078,381
204	OTHER-UNCLASSIFIED	P110P	308,589	14,392	376,900	186,797	23,553	84,781	42,019	23,496	245,197
205	TOTAL ACCOUNT 154										
206 165	PREPAID ITEMS										
207	AD VALOREM TAXES	LABOR									
208	OTHER PROD-RELATED PP	LABOR									
209	INSURANCE	LABOR									
210	PENSION EXPENSE	LABOR									
211	PREPAID RETIREE BENEFITS	LABOR									
212	MISC PREPAYMENTS	LABOR									
213	TOTAL ACCOUNT 165	LABOR									
214	WORKING CASH ALLOWANCE	O&M-T	0	0	0	0	0	0	0	0	0
215											
216	TOTAL WORKING CAPITAL		10,475,525	488,543	12,794,439	6,341,104	799,533	2,878,018	1,426,386	797,611	8,323,578
217											
218	NET ELECTRIC PLANT IN SERVICE		354,755,208	20,395,655	(42,770,847)	343,177,624	170,083,647	22,796,604	88,880,179	44,050,264	24,659,103
											257,034,316

1	IDAHO POWER COMPANY								
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION								
3	CLASS COST OF SERVICE STUDY								
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023								
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS								
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
7		*	*	*	*	*	*	*	
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION	
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM	
179	***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE***								
180									
181	NET ELECTRIC PLANT IN SERVICE	134,412,819	23,327,369	11,561,371	28,595,152	85,644,190	6,512,814	3,566,955	
182	LESS:								
183	252 CUSTOMER ADVANCES FOR CONSTRUCTION								
184	POWER SUPPLY	PI-SHO							
185	OTHER	CUSTADV	195,879	536,323	265,809	1,032,307	706	10,184	
186	TOTAL CUST ADV FOR CONSTRUCTION		195,879	536,323	265,809	1,032,307	706	10,184	
187									
188	ACCUMULATED DEFERRED INCOME TAXES								
189	ADIT - CUST ADVANCE RELATED	CUSTADV	(47,553)	(130,202)	(64,530)	(250,612)	(171)	(2,472)	
190	ADIT - OTHER	P111P	(518,712)	(103,099)	(51,098)	(209,812)	(353,155)	(18,988)	
191 281	ACCELERATED AMORTIZATION	P111P						(13,552)	
192 282	OTHER PROPERTY	P111P	11,339,175	2,253,781	1,117,006	4,586,555	7,720,069	296,249	
193 283	OTHER	P111P	179,497	35,677	17,682	72,604	122,207	6,571	
194	TOTAL ACCUMULATED DEFERRED INCOME TAXES		10,952,407	2,056,156	1,019,060	4,198,735	7,488,950	400,190	
195									
196	NET ELECTRIC PLANT IN SERVICE		123,264,532	20,734,890	10,276,502	23,364,110	78,154,534	6,102,439	
197	ADD:								
198	WORKING CAPITAL								
199 151	FUEL INVENTORY	KWH-S							
200 154	PLANT MATERIALS & SUPPLIES								
201	PRODUCTION - GENERAL	PI-SHO							
202	TRANSMISSION - GENERAL	T-PLT							
203	DISTRIBUTION - GENERAL	D3601	4,003,759	795,790	394,404	1,619,471	2,725,886	146,561	
204	OTHER-UNCLASSIFIED	P110P	121,523	24,154	11,971	49,155	82,737	4,448	
205	TOTAL ACCOUNT 154								
206 165	PREPAID ITEMS								
207	AD VALOREM TAXES	LABOR							
208	OTHER PROD-RELATED PP	LABOR							
209	INSURANCE	LABOR							
210	PENSION EXPENSE	LABOR							
211	PREPAID RETIREE BENEFITS	LABOR							
212	MISC PREPAYMENTS	LABOR							
213	TOTAL ACCOUNT 165	LABOR							
214	WORKING CASH ALLOWANCE	O&M-T	0	0	0	0	0	0	
215									
216	TOTAL WORKING CAPITAL		4,125,282	819,944	406,376	1,668,625	2,808,623	151,009	
217									
218	NET ELECTRIC PLANT IN SERVICE		127,389,815	21,554,833	10,682,878	25,032,735	80,963,156	6,253,449	



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION	*****
	ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER		
179	***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE***								
180									
181	NET ELECTRIC PLANT IN SERVICE								
182	LESS:								
183	252 CUSTOMER ADVANCES FOR CONSTRUCTION								
184	POWER SUPPLY			PI-SHO					
185	OTHER			CUSTADV					
186	TOTAL CUST ADV FOR CONSTRUCTION								
187									
188	ACCUMULATED DEFERRED INCOME TAXES								
189	ADIT - CUST ADVANCE RELATED			CUSTADV					
190	ADIT - OTHER			P111P					
191 281	ACCELERATED AMORTIZATION			P111P					
192 282	OTHER PROPERTY			P111P					
193 283	OTHER			P111P					
194	TOTAL ACCUMULATED DEFERRED INCOME TAXES								
195									
196	NET ELECTRIC PLANT IN SERVICE								
197	ADD:								
198	WORKING CAPITAL								
199 151	FUEL INVENTORY			KWH-S					
200 154	PLANT MATERIALS & SUPPLIES								
201	PRODUCTION - GENERAL			PI-SHO					
202	TRANSMISSION - GENERAL			T-PLT					
203	DISTRIBUTION - GENERAL			D3601					
204	OTHER-UNCLASSIFIED			P110P					
205	TOTAL ACCOUNT 154								
206 165	PREPAID ITEMS								
207	AD VALOREM TAXES			LABOR					
208	OTHER PROD-RELATED PP			LABOR					
209	INSURANCE			LABOR					
210	PENSION EXPENSE			LABOR					
211	PREPAID RETIREE BENEFITS			LABOR					
212	MISC PREPAYMENTS			LABOR					
213	TOTAL ACCOUNT 165								
214	WORKING CASH ALLOWANCE			O&M-T	0	0	0	0	
215									
216	TOTAL WORKING CAPITAL								
217									
218	NET ELECTRIC PLANT IN SERVICE								

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
179	***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE***						
180							
181	NET ELECTRIC PLANT IN SERVICE						
182	LESS:						
183	252 CUSTOMER ADVANCES FOR CONSTRUCTION						
184	POWER SUPPLY						
185	OTHER						
186	TOTAL CUST ADV FOR CONSTRUCTION						
187							
188	ACCUMULATED DEFERRED INCOME TAXES						
189	ADIT - CUST ADVANCE RELATED						
190	ADIT - OTHER						
191 281	ACCELERATED AMORTIZATION						
192 282	OTHER PROPERTY						
193 283	OTHER						
194	TOTAL ACCUMULATED DEFERRED INCOME TAXES						
195							
196	NET ELECTRIC PLANT IN SERVICE						
197	ADD:						
198	WORKING CAPITAL						
199 151	FUEL INVENTORY						
200 154	PLANT MATERIALS & SUPPLIES						
201	PRODUCTION - GENERAL						
202	TRANSMISSION - GENERAL						
203	DISTRIBUTION - GENERAL						
204	OTHER-UNCLASSIFIED						
205	TOTAL ACCOUNT 154						
206 165	PREPAID ITEMS						
207	AD VALOREM TAXES						
208	OTHER PROD-RELATED PP						
209	INSURANCE						
210	PENSION EXPENSE						
211	PREPAID RETIREE BENEFITS						
212	MISC PREPAYMENTS						
213	TOTAL ACCOUNT 165						
214	WORKING CASH ALLOWANCE						0
215							
216	TOTAL WORKING CAPITAL						0
217							
218	NET ELECTRIC PLANT IN SERVICE						0

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
219	<b>*** TABLE 3 - ADDITIONS &amp; DELETIONS TO RATE BASE ***</b>									
221	NET ELECTRIC PLANT IN SERVICE	3,839,482,895	1,207,778,547	119,668,492		23,609,967		930,042,693		58,027
222	ADD:									
223	105 PLANT HELD FOR FUTURE USE									
224	HYDRAULIC PRODUCTION	PI-H	0	0						
225	TRANS LAND & LAND RIGHTS	T-350	2,640,221					2,640,221		
226	TRANS STRUCTURES & IMPROVEMENTS	T-352								
227	TRANS STATION EQUIPMENT	T-353								
228	DIST LAND & LAND RIGHTS	D360	5,316,603							
229	DIST STRUCTURES & IMPROVEMENTS	D361								
230	DIST STATIONS EQUIPMENT	D362								
231	GEN LAND & LAND RIGHTS	P-PTD								
232	GEN STRUCTURES & IMPROVEMENTS	P-PTD								
233	COMMUNICATIONS EQUIPMENT	P-PTD								
234	TOTAL PLANT HELD FOR FUTURE USE		7,956,825	0				2,640,221		
235										
236	ELECTRIC PLANT ACQUISITION ADJUSTMENT	T-100	628,247					628,247		
237										
238	DEFERRED PROGRAMS									
239	182 / CONSERVATION PROGRAMS									
240	IDAHO DEFERRED CONSERVATION	PI-H								
241	OREGON DEFERRED CONSERVATION	PI-H								
242	OTHER DEFERRED CONSERVATION	PI-H								
243	TOTAL CONSERVATION									
244	182 / MISC. OTHER REGULATORY ASSETS									
245	CUB FUND INTEREST (OPUC 15-399)	NONE								
246	AM. FALLS BOND REFINANCING	PI-H	70,000	70,000						
247	SFAS 87 CAPITALIZED PENSION - OPUC	NONE								
248	CLOUD COMPUTING - (IPUC Order 34707)	P101P	1,006,327	345,820	32,589			234,284		14
249	WILDFIRE MITIGATION (IPUC Order 3507)	P-PTD	13,056,171	4,486,702	422,808			3,039,623		178
250	SIEMENS LTP RATE BASE (IPUC Order 3)	PI-OS	12,207,705	8,565,092	3,642,613					
251	SIEMENS LTP DEFERRED RATE BASE (IPUC Order 3)	PI-OS	8,181,006	5,739,905	2,441,101					
252	SIEMENS LTP RATE BASE (OPUC Order 3)	NONE								
253	SIEMENS LTP DEFERRED RATE BASE (OPUC Order 3)	NONE								
254	TOTAL OTHER REG ASSETS		34,521,209							
255	186 / MISC. OTHER DEFERRED PROGRAMS	T-PLT								
256	254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC	NONE								
257	RECONNECT FEES - (OPUC ADV 16-09)	NONE								
258	TOTAL DEFERRED PROGRAMS		34,521,209	19,207,519	6,539,110			3,273,907		192
259										
260	DEVELOPMENT OF SUBSIDIARY RATE BASE									
261	123 INVESTMENT IN IERCO	KWH-S	14,887,547			14,887,547				
262	186 PREPAID COAL ROYALTIES	KWH-S	571,281			571,281				
263	233 NOTES PAYABLE TO SUBSIDIARY	KWH-S	14,521,817			14,521,817				
264	TOTAL SUBSIDIARY RATE BASE		29,980,646			29,980,646				
265										
266	TOTAL COMBINED RATE BASE		3,912,569,823	1,226,986,067	126,207,603	53,590,613		936,585,068		58,219

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
219 ***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE ***											
220											
221 NET ELECTRIC PLANT IN SERVICE	354,755,208	20,395,655	(42,770,847)		343,177,624	170,083,647	22,796,604	88,880,179	44,050,264	24,659,103	257,034,316
222 ADD:											
223 105 PLANT HELD FOR FUTURE USE											
224 HYDRAULIC PRODUCTION	PI-H										
225 TRANS LAND & LAND RIGHTS	T-350										
226 TRANS STRUCTURES & IMPROVEMENTS	T-352										
227 TRANS STATION EQUIPMENT	T-353										
228 DIST LAND & LAND RIGHTS	D360	5,316,573	30								
229 DIST STRUCTURES & IMPROVEMENTS	D361										
230 DIST STATIONS EQUIPMENT	D362										
231 GEN LAND & LAND RIGHTS	P-PTD										
232 GEN STRUCTURES & IMPROVEMENTS	P-PTD										
233 COMMUNICATIONS EQUIPMENT	P-PTD										
234 TOTAL PLANT HELD FOR FUTURE USE	5,316,573	30									
235											
236 ELECTRIC PLANT ACQUISITION ADJUSTMENT	T-100										
237											
238 DEFERRED PROGRAMS											
239 182 / CONSERVATION PROGRAMS											
240 IDAHO DEFERRED CONSERVATION	PI-H										
241 OREGON DEFERRED CONSERVATION	PI-H										
242 OTHER DEFERRED CONSERVATION	PI-H										
243 TOTAL CONSERVATION											
244 182 / MISC. OTHER REGULATORY ASSETS											
245 CUB FUND INTEREST (OPUC 15-399)	NONE										
246 AM. FALLS BOND REFINANCING	PI-H										
247 SFAS 87 CAPITALIZED PENSION - OPUC	NONE										
248 CLOUD COMPUTING - (IPUC Order 34707)	P101P	75,780	3,534		92,555	45,872	5,784	20,820	10,319	5,770	60,213
249 WILDFIRE MITIGATION (IPUC Order 3507)	P-PTD	983,178	45,852		1,200,819	595,143	75,040	270,116	133,873	74,860	781,207
250 SIEMENS LTP RATE BASE (IPUC Order 3)	PI-OS										
251 SIEMENS LTP DEFERRED RATE BASE (IPUC Order 3)	PI-OS										
252 SIEMENS LTP RATE BASE (OPUC ORDER 3)	NONE										
253 SIEMENS LTP DEFERRED RATE BASE (OPUC ORDER 3)	NONE										
254 TOTAL OTHER REG ASSETS											
255 186 / MISC. OTHER DEFERRED PROGRAMS	T-PLT										
256 254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC	NONE										
257 RECONNECT FEES - (OPUC ADV 16-09)	NONE										
258 TOTAL DEFERRED PROGRAMS	1,058,958	49,386			1,293,374	641,014	80,824	290,935	144,192	80,629	841,420
259											
260 DEVELOPMENT OF SUBSIDIARY RATE BASE											
261 123 INVESTMENT IN IERCO	KWH-S										
262 186 PREPAID COAL ROYALTIES	KWH-S										
263 233 NOTES PAYABLE TO SUBSIDIARY	KWH-S										
264 TOTAL SUBSIDIARY RATE BASE											
265											
266 TOTAL COMBINED RATE BASE	361,130,739	20,445,071	(42,770,847)		344,470,998	170,724,661	22,877,428	89,171,115	44,194,456	24,739,733	257,875,737

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	DISTRIBUTION FUNCTION							
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
	SEC CUST	DEMAND	CUSTOMER				LIGHTS	CUST PREM
219 ***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE ***								
220								
221 NET ELECTRIC PLANT IN SERVICE	127,389,815	21,554,833		10,682,878	25,032,735	80,963,156	6,253,449	3,386,550
222 ADD:								
223 105 PLANT HELD FOR FUTURE USE								
224 HYDRAULIC PRODUCTION	PI-H							
225 TRANS LAND & LAND RIGHTS	T-350							
226 TRANS STRUCTURES & IMPROVEMENTS	T-352							
227 TRANS STATION EQUIPMENT	T-353							
228 DIST LAND & LAND RIGHTS	D360							
229 DIST STRUCTURES & IMPROVEMENTS	D361							
230 DIST STATIONS EQUIPMENT	D362							
231 GEN LAND & LAND RIGHTS	P-PTD							
232 GEN STRUCTURES & IMPROVEMENTS	P-PTD							
233 COMMUNICATIONS EQUIPMENT	P-PTD							
234 TOTAL PLANT HELD FOR FUTURE USE								
235								
236 ELECTRIC PLANT ACQUISITION ADJUSTMENT	T-100							
237								
238 DEFERRED PROGRAMS								
239 182 / CONSERVATION PROGRAMS								
240 IDAHO DEFERRED CONSERVATION	PI-H							
241 OREGON DEFERRED CONSERVATION	PI-H							
242 OTHER DEFERRED CONSERVATION	PI-H							
243 TOTAL CONSERVATION								
244 182 / MISC. OTHER REGULATORY ASSETS								
245 CUB FUND INTEREST (OPUC 15-399)	NONE							
246 AM. FALLS BOND REFINANCING	PI-H							
247 SFAS 87 CAPITALIZED PENSION - OPUC	NONE							
248 CLOUD COMPUTING - (IPUC Order 34707)	P101P	29,842	5,931	2,940	12,071	20,318	1,092	780
249 WILDFIRE MITIGATION (IPUC Order 3507)	P-PTD	387,177	76,956	38,140	156,608	263,603	14,173	10,115
250 SIEMENS LTP RATE BASE (IPUC Order 3)	PI-OS							
251 SIEMENS LTP DEFERRED RATE BASE (IPUC Order 3)	PI-OS							
252 SIEMENS LTP RATE BASE (OPUC ORDER 3)	NONE							
253 SIEMENS LTP DEFERRED RATE BASE (OPUC ORDER 3)	NONE							
254 TOTAL OTHER REG ASSETS								
255 186 / MISC. OTHER DEFERRED PROGRAMS	T-PLT							
256 254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC	NONE							
257 RECONNECT FEES - (OPUC ADV 16-09)	NONE							
258 TOTAL DEFERRED PROGRAMS		417,020	82,887	41,080	168,679	283,920	15,265	10,895
259								
260 DEVELOPMENT OF SUBSIDIARY RATE BASE								
261 123 INVESTMENT IN IERCO	KWH-S							
262 186 PREPAID COAL ROYALTIES	KWH-S							
263 233 NOTES PAYABLE TO SUBSIDIARY	KWH-S							
264 TOTAL SUBSIDIARY RATE BASE								
265								
266 TOTAL COMBINED RATE BASE		127,806,834	21,637,720	10,723,958	25,201,414	81,247,077	6,268,714	3,397,445

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	- - -	CUSTOMER	ACCOUNTING FUNCTION	- - -	*****	CUSTOMER INFORMATION FUNCTION	*****	
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	

219 \*\*\*TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE \*\*\*

220								
221	NET ELECTRIC PLANT IN SERVICE		0	0	0	0		
222	ADD:							
223	105 PLANT HELD FOR FUTURE USE							
224	HYDRAULIC PRODUCTION	PI-H						
225	TRANS LAND & LAND RIGHTS	T-350						
226	TRANS STRUCTURES & IMPROVEMENTS	T-352						
227	TRANS STATION EQUIPMENT	T-353						
228	DIST LAND & LAND RIGHTS	D360						
229	DIST STRUCTURES & IMPROVEMENTS	D361						
230	DIST STATIONS EQUIPMENT	D362						
231	GEN LAND & LAND RIGHTS	P-PTD						
232	GEN STRUCTURES & IMPROVEMENTS	P-PTD						
233	COMMUNICATIONS EQUIPMENT	P-PTD						
234	TOTAL PLANT HELD FOR FUTURE USE							
235								
236	ELECTRIC PLANT ACQUISITION ADJUSTMENT	T-100						
237								
238	DEFERRED PROGRAMS							
239	182 / CONSERVATION PROGRAMS							
240	IDAHO DEFERRED CONSERVATION	PI-H						
241	OREGON DEFERRED CONSERVATION	PI-H						
242	OTHER DEFERRED CONSERVATION	PI-H						
243	TOTAL CONSERVATION							
244	182 / MISC. OTHER REGULATORY ASSETS							
245	CUB FUND INTEREST (OPUC 15-399)	NONE						
246	AM. FALLS BOND REFINANCING	PI-H						
247	SFAS 87 CAPITALIZED PENSION - OPUC	NONE						
248	CLOUD COMPUTING - (IPUC Order 34707)	P101P						
249	WILDFIRE MITIGATION (IPUC Order 3507)	P-PTD						
250	SIEMENS LTP RATE BASE (IPUC Order 3)	PI-OS						
251	SIEMENS LTP DEFERRED RATE BASE (IPUC Order 3)	PI-OS						
252	SIEMENS LTP RATE BASE (OPUC ORDER 3)	NONE						
253	SIEMENS LTP DEFERRED RATE BASE (OPUC ORDER 3)	NONE						
254	TOTAL OTHER REG ASSETS							
255	186 / MISC. OTHER DEFERRED PROGRAMS	T-PLT						
256	254 / JIM BRIDGER PLANT END OF LIFE DEPR - OPUC	NONE						
257	RECONNECT FEES - (OPUC ADV 16-09)	NONE						
258	TOTAL DEFERRED PROGRAMS							
259								
260	DEVELOPMENT OF SUBSIDIARY RATE BASE							
261	123 INVESTMENT IN IERCO	KWH-S						
262	186 PREPAID COAL ROYALTIES	KWH-S						
263	233 NOTES PAYABLE TO SUBSIDIARY	KWH-S						
264	TOTAL SUBSIDIARY RATE BASE							
265								
266	TOTAL COMBINED RATE BASE		0	0	0	0		

IDAHO POWER COMPANY  
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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	INC TAXES & REVENUES TRANSFER
219	***TABLE 3 - ADDITIONS & DELETIONS TO RATE BASE***						
220							
221	NET ELECTRIC PLANT IN SERVICE					0	
222	ADD:						
223	105 PLANT HELD FOR FUTURE USE						
224	HYDRAULIC PRODUCTION	PI-H					
225	TRANS LAND & LAND RIGHTS	T-350					
226	TRANS STRUCTURES & IMPROVEMENT	T-352					
227	TRANS STATION EQUIPMENT	T-353					
228	DIST LAND & LAND RIGHTS	D360					
229	DIST STRUCTURES & IMPROVEMENTS	D361					
230	DIST STATIONS EQUIPMENT	D362					
231	GEN LAND & LAND RIGHTS	P-PTD					
232	GEN STRUCTURES & IMPROVEMENTS	P-PTD					
233	COMMUNICATIONS EQUIPMENT	P-PTD					
234	TOTAL PLANT HELD FOR FUTURE USE						
235							
236	ELECTRIC PLANT ACQUISITION ADJUSTMENT	T-100					
237							
238	DEFERRED PROGRAMS						
239	182 / CONSERVATION PROGRAMS						
240	IDAHO DEFERRED CONSERVATION	PI-H					
241	OREGON DEFERRED CONSERVATION	PI-H					
242	OTHER DEFERRED CONSERVATION	PI-H					
243	TOTAL CONSERVATION						
244	182 / MISC. OTHER REGULATORY ASSETS						
245	CUB FUND INTEREST (OPUC 15-399)	NONE					
246	AM. FALLS BOND REFINANCING	PI-H					
247	SFAS 87 CAPITALIZED PENSION - OPUC	NONE					
248	CLOUD COMPUTING - (IPUC Order 34707)	P101P					
249	WILDFIRE MITIGATION (IPUC Order 3507)	P-PTD					
250	SIEMENS LTP RATE BASE (IPUC Order 3)	PI-OS					
251	SIEMENS LTP DEFERRED RATE BASE (II)	PI-OS					
252	SIEMENS LTP RATE BASE (OPUC ORDE	NONE					
253	SIEMENS LTP DEFERRED RATE BASE (C	NONE					
254	TOTAL OTHER REG ASSETS						
255	186 / MISC. OTHER DEFERRED PROGRAMS	T-PLT					
256	254 / JIM BRIDGER PLANT END OF LIFE DEPR - OP	NONE					
257	RECONNECT FEES - (OPUC ADV 16-09)	NONE					
258	TOTAL DEFERRED PROGRAMS						
259							
260	DEVELOPMENT OF SUBSIDIARY RATE BASE						
261	123 INVESTMENT IN IERCO	KWH-S					
262	186 PREPAID COAL ROYALTIES	KWH-S					
263	233 NOTES PAYABLE TO SUBSIDIARY	KWH-S					
264	TOTAL SUBSIDIARY RATE BASE						
265							
266	TOTAL COMBINED RATE BASE					0	

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
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	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
267	<b>***TABLE 4 - OPERATING REVENUES***</b>									
268										
269	OPERATING REVENUES									
270	SALES OF ELECTRICITY									
271	FIRM ENERGY SALES									
272	440-448	RETAIL	TAX-REV	1,116,166,332						
273	442	CLEAN ENERGY YOUR WAY PPA REVENUE	TAX-REV	173,368,953						
274	447	FIRM SALES FOR RESALE	TAX-REV	3,474,555						
275	447	SYSTEM OPPORTUNITY SALES	KWH-O	18,325,578		18,325,578				
276	447	FINANCIAL LOSSES	KWH-O	9,422,985		9,422,985				
277		TOTAL SALES OF ELECTRICITY		1,320,758,403		27,748,563				
278										
279	OTHER OPERATING REVENUES									
280	415	MERCHANDISING REVENUES	M-REV	3,793,122		641				
281	449 /	OATT TARIFF REFUND								
282		NETWORK	NONE							
283		POINT-TO-POINT	NONE							
284		TOTAL ACCOUNT 449								
285										
286										
287	451	MISCELLANEOUS SERVICE REVENUES	MISC-REV	6,150,427						
288										
289	454	RENTS FROM ELECTRIC PROPERTY								
290		SUBSTATION EQUIPMENT	T-353	3,084,356				3,083,841		515
291		TRANSFORMER RENTALS	T-PLT	16,623				16,622		1
292		LINE RENTALS	P-PTD							
293		COGENERATION	COGEN-E	1,808,672		1,808,672				
294		DARK FIBER PROJECT	D-FIBER							
295		POLE ATTACHMENTS	D364	1,506,578						
296		FACILITIES CHARGES	OTH-REV	9,859,316						
297		OTHER RENTALS	PI-H	1,028,271	1,028,271					
298		MISCELLANEOUS	P-PTD	80,584	27,692	2,610		18,761		1
299		TOTAL ACCOUNT 454		17,384,400						
300										
301	456	OTHER ELECTRIC REVENUES								
302		TRANSMISSION NETWORK SERVICES-	T-100	10,628,615				10,628,615		
303		TRANSMISSION NETWORK SERVICES	D3601	762,362						
304		TRANSMISSION POINT-TO-POINT	T-100	46,361,643				46,361,643		
305		PHOTOVOLTAIC STATION SERVICE	D3601							
306		ENERGY EFFICIENCY RIDER	NONE							
307		STAND-BY SERVICE	D3601	759,997						
308		SIERRA PACIFIC USAGE CHARGE	PI-H	49,471	49,471					
309		ANTELOPE	T-PLT							
310		MISCELLANEOUS	P-PTD	1,590	547	52		370		0
311		TOTAL ACCOUNT 456		58,563,677	49,471			56,990,258		
312										
313		TOTAL OTHER OPERATING REVENUES		85,891,627	1,105,981	2,661	1,809,313	60,109,852		518
314										
315		TOTAL OPERATING REVENUES		1,406,650,030	1,105,981	2,661	29,557,875	60,109,852		518



**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**COST OF SERVICE STUDY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
***** DISTRIBUTION FUNCTION *****										
ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD

267 \*\*\*TABLE 4 - OPERATING REVENUES\*\*\*

268										
269	OPERATING REVENUES									
270	SALES OF ELECTRICITY									
271	FIRM ENERGY SALES									
272	440-448 RETAIL	TAX-REV								
273	442 CLEAN ENERGY YOUR WAY PPA REVENUE	TAX-REV								
274	447 FIRM SALES FOR RESALE	TAX-REV								
275	447 SYSTEM OPPORTUNITY SALES	KWH-O								
276	447 FINANCIAL LOSSES	KWH-O								
277	TOTAL SALES OF ELECTRICITY									
278										
279	OTHER OPERATING REVENUES									
280	415 MERCHANDISING REVENUES	M-REV			1,193,973	591,750	74,612	268,576	133,110	74,433 776,753
281	449 / OATT TARIFF REFUND									
282	NETWORK	NONE								
283	POINT-TO-POINT	NONE								
284	TOTAL ACCOUNT 449									
285										
286										
287	451 MISCELLANEOUS SERVICE REVENUES	MISC-REV								
288										
289	454 RENTS FROM ELECTRIC PROPERTY									
290	SUBSTATION EQUIPMENT	T-353								
291	TRANSFORMER RENTALS	T-PLT								
292	LINE RENTALS	P-PTD								
293	COGENERATION	COGEN-E								
294	DARK FIBER PROJECT	D-FIBER								
295	POLE ATTACHMENTS	D364			943,424	467,574	10,502			
296	FACILITIES CHARGES	OTH-REV								
297	OTHER RENTALS	PI-H								
298	MISCELLANEOUS	P-PTD	6,068	283	7,412	3,673	463	1,667	826	462 4,822
299	TOTAL ACCOUNT 454									
300										
301	456 OTHER ELECTRIC REVENUES									
302	TRANSMISSION NETWORK SERVICES-	T-100								
303	TRANSMISSION NETWORK SERVICES	D3601	146,771	6,845	179,261	88,844	11,202	40,323	19,985	11,175 116,620
304	TRANSMISSION POINT-TO-POINT	T-100								
305	PHOTOVOLTAIC STATION SERVICE	D3601								
306	ENERGY EFFICIENCY RIDER	NONE								
307	STAND-BY SERVICE	D3601	146,315	6,824	178,704	88,568	11,167	40,198	19,923	11,141 116,258
308	SIERRA PACIFIC USAGE CHARGE	PI-H								
309	ANTELOPE	T-PLT								
310	MISCELLANEOUS	P-PTD	120	6	146	72	9	33	16	9 95
311	TOTAL ACCOUNT 456		293,086	13,669	357,965	177,412	22,369	80,522	39,908	22,316 232,878
312										
313	TOTAL OTHER OPERATING REVENUES		299,274	13,957	2,502,919	1,240,482	107,956	350,797	173,860	97,220 1,014,549
314										
315	TOTAL OPERATING REVENUES		299,274	13,957	2,502,919	1,240,482	107,956	350,797	173,860	97,220 1,014,549

IDAHO POWER COMPANY  
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(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
ALLOCATOR	LINE TRANS SEC CUST	SEC LINES DEMAND	SEC LINES CUSTOMER	SERVICES	METERS	STREET LIGHTS	INSTALLATION CUST PREM

267 \*\*\*TABLE 4 - OPERATING REVENUES\*\*\*

268								
269	OPERATING REVENUES							
270	SALES OF ELECTRICITY							
271	FIRM ENERGY SALES							
272	440-448 RETAIL	TAX-REV						
273	442 CLEAN ENERGY YOUR WAY PPA REVENUE	TAX-REV						
274	447 FIRM SALES FOR RESALE	TAX-REV						
275	447 SYSTEM OPPORTUNITY SALES	KWH-O						
276	447 FINANCIAL LOSSES	KWH-O						
277	TOTAL SALES OF ELECTRICITY							
278								
279	OTHER OPERATING REVENUES							
280	415 MERCHANDISING REVENUES	M-REV	384,970	76,517	37,923	155,716	14,092	10,058
281	449 / OATT TARIFF REFUND							
282	NETWORK	NONE						
283	POINT-TO-POINT	NONE						
284	TOTAL ACCOUNT 449							
285								
286								
287	451 MISCELLANEOUS SERVICE REVENUES	MISC-REV						
288								
289	454 RENTS FROM ELECTRIC PROPERTY							
290	SUBSTATION EQUIPMENT	T-353						
291	TRANSFORMER RENTALS	T-PLT						
292	LINE RENTALS	P-PTD						
293	COGENERATION	COGEN-E						
294	DARK FIBER PROJECT	D-FIBER						
295	POLE ATTACHMENTS	D364		56,884	28,193			
296	FACILITIES CHARGES	OTH-REV						
297	OTHER RENTALS	PI-H						
298	MISCELLANEOUS	P-PTD	2,390	475	235	967	1,627	87
299	TOTAL ACCOUNT 454							62
300								
301	456 OTHER ELECTRIC REVENUES							
302	TRANSMISSION NETWORK SERVICES-	T-100						
303	TRANSMISSION NETWORK SERVICES	D3601	57,799	11,488	5,694	23,379	39,351	2,116
304	TRANSMISSION POINT-TO-POINT	T-100						1,510
305	PHOTOVOLTAIC STATION SERVICE	D3601						
306	ENERGY EFFICIENCY RIDER	NONE						
307	STAND-BY SERVICE	D3601	57,619	11,452	5,676	23,306	39,229	2,109
308	SIERRA PACIFIC USAGE CHARGE	PI-H						1,505
309	ANTELOPE	T-PLT						
310	MISCELLANEOUS	P-PTD	47	9	5	19	32	2
311	TOTAL ACCOUNT 456		115,418	22,941	11,370	46,685	78,580	4,225
312								3,015
313	TOTAL OTHER OPERATING REVENUES		502,825	156,826	77,725	203,386	80,239	18,406
314								13,137
315	TOTAL OPERATING REVENUES		502,825	156,826	77,725	203,386	80,239	18,406

IDAHO POWER COMPANY  
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(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	- - -	CUSTOMER	ACCOUNTING FUNCTION	- - -	*****	CUSTOMER INFORMATION FUNCTION	*****	
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

267 \*\*\*TABLE 4 - OPERATING REVENUES\*\*\*

268		
269	OPERATING REVENUES	
270	SALES OF ELECTRICITY	
271	FIRM ENERGY SALES	
272 440-448	RETAIL	TAX-REV
273 442	CLEAN ENERGY YOUR WAY PPA REVENUE	TAX-REV
274 447	FIRM SALES FOR RESALE	TAX-REV
275 447	SYSTEM OPPORTUNITY SALES	KWH-O
276 447	FINANCIAL LOSSES	KWH-O
277	TOTAL SALES OF ELECTRICITY	
278		
279	OTHER OPERATING REVENUES	
280 415	MERCHANDISING REVENUES	M-REV
281 449 / OATT	TARIFF REFUND	
282	NETWORK	NONE
283	POINT-TO-POINT	NONE
284	TOTAL ACCOUNT 449	
285		
286		
287 451	MISCELLANEOUS SERVICE REVENUES	MISC-REV
288		
289 454	RENTS FROM ELECTRIC PROPERTY	
290	SUBSTATION EQUIPMENT	T-353
291	TRANSFORMER RENTALS	T-PLT
292	LINE RENTALS	P-PTD
293	COGENERATION	COGEN-E
294	DARK FIBER PROJECT	D-FIBER
295	POLE ATTACHMENTS	D364
296	FACILITIES CHARGES	OTH-REV
297	OTHER RENTALS	PI-H
298	MISCELLANEOUS	P-PTD
299	TOTAL ACCOUNT 454	
300		
301 456	OTHER ELECTRIC REVENUES	
302	TRANSMISSION NETWORK SERVICES-	T-100
303	TRANSMISSION NETWORK SERVICES	D3601
304	TRANSMISSION POINT-TO-POINT	T-100
305	PHOTOVOLTAIC STATION SERVICE	D3601
306	ENERGY EFFICIENCY RIDER	NONE
307	STAND-BY SERVICE	D3601
308	SIERRA PACIFIC USAGE CHARGE	PI-H
309	ANTELOPE	T-PLT
310	MISCELLANEOUS	P-PTD
311	TOTAL ACCOUNT 456	
312		
313	TOTAL OTHER OPERATING REVENUES	
314		
315	TOTAL OPERATING REVENUES	

**IDAHO POWER COMPANY**  
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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
267	<b>***TABLE 4 - OPERATING REVENUES***</b>						
268							
269	OPERATING REVENUES						
270	SALES OF ELECTRICITY						
271	FIRM ENERGY SALES						
272	440-448	RETAIL	TAX-REV				1,116,166,332
273	442	CLEAN ENERGY YOUR WAY PPA REVENUE	TAX-REV				173,368,953
274	447	FIRM SALES FOR RESALE	TAX-REV				3,474,555
275	447	SYSTEM OPPORTUNITY SALES	KWH-O				
276	447	FINANCIAL LOSSES	KWH-O				
277	TOTAL SALES OF ELECTRICITY						1,293,009,840
278							
279	OTHER OPERATING REVENUES						
280	415	MERCHANDISING REVENUES	M-REV				
281	449 / OATT TARIFF REFUND						
282		NETWORK	NONE				
283		POINT-TO-POINT	NONE				
284	TOTAL ACCOUNT 449						
285							
286							
287	451	MISCELLANEOUS SERVICE REVENUES	MISC-REV		6,150,427		
288							
289	454	RENTS FROM ELECTRIC PROPERTY					
290		SUBSTATION EQUIPMENT	T-353				
291		TRANSFORMER RENTALS	T-PLT				
292		LINE RENTALS	P-PTD				
293		COGENERATION	COGEN-E				
294		DARK FIBER PROJECT	D-FIBER				
295		POLE ATTACHMENTS	D364				
296		FACILITIES CHARGES	OTH-REV			9,859,316	
297		OTHER RENTALS	PI-H				
298		MISCELLANEOUS	P-PTD				
299	TOTAL ACCOUNT 454						
300							
301	456	OTHER ELECTRIC REVENUES					
302		TRANSMISSION NETWORK SERVICES-	T-100				
303		TRANSMISSION NETWORK SERVICES	D3601				
304		TRANSMISSION POINT-TO-POINT	T-100				
305		PHOTOVOLTAIC STATION SERVICE	D3601				
306		ENERGY EFFICIENCY RIDER	NONE				
307		STAND-BY SERVICE	D3601				
308		SIERRA PACIFIC USAGE CHARGE	PI-H				
309		ANTELOPE	T-PLT				
310		MISCELLANEOUS	P-PTD				
311	TOTAL ACCOUNT 456						
312							
313	TOTAL OTHER OPERATING REVENUES				6,150,427	9,859,316	
314							
315	TOTAL OPERATING REVENUES				6,150,427	9,859,316	1,293,009,840

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
316	<b>***TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES***</b>									
317			Base-load	Peak						
318	STEAM POWER GENERATION									
319	OPERATION									
320	500-OP SUPERVISION & ENGINEERING	PI-S (73,374)	(73,374)							
321	501-OP FUEL	KWH-S 62,619,523				62,619,523				
322										
323	502-OP STEAM EXPENSES									
324	LABOR	PI-S 1,542,164	1,542,164							
325	OTHER	KWH-S (1,094,811)				(1,094,811)				
326	TOTAL ACCOUNT 502	447,353								
327	505-OP ELECTRIC EXPENSES									
328	LABOR	PI-S 600,571	600,571							
329	OTHER	KWH-S (544,984)				(544,984)				
330	TOTAL ACCOUNT 505	55,587								
331	506-OP MISCELLANEOUS EXPENSES	PI-S 407,703	407,703							
332	507-OP RENTS	PI-S 10,895	10,895							
333	TOTAL STEAM OPERATION EXPENSES	63,467,686								
334										
335	MAINTENANCE									
336	510-MT SUPERVISION & ENGINEERING	PI-S (240,497)	(240,497)							
337	511-MT STRUCTURES	PI-S 120,601	120,601							
338	512-MT BOILER PLANT									
339	LABOR	PI-S 3,821,200	3,821,200							
340	OTHER	KWH-S (3,392,111)				(3,392,111)				
341	TOTAL ACCOUNT 512	429,089								
342	513-MT ELECTRIC PLANT									
343	LABOR	PI-S 1,460,523	1,460,523							
344	OTHER	KWH-S (1,346,052)				(1,346,052)				
345	TOTAL ACCOUNT 513	114,471								
346	514-MT MISCELLANEOUS STEAM PLANT	PI-S 455,440	455,440							
347	TOTAL STEAM MAINTENANCE EXPENSES	879,105								
348										
349	TOTAL STEAM GENERATION EXPENSES	64,346,791								

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
316	***TABLE 5 - OPERATION & MAINTENANCE EXPENSES***										
317											
318	STEAM POWER GENERATION										
319	OPERATION										
320	500-OP	SUPERVISION & ENGINEERING									
321	501-OP	FUEL									
322											
323	502-OP	STEAM EXPENSES									
324		LABOR									
325		OTHER									
326		TOTAL ACCOUNT 502									
327	505-OP	ELECTRIC EXPENSES									
328		LABOR									
329		OTHER									
330		TOTAL ACCOUNT 505									
331	506-OP	MISCELLANEOUS EXPENSES									
332	507-OP	RENTS									
333		TOTAL STEAM OPERATION EXPENSES									
334											
335	MAINTENANCE										
336	510-MT	SUPERVISION & ENGINEERING									
337	511-MT	STRUCTURES									
338	512-MT	BOILER PLANT									
339		LABOR									
340		OTHER									
341		TOTAL ACCOUNT 512									
342	513-MT	ELECTRIC PLANT									
343		LABOR									
344		OTHER									
345		TOTAL ACCOUNT 513									
346	514-MT	MISCELLANEOUS STEAM PLANT									
347		TOTAL STEAM MAINTENANCE EXPENSES									
348											
349		TOTAL STEAM GENERATION EXPENSES									

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	* * * * * DISTRIBUTION FUNCTION * * * * *						
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET
	SEC CUST	DEMAND	CUSTOMER				LIGHTS
							CUST PREM

316 \*\*\*TABLE 5 - OPERATION & MAINTENANCE EXPENSES\*\*\*

317

318 STEAM POWER GENERATION

319 OPERATION

320 500-OP SUPERVISION & ENGINEERING

321 501-OP FUEL

322

323 502-OP STEAM EXPENSES

324 LABOR

325 OTHER

326 TOTAL ACCOUNT 502

327 505-OP ELECTRIC EXPENSES

328 LABOR

329 OTHER

330 TOTAL ACCOUNT 505

331 506-OP MISCELLANEOUS EXPENSES

332 507-OP RENTS

333 TOTAL STEAM OPERATION EXPENSES

334

335 MAINTENANCE

336 510-MT SUPERVISION & ENGINEERING

337 511-MT STRUCTURES

338 512-MT BOILER PLANT

339 LABOR

340 OTHER

341 TOTAL ACCOUNT 512

342 513-MT ELECTRIC PLANT

343 LABOR

344 OTHER

345 TOTAL ACCOUNT 513

346 514-MT MISCELLANEOUS STEAM PLANT

347 TOTAL STEAM MAINTENANCE EXPENSES

348

349 TOTAL STEAM GENERATION EXPENSES

PI-S
KWH-S
PI-S
KWH-S
PI-S
KWH-S
PI-S
PI-S
PI-S
KWH-S
PI-S
KWH-S
PI-S

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
		-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR		METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS		ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

316 \*\*\*TABLE 5 - OPERATION & MAINTENANCE EXPENSES \*\*\*

317

318 STEAM POWER GENERATION

319 OPERATION

320 500-OP	SUPERVISION & ENGINEERING	PI-S
321 501-OP	FUEL	KWH-S
322		
323 502-OP	STEAM EXPENSES	
324	LABOR	PI-S
325	OTHER	KWH-S
326	TOTAL ACCOUNT 502	
327 505-OP	ELECTRIC EXPENSES	
328	LABOR	PI-S
329	OTHER	KWH-S
330	TOTAL ACCOUNT 505	
331 506-OP	MISCELLANEOUS EXPENSES	PI-S
332 507-OP	RENTS	PI-S
333	TOTAL STEAM OPERATION EXPENSES	
334		
335 MAINTENANCE		
336 510-MT	SUPERVISION & ENGINEERING	PI-S
337 511-MT	STRUCTURES	PI-S
338 512-MT	BOILER PLANT	
339	LABOR	PI-S
340	OTHER	KWH-S
341	TOTAL ACCOUNT 512	
342 513-MT	ELECTRIC PLANT	
343	LABOR	PI-S
344	OTHER	KWH-S
345	TOTAL ACCOUNT 513	
346 514-MT	MISCELLANEOUS STEAM PLANT	PI-S
347	TOTAL STEAM MAINTENANCE EXPENSES	
348		
349	TOTAL STEAM GENERATION EXPENSES	



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
316	<b>***TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES***</b>						
317							
318	STEAM POWER GENERATION						
319	OPERATION						
320	500-OP SUPERVISION & ENGINEERING	PI-S					
321	501-OP FUEL	KWH-S					
322							
323	502-OP STEAM EXPENSES						
324	LABOR	PI-S					
325	OTHER	KWH-S					
326	TOTAL ACCOUNT 502						
327	505-OP ELECTRIC EXPENSES						
328	LABOR	PI-S					
329	OTHER	KWH-S					
330	TOTAL ACCOUNT 505						
331	506-OP MISCELLANEOUS EXPENSES	PI-S					
332	507-OP RENTS	PI-S					
333	TOTAL STEAM OPERATION EXPENSES						
334							
335	MAINTENANCE						
336	510-MT SUPERVISION & ENGINEERING	PI-S					
337	511-MT STRUCTURES	PI-S					
338	512-MT BOILER PLANT						
339	LABOR	PI-S					
340	OTHER	KWH-S					
341	TOTAL ACCOUNT 512						
342	513-MT ELECTRIC PLANT						
343	LABOR	PI-S					
344	OTHER	KWH-S					
345	TOTAL ACCOUNT 513						
346	514-MT MISCELLANEOUS STEAM PLANT	PI-S					
347	TOTAL STEAM MAINTENANCE EXPENSES						
348							
349	TOTAL STEAM GENERATION EXPENSES						

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS		** PRODUCTION FUNCTION **			----- TRANSMISSION FUNCTION -----			
			DEMAND			ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
350										
351	HYDRAULIC POWER GENERATION									
352	535-OP SUPERVISION & ENGINEERING	L-535	6,210,878	6,210,878						
353	536-OP WATER FOR POWER									
354	WATER FOR POWER/WCLOUD SEED	KWH-H	6,217,277			6,217,277				
355	WATER LEASE	KWH-H								
356	TOTAL ACCOUNT 536		6,217,277							
357										
358	537-OP HYDRAULIC EXPENSES	PI-H	19,366,472	19,366,472						
359	538-OP ELECTRIC EXPENSES									
360	LABOR	PI-H	1,540,414	1,540,414						
361	OTHER	KWH-H	602,063			602,063				
362	TOTAL ACCOUNT 538		2,142,477							
363										
364	539-OP MISCELLANEOUS EXPENSES	PI-H	5,496,716	5,496,716						
365	540-OP RENTS	PI-H	291,025	291,025						
366	TOTAL HYDRAULIC OPERATION EXPENSES		39,724,845							

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		***** DISTRIBUTION FUNCTION *****										
		ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
350												
351	HYDRAULIC POWER GENERATION											
352	535-OP SUPERVISION & ENGINEERING											
353	536-OP WATER FOR POWER											
354	WATER FOR POWER/WCLOUD SEED											
355	WATER LEASE											
356	TOTAL ACCOUNT 536											
357												
358	537-OP HYDRAULIC EXPENSES											
359	538-OP ELECTRIC EXPENSES											
360	LABOR											
361	OTHER											
362	TOTAL ACCOUNT 538											
363												
364	539-OP MISCELLANEOUS EXPENSES											
365	540-OP RENTS											
366	TOTAL HYDRAULIC OPERATION EXPENSES											

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)																							
	* * * * *										DISTRIBUTION FUNCTION										* * * * *									
ALLOCATOR	LINE	TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION																						
	SEC CUST	DEMAND	CUSTOMER				LIGHTS	CUST PREM																						

350			
351	HYDRAULIC POWER GENERATION		
352	535-OP SUPERVISION & ENGINEERING	L-535	
353	536-OP WATER FOR POWER		
354	WATER FOR POWER/WCLOUD SEED	KWH-H	
355	WATER LEASE	KWH-H	
356	TOTAL ACCOUNT 536		
357			
358	537-OP HYDRAULIC EXPENSES	PI-H	
359	538-OP ELECTRIC EXPENSES		
360	LABOR	PI-H	
361	OTHER	KWH-H	
362	TOTAL ACCOUNT 538		
363			
364	539-OP MISCELLANEOUS EXPENSES	PI-H	
365	540-OP RENTS	PI-H	
366	TOTAL HYDRAULIC OPERATION EXPENSES		

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

350			
351	HYDRAULIC POWER GENERATION		
352	535-OP SUPERVISION & ENGINEERING		L-535
353	536-OP WATER FOR POWER		
354	WATER FOR POWER/WCLOUD SEED		KWH-H
355	WATER LEASE		KWH-H
356	TOTAL ACCOUNT 536		
357			
358	537-OP HYDRAULIC EXPENSES		PI-H
359	538-OP ELECTRIC EXPENSES		
360	LABOR		PI-H
361	OTHER		KWH-H
362	TOTAL ACCOUNT 538		
363			
364	539-OP MISCELLANEOUS EXPENSES		PI-H
365	540-OP RENTS		PI-H
366	TOTAL HYDRAULIC OPERATION EXPENSES		

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
		ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
			DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
350								
351	HYDRAULIC POWER GENERATION							
352	535-OP SUPERVISION & ENGINEERING	L-535						
353	536-OP WATER FOR POWER							
354	WATER FOR POWER/WCLOUD SEED	KWH-H						
355	WATER LEASE	KWH-H						
356	TOTAL ACCOUNT 536							
357								
358	537-OP HYDRAULIC EXPENSES	PI-H						
359	538-OP ELECTRIC EXPENSES							
360	LABOR	PI-H						
361	OTHER	KWH-H						
362	TOTAL ACCOUNT 538							
363								
364	539-OP MISCELLANEOUS EXPENSES	PI-H						
365	540-OP RENTS	PI-H						
366	TOTAL HYDRAULIC OPERATION EXPENSES							

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
7		TOTALS	** PRODUCTION FUNCTION **				----- TRANSMISSION FUNCTION -----			
8	ALLOCATOR		DEMAND			ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
9			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
367	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***									
368										
369	MAINTENANCE									
370	541-MT	SUPERVISION & ENGINEERING	L-541	120,801	120,801					
371	542-MT	STRUCTURES	PI-H	991,499	991,499					
372	543-MT	RESERVOIRS, DAMS & WATERWAYS	PI-H	487,743	487,743					
373	544-MT	ELECTRIC PLANT								
374		LABOR	PI-H	1,833,025	1,833,025					
375		OTHER	KWH-H	966,545		966,545				
376		TOTAL ACCOUNT 544		2,799,570						
377										
378	545-MT	MISCELLANEOUS HYDRAULIC PLANT	PI-H	4,134,421	4,134,421					
379										
380		TOTAL HYDRAULIC MAINTENANCE EXPENSES		8,534,035						

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
367	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***										
368											
369	MAINTENANCE										
370	541-MT	SUPERVISION & ENGINEERING									
371	542-MT	STRUCTURES									
372	543-MT	RESERVOIRS, DAMS & WATERWAYS									
373	544-MT	ELECTRIC PLANT									
374		LABOR									
375		OTHER									
376		TOTAL ACCOUNT 544									
377											
378	545-MT	MISCELLANEOUS HYDRAULIC PLANT									
379											
380	TOTAL HYDRAULIC MAINTENANCE EXPENSES										



1	IDAHO POWER COMPANY															
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION															
3	CLASS COST OF SERVICE STUDY															
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023															
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS															
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)								
7	* * * * * DISTRIBUTION FUNCTION * * * * *															
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION								
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM								
367	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***															
368																
369	MAINTENANCE															
370	541-MT	SUPERVISION & ENGINEERING		L-541												
371	542-MT	STRUCTURES		PI-H												
372	543-MT	RESERVOIRS, DAMS & WATERWAYS		PI-H												
373	544-MT	ELECTRIC PLANT														
374		LABOR		PI-H												
375		OTHER		KWH-H												
376		TOTAL ACCOUNT 544														
377																
378	545-MT	MISCELLANEOUS HYDRAULIC PLANT		PI-H												
379																
380	TOTAL HYDRAULIC MAINTENANCE EXPENSES															

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	*****	CUSTOMER INFORMATION FUNCTION	*****
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER				
9		READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
367	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***									
368										
369	MAINTENANCE									
370	541-MT	SUPERVISION & ENGINEERING		L-541						
371	542-MT	STRUCTURES		PI-H						
372	543-MT	RESERVOIRS, DAMS & WATERWAYS		PI-H						
373	544-MT	ELECTRIC PLANT								
374		LABOR		PI-H						
375		OTHER		KWH-H						
376		TOTAL ACCOUNT 544								
377										
378	545-MT	MISCELLANEOUS HYDRAULIC PLANT		PI-H						
379										
380	TOTAL HYDRAULIC MAINTENANCE EXPENSES									

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
				MISCELLANEOUS			INC TAXES
	ALLOCATOR						& REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
367	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***						
368							
369	MAINTENANCE						
370	541-MT	SUPERVISION & ENGINEERING	L-541				
371	542-MT	STRUCTURES	PI-H				
372	543-MT	RESERVOIRS, DAMS & WATERWAYS	PI-H				
373	544-MT	ELECTRIC PLANT					
374		LABOR	PI-H				
375		OTHER	KWH-H				
376		TOTAL ACCOUNT 544					
377							
378	545-MT	MISCELLANEOUS HYDRAULIC PLANT	PI-H				
379							
380	TOTAL HYDRAULIC MAINTENANCE EXPENSES						

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
381										
382	TOTAL HYDRAULIC GENERATION EXPENSES	48,258,881								
383										
384	OTHER POWER GENERATION									
385	OPERATION									
386	546-OP SUPERVISION & ENGINEERING	L-546 685,537	480,982	204,555						
387	547-OP FUEL									
388	DIESEL FUEL	KWH-O 10,034				10,034				
389	OTHER	KWH-O 114,351,541				114,351,541				
390	TOTAL ACCOUNT 547	114,361,575								
391										
392	548-OP GENERATING EXPENSES									
393	LABOR	PI-OS 3,293,050	2,310,449	982,601						
394	OTHER	KWH-O 1,921,928				1,921,928				
395	TOTAL ACCOUNT 548	5,214,978								
396										
397	549-OP MISCELLANEOUS EXPENSES	PI-OS 72,854	51,116	21,739						
398	550-OP RENTS	PI-OS								
399										
400	TOTAL OTHER POWER OPER EXPENSES	120,334,945								
401										
402	MAINTENANCE									
403	551-MT SUPERVISION & ENGINEERING	L-551								
404	552-MT STRUCTURES	PI-OS 160,358	112,509	47,849						
405	553-MT GENERATING & ELECTRIC PLANT									
406	LABOR	PI-OS 58,030	40,715	17,315						
407	OTHER	KWH-O 838,743				838,743				
408	TOTAL ACCOUNT 553	896,774								
409										
410	554-MT MISCELLANEOUS EXPENSES	PI-OS 3,249,153	2,279,650	969,503						
411	TOTAL OTHER POWER MAINT EXPENSES	4,306,284								
412										
413	TOTAL OTHER POWER GEN EXPENSES	124,641,229								

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	***** DISTRIBUTION FUNCTION *****										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
381											
382	TOTAL HYDRAULIC GENERATION EXPENSES										
383											
384	OTHER POWER GENERATION										
385	OPERATION										
386	546-OP	SUPERVISION & ENGINEERING									
387	547-OP	FUEL									
388		DIESEL FUEL									
389		OTHER									
390		TOTAL ACCOUNT 547									
391											
392	548-OP	GENERATING EXPENSES									
393		LABOR									
394		OTHER									
395		TOTAL ACCOUNT 548									
396											
397	549-OP	MISCELLANEOUS EXPENSES									
398	550-OP	RENTS									
399											
400		TOTAL OTHER POWER OPER EXPENSES									
401											
402	MAINTENANCE										
403	551-MT	SUPERVISION & ENGINEERING									
404	552-MT	STRUCTURES									
405	553-MT	GENERATING & ELECTRIC PLANT									
406		LABOR									
407		OTHER									
408		TOTAL ACCOUNT 553									
409											
410	554-MT	MISCELLANEOUS EXPENSES									
411		TOTAL OTHER POWER MAINT EXPENSES									
412											
413		TOTAL OTHER POWER GEN EXPENSES									

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TOTAL HYDRAULIC GENERATION EXPENSES

## POWER GENERATION

ON

**SUPERVISION & ENGINEERING**

FUEL

DIESEL FUEL

OTHER

TOTAL ACCOUNT 547

## GENERATING EXPENSES

LABOR

OTHER

TOTAL ACCOUNT 548

MISCELLANEOUS EXPENSES

RENTS

TOTAL OTHER POWER OPER EXPENSES

ANCE

**SUPERVISION & ENGINEERING**

## STRUCTURES

## GENERATING & ELECTRIC PLANT

LABOR

OTHER

TOTAL ACCOUNT 553

MISCELLANEOUS EXPENSES

TOTAL OTHER POWER MAINT EXPENSES

TOTAL OTHER POWER GEN EXPENSES

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

381  
382 TOTAL HYDRAULIC GENERATION EXPENSES  
383

384 OTHER POWER GENERATION  
385 OPERATION

386 546-OP	SUPERVISION & ENGINEERING	L-546
387 547-OP	FUEL	
388	DIESEL FUEL	KWH-O
389	OTHER	KWH-O
390	TOTAL ACCOUNT 547	

391		
392 548-OP	GENERATING EXPENSES	
393	LABOR	PI-OS
394	OTHER	KWH-O
395	TOTAL ACCOUNT 548	

396		
397 549-OP	MISCELLANEOUS EXPENSES	PI-OS
398 550-OP	RENTS	PI-OS
399		

400 TOTAL OTHER POWER OPER EXPENSES  
401

402 MAINTENANCE

403 551-MT	SUPERVISION & ENGINEERING	L-551
404 552-MT	STRUCTURES	PI-OS
405 553-MT	GENERATING & ELECTRIC PLANT	
406	LABOR	PI-OS
407	OTHER	KWH-O
408	TOTAL ACCOUNT 553	

409		
410 554-MT	MISCELLANEOUS EXPENSES	PI-OS

411 TOTAL OTHER POWER MAINT EXPENSES

412  
413 TOTAL OTHER POWER GEN EXPENSES

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
381							
382	TOTAL HYDRAULIC GENERATION EXPENSES						
383							
384	OTHER POWER GENERATION						
385	OPERATION						
386	546-OP SUPERVISION & ENGINEERING	L-546					
387	547-OP FUEL						
388	DIESEL FUEL	KWH-O					
389	OTHER	KWH-O					
390	TOTAL ACCOUNT 547						
391							
392	548-OP GENERATING EXPENSES						
393	LABOR	PI-OS					
394	OTHER	KWH-O					
395	TOTAL ACCOUNT 548						
396							
397	549-OP MISCELLANEOUS EXPENSES	PI-OS					
398	550-OP RENTS	PI-OS					
399							
400	TOTAL OTHER POWER OPER EXPENSES						
401							
402	MAINTENANCE						
403	551-MT SUPERVISION & ENGINEERING	L-551					
404	552-MT STRUCTURES	PI-OS					
405	553-MT GENERATING & ELECTRIC PLANT						
406	LABOR	PI-OS					
407	OTHER	KWH-O					
408	TOTAL ACCOUNT 553						
409							
410	554-MT MISCELLANEOUS EXPENSES	PI-OS					
411	TOTAL OTHER POWER MAINT EXPENSES						
412							
413	TOTAL OTHER POWER GEN EXPENSES						



**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
414	<b>***TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES***</b>									
415										
416	OTHER POWER SUPPLY EXPENSE									
417	555.0	PURCHASED POWER								
418		POWER EXPENSE	PP-KWH	95,057,493		95,057,493				
419		CLEAN ENERGY YOUR WAY PPA COS	PP-KWH							
420		TRANSMISSION LOSSES	PP-KWH							
421		DEMAND RESPONSE INCENTIVE	PI-O	10,240,003	10,240,003					
422		TOTAL 555.0/PURCHASED POWER		105,297,496						
423										
424	555.1	COGENERATION & SMALL POWER PRO	PP-KWH	204,946,028		204,946,028				
425		TOTAL COGEN & SMALL POWER PROD		204,946,028						
426										
427		TOTAL ACCOUNT 555		310,243,524						
428										
429	556	LOAD CONTROL & DISPATCHING EXPEN	PP-KW							
430	557	PCA/ EPC ACCOUNTS	NONE							
431	557	OTHER	PI-SHO	6,743,211	6,162,485	580,727				
432										
433		TOTAL OTHER POWER SUPPLY EXPENSES		316,986,736						
434										
435		TOTAL PRODUCTION EXPENSES		554,233,636						
436										
437										
438	TRANSMISSION EXPENSES									
439										
440	OPERATION									
441	560-OP	SUPERVISION & ENGINEERING	L-560	3,446,215				3,445,898		318
442	561-OP	LOAD DISPATCHING	T-PLT	5,771,817				5,771,479		339
443	562-OP	STATION EXPENSES	T-353	2,994,513				2,994,013		500
444	563-OP	OVERHEAD LINE EXPENSES	T-354-356	1,156,414				1,156,412		2
445	565-OP	TRANSMISSION OF ELECTRICITY BY OT	KWH-T	9,808,355		9,808,355				
446	566-OP	MISCELLANEOUS EXPENSES	T-PLT	7				7		0
447	567-OP	RENTS	T-354-359	4,657,012				4,657,005		8
448										
449		TOTAL TRANSMISSION OPERATION		27,834,335						

IDAHO POWER COMPANY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	***** DISTRIBUTION FUNCTION *****										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
414	***TABLE 5 - OPERATION & MAINTENANCE EXPENSES***										
415											
416	OTHER POWER SUPPLY EXPENSE										
417	555.0	PURCHASED POWER									
418		POWER EXPENSE									
419		CLEAN ENERGY YOUR WAY PPA COS									
420		TRANSMISSION LOSSES									
421		DEMAND RESPONSE INCENTIVE									
422		TOTAL 555.0/PURCHASED POWER									
423											
424	555.1	COGENERATION & SMALL POWER PROD									
425		TOTAL COGEN & SMALL POWER PROD									
426											
427		TOTAL ACCOUNT 555									
428											
429	556	LOAD CONTROL & DISPATCHING EXPEN									
430	557	PCA/ EPC ACCOUNTS									
431	557	OTHER									
432											
433		TOTAL OTHER POWER SUPPLY EXPENSES									
434											
435		TOTAL PRODUCTION EXPENSES									
436											
437											
438		TRANSMISSION EXPENSES									
439											
440		OPERATION									
441	560-OP	SUPERVISION & ENGINEERING									
442	561-OP	LOAD DISPATCHING									
443	562-OP	STATION EXPENSES									
444	563-OP	OVERHEAD LINE EXPENSES									
445	565-OP	TRANSMISSION OF ELECTRICITY BY OT									
446	566-OP	MISCELLANEOUS EXPENSES									
447	567-OP	RENTS									
448											
449		TOTAL TRANSMISSION OPERATION									

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
SEC CUST	DEMAND	CUSTOMER				LIGHTS	CUST PREM

414 \*\*\*TABLE 5 - OPERATION & MAINTENANCE EXPENSES\*\*\*

415							
416	OTHER POWER SUPPLY EXPENSE						
417	555.0	PURCHASED POWER					
418		POWER EXPENSE	PP-KWH				
419		CLEAN ENERGY YOUR WAY PPA COS	PP-KWH				
420		TRANSMISSION LOSSES	PP-KWH				
421		DEMAND RESPONSE INCENTIVE	PI-O				
422		TOTAL 555.0/PURCHASED POWER					
423							
424	555.1	COGENERATION & SMALL POWER PROD	PP-KWH				
425		TOTAL COGEN & SMALL POWER PROD					
426							
427		TOTAL ACCOUNT 555					
428							
429	556	LOAD CONTROL & DISPATCHING EXPEN	PP-KW				
430	557	PCA/ EPC ACCOUNTS	NONE				
431	557	OTHER	PI-SHO				
432							
433		TOTAL OTHER POWER SUPPLY EXPENSES					
434							
435		TOTAL PRODUCTION EXPENSES					
436							
437							
438	TRANSMISSION EXPENSES						
439							
440	OPERATION						
441	560-OP	SUPERVISION & ENGINEERING	L-560				
442	561-OP	LOAD DISPATCHING	T-PLT				
443	562-OP	STATION EXPENSES	T-353				
444	563-OP	OVERHEAD LINE EXPENSES	T-354-356				
445	565-OP	TRANSMISSION OF ELECTRICITY BY OT	KWH-T				
446	566-OP	MISCELLANEOUS EXPENSES	T-PLT				
447	567-OP	RENTS	T-354-359				
448							
449		TOTAL TRANSMISSION OPERATION					

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS		OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

414 \*\*\*TABLE 5 - OPERATION & MAINTENANCE EXPENSES \*\*\*

415			
416	OTHER POWER SUPPLY EXPENSE		
417	555.0 PURCHASED POWER		
418	POWER EXPENSE	PP-KWH	
419	CLEAN ENERGY YOUR WAY PPA COS	PP-KWH	
420	TRANSMISSION LOSSES	PP-KWH	
421	DEMAND RESPONSE INCENTIVE	PI-O	
422	TOTAL 555.0/PURCHASED POWER		
423			
424	555.1 COGENERATION & SMALL POWER PROD	PP-KWH	
425	TOTAL COGEN & SMALL POWER PROD		
426			
427	TOTAL ACCOUNT 555		
428			
429	556 LOAD CONTROL & DISPATCHING EXPEN	PP-KW	
430	557 PCA/ EPC ACCOUNTS	NONE	
431	557 OTHER	PI-SHO	
432			
433	TOTAL OTHER POWER SUPPLY EXPENSES		
434			
435	TOTAL PRODUCTION EXPENSES		
436			
437			
438	TRANSMISSION EXPENSES		
439			
440	OPERATION		
441	560-OP SUPERVISION & ENGINEERING	L-560	
442	561-OP LOAD DISPATCHING	T-PLT	
443	562-OP STATION EXPENSES	T-353	
444	563-OP OVERHEAD LINE EXPENSES	T-354-356	
445	565-OP TRANSMISSION OF ELECTRICITY BY OT	KWH-T	
446	566-OP MISCELLANEOUS EXPENSES	T-PLT	
447	567-OP RENTS	T-354-359	
448			
449	TOTAL TRANSMISSION OPERATION		

IDAHO POWER COMPANY  
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CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
414	<b>***TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES***</b>						
415							
416	OTHER POWER SUPPLY EXPENSE						
417	555.0	PURCHASED POWER					
418		POWER EXPENSE					
419		CLEAN ENERGY YOUR WAY PPA COS					
420		TRANSMISSION LOSSES					
421		DEMAND RESPONSE INCENTIVE					
422		TOTAL 555.0/PURCHASED POWER					
423							
424	555.1	COGENERATION & SMALL POWER PROD					
425		TOTAL COGEN & SMALL POWER PROD					
426							
427	TOTAL ACCOUNT 555						
428							
429	556	LOAD CONTROL & DISPATCHING EXPEN					
430	557	PCA/ EPC ACCOUNTS					
431	557	OTHER					
432							
433	TOTAL OTHER POWER SUPPLY EXPENSES						
434							
435	TOTAL PRODUCTION EXPENSES						
436							
437							
438	TRANSMISSION EXPENSES						
439							
440	OPERATION						
441	560-OP	SUPERVISION & ENGINEERING					
442	561-OP	LOAD DISPATCHING					
443	562-OP	STATION EXPENSES					
444	563-OP	OVERHEAD LINE EXPENSES					
445	565-OP	TRANSMISSION OF ELECTRICITY BY OT					
446	566-OP	MISCELLANEOUS EXPENSES					
447	567-OP	RENTS					
448							
449	TOTAL TRANSMISSION OPERATION						

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
450	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>									
451	MAINTENANCE									
452	568-MT	SUPERVISION & ENGINEERING	L-568	212,937				212,919		18
453	569-MT	STRUCTURES	T-352	2,060,282				2,060,282		
454	570-MT	STATION EQUIPMENT	T-353	2,927,971				2,927,482		489
455	571-MT	OVERHEAD LINES	T-354-356	3,119,250				3,119,245		5
456	573-MT	MISCELLANEOUS PLANT	T-PLT	5,545				5,544		0
457										
458		TOTAL TRANSMISSION MAINTENANCE		8,325,986						
459										
460		TOTAL TRANSMISSION EXPENSES		36,160,321						
461										
462	REGIONAL MARKET EXPENSES									
463	OPERATION									
464	575 / OPER	TRANS MKT ADMIN - EIM	T-100	658,814				658,814		
465										
466		TOTAL REGIONAL MARKET EXPENSES		658,814						
467										
468	DISTRIBUTION EXPENSES		Base-load	Peak						
469										
470	OPERATION									
471	580-OP	SUPERVISION & ENGINEERING	L-580	6,125,235						
472	581-OP	LOAD DISPATCHING	D3601	5,719,617						
473	582-OP	STATION EXPENSES	D362	1,941,646						
474	583-OP	OVERHEAD LINE EXPENSES	D-364-365	5,775,361						
475	584-OP	UNDERGROUND LINE EXPENSES	D-366-367	4,896,899						
476	585-OP	STREET LIGHTING & SIGNAL SYSTEMS	CUSTINST	46,840						
477	586-OP	METER EXPENSES	METER	6,300,993						
478	587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST	1,145,133						
479	588-OP	MISCELLANEOUS EXPENSES	D3601	4,946,817						
480	589-OP	RENTS	D3601	706,360						
481		TOTAL DISTRIBUTION OPERATION		37,604,900						
482										
483	MAINTENANCE									
484	590-MT	SUPERVISION & ENGINEERING	L-590	12,909						
485	591-MT	STRUCTURES	D361							
486	592-MT	STATION EQUIPMENT	D362	4,398,336						
487	593-MT	OVERHEAD LINES	D-364-365	33,104,169						
488	594-MT	UNDERGROUND LINES	D-366-367	824,825						
489	595-MT	LINE TRANSFORMERS	D368	92,933						
490	596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT	222,570						
491	597-MT	METERS	METER	949,631						
492	598-MT	MISCELLANEOUS PLANT	CUSTINST	132,362						
493		TOTAL DISTRIBUTION MAINTENANCE		39,737,736						
494										
495		TOTAL DISTRIBUTION EXPENSES		77,342,636						

**IDAHO POWER COMPANY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	
	DISTRIBUTION FUNCTION											
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS	
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
450	***TABLE 5 - OPERATION & MAINTENANCE EXPENSES***											
451	MAINTENANCE											
452	568-MT	SUPERVISION & ENGINEERING	L-568									
453	569-MT	STRUCTURES	T-352									
454	570-MT	STATION EQUIPMENT	T-353									
455	571-MT	OVERHEAD LINES	T-354-356									
456	573-MT	MISCELLANEOUS PLANT	T-PLT									
457												
458		TOTAL TRANSMISSION MAINTENANCE										
459												
460		TOTAL TRANSMISSION EXPENSES										
461												
462	REGIONAL MARKET EXPENSES											
463	OPERATION											
464	575 / OPER TRANS MKT ADMIN - EIM	T-100										
465												
466		TOTAL REGIONAL MARKET EXPENSES										
467												
468	DISTRIBUTION EXPENSES											
469												
470	OPERATION											
471	580-OP	SUPERVISION & ENGINEERING	L-580	785,039	36,050	1,592,180	789,107	80,250	127,685	63,282	35,386	369,281
472	581-OP	LOAD DISPATCHING	D3601	1,101,147	51,354	1,344,902	666,552	84,044	302,526	149,936	83,842	874,942
473	582-OP	STATION EXPENSES	D362	1,858,243	83,403							
474	583-OP	OVERHEAD LINE EXPENSES	D-364-365			3,567,212	1,767,960	44,608				
475	584-OP	UNDERGROUND LINE EXPENSES	D-366-367			2,884,677	1,429,686	360,208				
476	585-OP	STREET LIGHTING & SIGNAL SYSTEMS	CUSTINST									
477	586-OP	METER EXPENSES	METER									
478	587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST									
479	588-OP	MISCELLANEOUS EXPENSES	D3601	952,366	44,415	1,163,187	576,492	72,688	261,651	129,678	72,514	756,725
480	589-OP	RENTS	D3601	135,989	6,342	166,092	82,318	10,379	37,361	18,517	10,354	108,053
481		TOTAL DISTRIBUTION OPERATION										
482												
483	MAINTENANCE											
484	590-MT	SUPERVISION & ENGINEERING	L-590	3,743	168	4,774	2,366	91	12	6	3	35
485	591-MT	STRUCTURES	D361									
486	592-MT	STATION EQUIPMENT	D362	4,209,407	188,929							
487	593-MT	OVERHEAD LINES	D-364-365			20,447,135	10,133,887	255,692				
488	594-MT	UNDERGROUND LINES	D-366-367			485,890	240,814	60,673				
489	595-MT	LINE TRANSFORMERS	D368						15,239	7,553	4,223	44,074
490	596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT									
491	597-MT	METERS	METER									
492	598-MT	MISCELLANEOUS PLANT	CUSTINST									
493		TOTAL DISTRIBUTION MAINTENANCE										
494												
495		TOTAL DISTRIBUTION EXPENSES										

IDAHO POWER COMPANY  
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	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	DISTRIBUTION FUNCTION							
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET LIGHTS	INSTALLATION CUST PREM
	SEC CUST	DEMAND	CUSTOMER					
450 ***TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***								
451 MAINTENANCE								
452 568-MT SUPERVISION & ENGINEERING	L-568							
453 569-MT STRUCTURES	T-352							
454 570-MT STATION EQUIPMENT	T-353							
455 571-MT OVERHEAD LINES	T-354-356							
456 573-MT MISCELLANEOUS PLANT	T-PLT							
457								
458 TOTAL TRANSMISSION MAINTENANCE								
459								
460 TOTAL TRANSMISSION EXPENSES								
461								
462 REGIONAL MARKET EXPENSES								
463 OPERATION								
464 575 / OPER TRANS MKT ADMIN - EIM	T-100							
465								
466 TOTAL REGIONAL MARKET EXPENSES								
467								
468 DISTRIBUTION EXPENSES								
469								
470 OPERATION								
471 580-OP SUPERVISION & ENGINEERING	L-580	183,021	105,910	52,490	74,030	1,568,096	13,683	249,747
472 581-OP LOAD DISPATCHING	D3601	433,634	86,189	42,717	175,399	295,232	15,873	11,329
473 582-OP STATION EXPENSES	D362							
474 583-OP OVERHEAD LINE EXPENSES	D-364-365		264,494	131,087				
475 584-OP UNDERGROUND LINE EXPENSES	D-366-367		148,653	73,674				
476 585-OP STREET LIGHTING & SIGNAL SYSTEMS	CUSTINST							46,840
477 586-OP METER EXPENSES	METER					6,300,993		
478 587-OP CUSTOMER INSTALLATIONS EXPENSE	CUSTINST							1,145,133
479 588-OP MISCELLANEOUS EXPENSES	D3601	375,044	74,544	36,945	151,700	255,342	13,729	9,798
480 589-OP RENTS	D3601	53,553	10,644	5,275	21,661	36,460	1,960	1,399
481 TOTAL DISTRIBUTION OPERATION								
482								
483 MAINTENANCE								
484 590-MT SUPERVISION & ENGINEERING	L-590	17	348	172	4	991	179	0
485 591-MT STRUCTURES	D361							
486 592-MT STATION EQUIPMENT	D362							
487 593-MT OVERHEAD LINES	D-364-365		1,516,069	751,385				
488 594-MT UNDERGROUND LINES	D-366-367		25,039	12,410				
489 595-MT LINE TRANSFORMERS	D368	21,844						
490 596-MT STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT						222,570	
491 597-MT METERS	METER					949,631		
492 598-MT MISCELLANEOUS PLANT	CUSTINST							132,362
493 TOTAL DISTRIBUTION MAINTENANCE								
494								
495 TOTAL DISTRIBUTION EXPENSES								



IDAHO POWER COMPANY  
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(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	- - -	CUSTOMER ACCOUNTING FUNCTION	- - -	*****	CUSTOMER INFORMATION FUNCTION	*****		
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	

450 \*\*\*TABLE 5 - OPERATION & MAINTENANCE EXPENSES \*\*\*

451 MAINTENANCE

452 568-MT	SUPERVISION & ENGINEERING	L-568
453 569-MT	STRUCTURES	T-352
454 570-MT	STATION EQUIPMENT	T-353
455 571-MT	OVERHEAD LINES	T-354-356
456 573-MT	MISCELLANEOUS PLANT	T-PLT

457  
458 TOTAL TRANSMISSION MAINTENANCE

459  
460 TOTAL TRANSMISSION EXPENSES

461  
462 REGIONAL MARKET EXPENSES

463 OPERATION

464 575 / OPER TRANS MKT ADMIN - EIM		T-100
--------------------------------------	--	-------

465  
466 TOTAL REGIONAL MARKET EXPENSES

467  
468 DISTRIBUTION EXPENSES

469  
470 OPERATION

471 580-OP	SUPERVISION & ENGINEERING	L-580
472 581-OP	LOAD DISPATCHING	D3601
473 582-OP	STATION EXPENSES	D362
474 583-OP	OVERHEAD LINE EXPENSES	D-364-365
475 584-OP	UNDERGROUND LINE EXPENSES	D-366-367
476 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	CUSTINST
477 586-OP	METER EXPENSES	METER
478 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST
479 588-OP	MISCELLANEOUS EXPENSES	D3601
480 589-OP	RENTS	D3601

481 TOTAL DISTRIBUTION OPERATION

482  
483 MAINTENANCE

484 590-MT	SUPERVISION & ENGINEERING	L-590
485 591-MT	STRUCTURES	D361
486 592-MT	STATION EQUIPMENT	D362
487 593-MT	OVERHEAD LINES	D-364-365
488 594-MT	UNDERGROUND LINES	D-366-367
489 595-MT	LINE TRANSFORMERS	D368
490 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT
491 597-MT	METERS	METER
492 598-MT	MISCELLANEOUS PLANT	CUSTINST

493 TOTAL DISTRIBUTION MAINTENANCE

494  
495 TOTAL DISTRIBUTION EXPENSES

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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	-	-	MISCELLANEOUS	-	-	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
450	***TABLE 5 - OPERATION & MAINTENANCE EXPENSES***						
451	MAINTENANCE						
452	568-MT	SUPERVISION & ENGINEERING	L-568				
453	569-MT	STRUCTURES	T-352				
454	570-MT	STATION EQUIPMENT	T-353				
455	571-MT	OVERHEAD LINES	T-354-356				
456	573-MT	MISCELLANEOUS PLANT	T-PLT				
457							
458		TOTAL TRANSMISSION MAINTENANCE					
459							
460		TOTAL TRANSMISSION EXPENSES					
461							
462	REGIONAL MARKET EXPENSES						
463	OPERATION						
464	575 / OPER TRANS MKT ADMIN - EIM		T-100				
465							
466		TOTAL REGIONAL MARKET EXPENSES					
467							
468	DISTRIBUTION EXPENSES						
469							
470	OPERATION						
471	580-OP	SUPERVISION & ENGINEERING	L-580				
472	581-OP	LOAD DISPATCHING	D3601				
473	582-OP	STATION EXPENSES	D362				
474	583-OP	OVERHEAD LINE EXPENSES	D-364-365				
475	584-OP	UNDERGROUND LINE EXPENSES	D-366-367				
476	585-OP	STREET LIGHTING & SIGNAL SYSTEMS	CUSTINST				
477	586-OP	METER EXPENSES	METER				
478	587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST				
479	588-OP	MISCELLANEOUS EXPENSES	D3601				
480	589-OP	RENTS	D3601				
481		TOTAL DISTRIBUTION OPERATION					
482							
483	MAINTENANCE						
484	590-MT	SUPERVISION & ENGINEERING	L-590				
485	591-MT	STRUCTURES	D361				
486	592-MT	STATION EQUIPMENT	D362				
487	593-MT	OVERHEAD LINES	D-364-365				
488	594-MT	UNDERGROUND LINES	D-366-367				
489	595-MT	LINE TRANSFORMERS	D368				
490	596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT				
491	597-MT	METERS	METER				
492	598-MT	MISCELLANEOUS PLANT	CUSTINST				
493		TOTAL DISTRIBUTION MAINTENANCE					
494							
495		TOTAL DISTRIBUTION EXPENSES					

**IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
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	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND POWER SUP	DEMAND TRANS	DEMAND SUBTRANS	DEMAND DIRECT
496	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>									
497										
498	CUSTOMER ACCOUNTING EXPENSES									
499	901-OP SUPERVISION	L-901	917,533							
500	902-OP METER READING	M-READ	1,768,247							
501	903-OP CUSTOMER RECORDS & COLLECTIONS	C-RECOR	16,063,116							
502	904-OP UNCOLLECTIBLE ACCOUNTS	UAR	5,389,398							
503	905-OP MISC CUSTOMER ACCOUNTS EXPENSE	D-902-904	(2,881)							
504	TOTAL CUSTOMER ACCOUNTING EXPENSES									
505	CUSTOMER SERVICES & INFORMATION EXPENSES									
506	907-OP SUPERVISION	L-907	1,103,115	162,234						
507	908-OP CUSTOMER ASSISTANCE									
508	ENERGY EFFICIENCY PROGRAMS	PI-H	1,673,332	1,673,332						
509	OTHER	C-ASSIST	9,704,522							
510	TOTAL ACCOUNT 908									
511	909-OP INFORMATION & INSTRUCTIONAL	C-ASSIST	285,588							
512	910-OP MISCELLANEOUS EXPENSES	D-908-909	775,684	111,286						
513	912 DEMO AND SELLING EXPENSES	NONE								
514	TOTAL CUST SERV & INFO EXPENSES									
515										
516	ADMINISTRATIVE & GENERAL EXPENSES									
517										
518	920-OP ADMINISTRATIVE & GENERAL SALARIES	LABOR	85,713,649	36,897,029	1,488,199			10,018,677		893
519	921-OP OFFICE SUPPLIES	LABOR	14,512,913	6,247,352	251,980			1,696,348		151
520	922-OP ADMIN & GENERAL EXP TRANSFERRED	LABOR	(38,641,443)	(16,633,925)	(670,910)			(4,516,622)		(403)
521	923-OP OUTSIDE SERVICES	LABOR	8,352,051	3,595,295	145,012			976,233		87
522										
523	924-OP PROPERTY INSURANCE									
524	PRODUCTION - STEAM	PI-S	395,764	395,764						
525	ALL RISK & MISCELLANEOUS	P110P-L20	4,725,542	1,483,795	159,944			1,149,860		67
526	TOTAL ACCOUNT 924									

IDAHO POWER COMPANY  
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	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
496 *** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***											
497											
498 CUSTOMER ACCOUNTING EXPENSES											
499 901-OP SUPERVISION	L-901										
500 902-OP METER READING	M-READ										
501 903-OP CUSTOMER RECORDS & COLLECTIONS	C-RECOR										
502 904-OP UNCOLLECTIBLE ACCOUNTS	UAR										
503 905-OP MISC CUSTOMER ACCOUNTS EXPENSE	D-902-904										
504 TOTAL CUSTOMER ACCOUNTING EXPENSES											
505 CUSTOMER SERVICES & INFORMATION EXPENSES											
506 907-OP SUPERVISION	L-907										
507 908-OP CUSTOMER ASSISTANCE											
508 ENERGY EFFICIENCY PROGRAMS	PI-H										
509 OTHER	C-ASSIST										
510 TOTAL ACCOUNT 908											
511 909-OP INFORMATION & INSTRUCTIONAL	C-ASSIST										
512 910-OP MISCELLANEOUS EXPENSES	D-908-909										
513 912 DEMO AND SELLING EXPENSES	NONE										
514 TOTAL CUST SERV & INFO EXPENSES											
515											
516 ADMINISTRATIVE & GENERAL EXPENSES											
517											
518 920-OP ADMINISTRATIVE & GENERAL SALARIES	LABOR	4,235,199	192,338		7,017,805	3,478,122	270,162	355,876	176,377	98,627	1,029,238
519 921-OP OFFICE SUPPLIES	LABOR	717,098	32,566		1,188,245	588,911	45,743	60,256	29,864	16,699	174,269
520 922-OP ADMIN & GENERAL EXP TRANSFERRED	LABOR	(1,909,313)	(86,710)		(3,163,768)	(1,568,008)	(121,794)	(160,436)	(79,514)	(44,463)	(464,001)
521 923-OP OUTSIDE SERVICES	LABOR	412,683	18,742		683,824	338,913	26,325	34,677	17,186	9,610	100,290
522											
523 924-OP PROPERTY INSURANCE											
524 PRODUCTION - STEAM	PI-S										
525 ALL RISK & MISCELLANEOUS	P110P-L20	371,927	17,345		454,258	225,137	28,387	102,182	50,643	28,319	295,523
526 TOTAL ACCOUNT 924											

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	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	* * * * * DISTRIBUTION FUNCTION * * * * *							
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
	SEC CUST	DEMAND	CUSTOMER				LIGHTS	CUST PREM
496 *** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***								
497								
498 CUSTOMER ACCOUNTING EXPENSES								
499 901-OP SUPERVISION	L-901							
500 902-OP METER READING	M-READ							
501 903-OP CUSTOMER RECORDS & COLLECTIONS	C-RECOR							
502 904-OP UNCOLLECTIBLE ACCOUNTS	UAR							
503 905-OP MISC CUSTOMER ACCOUNTS EXPENSE	D-902-904							
504 TOTAL CUSTOMER ACCOUNTING EXPENSES								
505 CUSTOMER SERVICES & INFORMATION EXPENSES								
506 907-OP SUPERVISION	L-907							
507 908-OP CUSTOMER ASSISTANCE								
508 ENERGY EFFICIENCY PROGRAMS	PI-H							
509 OTHER	C-ASSIST							
510 TOTAL ACCOUNT 908								
511 909-OP INFORMATION & INSTRUCTIONAL	C-ASSIST							
512 910-OP MISCELLANEOUS EXPENSES	D-908-909							
513 912 DEMO AND SELLING EXPENSES	NONE							
514 TOTAL CUST SERV & INFO EXPENSES								
515								
516 ADMINISTRATIVE & GENERAL EXPENSES								
517								
518 920-OP ADMINISTRATIVE & GENERAL SALARIES	LABOR	510,105	483,631	239,694	204,389	4,841,196	137,209	683,047
519 921-OP OFFICE SUPPLIES	LABOR	86,370	81,888	40,585	34,607	819,704	23,232	115,653
520 922-OP ADMIN & GENERAL EXP TRANSFERRED	LABOR	(229,965)	(218,031)	(108,059)	(92,143)	(2,182,509)	(61,857)	(307,932)
521 923-OP OUTSIDE SERVICES	LABOR	49,705	47,126	23,356	19,916	471,733	13,370	66,557
522								
523 924-OP PROPERTY INSURANCE								
524 PRODUCTION - STEAM	PI-S							
525 ALL RISK & MISCELLANEOUS	P110P-L20	146,465	29,112	14,428	59,243	99,718	5,361	3,827
526 TOTAL ACCOUNT 924								

**IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER	CUSTOMER	INFORMATION	FUNCTION	*****
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
496	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>								
497									
498	CUSTOMER ACCOUNTING EXPENSES								
499	901-OP	SUPERVISION	L-901	95,868	821,665				
500	902-OP	METER READING	M-READ	1,768,247					
501	903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR	16,063,116					
502	904-OP	UNCOLLECTIBLE ACCOUNTS	UAR		5,389,398				
503	905-OP	MISC CUSTOMER ACCOUNTS EXPENSE	D-902-904	(219)	(1,993)	(669)			
504	TOTAL CUSTOMER ACCOUNTING EXPENSES								
505	CUSTOMER SERVICES & INFORMATION EXPENSES								
506	907-OP	SUPERVISION	L-907			940,881			
507	908-OP	CUSTOMER ASSISTANCE							
508		ENERGY EFFICIENCY PROGRAMS	PI-H						
509		OTHER	C-ASSIST			9,704,522			
510	TOTAL ACCOUNT 908								
511	909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST			285,588			
512	910-OP	MISCELLANEOUS EXPENSES	D-908-909			664,398			
513	912	DEMO AND SELLING EXPENSES	NONE						
514	TOTAL CUST SERV & INFO EXPENSES								
515									
516	ADMINISTRATIVE & GENERAL EXPENSES								
517									
518	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR	972,917	8,338,669	4,044,248			
519	921-OP	OFFICE SUPPLIES	LABOR	164,733	1,411,892	684,766			
520	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR	(438,610)	(3,759,240)	(1,823,229)			
521	923-OP	OUTSIDE SERVICES	LABOR	94,802	812,531	394,077			
522									
523	924-OP	PROPERTY INSURANCE							
524		PRODUCTION - STEAM	PI-S						
525		ALL RISK & MISCELLANEOUS	P110P-L20						
526	TOTAL ACCOUNT 924								

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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
496	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>						
497							
498	CUSTOMER ACCOUNTING EXPENSES						
499	901-OP SUPERVISION	L-901					
500	902-OP METER READING	M-READ					
501	903-OP CUSTOMER RECORDS & COLLECTIONS	C-RECOR					
502	904-OP UNCOLLECTIBLE ACCOUNTS	UAR					
503	905-OP MISC CUSTOMER ACCOUNTS EXPENSE	D-902-904					
504	TOTAL CUSTOMER ACCOUNTING EXPENSES						
505	CUSTOMER SERVICES & INFORMATION EXPENSES						
506	907-OP SUPERVISION	L-907					
507	908-OP CUSTOMER ASSISTANCE						
508	ENERGY EFFICIENCY PROGRAMS	PI-H					
509	OTHER	C-ASSIST					
510	TOTAL ACCOUNT 908						
511	909-OP INFORMATION & INSTRUCTIONAL	C-ASSIST					
512	910-OP MISCELLANEOUS EXPENSES	D-908-909					
513	912 DEMO AND SELLING EXPENSES	NONE					
514	TOTAL CUST SERV & INFO EXPENSES						
515							
516	ADMINISTRATIVE & GENERAL EXPENSES						
517							
518	920-OP ADMINISTRATIVE & GENERAL SALARIES	LABOR					
519	921-OP OFFICE SUPPLIES	LABOR					
520	922-OP ADMIN & GENERAL EXP TRANSFERRED	LABOR					
521	923-OP OUTSIDE SERVICES	LABOR					
522							
523	924-OP PROPERTY INSURANCE						
524	PRODUCTION - STEAM	PI-S					
525	ALL RISK & MISCELLANEOUS	P110P-L20					
526	TOTAL ACCOUNT 924						

**IDAHO POWER COMPANY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND POWER SUP	DEMAND TRANS	DEMAND SUBTRANS	DEMAND DIRECT
527	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>									
528										
529	925-OP	INJURIES & DAMAGES	LABOR	11,358,326	4,889,402	197,208		1,327,623		118
530	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR	74,961,492	32,268,564	1,301,515		8,761,907		781
531	927-OP	FRANCHISE REQUIREMENTS	P101P							
532										
533	928-OP	REGULATORY COMMISSION EXPENSES								
534		FERC ADMIN ASSESS & SECURITIES								
535		CAPACITY RELATED	PI-SHO	2,711,513	2,477,997	233,516				
536		ENERGY RELATED	KWH-T	921,198		921,198				
537		FERC RATE CASE	T-PLT							
538		FERC ORDER 472	KWH-O	924,547		924,547				
539		FERC OTHER	T-100	104,606				104,606		
540		FERC - OREGON HYDRO FEE	PI-HO	260,632	232,325	28,307				
541		SEC EXPENSES	NONE							
542		IDAHO PUC -RATE CASE	OTH-EXP							
543		-OTHER	OTH-EXP	332,773						
544		OREGON PUC -RATE CASE	OTH-EXP							
545		-OTHER	OTH-EXP							
546		TOTAL ACCOUNT 928		5,255,269						
547										
548	929-OP	DUPLICATE CHARGES-CR	LABOR							
549	9301-OP	GENERAL ADVERTISING	LABOR							
550	9302-OP	MISCELLANEOUS EXPENSES	LABOR	3,870,432	1,666,099	67,200		452,397		40
551	931-OP	RENTS	L GEN-PLT							
552		TOTAL ADM & GEN OPERATION		170,503,996						
553										
554	935-MT	GENERAL PLANT MAINTENANCE	L GEN-PLT	7,723,111	2,654,017	250,103		1,798,027		106
555										
556		TOTAL ADMIN & GENERAL EXPENSES		178,227,107						
557										
558	416	MERCHANDISING EXPENSE	M-EXP	4,523,796		10,097				
559										
560		TOTAL OPER & MAINT EXPENSES		888,823,963	138,136,693	16,516,367	492,817,416	48,778,156		3,521
561										



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	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
527 *** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***											
528											
529 925-OP INJURIES & DAMAGES	LABOR	561,227	25,488		929,963	460,903	35,800	47,159	23,373	13,070	136,389
530 926-OP EMPLOYEE PENSIONS & BENEFITS	LABOR	3,703,924	168,210		6,137,472	3,041,817	236,272	311,234	154,252	86,255	900,127
531 927-OP FRANCHISE REQUIREMENTS	P101P										
532											
533 928-OP REGULATORY COMMISSION EXPENSES											
534 FERC ADMIN ASSESS & SECURITIES											
535 CAPACITY RELATED	PI-SHO										
536 ENERGY RELATED	KWH-T										
537 FERC RATE CASE	T-PLT										
538 FERC ORDER 472	KWH-O										
539 FERC OTHER	T-100										
540 FERC - OREGON HYDRO FEE	PI-HO										
541 SEC EXPENSES	NONE										
542 IDAHO PUC -RATE CASE	OTH-EXP										
543 -OTHER	OTH-EXP										
544 OREGON PUC -RATE CASE	OTH-EXP										
545 -OTHER	OTH-EXP										
546 TOTAL ACCOUNT 928											
547											
548 929-OP DUPLICATE CHARGES-CR	LABOR										
549 9301-OP GENERAL ADVERTISING	LABOR										
550 9302-OP MISCELLANEOUS EXPENSES	LABOR	191,242	8,685		316,892	157,056	12,199	16,070	7,964	4,454	46,476
551 931-OP RENTS	L GEN-PLT										
552 TOTAL ADM & GEN OPERATION											
553											
554 935-MT GENERAL PLANT MAINTENANCE	L GEN-PLT	581,579	27,123		710,320	352,045	44,388	159,781	79,190	44,282	462,107
555											
556 TOTAL ADMIN & GENERAL EXPENSES											
557											
558 416 MERCHANDISING EXPENSE	M-EXP				1,421,031	704,283	88,801	319,651	158,423	88,588	924,469
559											
560 TOTAL OPER & MAINT EXPENSES		17,911,499	814,448		47,352,090	23,468,360	1,634,918	1,990,925	986,730	551,763	5,757,998
561											

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	* * * * * DISTRIBUTION FUNCTION * * * * *							
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM
527 *** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***								
528								
529 925-OP INJURIES & DAMAGES	LABOR	67,596	64,088	31,763	27,085	641,530	18,182	90,514
530 926-OP EMPLOYEE PENSIONS & BENEFITS	LABOR	446,116	422,963	209,626	178,750	4,233,903	119,997	597,364
531 927-OP FRANCHISE REQUIREMENTS	P101P							
532								
533 928-OP REGULATORY COMMISSION EXPENSES								
534 FERC ADMIN ASSESS & SECURITIES								
535 CAPACITY RELATED	PI-SHO							
536 ENERGY RELATED	KWH-T							
537 FERC RATE CASE	T-PLT							
538 FERC ORDER 472	KWH-O							
539 FERC OTHER	T-100							
540 FERC - OREGON HYDRO FEE	PI-HO							
541 SEC EXPENSES	NONE							
542 IDAHO PUC -RATE CASE	OTH-EXP							
543 -OTHER	OTH-EXP							
544 OREGON PUC -RATE CASE	OTH-EXP							
545 -OTHER	OTH-EXP							
546 TOTAL ACCOUNT 928								
547								
548 929-OP DUPLICATE CHARGES-CR	LABOR							
549 9301-OP GENERAL ADVERTISING	LABOR							
550 9302-OP MISCELLANEOUS EXPENSES	LABOR	23,034	21,839	10,823	9,229	218,606	6,196	30,843
551 931-OP RENTS	L GEN-PLT							
552 TOTAL ADM & GEN OPERATION								
553								
554 935-MT GENERAL PLANT MAINTENANCE	L GEN-PLT	229,027	45,522	22,561	92,639	155,929	8,384	5,984
555								
556 TOTAL ADMIN & GENERAL EXPENSES								
557								
558 416 MERCHANDISING EXPENSE	M-EXP	458,180	91,068	45,135	185,328		16,772	11,970
559								
560 TOTAL OPER & MAINT EXPENSES		2,853,745	3,301,093	1,636,068	1,141,837	18,706,555	554,840	2,894,436
561								

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER	CUSTOMER	INFORMATION	FUNCTION	*****
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
527	*** TABLE 5 - OPERATION & MAINTENANCE EXPENSES ***								
528									
529	925-OP	INJURIES & DAMAGES	LABOR	128,926	1,104,997		535,923		
530	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR	850,871	7,292,644		3,536,926		
531	927-OP	FRANCHISE REQUIREMENTS	P101P						
532									
533	928-OP	REGULATORY COMMISSION EXPENSES							
534		FERC ADMIN ASSESS & SECURITIES							
535		CAPACITY RELATED	PI-SHO						
536		ENERGY RELATED	KWH-T						
537		FERC RATE CASE	T-PLT						
538		FERC ORDER 472	KWH-O						
539		FERC OTHER	T-100						
540		FERC - OREGON HYDRO FEE	PI-HO						
541		SEC EXPENSES	NONE						
542		IDAHO PUC -RATE CASE	OTH-EXP						
543		-OTHER	OTH-EXP						
544		OREGON PUC -RATE CASE	OTH-EXP						
545		-OTHER	OTH-EXP						
546		TOTAL ACCOUNT 928							
547									
548	929-OP	DUPLICATE CHARGES-CR	LABOR						
549	9301-OP	GENERAL ADVERTISING	LABOR						
550	9302-OP	MISCELLANEOUS EXPENSES	LABOR	43,932	376,536		182,620		
551	931-OP	RENTS	L GEN-PLT						
552		TOTAL ADM & GEN OPERATION							
553									
554	935-MT	GENERAL PLANT MAINTENANCE	L GEN-PLT						
555									
556		TOTAL ADMIN & GENERAL EXPENSES							
557									
558	416	MERCHANDISING EXPENSE	M-EXP						
559									
560		TOTAL OPER & MAINT EXPENSES		3,681,466	32,460,816	5,388,730	19,150,720		
561									

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
527	<b>*** TABLE 5 - OPERATION &amp; MAINTENANCE EXPENSES ***</b>						
528							
529	925-OP	INJURIES & DAMAGES	LABOR				
530	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR				
531	927-OP	FRANCHISE REQUIREMENTS	P101P				
532							
533	928-OP	REGULATORY COMMISSION EXPENSES					
534		FERC ADMIN ASSESS & SECURITIES					
535		CAPACITY RELATED	PI-SHO				
536		ENERGY RELATED	KWH-T				
537		FERC RATE CASE	T-PLT				
538		FERC ORDER 472	KWH-O				
539		FERC OTHER	T-100				
540		FERC - OREGON HYDRO FEE	PI-HO				
541		SEC EXPENSES	NONE				
542		IDAHO PUC -RATE CASE	OTH-EXP				
543		-OTHER	OTH-EXP			332,773	
544		OREGON PUC -RATE CASE	OTH-EXP				
545		-OTHER	OTH-EXP				
546		TOTAL ACCOUNT 928					
547							
548	929-OP	DUPLICATE CHARGES-CR	LABOR				
549	9301-OP	GENERAL ADVERTISING	LABOR				
550	9302-OP	MISCELLANEOUS EXPENSES	LABOR				
551	931-OP	RENTS	L GEN-PLT				
552		TOTAL ADM & GEN OPERATION					
553							
554	935-MT	GENERAL PLANT MAINTENANCE	L GEN-PLT				
555							
556		TOTAL ADMIN & GENERAL EXPENSES					
557							
558	416	MERCHANDISING EXPENSE	M-EXP				
559							
560		TOTAL OPER & MAINT EXPENSES				332,773	
561							

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
7	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
8			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
9										
562	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE***									
563										
564	DEPRECIATION EXPENSE									
565	310-316	STEAM PRODUCTION	PI-S	9,212,961	9,212,961					
566	330-336	HYDRAULIC PRODUCTION	PI-H	24,324,647	24,324,647					
567	340-346	OTHER PRODUCTION (BASELOAD)	PI-S	13,251,245	13,251,245					
568	340-346	OTHER PRODUCTION (PEAKERS)	PI-O	5,921,482		5,921,482				
569		TOTAL PRODUCTION PLANT		52,710,336						
570										
571	TRANSMISSION PLANT									
572	350	LAND & LAND RIGHTS	T-350	399,371				399,371		
573	352	STRUCTURES & IMPROVEMENTS	T-352	1,842,519				1,842,519		
574	353	STATION EQUIPMENT	T-353	9,871,275				9,869,626		1,650
575	354	TOWERS & FIXTURES	T-354	2,772,265				2,772,265		
576	355	POLES & FIXTURES	T-355	5,903,489				5,903,489		
577	356	OVERHEAD CONDUCTORS & DEVICES	T-356	3,930,824				3,930,806		18
578	359	ROADS & TRAILS	T-359	2,583				2,583		
579		TOTAL TRANSMISSION PLANT		24,722,326						
580										
581	DISTRIBUTION PLANT									
582	360	LAND & LAND RIGHTS	D360N	29,909						
583	361	STRUCTURES & IMPROVEMENTS	D361N	1,323,816						
584	362	STATION EQUIPMENT	D362N	6,442,540						
585	363	STORAGE BATTERY EQUIPMENT	PI-S	8,383,489	8,383,489					
586	364	POLES, TOWERS & FIXTURES	D364	6,133,059						
587	365	OVERHEAD CONDUCTORS & DEVICES	D365	3,477,165						
588	366	UNDERGROUND CONDUIT	D366	1,307,020						
589	367	UNDERGROUND CONDUCTORS & DEVICES	D367	7,813,424						
590	368	LINE TRANSFORMERS	D368	13,756,994						
591	369	SERVICES	SERVICE	1,118,272						
592	370	METERS	METER	5,718,060						
593	371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST	180,039						
594	373	STREET LIGHTING SYSTEMS	STLIGHT	208,773						
595		TOTAL DISTRIBUTION PLANT		55,892,559						

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
562	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE**										
563											
564	DEPRECIATION EXPENSE										
565	310-316	STEAM PRODUCTION	PI-S								
566	330-336	HYDRAULIC PRODUCTION	PI-H								
567	340-346	OTHER PRODUCTION (BASELOAD)	PI-S								
568	340-346	OTHER PRODUCTION (PEAKERS)	PI-O								
569	TOTAL PRODUCTION PLANT										
570											
571	TRANSMISSION PLANT										
572	350	LAND & LAND RIGHTS	T-350								
573	352	STRUCTURES & IMPROVEMENTS	T-352								
574	353	STATION EQUIPMENT	T-353								
575	354	TOWERS & FIXTURES	T-354								
576	355	POLES & FIXTURES	T-355								
577	356	OVERHEAD CONDUCTORS & DEVICES	T-356								
578	359	ROADS & TRAILS	T-359								
579	TOTAL TRANSMISSION PLANT										
580											
581	DISTRIBUTION PLANT										
582	360	LAND & LAND RIGHTS	D360N	29,909	0						
583	361	STRUCTURES & IMPROVEMENTS	D361N	1,311,337	12,478						
584	362	STATION EQUIPMENT	D362N	6,371,385	71,155						
585	363	STORAGE BATTERY EQUIPMENT	PI-S								
586	364	POLES, TOWERS & FIXTURES	D364		3,840,542	1,903,427	42,753				
587	365	OVERHEAD CONDUCTORS & DEVICES	D365		2,088,062	1,034,873	32,114				
588	366	UNDERGROUND CONDUIT	D366		621,627	308,087	158,384				
589	367	UNDERGROUND CONDUCTORS & DEVIC	D367		4,746,136	2,352,252	514,570				
590	368	LINE TRANSFORMERS	D368					2,255,892	1,118,052	625,195	6,524,314
591	369	SERVICES	SERVICE								
592	370	METERS	METER								
593	371	INSTALLATIONS ON CUSTOMER PREMISE	CUSTINST								
594	373	STREET LIGHTING SYSTEMS	STLIGHT								
595	TOTAL DISTRIBUTION PLANT										

1	IDAHO POWER COMPANY																
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION																
3	CLASS COST OF SERVICE STUDY																
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023																
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS																
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)									
7	* * * * * DISTRIBUTION FUNCTION * * * * *																
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION									
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM									
562	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE**																
563																	
564	DEPRECIATION EXPENSE																
565	310-316	STEAM PRODUCTION	PI-S														
566	330-336	HYDRAULIC PRODUCTION	PI-H														
567	340-346	OTHER PRODUCTION (BASELOAD)	PI-S														
568	340-346	OTHER PRODUCTION (PEAKERS)	PI-O														
569	TOTAL PRODUCTION PLANT																
570																	
571	TRANSMISSION PLANT																
572	350	LAND & LAND RIGHTS	T-350														
573	352	STRUCTURES & IMPROVEMENTS	T-352														
574	353	STATION EQUIPMENT	T-353														
575	354	TOWERS & FIXTURES	T-354														
576	355	POLES & FIXTURES	T-355														
577	356	OVERHEAD CONDUCTORS & DEVICES	T-356														
578	359	ROADS & TRAILS	T-359														
579	TOTAL TRANSMISSION PLANT																
580																	
581	DISTRIBUTION PLANT																
582	360	LAND & LAND RIGHTS	D360N														
583	361	STRUCTURES & IMPROVEMENTS	D361N														
584	362	STATION EQUIPMENT	D362N														
585	363	STORAGE BATTERY EQUIPMENT	PI-S														
586	364	POLES, TOWERS & FIXTURES	D364	231,568	114,769												
587	365	OVERHEAD CONDUCTORS & DEVICES	D365	215,374	106,742												
588	366	UNDERGROUND CONDUIT	D366	146,375	72,546												
589	367	UNDERGROUND CONDUCTORS & DEVIC	D367	134,036	66,430												
590	368	LINE TRANSFORMERS	D368	3,233,542													
591	369	SERVICES	SERVICE			1,118,272											
592	370	METERS	METER					5,718,060									
593	371	INSTALLATIONS ON CUSTOMER PREMISE	CUSTINST							180,039							
594	373	STREET LIGHTING SYSTEMS	STLIGHT					208,773									
595	TOTAL DISTRIBUTION PLANT																

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7		- - -	CUSTOMER ACCOUNTING FUNCTION			- - -	CUSTOMER INFORMATION FUNCTION *****			
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER					
9		READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
562	*** TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE *									
563										
564	DEPRECIATION EXPENSE									
565	310-316	STEAM PRODUCTION	PI-S							
566	330-336	HYDRAULIC PRODUCTION	PI-H							
567	340-346	OTHER PRODUCTION (BASELOAD)	PI-S							
568	340-346	OTHER PRODUCTION (PEAKERS)	PI-O							
569	TOTAL PRODUCTION PLANT									
570										
571	TRANSMISSION PLANT									
572	350	LAND & LAND RIGHTS	T-350							
573	352	STRUCTURES & IMPROVEMENTS	T-352							
574	353	STATION EQUIPMENT	T-353							
575	354	TOWERS & FIXTURES	T-354							
576	355	POLES & FIXTURES	T-355							
577	356	OVERHEAD CONDUCTORS & DEVICES	T-356							
578	359	ROADS & TRAILS	T-359							
579	TOTAL TRANSMISSION PLANT									
580										
581	DISTRIBUTION PLANT									
582	360	LAND & LAND RIGHTS	D360N							
583	361	STRUCTURES & IMPROVEMENTS	D361N							
584	362	STATION EQUIPMENT	D362N							
585	363	STORAGE BATTERY EQUIPMENT	PI-S							
586	364	POLES, TOWERS & FIXTURES	D364							
587	365	OVERHEAD CONDUCTORS & DEVICES	D365							
588	366	UNDERGROUND CONDUIT	D366							
589	367	UNDERGROUND CONDUCTORS & DEVIC	D367							
590	368	LINE TRANSFORMERS	D368							
591	369	SERVICES	SERVICE							
592	370	METERS	METER							
593	371	INSTALLATIONS ON CUSTOMER PREMISE	CUSTINST							
594	373	STREET LIGHTING SYSTEMS	STLIGHT							
595	TOTAL DISTRIBUTION PLANT									



			IDAHO POWER COMPANY															
			BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION															
			CLASS COST OF SERVICE STUDY															
			FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023															
			FUNCTIONALIZATION AND CLASSIFICATION OF COSTS															
			(A)	(AH)	(AI)	(AJ)				(AK)				(AL)	(AM)			
				-	-	-	-	-	-	-	-	-	-	-	-	-		
			ALLOCATOR	MISCELLANEOUS				REVENUE				OTHER	INC TAXES & REVENUES					
				DEMAND	ENERGY				CUSTOMER					TRANSFER				
562	*** TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE ***																	
563																		
564	DEPRECIATION EXPENSE																	
565	310-316	STEAM PRODUCTION	PI-S															
566	330-336	HYDRAULIC PRODUCTION	PI-H															
567	340-346	OTHER PRODUCTION (BASELOAD)	PI-S															
568	340-346	OTHER PRODUCTION (PEAKERS)	PI-O															
569	TOTAL PRODUCTION PLANT																	
570																		
571	TRANSMISSION PLANT																	
572	350	LAND & LAND RIGHTS	T-350															
573	352	STRUCTURES & IMPROVEMENTS	T-352															
574	353	STATION EQUIPMENT	T-353															
575	354	TOWERS & FIXTURES	T-354															
576	355	POLES & FIXTURES	T-355															
577	356	OVERHEAD CONDUCTORS & DEVICES	T-356															
578	359	ROADS & TRAILS	T-359															
579	TOTAL TRANSMISSION PLANT																	
580																		
581	DISTRIBUTION PLANT																	
582	360	LAND & LAND RIGHTS	D360N															
583	361	STRUCTURES & IMPROVEMENTS	D361N															
584	362	STATION EQUIPMENT	D362N															
585	363	STORAGE BATTERY EQUIPMENT	PI-S															
586	364	POLES, TOWERS & FIXTURES	D364															
587	365	OVERHEAD CONDUCTORS & DEVICES	D365															
588	366	UNDERGROUND CONDUIT	D366															
589	367	UNDERGROUND CONDUCTORS & DEVIC	D367															
590	368	LINE TRANSFORMERS	D368															
591	369	SERVICES	SERVICE															
592	370	METERS	METER															
593	371	INSTALLATIONS ON CUSTOMER PREMISES	CUSTOMER															
594	373	STREET LIGHTING SYSTEMS	STREET															
595	TOTAL DISTRIBUTION PLANT																	

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
7	ALLOCATOR	TOTALS	** PRODUCTION FUNCTION **				----- TRANSMISSION FUNCTION -----			
8			DEMAND			ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
9			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
596	*** TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE ***									
597										
598	GENERAL PLANT									
599 389	LAND & LAND RIGHTS	P-PTD								
600 390	STRUCTURES & IMPROVEMENTS	P-PTD	3,220,402	1,106,678	104,289		749,746			44
601 391	OFFICE FURNITURE & EQUIPMENT	P-PTD	6,688,226	2,298,383	216,590		1,557,094			91
602 392	TRANSPORTATION EQUIPMENT	P-PTD	69,294	23,813	2,244		16,132			1
603 393	STORES EQUIPMENT	P-PTD	217,528	74,753	7,044		50,643			3
604 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	773,482	265,804	25,048		180,075			11
605 395	LABORATORY EQUIPMENT	P-PTD	747,582	256,904	24,210		174,045			10
606 396	POWER OPERATED EQUIPMENT	P-PTD								
607 397	COMMUNICATIONS EQUIPMENT	P-PTD	5,370,906	1,845,691	173,930		1,250,407			73
608 398	MISCELLANEOUS EQUIPMENT	P-PTD	823,363	282,946	26,664		191,688			11
609	TOTAL GENERAL PLANT		17,910,784							
610										
611	DEPRECIATION ON DISALLOWED COSTS	P101P	(283,814)	(97,532)	(9,191)		(66,075)			(4)
612	TOTAL DEPRECIATION EXPENSE		150,952,190	61,229,781	6,492,310		28,824,414			1,909
613										
614	AMORTIZATION EXPENSE									
615	302/FRANCHISES AND CONSENTS	P101P	1,480,576	508,794	47,947		344,695			20
616	303/MISCELLANEOUS INTANGIBLE PLAN	PI-H	4,230,438	4,230,438						
617	ADJUSTMENTS, GAINS & LOSSES	P101P	14,385	4,943	466		3,349			0
618	TOTAL AMORTIZATION EXPENSE		5,725,400	4,744,176	48,412		348,044			20
619										
620	TOTAL DEPRECIATION & AMORTIZATION EXP		156,677,590	65,973,958	6,540,722		29,172,458			1,929
621										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	
		* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS	
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
596	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE**											
597												
598	GENERAL PLANT											
599	389	LAND & LAND RIGHTS	P-PTD									
600	390	STRUCTURES & IMPROVEMENTS	P-PTD	242,508	11,310	296,191	146,796	18,509	66,626	33,021	18,465	192,691
601	391	OFFICE FURNITURE & EQUIPMENT	P-PTD	503,648	23,488	615,138	304,871	38,440	138,371	68,579	38,348	400,186
602	392	TRANSPORTATION EQUIPMENT	P-PTD	5,218	243	6,373	3,159	398	1,434	711	397	4,146
603	393	STORES EQUIPMENT	P-PTD	16,381	764	20,007	9,916	1,250	4,500	2,230	1,247	13,016
604	394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	58,246	2,716	71,140	35,258	4,446	16,002	7,931	4,435	46,281
605	395	LABORATORY EQUIPMENT	P-PTD	56,296	2,625	68,758	34,077	4,297	15,467	7,665	4,286	44,731
606	396	POWER OPERATED EQUIPMENT	P-PTD									
607	397	COMMUNICATIONS EQUIPMENT	P-PTD	404,449	18,862	493,980	244,823	30,869	111,117	55,071	30,795	321,365
608	398	MISCELLANEOUS EQUIPMENT	P-PTD	62,002	2,892	75,727	37,532	4,732	17,034	8,442	4,721	49,265
609	TOTAL GENERAL PLANT											
610												
611	DEPRECIATION ON DISALLOWED COSTS		P101P	(21,372)	(997)	(26,103)	(12,937)	(1,631)	(5,872)	(2,910)	(1,627)	(16,982)
612	TOTAL DEPRECIATION EXPENSE			9,040,007	145,538	12,917,578	6,402,133	849,132	2,620,571	1,298,792	726,262	7,579,012
613												
614	AMORTIZATION EXPENSE											
615	302/FRANCHISES AND CONSENTS		P101P	111,493	5,200	136,173	67,489	8,510	30,631	15,181	8,489	88,589
616	303/MISCELLANEOUS INTANGIBLE PLAN		PI-H									
617	ADJUSTMENTS, GAINS & LOSSES		P101P	1,083	51	1,323	656	83	298	148	82	861
618	TOTAL AMORTIZATION EXPENSE			112,576	5,250	137,497	68,145	8,592	30,929	15,329	8,572	89,450
619												
620	TOTAL DEPRECIATION & AMORTIZATION EXP			9,152,583	150,788	13,055,074	6,470,278	857,725	2,651,500	1,314,121	734,834	7,668,462
621												

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)		
7		*	*	*	*	*	*	*	*	*
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION		
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM		
596	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE *									
597										
598	GENERAL PLANT									
599	389	LAND & LAND RIGHTS	P-PTD							
600	390	STRUCTURES & IMPROVEMENTS	P-PTD	95,500	18,982	9,408	38,629	65,020	3,496	2,495
601	391	OFFICE FURNITURE & EQUIPMENT	P-PTD	198,338	39,422	19,538	80,225	135,035	7,260	5,182
602	392	TRANSPORTATION EQUIPMENT	P-PTD	2,055	408	202	831	1,399	75	54
603	393	STORES EQUIPMENT	P-PTD	6,451	1,282	635	2,609	4,392	236	169
604	394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD	22,937	4,559	2,260	9,278	15,617	840	599
605	395	LABORATORY EQUIPMENT	P-PTD	22,169	4,406	2,184	8,967	15,094	812	579
606	396	POWER OPERATED EQUIPMENT	P-PTD							
607	397	COMMUNICATIONS EQUIPMENT	P-PTD	159,273	31,657	15,690	64,424	108,438	5,830	4,161
608	398	MISCELLANEOUS EQUIPMENT	P-PTD	24,417	4,853	2,405	9,876	16,624	894	638
609	TOTAL GENERAL PLANT									
610										
611	DEPRECIATION ON DISALLOWED COSTS		P101P	(8,416)	(1,673)	(829)	(3,404)	(5,730)	(308)	(220)
612	TOTAL DEPRECIATION EXPENSE			3,756,265	831,250	411,979	1,329,707	6,073,947	227,907	193,695
613										
614	AMORTIZATION EXPENSE									
615	302/FRANCHISES AND CONSENTS		P101P	43,906	8,727	4,325	17,759	29,893	1,607	1,147
616	303/MISCELLANEOUS INTANGIBLE PLAN		PI-H							
617	ADJUSTMENTS, GAINS & LOSSES		P101P	427	85	42	173	290	16	11
618	TOTAL AMORTIZATION EXPENSE			44,333	8,812	4,367	17,932	30,183	1,623	1,158
619										
620	TOTAL DEPRECIATION & AMORTIZATION EXP			3,800,597	840,062	416,347	1,347,639	6,104,130	229,530	194,854
621										

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
7		-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	*****	CUSTOMER INFORMATION FUNCTION *****
8	ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER				
9		READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
596	***TABLE 6 - DEPRECIATION & AMORTIZATION EXPENSE *									
597										
598	GENERAL PLANT									
599	389	LAND & LAND RIGHTS		P-PTD						
600	390	STRUCTURES & IMPROVEMENTS		P-PTD						
601	391	OFFICE FURNITURE & EQUIPMENT		P-PTD						
602	392	TRANSPORTATION EQUIPMENT		P-PTD						
603	393	STORES EQUIPMENT		P-PTD						
604	394	TOOLS, SHOP & GARAGE EQUIPMENT		P-PTD						
605	395	LABORATORY EQUIPMENT		P-PTD						
606	396	POWER OPERATED EQUIPMENT		P-PTD						
607	397	COMMUNICATIONS EQUIPMENT		P-PTD						
608	398	MISCELLANEOUS EQUIPMENT		P-PTD						
609		TOTAL GENERAL PLANT								
610										
611		DEPRECIATION ON DISALLOWED COSTS		P101P						
612		TOTAL DEPRECIATION EXPENSE								
613										
614	AMORTIZATION EXPENSE									
615		302/FRANCHISES AND CONSENTS		P101P						
616		303/MISCELLANEOUS INTANGIBLE PLAN		PI-H						
617		ADJUSTMENTS, GAINS & LOSSES		P101P						
618		TOTAL AMORTIZATION EXPENSE								
619										
620		TOTAL DEPRECIATION & AMORTIZATION EXP								
621										

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
596	<b>*** TABLE 6 - DEPRECIATION &amp; AMORTIZATION EXPENSE *</b>						
597							
598	GENERAL PLANT						
599 389	LAND & LAND RIGHTS	P-PTD					
600 390	STRUCTURES & IMPROVEMENTS	P-PTD					
601 391	OFFICE FURNITURE & EQUIPMENT	P-PTD					
602 392	TRANSPORTATION EQUIPMENT	P-PTD					
603 393	STORES EQUIPMENT	P-PTD					
604 394	TOOLS, SHOP & GARAGE EQUIPMENT	P-PTD					
605 395	LABORATORY EQUIPMENT	P-PTD					
606 396	POWER OPERATED EQUIPMENT	P-PTD					
607 397	COMMUNICATIONS EQUIPMENT	P-PTD					
608 398	MISCELLANEOUS EQUIPMENT	P-PTD					
609	TOTAL GENERAL PLANT						
610							
611	DEPRECIATION ON DISALLOWED COSTS	P101P					
612	TOTAL DEPRECIATION EXPENSE						
613							
614	AMORTIZATION EXPENSE						
615	302/FRANCHISES AND CONSENTS	P101P					
616	303/MISCELLANEOUS INTANGIBLE PLAN	PI-H					
617	ADJUSTMENTS, GAINS & LOSSES	P101P					
618	TOTAL AMORTIZATION EXPENSE						
619							
620	TOTAL DEPRECIATION & AMORTIZATION EXP						
621							

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
622	***TABLE 7 - TAXES OTHER THAN INCOME TAXES***									
623										
624	TAXES OTHER THAN INCOME									
625	FEDERAL TAXES	NONE								
626	FICA	LABOR								
627	FUTA	LABOR								
628	LESS PAYROLL DEDUCTION	LABOR								
629										
630	STATE TAXES									
631	AD VALOREM TAXES									
632	JIM BRIDGER STATION	PI-S								
633	VALMY	PI-S								
634	OTHER-PRODUCTION PLANT	PI-HO	7,828,388	6,978,158	850,229					
635	OTHER-TRANSMISSION PLANT	T-PLT	6,547,695					6,547,311		384
636	OTHER-DISTRIBUTION PLANT	D3602N	8,749,620							
637	OTHER-GENERAL PLANT	GEN-PLT	1,735,401	596,364	56,199			404,021		24
638										
639	LICENSES - HYDRO PROJECTS	PI-H	4,067	4,067						
640										
641	REGULATORY COMMISSION FEES									
642	STATE OF IDAHO	P101P	2,616,251	899,064	84,724			609,093		36
643	STATE OF OREGON	NONE								
644										
645	FRANCHISE TAXES									
646	STATE OF OREGON	NONE								
647										
648	OTHER STATE TAXES									
649	UNEMPLOYMENT TAXES	NONE								
650	HYDRO GENERATION TAX	KWH-TAX	1,806,165							
651	IRRIGATION-PIC	KWH-TAX	313,744							
652										
653	TOTAL TAXES OTHER THAN INCOME		29,601,331	8,477,654	991,152			7,560,424		444

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

6		(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
7			* * * * *	* * * * *	* * * * *	* * * * *	DISTRIBUTION FUNCTION			* * * * *	* * * * *	* * * * *
8		ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
9			GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
622	***TABLE 7 - TAXES OTHER THAN INCOME TAXES***											
623												
624	TAXES OTHER THAN INCOME											
625	FEDERAL TAXES	NONE										
626	FICA	LABOR										
627	FUTA	LABOR										
628	LESS PAYROLL DEDUCTION	LABOR										
629												
630	STATE TAXES											
631	AD VALOREM TAXES											
632	JIM BRIDGER STATION	PI-S										
633	VALMY	PI-S										
634	OTHER-PRODUCTION PLANT	PI-HO										
635	OTHER-TRANSMISSION PLANT	T-PLT										
636	OTHER-DISTRIBUTION PLANT	D3602N	1,548,179	16,510		2,115,783	1,048,612	132,217	475,930	235,878	131,899	1,376,448
637	OTHER-GENERAL PLANT	GEN-PLT	130,682	6,095		159,611	79,105	9,974	35,903	17,794	9,950	103,837
638												
639	LICENSES - HYDRO PROJECTS	PI-H										
640												
641	REGULATORY COMMISSION FEES											
642	STATE OF IDAHO	P101P	197,013	9,188		240,625	119,257	15,037	54,127	26,826	15,001	156,542
643	STATE OF OREGON	NONE										
644												
645	FRANCHISE TAXES											
646	STATE OF OREGON	NONE										
647												
648	OTHER STATE TAXES											
649	UNEMPLOYMENT TAXES	NONE										
650	HYDRO GENERATION TAX	KWH-TAX										
651	IRRIGATION-PIC	KWH-TAX										
652												
653	TOTAL TAXES OTHER THAN INCOME		1,875,874	31,792		2,516,018	1,246,974	157,228	565,960	280,498	156,850	1,636,826



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IDAHO POWER COMPANY

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CLASS COST OF SERVICE STUDY

FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023

FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)

(S)

(T)

(U)

(V)

(W)

(X)

(Y)

\* \* \* \* \*

DISTRIBUTION FUNCTION

\* \* \* \* \*

ALLOCATOR

LINE TRANS

SEC LINES

SEC LINES

SERVICES

METERS

STREET

INSTALLATION

SEC CUST

DEMAND

CUSTOMER

LIGHTS

CUST PREM

\*\*\*TABLE 7 - TAXES OTHER THAN INCOME TAXES\*\*\*

TAXES OTHER THAN INCOME

FEDERAL TAXES

FICA

FUTA

LESS PAYROLL DEDUCTION

STATE TAXES

AD VALOREM TAXES

JIM BRIDGER STATION

VALMY

OTHER-PRODUCTION PLANT

OTHER-TRANSMISSION PLANT

OTHER-DISTRIBUTION PLANT

OTHER-GENERAL PLANT

LICENSES - HYDRO PROJECTS

REGULATORY COMMISSION FEES

STATE OF IDAHO

STATE OF OREGON

FRANCHISE TAXES

STATE OF OREGON

OTHER STATE TAXES

UNEMPLOYMENT TAXES

HYDRO GENERATION TAX

IRRIGATION-PIC

TOTAL TAXES OTHER THAN INCOME

NONE

LABOR

LABOR

LABOR

PI-S

PI-S

PI-HO

T-PLT

D3602N

GEN-PLT

PI-H

P101P

NONE

NONE

NONE

KWH-TAX

KWH-TAX

811,234

161,241

79,913

328,134

552,314

29,696

21,194

682,187

135,592

67,201

275,936

464,455

24,972

17,823

51,463

10,229

5,070

20,816

35,038

1,884

1,345

77,584

15,421

7,643

31,382

52,822

2,840

2,027

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

622 \*\*\*TABLE 7 - TAXES OTHER THAN INCOME TAXES\*\*\*

623	TAXES OTHER THAN INCOME	
625	FEDERAL TAXES	NONE
626	FICA	LABOR
627	FUTA	LABOR
628	LESS PAYROLL DEDUCTION	LABOR
629		
630	STATE TAXES	
631	AD VALOREM TAXES	
632	JIM BRIDGER STATION	PI-S
633	VALMY	PI-S
634	OTHER-PRODUCTION PLANT	PI-HO
635	OTHER-TRANSMISSION PLANT	T-PLT
636	OTHER-DISTRIBUTION PLANT	D3602N
637	OTHER-GENERAL PLANT	GEN-PLT
638		
639	LICENSES - HYDRO PROJECTS	PI-H
640		
641	REGULATORY COMMISSION FEES	
642	STATE OF IDAHO	P101P
643	STATE OF OREGON	NONE
644		
645	FRANCHISE TAXES	
646	STATE OF OREGON	NONE
647		
648	OTHER STATE TAXES	
649	UNEMPLOYMENT TAXES	NONE
650	HYDRO GENERATION TAX	KWH-TAX
651	IRRIGATION-PIC	KWH-TAX
652		
653	TOTAL TAXES OTHER THAN INCOME	

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
622	***TABLE 7 - TAXES OTHER THAN INCOME TAXES***						
623							
624	TAXES OTHER THAN INCOME						
625	FEDERAL TAXES	NONE					
626	FICA	LABOR					
627	FUTA	LABOR					
628	LESS PAYROLL DEDUCTION	LABOR					
629							
630	STATE TAXES						
631	AD VALOREM TAXES						
632	JIM BRIDGER STATION	PI-S					
633	VALMY	PI-S					
634	OTHER-PRODUCTION PLANT	PI-HO					
635	OTHER-TRANSMISSION PLANT	T-PLT					
636	OTHER-DISTRIBUTION PLANT	D3602N					
637	OTHER-GENERAL PLANT	GEN-PLT					
638							
639	LICENSES - HYDRO PROJECTS	PI-H					
640							
641	REGULATORY COMMISSION FEES						
642	STATE OF IDAHO	P101P					
643	STATE OF OREGON	NONE					
644							
645	FRANCHISE TAXES						
646	STATE OF OREGON	NONE					
647							
648	OTHER STATE TAXES						
649	UNEMPLOYMENT TAXES	NONE					
650	HYDRO GENERATION TAX	KWH-TAX	1,806,165				
651	IRRIGATION-PIC	KWH-TAX	313,744				
652							
653	TOTAL TAXES OTHER THAN INCOME		2,119,909				

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND POWER SUP	DEMAND TRANS	DEMAND SUBTRANS	DEMAND DIRECT
654	<b>*** TABLE 8 - REGULATORY DEBITS/CREDITS ***</b>									
655										
656	REGULAT	STATE OF IDAHO - Siemens LTP Amort	PI-OS	1,075,354	754,483	320,871				
657	REGULAT	STATE OF IDAHO - Cloud Computing	P101P	201,265	69,164	6,518		46,857		3
658	REGULAT	STATE OF IDAHO - Wildfire Mitigation	P-PTD	1,865,167	640,957	60,401		434,232		25
659										
660	<b>*** TABLE 9 - INCOME TAXES ***</b>									
661										
662	410/411	NET PROVISION FOR DEFER INC TAXES								
663		ACCOUNT #282 - RELATED	P111P	(15,882,182)	(5,512,531)	(519,478)		(3,734,595)		(219)
664		ACCOUNTS #190 & #283 - RELATED	ADIT	(1,242,756)	(372,378)	(35,091)		(252,277)		(15)
665		TOTAL NET PROVISION FOR DEFER IT		(17,124,938)	(5,884,910)	(554,569)		(3,986,872)		(234)
666										
667	411.4	INVESTMENT TAX CREDIT ADJUSTMENT	P111P	23,926,476	8,304,618	782,592		5,626,160		330
668										
669	SUMMARY OF INCOME TAXES									
670										
671	TOTAL	FEDERAL INCOME TAX	TAX-REV	39,040,245						
672										
673	STATE INCOME TAXES									
674		STATE OF IDAHO	TAX-REV	(3,747,326)						
675		STATE OF OREGON	TAX-REV	685,175						
676		OTHER STATES	TAX-REV	233,716						
677		TOTAL STATE INCOME TAXES		(2,828,435)						
678										
679	TOTAL OPERATING EXPENSES			1,119,191,586						
680										
681	NET OPERATING INCOME			287,458,444						
682										
683					Base-load	Peak				

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	***** DISTRIBUTION FUNCTION *****										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
654 ***TABLE 8 - REGULATORY DEBITS/CREDITS***											
655											
656 REGULAT	STATE OF IDAHO - Siemens LTP Amort	PI-OS									
657 REGULAT	STATE OF IDAHO - Cloud Computing	P101P	15,156	707	18,511	9,174	1,157	4,164	2,064	1,154	12,043
658 REGULAT	STATE OF IDAHO - Wildfire Mitigation	P-PTD	140,454	6,550	171,546	85,020	10,720	38,588	19,125	10,694	111,601
659											
660 ***TABLE 9 - INCOME TAXES***											
661											
662 410/411 NET PROVISION FOR DEFER INC TAXES											
663 ACCOUNT #282 - RELATED	P111P	(1,090,022)	(15,161)		(1,475,372)	(731,215)	(92,197)	(331,874)	(164,482)	(91,975)	(959,821)
664 ACCOUNTS #190 & #283 - RELATED	ADIT	(73,632)	(1,024)		(172,824)	(85,654)	(6,228)	(25,372)	(12,575)	(6,213)	(73,926)
665 TOTAL NET PROVISION FOR DEFER IT		(1,163,654)	(16,185)		(1,648,196)	(816,869)	(98,425)	(357,246)	(177,056)	(98,188)	(1,033,747)
666											
667 411.4 INVESTMENT TAX CREDIT ADJUSTMENT	P111P	1,642,116	22,840		2,222,644	1,101,574	138,894	499,968	247,791	138,561	1,445,968
668											
669 SUMMARY OF INCOME TAXES											
670											
671 TOTAL FEDERAL INCOME TAX	TAX-REV										
672											
673 STATE INCOME TAXES											
674 STATE OF IDAHO	TAX-REV										
675 STATE OF OREGON	TAX-REV										
676 OTHER STATES	TAX-REV										
677 TOTAL STATE INCOME TAXES											
678											
679 TOTAL OPERATING EXPENSES											
680											
681 NET OPERATING INCOME											
682											
683											

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(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
ALLOCATOR	LINE TRANS SEC CUST	SEC LINES DEMAND	SEC LINES CUSTOMER	SERVICES	METERS	STREET LIGHTS	INSTALLATION CUST PREM

654 \*\*\*TABLE 8 - REGULATORY DEBITS/CREDITS\*\*\*

655

656 REGULAT	STATE OF IDAHO - Siemens LTP Amort	PI-OS							
657 REGULAT	STATE OF IDAHO - Cloud Computing	P101P	5,968	1,186	588	2,414	4,064	218	156
658 REGULAT	STATE OF IDAHO - Wildfire Mitigation	P-PTD	55,311	10,994	5,449	22,373	37,658	2,025	1,445

660 \*\*\*TABLE 9 - INCOME TAXES\*\*\*

662	410/411	NET PROVISION FOR DEFER INC TAXES								
663		ACCOUNT #282 - RELATED	P111P	(475,701)	(94,551)	(46,861)	(192,415)	(323,872)	(17,413)	(12,428)
664		ACCOUNTS #190 & #283 - RELATED	ADIT	(36,639)	(18,721)	(9,279)	(36,739)	(21,894)	(1,411)	(864)
665		TOTAL NET PROVISION FOR DEFER IT		(512,340)	(113,272)	(56,139)	(229,154)	(345,766)	(18,824)	(13,292)
667	411.4	INVESTMENT TAX CREDIT ADJUSTMENT	P111P	716,642	142,440	70,595	289,873	487,913	26,233	18,723
669		SUMMARY OF INCOME TAXES								
671		TOTAL FEDERAL INCOME TAX	TAX-REV							
673		STATE INCOME TAXES								
674		STATE OF IDAHO	TAX-REV							
675		STATE OF OREGON	TAX-REV							
676		OTHER STATES	TAX-REV							
677		TOTAL STATE INCOME TAXES								

679 TOTAL OPERATING EXPENSES

681 NET OPERATING INCOME

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(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
- - - CUSTOMER ACCOUNTING FUNCTION - - - ***** CUSTOMER INFORMATION FUNCTION *****								
ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER				
READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	

654 \*\*\*TABLE 8 - REGULATORY DEBITS/CREDITS\*\*\*

655		
656	REGULAT	STATE OF IDAHO - Siemens LTP Amort
657	REGULAT	STATE OF IDAHO - Cloud Computing
658	REGULAT	STATE OF IDAHO - Wildfire Mitigation

659  
660 \*\*\*TABLE 9 - INCOME TAXES\*\*\*

661		
662	410/411	NET PROVISION FOR DEFER INC TAXES
663		ACCOUNT #282 - RELATED
664		ACCOUNTS #190 & #283 - RELATED
665		TOTAL NET PROVISION FOR DEFER IT
666		
667	411.4	INVESTMENT TAX CREDIT ADJUSTMENT

668		
669		SUMMARY OF INCOME TAXES
670		
671		TOTAL FEDERAL INCOME TAX
672		
673		STATE INCOME TAXES
674		STATE OF IDAHO
675		STATE OF OREGON
676		OTHER STATES
677		TOTAL STATE INCOME TAXES

678  
679 TOTAL OPERATING EXPENSES  
680  
681 NET OPERATING INCOME  
682  
683

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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
654	***TABLE 8 - REGULATORY DEBITS/CREDITS***						
655							
656	REGULAT	STATE OF IDAHO - Siemens LTP Amort	PI-OS				
657	REGULAT	STATE OF IDAHO - Cloud Computing	P101P				
658	REGULAT	STATE OF IDAHO - Wildfire Mitigation	P-PTD				
659							
660	***TABLE 9 - INCOME TAXES***						
661							
662	410/411	NET PROVISION FOR DEFER INC TAXES					
663		ACCOUNT #282 - RELATED	P111P				
664		ACCOUNTS #190 & #283 - RELATED	ADIT				
665		TOTAL NET PROVISION FOR DEFER IT					
666							
667	411.4	INVESTMENT TAX CREDIT ADJUSTMENT	P111P				
668							
669	SUMMARY OF INCOME TAXES						
670							
671	TOTAL	FEDERAL INCOME TAX	TAX-REV				39,040,245
672							
673	STATE INCOME TAXES						
674		STATE OF IDAHO	TAX-REV				(3,747,326)
675		STATE OF OREGON	TAX-REV				685,175
676		OTHER STATES	TAX-REV				233,716
677		TOTAL STATE INCOME TAXES					
678							
679	TOTAL OPERATING EXPENSES						
680							
681	NET OPERATING INCOME						
682							
683							



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	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
684	<b>***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOCATOR***</b>									
685	STEAM POWER GENERATION									
686	OPERATION									
687	500 / SUPERVISION & ENGINEERING	L-500	255,277	255,277						
688	501 / FUEL	PI-S	2,455,198	2,455,198						
689	502 / STEAM EXPENSES									
690	LABOR	PI-S	1,542,164	1,542,164						
691	OTHER	PI-S								
692	TOTAL ACCOUNT 502									
693	505 / ELECTRIC EXPENSES									
694	LABOR	PI-S	600,571	600,571						
695	OTHER	PI-S	3,215,661	3,215,661						
696	TOTAL ACCOUNT 505									
697	506 / MISCELLANEOUS EXPENSES									
698	507 / RENTS									
699	STEAM OPERATION EXPENSES		8,068,870							
700										
701	MAINTENANCE									
702	510 / SUPERVISION & ENGINEERING	L-510								
703	511 / STRUCTURES	PI-S	631	631						
704	512 / BOILER PLANT									
705	LABOR	PI-S	3,821,200	3,821,200						
706	OTHER	PI-S								
707	TOTAL ACCOUNT 512									
708	513 / ELECTRIC PLANT									
709	LABOR	PI-S	1,460,523	1,460,523						
710	OTHER	PI-S								
711	TOTAL ACCOUNT 513									
712	514 / MISCELLANEOUS STEAM PLANT	PI-S	2,342,261	2,342,261						
713	STEAM MAINTENANCE EXPENSES									
714	TOTAL STEAM GENERATION EXPENSES		15,693,485							
715										
716	HYDRAULIC POWER GENERATION									
717	535-OP SUPERVISION & ENGINEERING	L-535	4,061,414	4,061,414						
718	536-OP WATER FOR POWER	PI-H	828,021	828,021						
719	537-OP HYDRAULIC EXPENSES	PI-H	6,006,734	6,006,734						
720	538-OP ELECTRIC EXPENSES	PI-H	1,448,837	1,448,837						
721	539-OP MISCELLANEOUS EXPENSES	PI-H	3,262,471	3,262,471						
722	540-OP RENTS									
723	TOTAL HYDRAULIC OPERATION EXPENSES									
724	541-MT SUPERVISION & ENGINEERING	L-541	86,513	86,513						
725	542-MT STRUCTURES	PI-H	554,103	554,103						
726	543-MT RESERVOIRS, DAMS & WATERWAYS	PI-H	244,475	244,475						
727	544-MT ELECTRIC PLANT	PI-H	1,725,993	1,725,993						
728	545-MT MISCELLANEOUS HYDRAULIC PLANT	PI-H	2,075,350	2,075,350						
729	TOTAL HYDRAULIC MAINTENANCE EXPENSES									
730	TOTAL HYDRAULIC GENERATION EXPENSES		20,293,911							

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	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
684	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.										
685	STEAM POWER GENERATION										
686	OPERATION										
687	500 / SUPERVISION & ENGINEERING	L-500									
688	501 / FUEL	PI-S									
689	502 / STEAM EXPENSES										
690	LABOR	PI-S									
691	OTHER	PI-S									
692	TOTAL ACCOUNT 502										
693	505 / ELECTRIC EXPENSES										
694	LABOR	PI-S									
695	OTHER	PI-S									
696	TOTAL ACCOUNT 505										
697	506 / MISCELLANEOUS EXPENSES	PI-S									
698	507 / RENTS	PI-S									
699	STEAM OPERATION EXPENSES										
700											
701	MAINTENANCE										
702	510 / SUPERVISION & ENGINEERING	L-510									
703	511 / STRUCTURES	PI-S									
704	512 / BOILER PLANT										
705	LABOR	PI-S									
706	OTHER	PI-S									
707	TOTAL ACCOUNT 512										
708	513 / ELECTRIC PLANT										
709	LABOR	PI-S									
710	OTHER	PI-S									
711	TOTAL ACCOUNT 513										
712	514 / MISCELLANEOUS STEAM PLANT	PI-S									
713	STEAM MAINTENANCE EXPENSES										
714	TOTAL STEAM GENERATION EXPENSES										
715											
716	HYDRAULIC POWER GENERATION										
717	535-OP SUPERVISION & ENGINEERING	L-535									
718	536-OP WATER FOR POWER	PI-H									
719	537-OP HYDRAULIC EXPENSES	PI-H									
720	538-OP ELECTRIC EXPENSES	PI-H									
721	539-OP MISCELLANEOUS EXPENSES	PI-H									
722	540-OP RENTS										
723	TOTAL HYDRAULIC OPERATION EXPENSES										
724	541-MT SUPERVISION & ENGINEERING	L-541									
725	542-MT STRUCTURES	PI-H									
726	543-MT RESERVOIRS, DAMS & WATERWAYS	PI-H									
727	544-MT ELECTRIC PLANT	PI-H									
728	545-MT MISCELLANEOUS HYDRAULIC PLANT	PI-H									
729	TOTAL HYDRAULIC MAINTENANCE EXPENSES										
730	TOTAL HYDRAULIC GENERATION EXPENSES										

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)		
7		*	*	*	*	*	*	*	*	*
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	DISTRIBUTION FUNCTION	SERVICES	METERS	STREET	INSTALLATION	
9		SEC CUST	DEMAND	CUSTOMER				LIGHTS	CUST PREM	
684	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.									
685	STEAM POWER GENERATION									
686	OPERATION									
687	500 / SUPERVISION & ENGINEERING	L-500								
688	501 / FUEL	PI-S								
689	502 / STEAM EXPENSES									
690	LABOR	PI-S								
691	OTHER	PI-S								
692	TOTAL ACCOUNT 502									
693	505 / ELECTRIC EXPENSES									
694	LABOR	PI-S								
695	OTHER	PI-S								
696	TOTAL ACCOUNT 505									
697	506 / MISCELLANEOUS EXPENSES									
698	507 / RENTS									
699	STEAM OPERATION EXPENSES									
700										
701	MAINTENANCE									
702	510 / SUPERVISION & ENGINEERING	L-510								
703	511 / STRUCTURES	PI-S								
704	512 / BOILER PLANT									
705	LABOR	PI-S								
706	OTHER	PI-S								
707	TOTAL ACCOUNT 512									
708	513 / ELECTRIC PLANT									
709	LABOR	PI-S								
710	OTHER	PI-S								
711	TOTAL ACCOUNT 513									
712	514 / MISCELLANEOUS STEAM PLANT									
713	STEAM MAINTENANCE EXPENSES									
714	TOTAL STEAM GENERATION EXPENSES									
715										
716	HYDRAULIC POWER GENERATION									
717	535-OP SUPERVISION & ENGINEERING	L-535								
718	536-OP WATER FOR POWER	PI-H								
719	537-OP HYDRAULIC EXPENSES	PI-H								
720	538-OP ELECTRIC EXPENSES	PI-H								
721	539-OP MISCELLANEOUS EXPENSES	PI-H								
722	540-OP RENTS									
723	TOTAL HYDRAULIC OPERATION EXPENSES									
724	541-MT SUPERVISION & ENGINEERING	L-541								
725	542-MT STRUCTURES	PI-H								
726	543-MT RESERVOIRS, DAMS & WATERWAYS	PI-H								
727	544-MT ELECTRIC PLANT	PI-H								
728	545-MT MISCELLANEOUS HYDRAULIC PLANT	PI-H								
729	TOTAL HYDRAULIC MAINTENANCE EXPENSES									
730	TOTAL HYDRAULIC GENERATION EXPENSES									



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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
684	<b>***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.</b>						
685	STEAM POWER GENERATION						
686	OPERATION						
687	500 / SUPERVISION & ENGINEERING	L-500					
688	501 / FUEL	PI-S					
689	502 / STEAM EXPENSES						
690	LABOR	PI-S					
691	OTHER	PI-S					
692	TOTAL ACCOUNT 502						
693	505 / ELECTRIC EXPENSES						
694	LABOR	PI-S					
695	OTHER	PI-S					
696	TOTAL ACCOUNT 505						
697	506 / MISCELLANEOUS EXPENSES	PI-S					
698	507 / RENTS	PI-S					
699	STEAM OPERATION EXPENSES						
700							
701	MAINTENANCE						
702	510 / SUPERVISION & ENGINEERING	L-510					
703	511 / STRUCTURES	PI-S					
704	512 / BOILER PLANT						
705	LABOR	PI-S					
706	OTHER	PI-S					
707	TOTAL ACCOUNT 512						
708	513 / ELECTRIC PLANT						
709	LABOR	PI-S					
710	OTHER	PI-S					
711	TOTAL ACCOUNT 513						
712	514 / MISCELLANEOUS STEAM PLANT	PI-S					
713	STEAM MAINTENANCE EXPENSES						
714	TOTAL STEAM GENERATION EXPENSES						
715							
716	HYDRAULIC POWER GENERATION						
717	535-OP SUPERVISION & ENGINEERING	L-535					
718	536-OP WATER FOR POWER	PI-H					
719	537-OP HYDRAULIC EXPENSES	PI-H					
720	538-OP ELECTRIC EXPENSES	PI-H					
721	539-OP MISCELLANEOUS EXPENSES	PI-H					
722	540-OP RENTS						
723	TOTAL HYDRAULIC OPERATION EXPENSES						
724	541-MT SUPERVISION & ENGINEERING	L-541					
725	542-MT STRUCTURES	PI-H					
726	543-MT RESERVOIRS, DAMS & WATERWAYS	PI-H					
727	544-MT ELECTRIC PLANT	PI-H					
728	545-MT MISCELLANEOUS HYDRAULIC PLANT	PI-H					
729	TOTAL HYDRAULIC MAINTENANCE EXPENSES						
730	TOTAL HYDRAULIC GENERATION EXPENSES						

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	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
731	*** TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOCATOR ***									
732										
733	OTHER POWER GENERATION									
734	546-OP	SUPERVISION & ENGINEERING	L-546	495,643	347,750	147,893				
735	548-OP	GENERATING EXPENSES	PI-OS	3,102,974	2,177,089	925,885				
736	549-OP	MISCELLANEOUS EXPENSES	PI-OS	355,488	249,415	106,073				
737	550-OP	RENTS	PI-OS							
738		TOTAL OTHER POWER OPER EXPENSES		3,954,105						
739										
740	551-MT	SUPERVISION & ENGINEERING	L-551							
741	552-MT	STRUCTURES	PI-OS	41,290	28,970	12,320				
742	553-MT	GENERATING & ELECTRIC PLANT	PI-OS	54,507	38,243	16,264				
743	554-MT	MISCELLANEOUS EXPENSES	PI-OS	662,259	464,650	197,609				
744		TOTAL OTHER POWER MAINT EXPENSES		758,056						
745		TOTAL OTHER POWER GEN EXPENSES		4,712,161						
746	555	PURCHASED POWER								
747	556	LOAD CONTROL & DISPATCHING EXPEN	PP-KW							
748	557	OTHER	PI-SHO	4,311,949	3,940,603	371,346				
749		TOTAL OTHER POWER SUPPLY EXPENSES		4,311,949						
750										
751		TOTAL PRODUCTION EXPENSES		45,011,506						
752										
753	TRANSMISSION EXPENSES									
754	560-OP	SUPERVISION & ENGINEERING	L-560	2,283,367				2,283,156		211
755	561-OP	LOAD DISPATCHING	T-PLT	2,929,396				2,929,224		172
756	562-OP	STATION EXPENSES	T-353	1,806,653				1,806,351		302
757	563-OP	OVERHEAD LINE EXPENSES	T-354-356	410,892				410,891		1
758	565-OP	TRANSMISSION OF ELECTRICITY BY OT	KWH-T							
759	566-OP	MISCELLANEOUS EXPENSES	T-PLT							
760	567-OP	RENTS	T-PLT							
761		TOTAL TRANSMISSION OPERATION		7,430,307						
762	568-MT	SUPERVISION & ENGINEERING	L-568	87,233				87,226		7
763	569-MT	STRUCTURES	T-352	1,383,185				1,383,185		
764	570-MT	STATION EQUIPMENT	T-353	2,232,077				2,231,704		373
765	571-MT	OVERHEAD LINES	T-354-356	830,425				830,424		1
766	573-MT	MISCELLANEOUS PLANT	T-PLT	3,376				3,376		0
767		TOTAL TRANSMISSION MAINTENANCE		4,536,296						
768		TOTAL TRANSMISSION EXPENSES		11,966,603						

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	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	DISTRIBUTION FUNCTION										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
731 *** TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.											
732											
733 OTHER POWER GENERATION											
734 546-OP SUPERVISION & ENGINEERING	L-546										
735 548-OP GENERATING EXPENSES	PI-OS										
736 549-OP MISCELLANEOUS EXPENSES	PI-OS										
737 550-OP RENTS	PI-OS										
738 TOTAL OTHER POWER OPER EXPENSES											
739											
740 551-MT SUPERVISION & ENGINEERING	L-551										
741 552-MT STRUCTURES	PI-OS										
742 553-MT GENERATING & ELECTRIC PLANT	PI-OS										
743 554-MT MISCELLANEOUS EXPENSES	PI-OS										
744 TOTAL OTHER POWER MAINT EXPENSES											
745 TOTAL OTHER POWER GEN EXPENSES											
746 555 PURCHASED POWER											
747 556 LOAD CONTROL & DISPATCHING EXPEN	PP-KW										
748 557 OTHER	PI-SHO										
749 TOTAL OTHER POWER SUPPLY EXPENSES											
750											
751 TOTAL PRODUCTION EXPENSES											
752											
753 TRANSMISSION EXPENSES											
754 560-OP SUPERVISION & ENGINEERING	L-560										
755 561-OP LOAD DISPATCHING	T-PLT										
756 562-OP STATION EXPENSES	T-353										
757 563-OP OVERHEAD LINE EXPENSES	T-354-356										
758 565-OP TRANSMISSION OF ELECTRICITY BY OT	KWH-T										
759 566-OP MISCELLANEOUS EXPENSES	T-PLT										
760 567-OP RENTS	T-PLT										
761 TOTAL TRANSMISSION OPERATION											
762 568-MT SUPERVISION & ENGINEERING	L-568										
763 569-MT STRUCTURES	T-352										
764 570-MT STATION EQUIPMENT	T-353										
765 571-MT OVERHEAD LINES	T-354-356										
766 573-MT MISCELLANEOUS PLANT	T-PLT										
767 TOTAL TRANSMISSION MAINTENANCE											
768 TOTAL TRANSMISSION EXPENSES											

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
	* * *	* * *	* * *	* * *	* * *	* * *	* * *
	* * *	* * *	* * *	* * *	* * *	* * *	* * *
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET
	SEC CUST	DEMAND	CUSTOMER				INSTALLATION
							LIGHTS CUST PREM

731 \*\*\* TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC

732			
733	OTHER POWER GENERATION		
734	546-OP	SUPERVISION & ENGINEERING	L-546
735	548-OP	GENERATING EXPENSES	PI-OS
736	549-OP	MISCELLANEOUS EXPENSES	PI-OS
737	550-OP	RENTS	PI-OS
738	TOTAL OTHER POWER OPER EXPENSES		
739			
740	551-MT	SUPERVISION & ENGINEERING	L-551
741	552-MT	STRUCTURES	PI-OS
742	553-MT	GENERATING & ELECTRIC PLANT	PI-OS
743	554-MT	MISCELLANEOUS EXPENSES	PI-OS
744	TOTAL OTHER POWER MAINT EXPENSES		
745	TOTAL OTHER POWER GEN EXPENSES		
746	555	PURCHASED POWER	
747	556	LOAD CONTROL & DISPATCHING EXPEN	PP-KW
748	557	OTHER	PI-SHO
749	TOTAL OTHER POWER SUPPLY EXPENSES		
750			
751	TOTAL PRODUCTION EXPENSES		
752			
753	TRANSMISSION EXPENSES		
754	560-OP	SUPERVISION & ENGINEERING	L-560
755	561-OP	LOAD DISPATCHING	T-PLT
756	562-OP	STATION EXPENSES	T-353
757	563-OP	OVERHEAD LINE EXPENSES	T-354-356
758	565-OP	TRANSMISSION OF ELECTRICITY BY OT	KWH-T
759	566-OP	MISCELLANEOUS EXPENSES	T-PLT
760	567-OP	RENTS	T-PLT
761	TOTAL TRANSMISSION OPERATION		
762	568-MT	SUPERVISION & ENGINEERING	L-568
763	569-MT	STRUCTURES	T-352
764	570-MT	STATION EQUIPMENT	T-353
765	571-MT	OVERHEAD LINES	T-354-356
766	573-MT	MISCELLANEOUS PLANT	T-PLT
767	TOTAL TRANSMISSION MAINTENANCE		
768	TOTAL TRANSMISSION EXPENSES		



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(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	CUSTOMER INFORMATION FUNCTION *****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

731 \*\*\* TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC

732

733 OTHER POWER GENERATION

734 546-OP	SUPERVISION & ENGINEERING	L-546
735 548-OP	GENERATING EXPENSES	PI-OS
736 549-OP	MISCELLANEOUS EXPENSES	PI-OS
737 550-OP	RENTS	PI-OS

738 TOTAL OTHER POWER OPER EXPENSES

739

740 551-MT	SUPERVISION & ENGINEERING	L-551
741 552-MT	STRUCTURES	PI-OS
742 553-MT	GENERATING & ELECTRIC PLANT	PI-OS
743 554-MT	MISCELLANEOUS EXPENSES	PI-OS

744 TOTAL OTHER POWER MAINT EXPENSES

745 TOTAL OTHER POWER GEN EXPENSES

746 555 PURCHASED POWER

747 556	LOAD CONTROL & DISPATCHING EXPEN	PP-KW
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748 557	OTHER	PI-SHO
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749 TOTAL OTHER POWER SUPPLY EXPENSES

750

751 TOTAL PRODUCTION EXPENSES

752

753 TRANSMISSION EXPENSES

754 560-OP	SUPERVISION & ENGINEERING	L-560
755 561-OP	LOAD DISPATCHING	T-PLT
756 562-OP	STATION EXPENSES	T-353
757 563-OP	OVERHEAD LINE EXPENSES	T-354-356
758 565-OP	TRANSMISSION OF ELECTRICITY BY OT	KWH-T
759 566-OP	MISCELLANEOUS EXPENSES	T-PLT
760 567-OP	RENTS	T-PLT

761 TOTAL TRANSMISSION OPERATION

762 568-MT	SUPERVISION & ENGINEERING	L-568
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763 569-MT	STRUCTURES	T-352
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764 570-MT	STATION EQUIPMENT	T-353
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765 571-MT	OVERHEAD LINES	T-354-356
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766 573-MT	MISCELLANEOUS PLANT	T-PLT
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767 TOTAL TRANSMISSION MAINTENANCE

768 TOTAL TRANSMISSION EXPENSES

IDAHO POWER COMPANY  
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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	INC TAXES & REVENUES TRANSFER
731 *** TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.							
732							
733 OTHER POWER GENERATION							
734 546-OP SUPERVISION & ENGINEERING	L-546						
735 548-OP GENERATING EXPENSES	PI-OS						
736 549-OP MISCELLANEOUS EXPENSES	PI-OS						
737 550-OP RENTS	PI-OS						
738 TOTAL OTHER POWER OPER EXPENSES							
739							
740 551-MT SUPERVISION & ENGINEERING	L-551						
741 552-MT STRUCTURES	PI-OS						
742 553-MT GENERATING & ELECTRIC PLANT	PI-OS						
743 554-MT MISCELLANEOUS EXPENSES	PI-OS						
744 TOTAL OTHER POWER MAINT EXPENSES							
745 TOTAL OTHER POWER GEN EXPENSES							
746 555 PURCHASED POWER							
747 556 LOAD CONTROL & DISPATCHING EXPEN	PP-KW						
748 557 OTHER	PI-SHO						
749 TOTAL OTHER POWER SUPPLY EXPENSES							
750							
751 TOTAL PRODUCTION EXPENSES							
752							
753 TRANSMISSION EXPENSES							
754 560-OP SUPERVISION & ENGINEERING	L-560						
755 561-OP LOAD DISPATCHING	T-PLT						
756 562-OP STATION EXPENSES	T-353						
757 563-OP OVERHEAD LINE EXPENSES	T-354-356						
758 565-OP TRANSMISSION OF ELECTRICITY BY OT	KWH-T						
759 566-OP MISCELLANEOUS EXPENSES	T-PLT						
760 567-OP RENTS	T-PLT						
761 TOTAL TRANSMISSION OPERATION							
762 568-MT SUPERVISION & ENGINEERING	L-568						
763 569-MT STRUCTURES	T-352						
764 570-MT STATION EQUIPMENT	T-353						
765 571-MT OVERHEAD LINES	T-354-356						
766 573-MT MISCELLANEOUS PLANT	T-PLT						
767 TOTAL TRANSMISSION MAINTENANCE							
768 TOTAL TRANSMISSION EXPENSES							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
769	<b>*** TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOCATOR ***</b>									
770										
771	DISTRIBUTION EXPENSES									
772 580-OP	SUPERVISION & ENGINEERING	L-580	2,854,543							
773 581-OP	LOAD DISPATCHING	D3601	4,009,091							
774 582-OP	STATION EXPENSES	D362	936,981							
775 583-OP	OVERHEAD LINE EXPENSES	D-364-365	3,354,617							
776 584-OP	UNDERGROUND LINE EXPENSES	D-366-367	1,352,112							
777 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT	19,552							
778 586-OP	METER EXPENSES	METER	4,041,475							
779 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST	685,851							
780 588-OP	MISCELLANEOUS EXPENSES	D3601	2,749,719							
781 589-OP	RENTS	D3601								
782	TOTAL DISTRIBUTION OPERATION		20,003,940							
783										
784 590-MT	SUPERVISION & ENGINEERING	L-590	8,912							
785 591-MT	STRUCTURES	D361								
786 592-MT	STATION EQUIPMENT	D362	2,588,326							
787 593-MT	OVERHEAD LINES	D-364-365	4,830,600							
788 594-MT	UNDERGROUND LINES	D-366-367	300,238							
789 595-MT	LINE TRANSFORMERS	D368	24,370							
790 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT	118,851							
791 597-MT	METERS	METER	656,208							
792 598-MT	MISCELLANEOUS PLANT	D3601	76,191							
793	TOTAL DISTRIBUTION MAINTENANCE		8,603,695							
794	TOTAL DISTRIBUTION EXPENSES		28,607,635							
795										
796	CUSTOMER ACCOUNTING EXPENSES									
797 901-OP	SUPERVISION	L-901	610,646							
798 902-OP	METER READING	M-READ	1,098,173							
799 903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR	9,412,221							
800 904-OP	UNCOLLECTIBLE ACCOUNTS	UAR								
801 905-OP	MISC CUSTOMER ACCOUNTS EXPENSES	L 798-800								
802	TOTAL CUSTOMER ACCOUNTING EXPENSES		11,121,040							
803										
804	CUSTOMER SERVICES & INFORMATION EXPENSES									
805 907-OP	SUPERVISION	L-907	806,758			118,649				
806 908-OP	CUSTOMER ASSISTANCE	D-908	4,555,597			669,988				
807 908 /	ENERGY EFFICIENCY RIDER	NONE								
808 909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST								
809 912	DEMO AND SELLING EXPENSES	L 806-808	300,634			44,214				
810	TOTAL CUST SERV & INFO EXPENSES		5,662,989							
811										

**IDAHO POWER COMPANY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	DISTRIBUTION FUNCTION										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
769	<b>***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC</b>										
770											
771	DISTRIBUTION EXPENSES										
772 580-OP	SUPERVISION & ENGINEERING	L-580	365,851	16,800	742,003	367,747	37,399	59,505	29,492	16,491	172,096
773 581-OP	LOAD DISPATCHING	D3601	771,834	35,996	942,691	467,211	58,909	212,052	105,096	58,768	613,279
774 582-OP	STATION EXPENSES	D362	896,734	40,248							
775 583-OP	OVERHEAD LINE EXPENSES	D-364-365			2,072,014	1,026,919	25,911				
776 584-OP	UNDERGROUND LINE EXPENSES	D-366-367			796,505	394,759	99,459				
777 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT									
778 586-OP	METER EXPENSES	METER									
779 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST									
780 588-OP	MISCELLANEOUS EXPENSES	D3601	529,379	24,688	646,565	320,446	40,404	145,440	72,082	40,307	420,630
781 589-OP	RENTS	D3601									
782	TOTAL DISTRIBUTION OPERATION										
783											
784 590-MT	SUPERVISION & ENGINEERING	L-590	2,584	116	3,296	1,633	63	8	4	2	24
785 591-MT	STRUCTURES	D361									
786 592-MT	STATION EQUIPMENT	D362	2,477,145	111,181							
787 593-MT	OVERHEAD LINES	D-364-365			2,983,670	1,478,749	37,311				
788 594-MT	UNDERGROUND LINES	D-366-367			176,865	87,657	22,085				
789 595-MT	LINE TRANSFORMERS	D368						3,996	1,981	1,108	11,557
790 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT									
791 597-MT	METERS	METER									
792 598-MT	MISCELLANEOUS PLANT	D3601	14,668	684	17,915	8,879	1,120	4,030	1,997	1,117	11,655
793	TOTAL DISTRIBUTION MAINTENANCE										
794	TOTAL DISTRIBUTION EXPENSES										
795											
796	CUSTOMER ACCOUNTING EXPENSES										
797 901-OP	SUPERVISION	L-901									
798 902-OP	METER READING	M-READ									
799 903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR									
800 904-OP	UNCOLLECTIBLE ACCOUNTS	UAR									
801 905-OP	MISC CUSTOMER ACCOUNTS EXPENSES	L 798-800									
802	TOTAL CUSTOMER ACCOUNTING EXPENSES										
803											
804	CUSTOMER SERVICES & INFORMATION EXPENSES										
805 907-OP	SUPERVISION	L-907									
806 908-OP	CUSTOMER ASSISTANCE	D-908									
807 908 /	ENERGY EFFICIENCY RIDER	NONE									
808 909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST									
809 912	DEMO AND SELLING EXPENSES	L 806-808									
810	TOTAL CUST SERV & INFO EXPENSES										
811											

**IDAHO POWER COMPANY**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
		* * * * *	* * * * *	* * * * *	DISTRIBUTION FUNCTION			* * * * *	
	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION	
		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM	
769	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.								
770									
771	DISTRIBUTION EXPENSES								
772 580-OP	SUPERVISION & ENGINEERING	L-580	85,293	49,357	24,462	34,500	730,780	6,377	116,389
773 581-OP	LOAD DISPATCHING	D3601	303,950	60,413	29,942	122,944	206,939	11,126	7,941
774 582-OP	STATION EXPENSES	D362							
775 583-OP	OVERHEAD LINE EXPENSES	D-364-365		153,631	76,142				
776 584-OP	UNDERGROUND LINE EXPENSES	D-366-367		41,045	20,343				
777 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT					19,552		
778 586-OP	METER EXPENSES	METER				4,041,475			
779 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST							685,851
780 588-OP	MISCELLANEOUS EXPENSES	D3601	208,470	41,436	20,536	84,324	141,933	7,631	5,447
781 589-OP	RENTS	D3601							
782	TOTAL DISTRIBUTION OPERATION								
783									
784 590-MT	SUPERVISION & ENGINEERING	L-590	12	240	119	2	684	123	0
785 591-MT	STRUCTURES	D361							
786 592-MT	STATION EQUIPMENT	D362							
787 593-MT	OVERHEAD LINES	D-364-365		221,227	109,643				
788 594-MT	UNDERGROUND LINES	D-366-367		9,114	4,517				
789 595-MT	LINE TRANSFORMERS	D368	5,728						
790 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT					118,851		
791 597-MT	METERS	METER				656,208			
792 598-MT	MISCELLANEOUS PLANT	D3601	5,776	1,148	569	2,336	3,933	211	151
793	TOTAL DISTRIBUTION MAINTENANCE								
794	TOTAL DISTRIBUTION EXPENSES								
795									
796	CUSTOMER ACCOUNTING EXPENSES								
797 901-OP	SUPERVISION	L-901							
798 902-OP	METER READING	M-READ							
799 903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR							
800 904-OP	UNCOLLECTIBLE ACCOUNTS	UAR							
801 905-OP	MISC CUSTOMER ACCOUNTS EXPENSES	L 798-800							
802	TOTAL CUSTOMER ACCOUNTING EXPENSES								
803									
804	CUSTOMER SERVICES & INFORMATION EXPENSES								
805 907-OP	SUPERVISION	L-907							
806 908-OP	CUSTOMER ASSISTANCE	D-908							
807 908 /	ENERGY EFFICIENCY RIDER	NONE							
808 909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST							
809 912	DEMO AND SELLING EXPENSES	L 806-808							
810	TOTAL CUST SERV & INFO EXPENSES								
811									

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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	*****	CUSTOMER INFORMATION FUNCTION	*****
ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

769 \*\*\*TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC

770								
771	DISTRIBUTION EXPENSES							
772 580-OP	SUPERVISION & ENGINEERING	L-580						
773 581-OP	LOAD DISPATCHING	D3601						
774 582-OP	STATION EXPENSES	D362						
775 583-OP	OVERHEAD LINE EXPENSES	D-364-365						
776 584-OP	UNDERGROUND LINE EXPENSES	D-366-367						
777 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT						
778 586-OP	METER EXPENSES	METER						
779 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST						
780 588-OP	MISCELLANEOUS EXPENSES	D3601						
781 589-OP	RENTS	D3601						
782	TOTAL DISTRIBUTION OPERATION							
783								
784 590-MT	SUPERVISION & ENGINEERING	L-590						
785 591-MT	STRUCTURES	D361						
786 592-MT	STATION EQUIPMENT	D362						
787 593-MT	OVERHEAD LINES	D-364-365						
788 594-MT	UNDERGROUND LINES	D-366-367						
789 595-MT	LINE TRANSFORMERS	D368						
790 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT						
791 597-MT	METERS	METER						
792 598-MT	MISCELLANEOUS PLANT	D3601						
793	TOTAL DISTRIBUTION MAINTENANCE							
794	TOTAL DISTRIBUTION EXPENSES							
795								
796	CUSTOMER ACCOUNTING EXPENSES							
797 901-OP	SUPERVISION	L-901	63,803	546,843				
798 902-OP	METER READING	M-READ	1,098,173					
799 903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR		9,412,221				
800 904-OP	UNCOLLECTIBLE ACCOUNTS	UAR						
801 905-OP	MISC CUSTOMER ACCOUNTS EXPENSES	L 798-800						
802	TOTAL CUSTOMER ACCOUNTING EXPENSES							
803								
804	CUSTOMER SERVICES & INFORMATION EXPENSES							
805 907-OP	SUPERVISION	L-907		688,109				
806 908-OP	CUSTOMER ASSISTANCE	D-908		3,885,609				
807 908 /	ENERGY EFFICIENCY RIDER	NONE						
808 909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST						
809 912	DEMO AND SELLING EXPENSES	L 806-808		256,420				
810	TOTAL CUST SERV & INFO EXPENSES							
811								

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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	INC TAXES & REVENUES TRANSFER
769	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC						
770							
771	DISTRIBUTION EXPENSES						
772 580-OP	SUPERVISION & ENGINEERING	L-580					
773 581-OP	LOAD DISPATCHING	D3601					
774 582-OP	STATION EXPENSES	D362					
775 583-OP	OVERHEAD LINE EXPENSES	D-364-365					
776 584-OP	UNDERGROUND LINE EXPENSES	D-366-367					
777 585-OP	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT					
778 586-OP	METER EXPENSES	METER					
779 587-OP	CUSTOMER INSTALLATIONS EXPENSE	CUSTINST					
780 588-OP	MISCELLANEOUS EXPENSES	D3601					
781 589-OP	RENTS	D3601					
782	TOTAL DISTRIBUTION OPERATION						
783							
784 590-MT	SUPERVISION & ENGINEERING	L-590					
785 591-MT	STRUCTURES	D361					
786 592-MT	STATION EQUIPMENT	D362					
787 593-MT	OVERHEAD LINES	D-364-365					
788 594-MT	UNDERGROUND LINES	D-366-367					
789 595-MT	LINE TRANSFORMERS	D368					
790 596-MT	STREET LIGHTING & SIGNAL SYSTEMS	STLIGHT					
791 597-MT	METERS	METER					
792 598-MT	MISCELLANEOUS PLANT	D3601					
793	TOTAL DISTRIBUTION MAINTENANCE						
794	TOTAL DISTRIBUTION EXPENSES						
795							
796	CUSTOMER ACCOUNTING EXPENSES						
797 901-OP	SUPERVISION	L-901					
798 902-OP	METER READING	M-READ					
799 903-OP	CUSTOMER RECORDS & COLLECTIONS	C-RECOR					
800 904-OP	UNCOLLECTIBLE ACCOUNTS	UAR					
801 905-OP	MISC CUSTOMER ACCOUNTS EXPENSES	L 798-800					
802	TOTAL CUSTOMER ACCOUNTING EXPENSES						
803							
804	CUSTOMER SERVICES & INFORMATION EXPENSES						
805 907-OP	SUPERVISION	L-907					
806 908-OP	CUSTOMER ASSISTANCE	D-908					
807 908 /	ENERGY EFFICIENCY RIDER	NONE					
808 909-OP	INFORMATION & INSTRUCTIONAL	C-ASSIST					
809 912	DEMO AND SELLING EXPENSES	L 806-808					
810	TOTAL CUST SERV & INFO EXPENSES						
811							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			DEMAND	DEMAND	DEMAND	DEMAND
							POWER SUP	TRANS	SUBTRANS	DIRECT
812	<b>***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOCATOR***</b>									
813										
814	ADMINISTRATIVE & GENERAL EXPENSES									
815	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR	51,175,830	22,029,585	888,538		5,981,709		533
816	921-OP	OFFICE SUPPLIES	LABOR	218,898	94,229	3,801		25,586		2
817	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR							
818	923-OP	OUTSIDE SERVICES	O&M-M							
819	924-OP	PROPERTY INSURANCE								
820		PRODUCTION - STEAM	NONE							
821		ALL RISK & MISCELLANEOUS	P101P	363,208	124,815	11,762		84,559		5
822		TOTAL ACCOUNT 924		363,208						
823										
824	925-OP	INJURIES & DAMAGES	LABOR	126,578	54,488	2,198		14,795		1
825	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR							
826	927-OP	FRANCHISE REQUIREMENTS	NONE							
827	928-OP	REGULATORY COMMISSION EXPENSES								
828		FERC ADMIN ASSESSMENTS	NONE							
829		FERC RATE CASE EXPENSE	NONE							
830		SEC EXPENSES	NONE							
831		IDAHO PUC - RATE CASE	NONE							
832		- OTHER	NONE							
833		OREGON PUC - RATE CASE	NONE							
834		-OTHER	NONE							
835		NEVADA PSC - RATE CASE	NONE							
836		-OTHER	NONE							
837		TOTAL ACCOUNT 928								
838										
839	929-OP	DUPLICATE CHARGES-CR	NONE							
840	9301-OP	GENERAL ADVERTISING	LABOR							
841	9302-OP	MISCELLANEOUS EXPENSES	LABOR	205,380	88,410	3,566		24,006		2
842	931-OP	RENTS	GEN-PLT							
843	935-MT	GENERAL PLANT MAINTENANCE	GEN-PLT	993,286	341,339	32,166		231,248		14
844		TOTAL ADMIN & GENERAL EXPENSES		53,083,181						
845		TOTAL OPER & MAINT EXPENSES		155,452,955	66,799,832	2,719,421		18,327,439		1,625
846										
847		TOTAL LABOR - RATIO (%)		1.0000	0.4297	0.0175		0.1179		0.0000



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

6		(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
7			* * * * *	* * * * *	* * * * *	* * * * *	DISTRIBUTION FUNCTION			* * * * *	* * * * *	* * * * *
8		ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
9			GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
812	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.											
813												
814	ADMINISTRATIVE & GENERAL EXPENSES											
815	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR	2,528,650	114,836		4,190,021	2,076,633	161,302	212,478	105,307	58,886
816	921-OP	OFFICE SUPPLIES	LABOR	10,816	491		17,922	8,883	690	909	450	252
817	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR									
818	923-OP	OUTSIDE SERVICES	O&M-M									
819	924-OP	PROPERTY INSURANCE										
820		PRODUCTION - STEAM	NONE									
821		ALL RISK & MISCELLANEOUS	P101P	27,351	1,276		33,405	16,556	2,088	7,514	3,724	2,083
822		TOTAL ACCOUNT 924										
823												
824	925-OP	INJURIES & DAMAGES	LABOR	6,254	284		10,364	5,136	399	526	260	146
825	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR									
826	927-OP	FRANCHISE REQUIREMENTS	NONE									
827	928-OP	REGULATORY COMMISSION EXPENSES										
828		FERC ADMIN ASSESSMENTS	NONE									
829		FERC RATE CASE EXPENSE	NONE									
830		SEC EXPENSES	NONE									
831		IDAHO PUC - RATE CASE	NONE									
832		- OTHER	NONE									
833		OREGON PUC - RATE CASE	NONE									
834		-OTHER	NONE									
835		NEVADA PSC - RATE CASE	NONE									
836		-OTHER	NONE									
837		TOTAL ACCOUNT 928										
838												
839	929-OP	DUPLICATE CHARGES-CR	NONE									
840	9301-OP	GENERAL ADVERTISING	LABOR									
841	9302-OP	MISCELLANEOUS EXPENSES	LABOR	10,148	461		16,816	8,334	647	853	423	236
842	931-OP	RENTS	GEN-PLT									
843	935-MT	GENERAL PLANT MAINTENANCE	GEN-PLT	74,798	3,488		91,356	45,277	5,709	20,550	10,185	5,695
844		TOTAL ADMIN & GENERAL EXPENSES										
845		TOTAL OPER & MAINT EXPENSES		7,716,213	350,549		12,741,408	6,314,821	493,495	667,861	331,001	185,090
846												
847		TOTAL LABOR - RATIO (%)		0.0496	0.0023		0.0820	0.0406	0.0032	0.0043	0.0021	0.0012
												0.0124

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6		(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
7			* * * * *	* * * * *	* * * * *	DISTRIBUTION FUNCTION			* * * * *	
8		ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION	
9			SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM	
812	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.									
813										
814	ADMINISTRATIVE & GENERAL EXPENSES									
815	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR	304,561	288,755	143,111	122,032	2,890,464	81,921	407,817
816	921-OP	OFFICE SUPPLIES	LABOR	1,303	1,235	612	522	12,364	350	1,744
817	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR							
818	923-OP	OUTSIDE SERVICES	O&M-M							
819	924-OP	PROPERTY INSURANCE								
820		PRODUCTION - STEAM	NONE							
821		ALL RISK & MISCELLANEOUS	P101P	10,771	2,141	1,061	4,357	7,333	394	281
822		TOTAL ACCOUNT 924								
823										
824	925-OP	INJURIES & DAMAGES	LABOR	753	714	354	302	7,149	203	1,009
825	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR							
826	927-OP	FRANCHISE REQUIREMENTS	NONE							
827	928-OP	REGULATORY COMMISSION EXPENSES								
828		FERC ADMIN ASSESSMENTS	NONE							
829		FERC RATE CASE EXPENSE	NONE							
830		SEC EXPENSES	NONE							
831		IDAHO PUC - RATE CASE	NONE							
832		- OTHER	NONE							
833		OREGON PUC - RATE CASE	NONE							
834		-OTHER	NONE							
835		NEVADA PSC - RATE CASE	NONE							
836		-OTHER	NONE							
837		TOTAL ACCOUNT 928								
838										
839	929-OP	DUPLICATE CHARGES-CR	NONE							
840	9301-OP	GENERAL ADVERTISING	LABOR							
841	9302-OP	MISCELLANEOUS EXPENSES	LABOR	1,222	1,159	574	490	11,600	329	1,637
842	931-OP	RENTS	GEN-PLT							
843	935-MT	GENERAL PLANT MAINTENANCE	GEN-PLT	29,456	5,855	2,902	11,914	20,054	1,078	770
844		TOTAL ADMIN & GENERAL EXPENSES								
845		TOTAL OPER & MAINT EXPENSES		957,295	877,470	434,886	383,723	8,730,916	248,148	1,229,037
846										
847		TOTAL LABOR - RATIO (%)		0.0062	0.0056	0.0028	0.0025	0.0562	0.0016	0.0079

IDAHO POWER COMPANY  
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	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
	ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER	CUSTOMER	INFORMATION	FUNCTION	*****
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
812	***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC.								
813									
814	ADMINISTRATIVE & GENERAL EXPENSES								
815	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR	580,885	4,978,651		2,414,642		
816	921-OP	OFFICE SUPPLIES	LABOR	2,485	21,296		10,328		
817	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR						
818	923-OP	OUTSIDE SERVICES	O&M-M						
819	924-OP	PROPERTY INSURANCE							
820		PRODUCTION - STEAM	NONE						
821		ALL RISK & MISCELLANEOUS	P101P						
822		TOTAL ACCOUNT 924							
823									
824	925-OP	INJURIES & DAMAGES	LABOR	1,437	12,314		5,972		
825	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR						
826	927-OP	FRANCHISE REQUIREMENTS	NONE						
827	928-OP	REGULATORY COMMISSION EXPENSES							
828		FERC ADMIN ASSESSMENTS	NONE						
829		FERC RATE CASE EXPENSE	NONE						
830		SEC EXPENSES	NONE						
831		IDAHO PUC - RATE CASE	NONE						
832		- OTHER	NONE						
833		OREGON PUC - RATE CASE	NONE						
834		-OTHER	NONE						
835		NEVADA PSC - RATE CASE	NONE						
836		-OTHER	NONE						
837		TOTAL ACCOUNT 928							
838									
839	929-OP	DUPLICATE CHARGES-CR	NONE						
840	9301-OP	GENERAL ADVERTISING	LABOR						
841	9302-OP	MISCELLANEOUS EXPENSES	LABOR	2,331	19,980		9,691		
842	931-OP	RENTS	GEN-PLT						
843	935-MT	GENERAL PLANT MAINTENANCE	GEN-PLT						
844		TOTAL ADMIN & GENERAL EXPENSES							
845		TOTAL OPER & MAINT EXPENSES		1,749,115	14,991,305		7,270,771		
846									
847		TOTAL LABOR - RATIO (%)		0.0113	0.0964		0.0468		

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	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
812	<b>***TABLE 10 - DEVELOPMENT OF LABOR RELATED ALLOC</b>						
813							
814	ADMINISTRATIVE & GENERAL EXPENSES						
815	920-OP	ADMINISTRATIVE & GENERAL SALARIES	LABOR				
816	921-OP	OFFICE SUPPLIES	LABOR				
817	922-OP	ADMIN & GENERAL EXP TRANSFERRED	LABOR				
818	923-OP	OUTSIDE SERVICES	O&M-M				
819	924-OP	PROPERTY INSURANCE					
820		PRODUCTION - STEAM	NONE				
821		ALL RISK & MISCELLANEOUS	P101P				
822		TOTAL ACCOUNT 924					
823							
824	925-OP	INJURIES & DAMAGES	LABOR				
825	926-OP	EMPLOYEE PENSIONS & BENEFITS	LABOR				
826	927-OP	FRANCHISE REQUIREMENTS	NONE				
827	928-OP	REGULATORY COMMISSION EXPENSES					
828		FERC ADMIN ASSESSMENTS	NONE				
829		FERC RATE CASE EXPENSE	NONE				
830		SEC EXPENSES	NONE				
831		IDAHO PUC - RATE CASE	NONE				
832		- OTHER	NONE				
833		OREGON PUC - RATE CASE	NONE				
834		-OTHER	NONE				
835		NEVADA PSC - RATE CASE	NONE				
836		-OTHER	NONE				
837		TOTAL ACCOUNT 928					
838							
839	929-OP	DUPLICATE CHARGES-CR	NONE				
840	9301-OP	GENERAL ADVERTISING	LABOR				
841	9302-OP	MISCELLANEOUS EXPENSES	LABOR				
842	931-OP	RENTS	GEN-PLT				
843	935-MT	GENERAL PLANT MAINTENANCE	GEN-PLT				
844		TOTAL ADMIN & GENERAL EXPENSES					
845		TOTAL OPER & MAINT EXPENSES					
846							
847		TOTAL LABOR - RATIO (%)					

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
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**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
			Base-load	Peak			POWER SUP	DEMAND	DEMAND	DEMAND
								TRANS	SUBTRANS	DIRECT
848	<b>*** TABLE 11 - FUNCTIONALIZATION ALLOCATORS ***</b>									
849										
850	<b>DIRECT ASSIGNMENT ALLOCATORS</b>									
851	<u>PRODUCTION DIRECT ASSIGNMENT ALLOCATORS</u>									
852	KWH GENERATION - BY STEAM UNITS	KWH-S	100%			100%				
853	KWH GENERATION - BY HYDRAULIC UNITS	KWH-H	100%			100%				
854	KWH GENERATION - BY OTHER UNITS	KWH-O	100%			100%				
855	KWH GENERATION - BY OTHER	KWH-O	100%			100%				
856	KWH GENERATION - ANNUAL	KWH-T	100%			100%				
857	555 PURCHASED POWER - CAPACITY	PP-KW	100%	91%	9%					
858	555 PURCHASED POWER - ENERGY	PP-KWH	100%			100%				
859	555 PURCHASED POWER - OTHER	PP-OT	100%			100%				
860	555 PURCHASED POWER - TOTAL	PP-T	100%	30%	3%	67%				
861	TOTAL COGEN & SMALL POWER PROD	COGEN-E:	100%			100%				
862	PRODUCTION - STEAM INVESTMENT	PI-S	100%	100%						
863	PRODUCTION - HYDRAULIC INVESTMENT	PI-H	100%	100%						
864	PRODUCTION - OTHER INVESTMENT	PI-O	100%		100%					
865	PRODUCTION - OTHER INVESTMENT - Baseload &	PI-OS	100%	70%	30%					
866	<u>TRANSMISSION DIRECT ASSIGNMENT ALLOCATORS</u>									
867	TRANSMISSION PLANT	T-100	100%					100%		
868	TRANSMISSION DIRECT ASSIGNMENT	T-Direct	100%							100%
869	<u>DISTRIBUTION DIRECT ASSIGNMENT ALLOCATORS</u>									
870	SUBSTATION CIAC	CIAC	100%							
871	SERVICES	SERVICE	100%							
872	METERS	METER	100%							
873	METER READING	M-READ	100%							
874	CUSTOMER RECORDS	C-RECORI	100%							
875	CUSTOMER ASSISTANCE	C-ASSIST	100%							
876	UNCOLLECTIBLE ACCOUNTS	UAR	100%							
877	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST	100%							
878	STREET LIGHTING SYSTEMS	STLIGHT	100%							
879	<u>OTHER DIRECT ASSIGNMENT ALLOCATORS</u>									
880	MISC. REVENUE	MISC-REV	100%							
881	OTHER REVENUE	OTH-REV	100%							
882	OTHER EXPENSE	OTH-EXP	100%							
883	INCOME TAX AND REVENUE ALLOCATOR	TAX-REV	100%							
884	KWH-TAX	KWH-TAX	100%							
885	NULL REV. REQ. VALUE	NONE								
886	<b>DERIVED ALLOCATORS</b>									
887	<u>PRODUCTION ALLOCATORS</u>									
888	PRODUCTION - HYDRAULIC & OTHER INVESTMENT		1,664,974,337	1,484,143,992	180,830,345					
889	L 21-23	PI-HO	100%	89%	11%					
890	TOTAL PRODUCTION PLANT INVESTMENT		2,099,744,010	1,918,913,664	180,830,345					
891	L 25	PI-SHO	100%	91%	9%					
892	<u>TRANSMISSION ALLOCATORS</u>									
893	350 LAND & LAND RIGHTS		39,364,923					39,364,923		
894	L 31	T-350	100%					100%		
895	352 STRUCTURES & IMPROVEMENTS		96,459,348					96,459,348		

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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
	***** DISTRIBUTION FUNCTION *****										
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
	GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD	
848	*** TABLE 11 - FUNCTIONALIZATION ALLOCATORS ***										
849											
850	<b>DIRECT ASSIGNMENT ALLOCATORS</b>										
851	<u>PRODUCTION DIRECT ASSIGNMENT ALLOCATORS</u>										
852	KWH GENERATION - BY STEAM UNITS	KWH-S									
853	KWH GENERATION - BY HYDRAULIC UNITS	KWH-H									
854	KWH GENERATION - BY OTHER UNITS	KWH-O									
855	KWH GENERATION - BY OTHER	KWH-O									
856	KWH GENERATION - ANNUAL	KWH-T									
857	555 PURCHASED POWER - CAPACITY	PP-KW									
858	555 PURCHASED POWER - ENERGY	PP-KWH									
859	555 PURCHASED POWER - OTHER	PP-OT									
860	555 PURCHASED POWER - TOTAL	PP-T									
861	TOTAL COGEN & SMALL POWER PROD	COGEN-E:									
862	PRODUCTION - STEAM INVESTMENT	PI-S									
863	PRODUCTION - HYDRAULIC INVESTMENT	PI-H									
864	PRODUCTION - OTHER INVESTMENT	PI-O									
865	PRODUCTION - OTHER INVESTMENT - Baseload &	PI-OS									
866	<u>TRANSMISSION DIRECT ASSIGNMENT ALLOCATORS</u>										
867	TRANSMISSION PLANT	T-100									
868	TRANSMISSION DIRECT ASSIGNMENT	T-Direct									
869	<u>DISTRIBUTION DIRECT ASSIGNMENT ALLOCATORS</u>										
870	SUBSTATION CIAC	CIAC		100%							
871	SERVICES	SERVICE									
872	METERS	METER									
873	METER READING	M-READ									
874	CUSTOMER RECORDS	C-RECORI									
875	CUSTOMER ASSISTANCE	C-ASSIST									
876	UNCOLLECTIBLE ACCOUNTS	UAR									
877	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST									
878	STREET LIGHTING SYSTEMS	STLIGHT									
879	<u>OTHER DIRECT ASSIGNMENT ALLOCATORS</u>										
880	MISC. REVENUE	MISC-REV									
881	OTHER REVENUE	OTH-REV									
882	OTHER EXPENSE	OTH-EXP									
883	INCOME TAX AND REVENUE ALLOCATOR	TAX-REV									
884	KWH-TAX	KWH-TAX									
885	NULL REV. REQ. VALUE	NONE									
886	<b>DERIVED ALLOCATORS</b>										
887	<u>PRODUCTION ALLOCATORS</u>										
888	PRODUCTION - HYDRAULIC & OTHER INVESTMENT										
889	L 21-23	PI-HO									
890	TOTAL PRODUCTION PLANT INVESTMENT										
891	L 25	PI-SHO									
892	<u>TRANSMISSION ALLOCATORS</u>										
893	350 LAND & LAND RIGHTS										
894	L 31	T-350									
895	352 STRUCTURES & IMPROVEMENTS										

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(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
* * * * * DISTRIBUTION FUNCTION * * * * *							
ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
	SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM

848 \*\*\* TABLE 11 - FUNCTIONALIZATION ALLOCATORS \*\*\*

849					
850	DIRECT ASSIGNMENT ALLOCATORS				
851	PRODUCTION DIRECT ASSIGNMENT ALLOCATORS				
852	KWH GENERATION - BY STEAM UNITS	KWH-S			
853	KWH GENERATION - BY HYDRAULIC UNITS	KWH-H			
854	KWH GENERATION - BY OTHER UNITS	KWH-O			
855	KWH GENERATION - BY OTHER	KWH-O			
856	KWH GENERATION - ANNUAL	KWH-T			
857	555 PURCHASED POWER - CAPACITY	PP-KW			
858	555 PURCHASED POWER - ENERGY	PP-KWH			
859	555 PURCHASED POWER - OTHER	PP-OT			
860	555 PURCHASED POWER - TOTAL	PP-T			
861	TOTAL COGEN & SMALL POWER PROD	COGEN-E:			
862	PRODUCTION - STEAM INVESTMENT	PI-S			
863	PRODUCTION - HYDRAULIC INVESTMENT	PI-H			
864	PRODUCTION - OTHER INVESTMENT	PI-O			
865	PRODUCTION - OTHER INVESTMENT - Baseload & Other	PI-OS			
866	TRANSMISSION DIRECT ASSIGNMENT ALLOCATORS				
867	TRANSMISSION PLANT	T-100			
868	TRANSMISSION DIRECT ASSIGNMENT	T-Direct			
869	DISTRIBUTION DIRECT ASSIGNMENT ALLOCATORS				
870	SUBSTATION CIAC	CIAC			
871	SERVICES	SERVICE	100%		
872	METERS	METER		100%	
873	METER READING	M-READ			
874	CUSTOMER RECORDS	C-RECORD			
875	CUSTOMER ASSISTANCE	C-ASSIST			
876	UNCOLLECTIBLE ACCOUNTS	UAR			
877	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST			100%
878	STREET LIGHTING SYSTEMS	STLIGHT		100%	
879	OTHER DIRECT ASSIGNMENT ALLOCATORS				
880	MISC. REVENUE	MISC-REV			
881	OTHER REVENUE	OTH-REV			
882	OTHER EXPENSE	OTH-EXP			
883	INCOME TAX AND REVENUE ALLOCATOR	TAX-REV			
884	KWH-TAX	KWH-TAX			
885	NULL REV. REQ. VALUE	NONE			
886	DERIVED ALLOCATORS				
887	PRODUCTION ALLOCATORS				
888	PRODUCTION - HYDRAULIC & OTHER INVESTMENT				
889	L 21-23	PI-HO			
890	TOTAL PRODUCTION PLANT INVESTMENT				
891	L 25	PI-SHO			
892	TRANSMISSION ALLOCATORS				
893	350 LAND & LAND RIGHTS				
894	L 31	T-350			
895	352 STRUCTURES & IMPROVEMENTS				

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
CLASS COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
- - - CUSTOMER ACCOUNTING FUNCTION - - - ***** CUSTOMER INFORMATION FUNCTION *****								
ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER				
	READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER

848 \*\*\* TABLE 11 - FUNCTIONALIZATION ALLOCATORS \*\*\*

849

850 **DIRECT ASSIGNMENT ALLOCATORS**

851 PRODUCTION DIRECT ASSIGNMENT ALLOCATORS

852	KWH GENERATION - BY STEAM UNITS	KWH-S
853	KWH GENERATION - BY HYDRAULIC UNITS	KWH-H
854	KWH GENERATION - BY OTHER UNITS	KWH-O
855	KWH GENERATION - BY OTHER	KWH-O
856	KWH GENERATION - ANNUAL	KWH-T
857	555 PURCHASED POWER - CAPACITY	PP-KW
858	555 PURCHASED POWER - ENERGY	PP-KWH
859	555 PURCHASED POWER - OTHER	PP-OT
860	555 PURCHASED POWER - TOTAL	PP-T
861	TOTAL COGEN & SMALL POWER PROD	COGEN-E:
862	PRODUCTION - STEAM INVESTMENT	PI-S
863	PRODUCTION - HYDRAULIC INVESTMENT	PI-H
864	PRODUCTION - OTHER INVESTMENT	PI-O
865	PRODUCTION - OTHER INVESTMENT - Baseload &	PI-OS

866 TRANSMISSION DIRECT ASSIGNMENT ALLOCATORS

867	TRANSMISSION PLANT	T-100
868	TRANSMISSION DIRECT ASSIGNMENT	T-Direct

869 DISTRIBUTION DIRECT ASSIGNMENT ALLOCATORS

870	SUBSTATION CIAC	CIAC
871	SERVICES	SERVICE
872	METERS	METER
873	METER READING	M-READ 100%
874	CUSTOMER RECORDS	C-RECORI 100%
875	CUSTOMER ASSISTANCE	C-ASSIST 100%
876	UNCOLLECTIBLE ACCOUNTS	UAR 100%
877	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST
878	STREET LIGHTING SYSTEMS	STLIGHT

879 OTHER DIRECT ASSIGNMENT ALLOCATORS

880	MISC. REVENUE	MISC-REV
881	OTHER REVENUE	OTH-REV
882	OTHER EXPENSE	OTH-EXP
883	INCOME TAX AND REVENUE ALLOCATOR	TAX-REV
884	KWH-TAX	KWH-TAX
885	NULL REV. REQ. VALUE	NONE

886 **DERIVED ALLOCATORS**

887 PRODUCTION ALLOCATORS

888	PRODUCTION - HYDRAULIC & OTHER INVESTMENT	
889	L 21-23	PI-HO
890	TOTAL PRODUCTION PLANT INVESTMENT	
891	L 25	PI-SHO

892 TRANSMISSION ALLOCATORS

893	350	LAND & LAND RIGHTS
894	L 31	T-350
895	352	STRUCTURES & IMPROVEMENTS



IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
	ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
848	*** TABLE 11 - FUNCTIONALIZATION ALLOCATORS ***						
849							
850	<b>DIRECT ASSIGNMENT ALLOCATORS</b>						
851	<u>PRODUCTION DIRECT ASSIGNMENT ALLOCATORS</u>						
852	KWH GENERATION - BY STEAM UNITS	KWH-S					
853	KWH GENERATION - BY HYDRAULIC UNITS	KWH-H					
854	KWH GENERATION - BY OTHER UNITS	KWH-O					
855	KWH GENERATION - BY OTHER	KWH-O					
856	KWH GENERATION - ANNUAL	KWH-T					
857	555 PURCHASED POWER - CAPACITY	PP-KW					
858	555 PURCHASED POWER - ENERGY	PP-KWH					
859	555 PURCHASED POWER - OTHER	PP-OT					
860	555 PURCHASED POWER - TOTAL	PP-T					
861	TOTAL COGEN & SMALL POWER PROD	COGEN-E:					
862	PRODUCTION - STEAM INVESTMENT	PI-S					
863	PRODUCTION - HYDRAULIC INVESTMENT	PI-H					
864	PRODUCTION - OTHER INVESTMENT	PI-O					
865	PRODUCTION - OTHER INVESTMENT - Baseload	PI-OS					
866	<u>TRANSMISSION DIRECT ASSIGNMENT ALLOCATORS</u>						
867	TRANSMISSION PLANT	T-100					
868	TRANSMISSION DIRECT ASSIGNMENT	T-Direct					
869	<u>DISTRIBUTION DIRECT ASSIGNMENT ALLOCATORS</u>						
870	SUBSTATION CIAC	CIAC					
871	SERVICES	SERVICE					
872	METERS	METER					
873	METER READING	M-READ					
874	CUSTOMER RECORDS	C-RECORI					
875	CUSTOMER ASSISTANCE	C-ASSIST					
876	UNCOLLECTIBLE ACCOUNTS	UAR					
877	INSTALLATIONS ON CUSTOMER PREMISES	CUSTINST					
878	STREET LIGHTING SYSTEMS	STLIGHT					
879	<u>OTHER DIRECT ASSIGNMENT ALLOCATORS</u>						
880	MISC. REVENUE	MISC-REV			100%		
881	OTHER REVENUE	OTH-REV				100%	
882	OTHER EXPENSE	OTH-EXP				100%	
883	INCOME TAX AND REVENUE ALLOCATOR	TAX-REV					100%
884	KWH-TAX	KWH-TAX	100%				
885	NULL REV. REQ. VALUE	NONE					
886	<b>DERIVED ALLOCATORS</b>						
887	<u>PRODUCTION ALLOCATORS</u>						
888	PRODUCTION - HYDRAULIC & OTHER INVESTMENT						
889	L 21-23	PI-HO					
890	TOTAL PRODUCTION PLANT INVESTMENT						
891	L 25	PI-SHO					
892	<u>TRANSMISSION ALLOCATORS</u>						
893	350 LAND & LAND RIGHTS						
894	L 31	T-350					
895	352 STRUCTURES & IMPROVEMENTS						

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

		(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
		ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	----- TRANSMISSION FUNCTION -----			
				Base-load	Peak			POWER SUP	DEMAND	DEMAND	DEMAND
								TRANS	SUBTRANS	DIRECT	
896	L 36	T-352	100%						100%		
897	353 STATION EQUIPMENT		449,356,402					449,281,302		75,100	
898	L 41	T-353	100%					100%		0%	
899	354 TOWERS & FIXTURES		227,483,716					227,483,716			
900	L 47	T-354	100%					100%			
901	355 POLES & FIXTURES		226,404,073					226,404,073			
902	L 52	T-355	100%					100%			
903	356 OVERHEAD CONDUCTORS & DEVICES		260,647,076					260,645,887		1,189	
904	L 57	T-356	100%					100%		0%	
905	359 ROADS & TRAILS		374,346					374,346			
906	L 63	T-359	100%					100%			
907	354-359 COMBINED TRANSMISSION ALLOCATOR		714,909,210					714,908,021		1,189	
####	L 45-62	T-354-359	100%					100%		0%	
909	354 - 359 COMBINED TRANSMISSION ALLOCATOR		714,534,864					714,533,675		1,189	
910	L 45-56	T-354-356	100%					100%		0%	
911	TOTAL TRANSMISSION PLANT		1,300,089,883					1,300,013,594		76,289	
912	L 64	T-PLT	100%					100%		0%	
913	<u>DISTRIBUTION ALLOCATORS</u>										
914	#360 LAND		9,056,163								
915	(DERIVED FROM ACTUALS)	D360	100%								
916	#361 STRUCTURES & IMPROVEMENTS		64,320,867								
917	(DERIVED FROM ACTUALS)	D361	100%								
918	#362 STATION EQUIPMENT		349,200,558								
919	(DERIVED FROM ACTUALS)	D362	100%								
920	#360 NET PLANT		8,625,808								
921	(DERIVED FROM ACTUALS)	D360N	100%								
922	#361 NET PLANT		56,873,252								
923	(DERIVED FROM ACTUALS)	D361N	100%								
924	#362 NET PLANT		314,307,682								
925	(DERIVED FROM ACTUALS)	D362N	100%								
926	#364 POLES, TOWERS, & FIXTURES		288,748,305								
927	(DERIVED FROM ACTUALS)	D364	100%								
928	#365 OVERHEAD CONDUCTORS & DEVICES		146,384,826								
929	(DERIVED FROM ACTUALS)	D365	100%								
930	#366 UNDERGROUND CONDUIT		51,958,505								
931	(DERIVED FROM ACTUALS)	D366	100%								
932	#367 UNDERGROUND CONDUCTORS & DEVICES		313,429,461								
933	(DERIVED FROM ACTUALS)	D367	100%								
934	#368 LINE TRANSFORMERS		666,063,582								
935	(DERIVED FROM ACTUALS)	D368	100%								
936	TOTAL DISTRIBUTION PLANT		2,184,148,463								
937		D3601	100%								
938	TOTAL NET DISTRIBUTION PLANT		2,123,850,274								

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
			DISTRIBUTION FUNCTION									
		ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
			GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
896	L 36	T-352										
897	353 STATION EQUIPMENT											
898	L 41	T-353										
899	354 TOWERS & FIXTURES											
900	L 47	T-354										
901	355 POLES & FIXTURES											
902	L 52	T-355										
903	356 OVERHEAD CONDUCTORS & DEVICES											
904	L 57	T-356										
905	359 ROADS & TRAILS											
906	L 63	T-359										
907	354-359 COMBINED TRANSMISSION ALLOCATOR											
####	L 45-62	T-354-359										
909	354 - 359 COMBINED TRANSMISSION ALLOCATOR											
910	L 45-56	T-354-356										
911	TOTAL TRANSMISSION PLANT											
912	L 64	T-PLT										
913	<u>DISTRIBUTION ALLOCATORS</u>											
914	#360 LAND		9,056,112	51								
915	(DERIVED FROM ACTUALS)	D360	100%	0%								
916	#361 STRUCTURES & IMPROVEMENTS		60,478,466	3,842,401								
917	(DERIVED FROM ACTUALS)	D361	94%	6%								
918	#362 STATION EQUIPMENT		334,200,746	14,999,812								
919	(DERIVED FROM ACTUALS)	D362	96%	4%								
920	#360 NET PLANT		8,625,757	51								
921	(DERIVED FROM ACTUALS)	D360N	100%	0%								
922	#361 NET PLANT		56,337,171	536,081								
923	(DERIVED FROM ACTUALS)	D361N	99%	1%								
924	#362 NET PLANT		310,836,279	3,471,403								
925	(DERIVED FROM ACTUALS)	D362N	99%	1%								
926	#364 POLES, TOWERS, & FIXTURES					180,815,162	89,614,532	2,012,844				
927	(DERIVED FROM ACTUALS)	D364				63%	31%	1%				
928	#365 OVERHEAD CONDUCTORS & DEVICES					87,905,108	43,567,005	1,351,968				
929	(DERIVED FROM ACTUALS)	D365				60%	30%	1%				
930	#366 UNDERGROUND CONDUIT					24,711,812	12,247,521	6,296,318				
931	(DERIVED FROM ACTUALS)	D366				48%	24%	12%				
932	#367 UNDERGROUND CONDUCTORS & DEVICES					190,387,577	94,358,755	20,641,588				
933	(DERIVED FROM ACTUALS)	D367				61%	30%	7%				
934	#368 LINE TRANSFORMERS								109,222,060	54,131,986	30,269,678	315,883,541
935	(DERIVED FROM ACTUALS)	D368							16%	8%	5%	47%
936	TOTAL DISTRIBUTION PLANT		420,494,493	19,610,440		513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916
937		D3601	19%	1%		24%	12%	1%	5%	3%	1%	15%
938	TOTAL NET DISTRIBUTION PLANT		375,799,208	4,007,536		513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916

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			IDAHO POWER COMPANY							
			BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION							
			CLASS COST OF SERVICE STUDY							
			FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023							
			FUNCTIONALIZATION AND CLASSIFICATION OF COSTS							
	(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)	
		- - -	CUSTOMER	ACCOUNTING FUNCTION	- - - *****	CUSTOMER INFORMATION FUNCTION	*****			
	ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER				
		READING	RECORDS	ACCOUNTS		OTHER ASSISTANCE	DEMONSTR	ADVERTISING	OTHER	
896	L 36	T-352								
897	353 STATION EQUIPMENT									
898	L 41	T-353								
899	354 TOWERS & FIXTURES									
900	L 47	T-354								
901	355 POLES & FIXTURES									
902	L 52	T-355								
903	356 OVERHEAD CONDUCTORS & DEVICES									
904	L 57	T-356								
905	359 ROADS & TRAILS									
906	L 63	T-359								
907	354-359 COMBINED TRANSMISSION ALLOCATOR									
####	L 45-62	T-354-359								
909	354 - 359 COMBINED TRANSMISSION ALLOCATOR									
910	L 45-56	T-354-356								
911	TOTAL TRANSMISSION PLANT									
912	L 64	T-PLT								
913	DISTRIBUTION ALLOCATORS									
914	#360 LAND									
915	(DERIVED FROM ACTUALS)	D360								
916	#361 STRUCTURES & IMPROVEMENTS									
917	(DERIVED FROM ACTUALS)	D361								
918	#362 STATION EQUIPMENT									
919	(DERIVED FROM ACTUALS)	D362								
920	#360 NET PLANT									
921	(DERIVED FROM ACTUALS)	D360N								
922	#361 NET PLANT									
923	(DERIVED FROM ACTUALS)	D361N								
924	#362 NET PLANT									
925	(DERIVED FROM ACTUALS)	D362N								
926	#364 POLES, TOWERS, & FIXTURES									
927	(DERIVED FROM ACTUALS)	D364								
928	#365 OVERHEAD CONDUCTORS & DEVICES									
929	(DERIVED FROM ACTUALS)	D365								
930	#366 UNDERGROUND CONDUIT									
931	(DERIVED FROM ACTUALS)	D366								
932	#367 UNDERGROUND CONDUCTORS & DEVICES									
933	(DERIVED FROM ACTUALS)	D367								
934	#368 LINE TRANSFORMERS									
935	(DERIVED FROM ACTUALS)	D368								
936	TOTAL DISTRIBUTION PLANT									
937		D3601								
938	TOTAL NET DISTRIBUTION PLANT									

IDAHO POWER COMPANY  
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CLASS COST OF SERVICE STUDY  
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FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

		(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)
		ALLOCATOR	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES
			DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER
896	L 36	T-352						
897	353 STATION EQUIPMENT							
898	L 41	T-353						
899	354 TOWERS & FIXTURES							
900	L 47	T-354						
901	355 POLES & FIXTURES							
902	L 52	T-355						
903	356 OVERHEAD CONDUCTORS & DEVICES							
904	L 57	T-356						
905	359 ROADS & TRAILS							
906	L 63	T-359						
907	354-359 COMBINED TRANSMISSION ALLOCATOR							
####	L 45-62	T-354-359						
909	354 - 359 COMBINED TRANSMISSION ALLOCATOR							
910	L 45-56	T-354-356						
911	TOTAL TRANSMISSION PLANT							
912	L 64	T-PLT						
913	<u>DISTRIBUTION ALLOCATORS</u>							
914	#360 LAND							
915	(DERIVED FROM ACTUALS)	D360						
916	#361 STRUCTURES & IMPROVEMENTS							
917	(DERIVED FROM ACTUALS)	D361						
918	#362 STATION EQUIPMENT							
919	(DERIVED FROM ACTUALS)	D362						
920	#360 NET PLANT							
921	(DERIVED FROM ACTUALS)	D360N						
922	#361 NET PLANT							
923	(DERIVED FROM ACTUALS)	D361N						
924	#362 NET PLANT							
925	(DERIVED FROM ACTUALS)	D362N						
926	#364 POLES, TOWERS, & FIXTURES							
927	(DERIVED FROM ACTUALS)	D364						
928	#365 OVERHEAD CONDUCTORS & DEVICES							
929	(DERIVED FROM ACTUALS)	D365						
930	#366 UNDERGROUND CONDUIT							
931	(DERIVED FROM ACTUALS)	D366						
932	#367 UNDERGROUND CONDUCTORS & DEVICES							
933	(DERIVED FROM ACTUALS)	D367						
934	#368 LINE TRANSFORMERS							
935	(DERIVED FROM ACTUALS)	D368						
936	TOTAL DISTRIBUTION PLANT							
937		D3601						
938	TOTAL NET DISTRIBUTION PLANT							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**CLASS COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
	ALLOCATOR	TOTALS	DEMAND	** PRODUCTION FUNCTION **		ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
939	D3602N	100%								
940	DARK FIBER PROJECT REVENUE (ACCT 454)	2,184,148,463								
941	(DERIVED FROM ACTUALS)									
942	D-FIBER	100%								
943	MERCHANDISING REVENUE	1,631,303,567								
944	(DERIVED FROM ACTUALS)									
945	M-REV	100%								
946	MERCHANDISING EXPENSE	1,631,303,567								
947	(DERIVED FROM ACTUALS)									
948	M-EXP	100%								
949	CUSTOMER ADVANCES FOR CONSTRUCTION	63,977,523								
950	CUSTADV	100%								
951	364-365 COMBINED DISTRIBUTION ALLOCATOR	461,598,814								
952	L 87-88	100%								
953	D-364-365	100%								
954	366-367 COMBINED DISTRIBUTION ALLOCATOR	387,833,499								
955	L 89-90	100%								
956	D-366-367	100%								
957	902-904 COMBINED DISTRIBUTION ALLOCATOR	23,220,761								
958	L 500-502	100%								
959	D-902-904	100%								
960	908 COMBINED DISTRIBUTION ALLOCATOR	11,377,854	1,673,332							
961	507-509	100%	15%							
962	D-908	100%								
963	908-909 COMBINED DISTRIBUTION ALLOCATOR	11,663,442	1,673,332							
964	L 507-511	100%	14%							
965	D-908-909	100%								
966	PLANT-RELATED ALLOCATORS									
967	"P112P" NET TOTAL PLANT PLUS INTANGIBLE	6,119,224,374	2,123,568,725	200,116,177			1,438,662,020			84,425
968	P112P	100%	35%	3%			24%			0%
969	"P111P" NET TOTAL PLANT LESS INTANGIBLE	6,018,437,105	2,088,933,575	196,852,306			1,415,197,616			83,048
970	P111P	100%	35%	3%			24%			0%
971	"P101P" TOTAL PLANT LESS INTANGIBLE	6,078,735,296	2,088,933,575	196,852,306			1,415,197,616			83,048
972	P101P	100%	34%	3%			23%			0%
973	"P110P" TOTAL PLANT INCLUDING INTANGIBLE	6,179,522,565	2,123,568,725	200,116,177			1,438,662,020			84,425
974	P110P	100%	34%	3%			23%			0%
975	"PTD" PLANT	5,583,982,355	1,918,913,664	180,830,345			1,300,013,594			76,289
976	P-PTD	100%	34%	3%			23%			0%
977	P110P - LESS STEAM PRODUCTION	5,912,422,670	1,856,468,830	200,116,177			1,438,662,020			84,425
978	P110P-L2C	100%	31%	3%			24%			0%
979	TOTAL GENERAL PLANT	494,752,941	170,019,910	16,021,961			115,184,022			6,759
980	GEN-PLT	100%	34%	3%			23%			0%
981	O&M /LABOR ALLOCATORS									
982	O&M PROD,TRANS,DIST,CA & CI (LABOR ONLY)	102,369,774	44,066,967	1,777,391			11,965,536			1,067
983	LABOR	100%	43%	2%			12%			0%
984	O&M PROD,TRANS,DIST,CA & CI (TOTAL O&M)	706,073,060	61,962,979	13,064,291		490,961,573	27,009,100			1,679
985	O&M-M	100%	9%	2%		70%	4%			0%
986	O&M PROD,ADMIN & GENERAL ONLY (TOTAL O&M)	182,750,903	76,173,715	3,452,075		1,855,842	21,769,057			1,842
987	O&M-AG	100%	42%	2%		1%	12%			0%
988	TOTAL OPERATING EXPENSES	888,823,963	138,136,693	16,516,367		492,817,416	48,778,156			3,521
989	L 560	100%	16%	2%		55%	5%			0%
990	SUPERVISION 500 - 501-507	7,813,593	7,813,593							
991	L 688-698	100%	100%							

**IDAHO POWER COMPANY**  
**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**  
**COST OF SERVICE STUDY**  
**FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**FUNCTIONALIZATION AND CLASSIFICATION OF COSTS**

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
939	D3602N	18%	0%		24%	12%	2%	5%	3%	2%	16%
940	DARK FIBER PROJECT REVENUE (ACCT 454)	420,494,493	19,610,440		513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916
941	(DERIVED FROM ACTUALS)	D-FIBER	19%	1%	24%	12%	1%	5%	3%	1%	15%
942	MERCHANDISING REVENUE				513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916
943	(DERIVED FROM ACTUALS)	M-REV			31%	16%	2%	7%	4%	2%	20%
944	MERCHANDISING EXPENSE				513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916
945	(DERIVED FROM ACTUALS)	M-EXP			31%	16%	2%	7%	4%	2%	20%
946	CUSTOMER ADVANCES FOR CONSTRUCTION				27,550,407	13,654,368		1,112,215	551,229		3,422,755
947	CUSTADV				43%	21%		2%	1%		5%
948	364-365 COMBINED DISTRIBUTION ALLOCATOR				285,111,328	141,305,176	3,565,330				
949	L 87-88	D-364-365			62%	31%	1%				
950	366-367 COMBINED DISTRIBUTION ALLOCATOR				228,465,887	113,230,900	28,528,437				
951	L 89-90	D-366-367			59%	29%	7%				
952	902-904 COMBINED DISTRIBUTION ALLOCATOR										
953	L 500-502	D-902-904									
954	908 COMBINED DISTRIBUTION ALLOCATOR										
955	507-509	D-908									
956	908-909 COMBINED DISTRIBUTION ALLOCATOR										
957	L 507-511	D-908-909									
958	<u>PLANT-RELATED ALLOCATORS</u>										
959	"P112P" NET TOTAL PLANT PLUS INTANGIBLE	420,645,584	6,099,019		568,351,006	281,682,735	35,516,616	127,846,492	63,362,516	35,431,232	369,747,673
960	P112P	7%	0%		9%	5%	1%	2%	1%	1%	6%
961	"P111P" NET TOTAL PLANT LESS INTANGIBLE	413,055,930	5,745,063		559,081,269	277,088,524	34,937,344	125,761,331	62,329,081	34,853,352	363,717,133
962	P111P	7%	0%		9%	5%	1%	2%	1%	1%	6%
963	"P101P" TOTAL PLANT LESS INTANGIBLE	457,751,217	21,347,968		559,081,269	277,088,524	34,937,344	125,761,331	62,329,081	34,853,352	363,717,133
964	P101P	8%	0%		9%	5%	1%	2%	1%	1%	6%
965	"P110P" TOTAL PLANT INCLUDING INTANGIBLE	465,340,871	21,701,923		568,351,006	281,682,735	35,516,616	127,846,492	63,362,516	35,431,232	369,747,673
966	P110P	8%	0%		9%	5%	1%	2%	1%	1%	6%
967	"PTD" PLANT	420,494,493	19,610,440		513,577,215	254,536,076	32,093,767	115,525,520	57,256,069	32,016,611	334,113,916
968	P-PTD	8%	0%		9%	5%	1%	2%	1%	1%	6%
969	P110P - LESS STEAM PRODUCTION	465,340,871	21,701,923		568,351,006	281,682,735	35,516,616	127,846,492	63,362,516	35,431,232	369,747,673
970	P110P-L2C	8%	0%		10%	5%	1%	2%	1%	1%	6%
971	TOTAL GENERAL PLANT	37,256,724	1,737,527		45,504,054	22,552,448	2,843,577	10,235,811	5,073,012	2,836,741	29,603,217
972	GEN-PLT	8%	0%		9%	5%	1%	2%	1%	1%	6%
973	<u>O&amp;M /LABOR ALLOCATORS</u>										
974	O&M PROD,TRANS,DIST,CA & CI (LABOR ONLY)	5,058,195	229,713		8,381,525	4,154,001	322,661	425,031	210,651	117,793	1,229,242
975	LABOR	5%	0%		8%	4%	0%	0%	0%	0%	1%
976	O&M PROD,TRANS,DIST,CA & CI (TOTAL O&M)	9,045,933	410,661		31,656,049	15,689,182	968,634	744,474	368,972	206,323	2,153,110
977	O&M-M	1%	0%		4%	2%	0%	0%	0%	0%	0%
978	O&M PROD,ADMIN & GENERAL ONLY (TOTAL O&M)	8,865,565	403,787		15,696,041	7,779,178	666,284	1,246,451	617,758	345,440	3,604,888
979	O&M-AG	5%	0%		9%	4%	0%	1%	0%	0%	2%
980	TOTAL OPERATING EXPENSES	17,911,499	814,448		47,352,090	23,468,360	1,634,918	1,990,925	986,730	551,763	5,757,998
981	L 560	O&M-T	2%	0%	5%	3%	0%	0%	0%	0%	1%
982	SUPERVISION 500 - 501-507										
983	L 688-698	L-500									



1	IDAHO POWER COMPANY								
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION								
3	CLASS COST OF SERVICE STUDY								
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023								
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS								
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	
7	* * * * * DISTRIBUTION FUNCTION * * * * *								
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION	
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM	
939	D3602N	8%	2%	1%	3%	5%	0%	0%	
940	DARK FIBER PROJECT REVENUE (ACCT 454)	165,591,546	32,913,074	16,312,181	66,979,720	112,739,963	6,061,607	4,326,265	
941	(DERIVED FROM ACTUALS)	D-FIBER	8%	2%	1%	3%	5%	0%	
942	MERCHANDISING REVENUE	165,591,546	32,913,074	16,312,181	66,979,720		6,061,607	4,326,265	
943	(DERIVED FROM ACTUALS)	M-REV	10%	2%	1%	4%	0%	0%	
944	MERCHANDISING EXPENSE	165,591,546	32,913,074	16,312,181	66,979,720		6,061,607	4,326,265	
945	(DERIVED FROM ACTUALS)	M-EXP	10%	2%	1%	4%	0%	0%	
946	CUSTOMER ADVANCES FOR CONSTRUCTION	1,696,365	4,644,708	2,301,982	8,940,078	6,113	88,201	9,103	
947	CUSTADV	3%	7%	4%	14%	0%	0%	0%	
948	364-365 COMBINED DISTRIBUTION ALLOCATOR		21,139,799	10,477,181					
949	L 87-88	D-364-365	5%	2%					
950	366-367 COMBINED DISTRIBUTION ALLOCATOR		11,773,274	5,835,000					
951	L 89-90	D-366-367	3%	2%					
952	902-904 COMBINED DISTRIBUTION ALLOCATOR								
953	L 500-502	D-902-904							
954	908 COMBINED DISTRIBUTION ALLOCATOR								
955	507-509	D-908							
956	908-909 COMBINED DISTRIBUTION ALLOCATOR								
957	L 507-511	D-908-909							
958	<u>PLANT-RELATED ALLOCATORS</u>								
959	"P112P" NET TOTAL PLANT PLUS INTANGIBLE	183,252,136	36,423,303	18,051,900	74,123,210	124,763,852	6,708,087	4,787,668	
960	P112P	3%	1%	0%	1%	2%	0%	0%	
961	"P111P" NET TOTAL PLANT LESS INTANGIBLE	180,263,316	35,829,243	17,757,476	72,914,269	122,728,968	6,598,679	4,709,581	
962	P111P	3%	1%	0%	1%	2%	0%	0%	
963	"P101P" TOTAL PLANT LESS INTANGIBLE	180,263,316	35,829,243	17,757,476	72,914,269	122,728,968	6,598,679	4,709,581	
964	P101P	3%	1%	0%	1%	2%	0%	0%	
965	"P110P" TOTAL PLANT INCLUDING INTANGIBLE	183,252,136	36,423,303	18,051,900	74,123,210	124,763,852	6,708,087	4,787,668	
966	P110P	3%	1%	0%	1%	2%	0%	0%	
967	"PTD" PLANT	165,591,546	32,913,074	16,312,181	66,979,720	112,739,963	6,061,607	4,326,265	
968	P-PTD	3%	1%	0%	1%	2%	0%	0%	
969	P110P - LESS STEAM PRODUCTION	183,252,136	36,423,303	18,051,900	74,123,210	124,763,852	6,708,087	4,787,668	
970	P110P-L2C	3%	1%	0%	1%	2%	0%	0%	
971	TOTAL GENERAL PLANT	14,671,770	2,916,170	1,445,295	5,934,548	9,989,005	537,072	383,316	
972	GEN-PLT	3%	1%	0%	1%	2%	0%	0%	
973	<u>O&amp;M /LABOR ALLOCATORS</u>								
974	O&M PROD,TRANS,DIST,CA & CI (LABOR ONLY)	609,230	577,611	286,272	244,107	5,781,951	163,872	815,779	
975	LABOR	1%	1%	0%	0%	6%	0%	1%	
976	O&M PROD,TRANS,DIST,CA & CI (TOTAL O&M)	1,067,112	2,231,889	1,106,155	422,794	9,406,745	267,994	1,596,609	
977	O&M-M	0%	0%	0%	0%	1%	0%	0%	
978	O&M PROD,ADMIN & GENERAL ONLY (TOTAL O&M)	1,786,633	1,069,204	529,913	719,043	9,299,810	286,846	1,297,827	
979	O&M-AG	1%	1%	0%	0%	5%	0%	1%	
980	TOTAL OPERATING EXPENSES	2,853,745	3,301,093	1,636,068	1,141,837	18,706,555	554,840	2,894,436	
981	L 560	O&M-T	0%	0%	0%	2%	0%	0%	
982	SUPERVISION 500 - 501-507								
983	L 688-698	L-500							

1	IDAHO POWER COMPANY									
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3	CLASS COST OF SERVICE STUDY									
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5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6		(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
7		ALLOCATOR	METER	CUSTOMER	UNCOLLECT	CUSTOMER	CUSTOMER	INFORMATION	FUNCTION	*****
8			READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER
939		D3602N								
940	DARK FIBER PROJECT REVENUE (ACCT 454)									
941	(DERIVED FROM ACTUALS)	D-FIBER								
942	MERCHANDISING REVENUE									
943	(DERIVED FROM ACTUALS)	M-REV								
944	MERCHANDISING EXPENSE									
945	(DERIVED FROM ACTUALS)	M-EXP								
946	CUSTOMER ADVANCES FOR CONSTRUCTION									
947		CUSTADV								
948	364-365 COMBINED DISTRIBUTION ALLOCATOR									
949	L 87-88	D-364-365								
950	366-367 COMBINED DISTRIBUTION ALLOCATOR									
951	L 89-90	D-366-367								
952	902-904 COMBINED DISTRIBUTION ALLOCATOR		1,768,247	16,063,116	5,389,398					
953	L 500-502	D-902-904	8%	69%	23%					
954	908 COMBINED DISTRIBUTION ALLOCATOR						9,704,522			
955	507-509	D-908					85%			
956	908-909 COMBINED DISTRIBUTION ALLOCATOR						9,990,110			
957	L 507-511	D-908-909					86%			
958	PLANT-RELATED ALLOCATORS									
959	"P112P" NET TOTAL PLANT PLUS INTANGIBLE									
960		P112P								
961	"P111P" NET TOTAL PLANT LESS INTANGIBLE									
962		P111P								
963	"P101P" TOTAL PLANT LESS INTANGIBLE									
964		P101P								
965	"P110P" TOTAL PLANT INCLUDING INTANGIBLE									
966		P110P								
967	"PTD" PLANT									
968		P-PTD								
969	P110P - LESS STEAM PRODUCTION									
970		P110P-L2C								
971	TOTAL GENERAL PLANT									
972		GEN-PLT								
973	O&M /LABOR ALLOCATORS									
974	O&M PROD,TRANS,DIST,CA & CI (LABOR ONLY)		1,161,976	9,959,064			4,830,138			
975	LABOR		1%	10%			5%			
976	O&M PROD,TRANS,DIST,CA & CI (TOTAL O&M)		1,863,895	16,882,788	5,388,730		11,595,389			
977	O&M-M		0%	2%	1%		2%			
978	O&M PROD,ADMIN & GENERAL ONLY (TOTAL O&M)		1,817,571	15,578,028			7,555,331			
979	O&M-AG		1%	9%			4%			
980	TOTAL OPERATING EXPENSES		3,681,466	32,460,816	5,388,730		19,150,720			
981	L 560	O&M-T	0%	4%	1%		2%			
982	SUPERVISION 500 - 501-507									
983	L 688-698	L-500								

IDAHO POWER COMPANY									
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
CLASS COST OF SERVICE STUDY									
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
	(A)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)		
	ALLOCATOR	- - - - -	- - - - -	MISCELLANEOUS	- - - - -	- - - - -	- - - - -	INC TAXES & REVENUES	
		DEMAND	ENERGY	CUSTOMER	REVENUE	OTHER	TRANSFER		
939	D3602N								
940	DARK FIBER PROJECT REVENUE (ACCT 454)								
941	(DERIVED FROM ACTUALS)								
942	MERCHANDISING REVENUE								
943	(DERIVED FROM ACTUALS)								
944	MERCHANDISING EXPENSE								
945	(DERIVED FROM ACTUALS)								
946	CUSTOMER ADVANCES FOR CONSTRUCTION								
947	CUSTADV								
948	364-365 COMBINED DISTRIBUTION ALLOCATOR								
949	L 87-88	D-364-365							
950	366-367 COMBINED DISTRIBUTION ALLOCATOR								
951	L 89-90	D-366-367							
952	902-904 COMBINED DISTRIBUTION ALLOCATOR								
953	L 500-502	D-902-904							
954	908 COMBINED DISTRIBUTION ALLOCATOR								
955	507-509	D-908							
956	908-909 COMBINED DISTRIBUTION ALLOCATOR								
957	L 507-511	D-908-909							
958	PLANT-RELATED ALLOCATORS								
959	"P112P" NET TOTAL PLANT PLUS INTANGIBLE								
960	P112P								
961	"P111P" NET TOTAL PLANT LESS INTANGIBLE								
962	P111P								
963	"P101P" TOTAL PLANT LESS INTANGIBLE								
964	P101P								
965	"P110P" TOTAL PLANT INCLUDING INTANGIBLE								
966	P110P								
967	"PTD" PLANT								
968	P-PTD								
969	P110P - LESS STEAM PRODUCTION								
970	P110P-L2C								
971	TOTAL GENERAL PLANT								
972	GEN-PLT								
973	O&M /LABOR ALLOCATORS								
974	O&M PROD,TRANS,DIST,CA & CI (LABOR ONLY)								
975	LABOR								
976	O&M PROD,TRANS,DIST,CA & CI (TOTAL O&M)								
977	O&M-M								
978	O&M PROD,ADMIN & GENERAL ONLY (TOTAL O&M)							332,773	
979	O&M-AG							0%	
980	TOTAL OPERATING EXPENSES							332,773	
981	L 560	O&M-T						0%	
982	SUPERVISION 500 - 501-507								
983	L 688-698	L-500							

1	IDAHO POWER COMPANY									
2	BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION									
3	CLASS COST OF SERVICE STUDY									
4	FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023									
5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS									
6	(A)	(B)	(C)	(CC)	(CCC)	(D)	(E)	(F)	(G)	(H)
7		TOTALS	** PRODUCTION FUNCTION **				----- TRANSMISSION FUNCTION -----			
8	ALLOCATOR		DEMAND			ENERGY	DEMAND	DEMAND	DEMAND	DEMAND
9			Base-load	Peak			POWER SUP	TRANS	SUBTRANS	DIRECT
984	SUPERVISION 510 - 511-514		7,624,615							
985	L 703-712	L-510	100%	100%						
986	SUPERVISION 535 - 536-540		11,546,063	11,546,063						
987	L 718-722	L-535	100%	100%						
988	SUPERVISION 541 - 542-545		4,599,921	4,599,921						
989	L 725-728	L-541	100%	100%						
990	SUPERVISION 546 - 548-550		3,458,462	2,426,504	1,031,958					
991	L 735-737	L-546	100%	70%	30%					
992	SUPERVISION 551 - 552-554		758,056	531,862	226,194					
993	L 741-743	L-551	100%	70%	30%					
994	SUPERVISION 560 - 561-567		5,146,941					5,146,466		475
995	L 755-760	L-560	100%					100%		0%
996	SUPERVISION 568 - 569-573		4,449,063					4,448,688		375
997	L 763-766	L-568	100%					100%		0%
998	SUPERVISION 580 - 581-589		17,149,398							
999	L 773-781	L-580	100%							
1000	SUPERVISION 590 - 591-598		8,594,783							
1001	L 785-792	L-590	100%							
1002	SUPERVISION 901- 902-905		10,510,395							
1003	L 798-801	L-901	100%							
1004	SUPERVISION 907 - 908-912		4,856,231	714,202						
1005	L 806-809	L-907	100%	15%						
1006	<u>DEFERRED TAX ALLOCATOR</u>									
1007	ADIT 190 & 283		(13,118,782)	(3,930,900)	(370,431)			(2,663,082)		(156)
1008	L 189,190,193	ADIT	100%	30%	3%			20%		0%

IDAHO POWER COMPANY  
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION  
COST OF SERVICE STUDY  
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2023  
FUNCTIONALIZATION AND CLASSIFICATION OF COSTS

	(A)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)
		DISTRIBUTION FUNCTION									
	ALLOCATOR	SUBSTATION	SUBSTATION	SUBSTATION	PRI LINES	PRI LINES	SEC LINES	LINE TRANS	LINE TRANS	LINE TRANS	LINE TRANS
		GENERAL	DIRECT	CIAC	DEMAND	CUSTOMER	DIRECT	PRI DMD	PRI CUST	PRI DIRECT	SEC DMD
984	SUPERVISION 510 - 511-514										
985	L 703-712	L-510									
986	SUPERVISION 535 - 536-540										
987	L 718-722	L-535									
988	SUPERVISION 541 - 542-545										
989	L 725-728	L-541									
990	SUPERVISION 546 - 548-550										
991	L 735-737	L-546									
992	SUPERVISION 551 - 552-554										
993	L 741-743	L-551									
994	SUPERVISION 560 - 561-567										
995	L 755-760	L-560									
996	SUPERVISION 568 - 569-573										
997	L 763-766	L-568									
998	SUPERVISION 580 - 581-589	2,197,947	100,932		4,457,775	2,209,336	224,684	357,492	177,178	99,075	1,033,910
999	L 773-781	L-580	13%	1%	26%	13%	1%	2%	1%	1%	6%
1000	SUPERVISION 590 - 591-598	2,491,814	111,865		3,178,451	1,575,285	60,516	8,026	3,978	2,224	23,213
1001	L 785-792	L-590	29%	1%	37%	18%	1%	0%	0%	0%	0%
1002	SUPERVISION 901- 902-905										
1003	L 798-801	L-901									
1004	SUPERVISION 907 - 908-912										
1005	L 806-809	L-907									
1006	<u>DEFERRED TAX ALLOCATOR</u>										
1007	ADIT 190 & 283	(777,278)	(10,811)		(1,824,369)	(904,183)	(65,744)	(267,832)	(132,742)	(65,586)	(780,381)
1008	L 189,190,193	ADIT	6%	0%	14%	7%	1%	2%	1%	0%	6%

1	IDAHO POWER COMPANY							
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5	FUNCTIONALIZATION AND CLASSIFICATION OF COSTS							
6	(A)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
7	* * * * * DISTRIBUTION FUNCTION * * * * *							
8	ALLOCATOR	LINE TRANS	SEC LINES	SEC LINES	SERVICES	METERS	STREET	INSTALLATION
9		SEC CUST	DEMAND	CUSTOMER			LIGHTS	CUST PREM
984	SUPERVISION 510 - 511-514							
985	L 703-712	L-510						
986	SUPERVISION 535 - 536-540							
987	L 718-722	L-535						
988	SUPERVISION 541 - 542-545							
989	L 725-728	L-541						
990	SUPERVISION 546 - 548-550							
991	L 735-737	L-546						
992	SUPERVISION 551 - 552-554							
993	L 741-743	L-551						
994	SUPERVISION 560 - 561-567							
995	L 755-760	L-560						
996	SUPERVISION 568 - 569-573							
997	L 763-766	L-568						
998	SUPERVISION 580 - 581-589	512,420	296,525	146,962	207,268	4,390,347	38,309	699,239
999	L 773-781	L-580	3%	2%	1%	1%	26%	0%
1000	SUPERVISION 590 - 591-598	11,504	231,489	114,729	2,336	660,141	119,062	151
1001	L 785-792	L-590	0%	3%	1%	0%	8%	1%
1002	SUPERVISION 901- 902-905							
1003	L 798-801	L-901						
1004	SUPERVISION 907 - 908-912							
1005	L 806-809	L-907						
1006	<u>DEFERRED TAX ALLOCATOR</u>							
1007	ADIT 190 & 283	(386,768)	(197,625)	(97,946)	(387,820)	(231,119)	(14,890)	(9,118)
1008	L 189,190,193	ADIT	3%	2%	1%	3%	2%	0%

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6		(A)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	(AG)
7		-	-	CUSTOMER ACCOUNTING FUNCTION	-	-	-	*****	CUSTOMER INFORMATION FUNCTION	*****
8		ALLOCATOR	METER	CUSTOMER	UNCOLLECT		CUSTOMER			
9			READING	RECORDS	ACCOUNTS	OTHER	ASSISTANCE	DEMONSTR	ADVERTISING	OTHER
984	SUPERVISION 510 - 511-514									
985	L 703-712	L-510								
986	SUPERVISION 535 - 536-540									
987	L 718-722	L-535								
988	SUPERVISION 541 - 542-545									
989	L 725-728	L-541								
990	SUPERVISION 546 - 548-550									
991	L 735-737	L-546								
992	SUPERVISION 551 - 552-554									
993	L 741-743	L-551								
994	SUPERVISION 560 - 561-567									
995	L 755-760	L-560								
996	SUPERVISION 568 - 569-573									
997	L 763-766	L-568								
998	SUPERVISION 580 - 581-589									
999	L 773-781	L-580								
1000	SUPERVISION 590 - 591-598									
1001	L 785-792	L-590								
1002	SUPERVISION 901- 902-905		1,098,173	9,412,221						
1003	L 798-801	L-901	10%	90%						
1004	SUPERVISION 907 - 908-912						4,142,029			
1005	L 806-809	L-907					85%			
1006	<u>DEFERRED TAX ALLOCATOR</u>									
1007	ADIT 190 & 283									
1008	L 189,190,193	ADIT								

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984 SUPERVISION 510 - 511-514  
985 L 703-712  
986 SUPERVISION 535 - 536-540  
987 L 718-722  
988 SUPERVISION 541 - 542-545  
989 L 725-728  
990 SUPERVISION 546 - 548-550  
991 L 735-737  
992 SUPERVISION 551 - 552-554  
993 L 741-743  
994 SUPERVISION 560 - 561-567  
995 L 755-760  
996 SUPERVISION 568 - 569-573  
997 L 763-766  
998 SUPERVISION 580 - 581-589  
999 L 773-781  
1000 SUPERVISION 590 - 591-598  
1001 L 785-792  
1002 SUPERVISION 901- 902-905  
1003 L 798-801  
1004 SUPERVISION 907 - 908-912  
1005 L 806-809  
1006 DEFERRED TAX ALLOCATOR  
1007 ADIT 190 & 283  
1008 L 189,190,193



**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 38**

IDAHO POWER COMPANY													
3CP/12CP CLASS COST OF SERVICE STUDY													
*** RATE BASE ***													
TWELVE MONTHS ENDING DECEMBER 31, 2023													
SUMMARY OF FUNCTIONALIZED COSTS													
FUNCTION	(A) PLANT IN SERVICE	(B) DEPRECIATION RESERVE	(C) AMORTIZATION RESERVE	(D) SUBSTATION CIAC	(E) NET PLANT	(F) CUSTOMER ADV CONST	(G) ACCUM DEF INC TAXES	(H) ACQUISITION ADJUSTMENT	(I) WORKING CAPITAL	(J) DEFERRED PROGRAMS	(K) SUBSIDIARY RATE BASE	(L) PLNT HLD FOR FUTURE USE	(M) TOTAL RATE BASE
PRODUCTION													
DEMAND - Base-load	2,123,568,725	775,552,890	28,321,108	0	1,319,694,727	0	127,470,124	0	15,553,944	19,207,519	0	0	1,226,986,067
DEMAND - Peak	200,116,177	69,317,877	583,298	0	130,215,002	0	12,012,248	0	1,465,738	6,539,110	0	0	126,207,603
DEMAND - Not in Use	0	0	0	0	0	0	0	0	0	0	0	0	0
ENERGY - POWER SUPPLY	0	0	0	0	0	0	0	0	23,609,967	0	29,980,646	0	53,590,613
ENERGY - Summer	0	0	0	0	0	0	0	0	0	0	0	0	0
ENERGY - Non-Summer	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
TRANSMISSION	0	0	0	0	0	0	0	0	0	0	0	0	0
DEMAND - POWER SUPPLY	0	0	0	0	0	0	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	1,438,662,020	433,115,447	4,193,406	0	1,001,353,167	0	86,357,660	628,247	15,047,187	3,273,907	0	2,640,221	936,585,068
DEMAND - SUBTRANSMISSION	0	0	0	0	0	0	0	0	0	0	0	0	0
DEMAND - DIRECT	84,425	21,968	246	0	62,211	0	5,068	0	883	192	0	0	58,219
	0	0	0	0	0	0	0	0	0	0	0	0	0
DISTRIBUTION	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATIONS - GENERAL	465,340,871	94,499,470	1,356,374	0	369,485,027	0	25,205,345	0	10,475,525	1,058,958	0	5,316,573	361,130,739
SUBSTATIONS - DIRECT	21,701,923	1,380,982	63,257	0	20,257,685	0	350,573	0	488,543	49,386	0	30	20,445,071
LINES - PRIMARY DEMAND	568,351,006	199,786,215	1,656,627	0	366,908,163	3,181,235	33,343,743	0	12,794,439	1,293,374	0	0	344,470,998
LINES - PRIMARY CUSTOMER	281,682,735	99,016,852	821,048	0	181,844,835	1,576,665	16,525,627	0	6,341,104	641,014	0	0	170,724,661
LINES - SECONDARY DIRECT	35,516,616	11,284,088	103,524	0	24,129,005	0	2,131,934	0	799,533	80,824	0	0	22,877,428
LINE TRANS - PRIMARY DEMAND	127,846,492	33,700,274	372,646	0	93,773,572	128,427	7,642,983	0	2,878,018	290,935	0	0	89,171,115
LINE TRANS - PRIMARY CUST	63,362,516	16,702,329	184,689	0	46,475,498	63,650	3,787,970	0	1,426,386	144,192	0	0	44,194,456
LINE TRANS - SECOND DIRECT	35,431,232	9,339,656	103,275	0	25,988,301	0	2,126,808	0	797,611	80,629	0	0	24,739,733
LINE TRANS - SECOND DEMAND	369,747,673	97,465,309	1,077,739	0	271,204,625	395,224	22,098,663	0	8,323,578	841,420	0	0	257,875,737
LINE TRANS - SECOND CUSTOME	183,252,136	48,305,175	534,143	0	134,412,819	195,879	10,952,407	0	4,125,282	417,020	0	0	127,806,834
LINES - SECONDARY DEMAND	36,423,303	12,989,768	106,166	0	23,327,369	536,323	2,056,156	0	819,944	82,887	0	0	21,637,720
LINES - SECONDARY CUSTOMER	18,051,900	6,437,911	52,818	0	11,561,371	265,809	1,019,060	0	406,376	41,080	0	0	10,723,958
SERVICES	74,123,210	45,312,003	216,054	0	28,595,152	1,032,307	4,198,735	0	1,668,625	168,679	0	0	25,201,414
METERS	124,763,852	38,756,001	363,661	0	85,644,190	706	7,488,950	0	2,808,623	283,920	0	0	81,247,077
STREET LIGHTS	6,708,087	175,721	19,553	0	6,512,814	10,184	400,190	0	151,009	15,265	0	0	6,268,714
INSTALL ON CUST PREMISES	4,787,668	1,206,758	13,955	0	3,566,955	1,051	287,131	0	107,778	10,895	0	0	3,397,445
	0	0	0	0	0	0	0	0	0	0	0	0	0
CUSTOMER ACCOUNTING	0	0	0	0	0	0	0	0	0	0	0	0	0
METER READING	0	0	0	0	0	0	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	0	0	0	0	0	0	0	0	0	0	0	0	0
UNCOLLECTIBLES	0	0	0	0	0	0	0	0	0	0	0	0	0
MISC	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
CONSUMER INFORMATION	0	0	0	0	0	0	0	0	0	0	0	0	0
CUSTOMER ASSIST	0	0	0	0	0	0	0	0	0	0	0	0	0
SALES EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0	0
ADVERTISING	0	0	0	0	0	0	0	0	0	0	0	0	0
MISC	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0	0	0	0	0	0	0	0
DEMAND	0	0	0	0	0	0	0	0	0	0	0	0	0
ENERGY	0	0	0	0	0	0	0	0	0	0	0	0	0
CUSTOMER	0	0	0	0	0	0	0	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION CIAC	0	0	0	(42,770,847)	(42,770,847)	0	0	0	0	0	0	0	(42,770,847)
TOTALS	6,179,522,565	1,994,366,693	40,143,386	(42,770,847)	4,102,241,639	7,387,459	365,461,375	628,247	110,090,091	34,521,209	29,980,646	7,956,825	3,912,569,823

	IDAHO POWER COMPANY												
	3CP/12CP CLASS COST OF SERVICE STUDY												
	TWELVE MONTHS ENDING DECEMBER 31, 2023												
	SUMMARY OF FUNCTIONALIZED COSTS												
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
FUNCTION	OPERATION & MAINTENANCE	DEPRECIATION EXPENSE	AMORTIZATION EXPENSE	OTHER TAXES	REGULATORY DEB/CRED	PROV FOR DEF FIT	DEFERRED ITC	CONST WORK IN PROGRESS					TOTAL EXPENSES
PRODUCTION													
DEMAND - Base-load	138,136,693	61,229,781	4,744,176	8,477,654	1,464,604	(5,884,910)	8,304,618	6,537,444					223,010,061
DEMAND - Peak	16,516,367	6,492,310	48,412	991,152	387,790	(554,569)	782,592						24,664,054
DEMAND - Not in Use	0	0	0	0	0	0	0						0
ENERGY - POWER SUPPLY	492,817,416	0	0	0	0	0	0		0				492,817,416
ENERGY - Summer	0	0	0	0	0	0	0						0
ENERGY - Non-Summer	0	0	0	0	0	0	0						0
	0	0	0	0	0	0	0						0
TRANSMISSION	0	0	0	0	0	0	0						0
DEMAND - POWER SUPPLY	0	0	0	0	0	0	0						0
DEMAND - TRANSMISSION	48,778,156	28,824,414	348,044	7,560,424	481,088	(3,986,872)	5,626,160						87,631,416
DEMAND - SUBTRANSMISSION	0	0	0	0	0	0	0						0
DEMAND - DIRECT	3,521	1,909	20	444	28	(234)	330						6,018
	0	0	0	0	0	0	0						0
DISTRIBUTION	0	0	0	0	0	0	0						0
SUBSTATIONS - GENERAL	17,911,499	9,040,007	112,576	1,875,874	155,610	(1,163,654)	1,642,116						29,574,028
SUBSTATIONS - DIRECT	814,448	145,538	5,250	31,792	7,257	(16,185)	22,840						1,010,940
LINES - PRIMARY DEMAND	47,352,090	12,917,578	137,497	2,516,018	190,057	(1,648,196)	2,222,644						63,687,687
LINES - PRIMARY CUSTOMER	23,468,360	6,402,133	68,145	1,246,974	94,195	(816,869)	1,101,574						31,564,512
LINES - SECONDARY DIRECT	1,634,918	849,132	8,592	157,228	11,877	(98,425)	138,894						2,702,216
LINE TRANS - PRIMARY DEMAND	1,990,925	2,620,571	30,929	565,960	42,752	(357,246)	499,968						5,393,859
LINE TRANS - PRIMARY CUST	986,730	1,298,792	15,329	280,498	21,188	(177,056)	247,791						2,673,272
LINE TRANS - SECOND DIRECT	551,763	726,262	8,572	156,850	11,848	(98,188)	138,561						1,495,666
LINE TRANS - SECOND DEMAND	5,757,998	7,579,012	89,450	1,636,826	123,644	(1,033,747)	1,445,968						15,599,151
LINE TRANS - SECOND CUSTOME	2,853,745	3,756,265	44,333	811,234	61,280	(512,340)	716,642						7,731,158
LINES - SECONDARY DEMAND	3,301,093	831,250	8,812	161,241	12,180	(113,272)	142,440						4,343,745
LINES - SECONDARY CUSTOMER	1,636,068	411,979	4,367	79,913	6,037	(56,139)	70,595						2,152,821
SERVICES	1,141,837	1,329,707	17,932	328,134	24,787	(229,154)	289,873						2,903,116
METERS	18,706,555	6,073,947	30,183	552,314	41,721	(345,766)	487,913						25,546,867
STREET LIGHTS	554,840	227,907	1,623	29,696	2,243	(18,824)	26,233						823,719
INSTALL ON CUST PREMISES	2,894,436	193,695	1,158	21,194	1,601	(13,292)	18,723						3,117,516
	0	0	0	0	0	0	0						0
CUSTOMER ACCOUNTING	0	0	0	0	0	0	0						0
METER READING	3,681,466	0	0	0	0	0	0						3,681,466
CUSTOMER ACCOUNTS	32,460,816	0	0	0	0	0	0						32,460,816
UNCOLLECTIBLES	5,388,730	0	0	0	0	0	0						5,388,730
MISC	0	0	0	0	0	0	0						0
	0	0	0	0	0	0	0						0
CONSUMER INFORMATION	0	0	0	0	0	0	0						0
CUSTOMER ASSIST	19,150,720	0	0	0	0	0	0						19,150,720
SALES EXPENSE	0	0	0	0	0	0	0						0
ADVERTISING	0	0	0	0	0	0	0						0
MISC	0	0	0	0	0	0	0						0
	0	0	0	0	0	0	0						0
MISCELLANEOUS	0	0	0	0	0	0	0						0
DEMAND	0	0	0	0	0	0	0						0
ENERGY	0	0	0	2,119,909	0	0	0						2,119,909
CUSTOMER	0	0	0	0	0	0	0						0
REVENUE	0	0	0	0	0	0	0						0
OTHER	332,773	0	0	0	0	0	0						332,773
RETAIL SALES REVENUE	0	0	0	0	0	0	0						0
TOTALS	888,823,963	150,952,190	5,725,400	29,601,331	3,141,786	(17,124,938)	23,926,476	6,537,444	0	0	0	0	1,091,583,652

121														
122														
123	*** OTHER REVENUES ***													
124														
125		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
126	FUNCTION	REVENUES												TOTAL
127														REVENUES
128	PRODUCTION													
129	DEMAND - Base-load	1,105,981												1,105,981
130	DEMAND - Peak	2,661												2,661
131	DEMAND - Not in Use	0												0
132	ENERGY - POWER SUPPLY	29,557,875												29,557,875
133	ENERGY - Summer	0												0
134	ENERGY - Non-Summer	0												0
135		0												
136	TRANSMISSION	0												
137	DEMAND - POWER SUPPLY	0												0
138	DEMAND - TRANSMISSION	60,109,852												60,109,852
139	DEMAND - SUBTRANSMISSION	0												0
140	DEMAND - DIRECT	518												518
141		0												
142	DISTRIBUTION	0												
143	SUBSTATIONS - GENERAL	299,274												299,274
144	SUBSTATIONS - DIRECT	13,957												13,957
145	LINES - PRIMARY DEMAND	2,502,919												2,502,919
146	LINES - PRIMARY CUSTOMER	1,240,482												1,240,482
147	LINES - SECONDARY DIRECT	107,956												107,956
148	LINE TRANS - PRIMARY DEMAND	350,797												350,797
149	LINE TRANS - PRIMARY CUST	173,860												173,860
150	LINE TRANS - SECOND DIRECT	97,220												97,220
151	LINE TRANS - SECOND DEMAND	1,014,549												1,014,549
152	LINE TRANS - SECOND CUSTOME	502,825												502,825
153	LINES - SECONDARY DEMAND	156,826												156,826
154	LINES - SECONDARY CUSTOMER	77,725												77,725
155	SERVICES	203,386												203,386
156	METERS	80,239												80,239
157	STREET LIGHTS	18,406												18,406
158	INSTALL ON CUST PREMISES	13,137												13,137
159		0												
160	CUSTOMER ACCOUNTING	0												
161	METER READING	0												0
162	CUSTOMER ACCOUNTS	0												0
163	UNCOLLECTIBLES	0												0
164	MISC	0												0
165		0												
166	CONSUMER INFORMATION	0												
167	CUSTOMER ASSIST	0												0
168	SALES EXPENSE	0												0
169	ADVERTISING	0												0
170	MISC	0												0
171		0												
172	MISCELLANEOUS	0												
173	DEMAND	0												0
174	ENERGY	0												0
175	CUSTOMER	0												0
176	MISC. REVENUE	6,150,427												6,150,427
177	FACILITIES CHARGE REVENUE	9,859,316												9,859,316
178	RETAIL SALES REVENUE													0
179														
180	TOTALS	113,640,190	0	0	0	0	0	0	0	0	0	0	0	113,640,190

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 39**

**IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023  
ALLOCATION TO CLASSES**

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	SOURCES	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
	& NOTES		(1)	On Site Gen (6)	GEN SRV (7)	On Site Gen (8)	PRIM & TRAN (9-P/T)	SECONDARY (9-S)	LIGHTING (15)	SEC/PRIM/TRA (19-S/P/T)	SECONDARY (24-S)
6	*** SUMMARY OF RESULTS ***										
10	RATE BASE										
11	ELECTRIC PLANT IN SERVICE	PAGE 2C	6,179,522,565	2,817,968,008	87,956,334	85,902,468	456,112	193,263,380	1,134,709,132	5,857,139	650,933,342
12	LESS: ACCUM PROVISION FOR DEPRECIATION	PAGE 2D	1,994,366,693	921,361,756	28,133,301	28,458,084	143,379	62,367,609	368,351,197	1,523,155	211,347,951
13	: AMORT OF OTHER UTILITY PLANT	PAGE 2E	40,143,386	17,679,176	506,489	449,874	2,228	1,348,962	7,989,663	17,072	4,710,910
14	SUBSTATION CIAC	PAGE 2F	(42,770,847)	(4,292,179)	(205,156)	(472,238)	(6,923)	(1,519,756)	(2,598,489)	(4,296)	(15,762,857)
15	NET ELECTRIC PLANT IN SERVICE		4,102,241,639	1,874,634,897	59,111,388	56,522,272	303,581	128,027,053	755,769,783	4,312,615	419,111,624
16	CUSTOMER ADVANCES FOR CONSTRUCTION	PAGE 2H	7,387,459	4,347,671	154,394	200,296	1,030	102,620	1,027,059	2,848	399,869
17	ACCUMULATED DEFERRED INCOME TAXES	PAGE 2I	365,461,375	167,060,145	5,192,663	5,085,278	26,799	11,494,617	67,389,032	349,846	38,650,665
18	ELECTRIC PLANT ACQUISITION ADJUSTMENT	PAGE 2J	628,247	267,673	7,023	5,597	25	21,946	130,853	0	78,393
19	WORKING CAPITAL	PAGE 2K	110,090,091	49,797,567	1,639,182	1,688,736	9,167	3,441,483	19,895,022	140,180	11,782,152
20	DEFERRED PROGRAMS	PAGE 2L	34,521,209	15,072,007	424,089	371,436	1,784	1,129,045	6,680,942	13,329	3,920,677
21	SUBSIDIARY RATE BASE	PAGE 2M	29,980,646	11,169,860	315,122	283,541	1,236	1,183,254	6,747,739	10,573	4,695,810
22	PLANT HELD FOR FUTURE USE	PAGE 2N	7,956,825	3,145,909	126,112	67,402	747	250,847	1,474,094	2,038	963,340
24	TOTAL RATE BASE		3,912,569,823	1,782,680,096	56,275,860	53,653,411	288,712	122,456,391	722,282,341	4,126,040	401,501,460
27	RETURN UNDER PRESENT RATES										
28	SALES REVENUES	PAGE 1	1,293,009,840	566,136,133	13,032,773	17,760,920	48,160	43,557,610	269,827,909	1,327,038	153,898,825
29	OTHER OPERATING REVENUES	PAGE 4C	113,640,190	46,200,098	1,158,525	1,173,490	4,682	6,781,861	20,560,253	112,468	18,324,115
30	TOTAL OPERATING REVENUES		1,406,650,030	612,336,231	14,191,298	18,934,410	52,842	50,339,471	290,388,162	1,439,506	172,222,939
32	OPERATING EXPENSES										
33	OPERATION & MAINTENANCE EXPENSES	PAGE 3C	888,823,963	388,738,091	11,127,348	12,888,267	53,211	29,936,675	176,244,175	616,357	112,246,184
34	DEPRECIATION EXPENSE	PAGE 3D	150,952,190	69,023,727	2,106,824	2,171,839	10,768	4,779,265	28,116,787	50,132	15,972,606
35	AMORTIZATION OF LIMITED TERM PLANT	PAGE 3E	5,725,400	2,491,872	69,110	58,965	282	196,930	1,169,587	417	695,293
36	TAXES OTHER THAN INCOME	PAGE 3F	29,601,331	13,347,740	407,862	402,452	2,065	947,637	5,535,886	8,310	3,240,936
37	REGULATORY DEBITS/CREDITS	PAGE 3G	3,141,786	1,398,600	41,212	38,043	192	100,848	594,931	576	345,861
38	PROVISION FOR DEFERRED INCOME TAXES	PAGE 3H	(17,124,938)	(7,870,826)	(245,266)	(242,206)	(1,274)	(534,177)	(3,147,003)	(4,774)	(1,798,057)
39	INVESTMENT TAX CREDIT ADJUSTMENT	PAGE 3I	23,926,476	10,965,963	341,101	335,293	1,765	750,485	4,407,628	6,673	2,524,389
40	CONSTRUCTION WORK IN PROGRESS	PAGE 3J	6,537,444	2,796,006	73,882	58,927	265	232,072	1,383,095	0	831,110
41	FEDERAL INCOME TAXES	PAGE 1	39,040,245	13,370,532	262,324	322,579	494	1,659,227	9,065,970	7,507	6,781,260
42	STATE INCOME TAXES	PAGE 1	(2,828,435)	(968,684)	(19,005)	(23,371)	(36)	(120,210)	(656,822)	(544)	(491,297)
43	TOTAL OPERATING EXPENSES		1,127,795,462	493,293,021	14,165,393	16,010,788	67,732	37,948,754	222,714,233	684,655	140,348,285
45	OPERATING INCOME		278,854,568	119,043,210	25,905	2,923,623	(14,890)	12,390,717	67,673,928	754,851	31,874,654
47	ADD: IERCO OPERATING INCOME	PAGE 1	1,759,534	655,548	18,494	16,641	73	69,444	396,018	621	275,592
48	CONSOLIDATED OPERATING INCOME		280,614,102	119,698,758	44,400	2,940,263	(14,817)	12,460,161	68,069,946	755,471	32,150,247
51	RATE OF RETURN UNDER PRESENT RATES		7.172%	6.715%	0.079%	5.480%	-5.132%	10.175%	9.424%	18.310%	8.008%
52	RATE OF RETURN INDEX		1.000	0.936	0.011	0.764	(0.716)	1.419	1.314	2.553	1.116

IDAHO POWER COMPANY									
3CP/12CP CLASS COST OF SERVICE STUDY									
TWELVE MONTHS ENDING DECEMBER 31, 2023									
ALLOCATION TO CLASSES									
	SOURCES	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON	
*** SUMMARY OF RESULTS ***									
RATE BASE									
ELECTRIC PLANT IN SERVICE	PAGE 2C	6,179,522,565	5,566,052	12,793,366	1,496,706	45,213,165	37,652,894	148,387,912	
LESS: ACCUM PROVISION FOR DEPRECIATION	PAGE 2D	1,994,366,693	1,760,030	1,979,162	476,366	15,377,730	12,079,222	44,871,729	
: AMORT OF OTHER UTILITY PLANT	PAGE 2E	40,143,386	31,489	37,290	7,485	408,021	282,490	1,194,233	
SUBSTATION CIAC	PAGE 2F	(42,770,847)	(10,144)	(21,076)	(1,060)	0	(70,288)	(14,764,442)	
NET ELECTRIC PLANT IN SERVICE		4,102,241,639	3,764,389	10,755,838	1,011,795	29,427,413	25,220,894	87,557,509	
CUSTOMER ADVANCES FOR CONSTRUCTION	PAGE 2H	7,387,459	10,108	29,490	3,144	0		62	2
ACCUMULATED DEFERRED INCOME TAXES	PAGE 2I	365,461,375	329,188	755,652	88,821	2,713,982	2,188,449	8,027,016	
ELECTRIC PLANT ACQUISITION ADJUSTMENT	PAGE 2J	628,247	425	0	87	7,526	4,844	21,349	
WORKING CAPITAL	PAGE 2K	110,090,091	111,796	325,745	30,946	748,168	708,114	2,467,948	
DEFERRED PROGRAMS	PAGE 2L	34,521,209	25,867	29,113	6,090	326,077	239,943	1,012,723	
SUBSIDIARY RATE BASE	PAGE 2M	29,980,646	28,061	47,932	5,743	460,286	338,953	1,164,174	
PLANT HELD FOR FUTURE USE	PAGE 2N	7,956,825	6,596	9,997	867	31,630	20,361	89,747	
TOTAL RATE BASE		3,912,569,823	3,597,837	10,383,484	963,563	28,287,118	24,344,597	84,286,431	
RETURN UNDER PRESENT RATES									
SALES REVENUES	PAGE 1	1,293,009,840	1,309,792	3,750,417	199,244	13,302,981	9,818,665	36,591,539	
OTHER OPERATING REVENUES	PAGE 4C	113,640,190	93,861	176,934	19,105	1,187,749	1,744,729	3,241,706	
TOTAL OPERATING REVENUES		1,406,650,030	1,403,653	3,927,351	218,349	14,490,730	11,563,394	39,833,245	
OPERATING EXPENSES									
OPERATION & MAINTENANCE EXPENSES	PAGE 3C	888,823,963	901,046	1,947,396	254,097	9,999,258	7,468,743	26,854,451	
DEPRECIATION EXPENSE	PAGE 3D	150,952,190	130,341	365,665	37,901	1,157,872	917,560	3,434,221	
AMORTIZATION OF LIMITED TERM PLANT	PAGE 3E	5,725,400	4,267	3,100	960	63,741	42,128	181,501	
TAXES OTHER THAN INCOME	PAGE 3F	29,601,331	26,730	59,758	7,082	236,953	189,440	693,404	
REGULATORY DEBITS/CREDITS	PAGE 3G	3,141,786	2,559	4,285	643	26,845	20,698	85,097	
PROVISION FOR DEFERRED INCOME TAXES	PAGE 3H	(17,124,938)	(15,575)	(35,952)	(4,223)	(125,296)	(101,036)	(370,583)	
INVESTMENT TAX CREDIT ADJUSTMENT	PAGE 3I	23,926,476	21,651	49,777	5,857	176,815	142,577	522,956	
CONSTRUCTION WORK IN PROGRESS	PAGE 3J	6,537,444	4,509	0	922	81,598	51,026	225,005	
FEDERAL INCOME TAXES	PAGE 3J	39,040,245	36,701	53,040	6,863	692,053	509,028	1,717,811	
STATE INCOME TAXES	PAGE 1	(2,828,435)	(2,659)	(3,843)	(497)	(50,139)	(36,879)	(124,454)	
TOTAL OPERATING EXPENSES		1,127,795,462	1,109,570	2,443,226	309,606	12,259,699	9,203,286	33,219,409	
OPERATING INCOME		278,854,568	294,083	1,484,125	(91,256)	2,231,030	2,360,107	6,613,835	
ADD: IERCO OPERATING INCOME									
ADD: IERCO OPERATING INCOME	PAGE 1	1,759,534	1,647	2,813	337	27,014	19,893	68,324	
CONSOLIDATED OPERATING INCOME		280,614,102	295,730	1,486,938	(90,919)	2,258,044	2,380,000	6,682,159	
RATE OF RETURN UNDER PRESENT RATES									
RATE OF RETURN INDEX		7.172%	8.220%	14.320%	-9.436%	7.983%	9.776%	7.928%	
RATE OF RETURN INDEX		1.000	1.146	1.997	(1.316)	1.113	1.363	1.105	

53	IDAHO POWER COMPANY											PAGE 2C
54	3CP/12CP CLASS COST OF SERVICE STUDY											
55	TWELVE MONTHS ENDING DECEMBER 31, 2023											
56	*** TABLE 1 - PLANT IN SERVICE ***											
57	ALLOCATION TO CIATION TO CLASSES											
58	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
59		FACTOR	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
60	PRODUCTION			RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
61	DEMAND - BASE-LOAD TOTAL		2,123,568,725	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
62	DEMAND - Base-load Summer	D10BS	912,537,126	376,673,290	9,220,865	6,956,707	24,362	26,841,350	158,618,772	0	91,778,497	201,916,584
63	DEMAND - Peak	D10P	200,116,177	82,603,126	2,022,103	1,525,581	5,343	5,886,214	34,784,538	0	20,126,701	44,279,595
64	DEMAND - Base-load Non-Summer	D10BNS	1,211,031,599	531,557,965	14,778,334	12,184,575	61,839	48,543,094	290,654,133	0	178,192,266	57,632,856
65	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
66	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
67	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
68			0									
69	TRANSMISSION		0									
70	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
71	DEMAND - TRANSMISSION	D13	1,438,662,020	612,960,171	16,081,551	12,817,335	56,695	50,256,351	299,648,375	0	179,516,094	188,938,204
72	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
73	DEMAND - DIRECT	DA3509	84,425	0	0	0	0	84,425	0	0	0	0
74			0									
75	DISTRIBUTION		0									
76	SUBSTATIONS - GENERAL	D20	465,340,871	176,891,787	8,454,990	3,840,624	56,305	13,883,137	80,890,364	178,369	55,482,426	124,322,651
77	SUBSTATIONS - DIRECT	DA3602	21,701,923	0	0	0	0	0	0	0	5,490	0
78	LINES - PRIMARY DEMAND	D20	568,351,006	216,049,420	10,326,629	4,690,803	68,770	16,956,377	98,796,651	217,854	67,764,287	151,843,322
79	LINES - PRIMARY CUSTOMER	C20	281,682,735	231,590,653	6,248,594	14,296,103	41,147	131,671	17,758,414	0	53,609	9,018,943
80	LINES - SECONDARY DIRECT	DA3647	35,516,616	0	0	0	0	9,491,902	0	439,858	20,759,445	0
81	LINE TRANS - PRIMARY DEMAND	D50	127,846,492	48,598,771	2,322,901	1,055,163	15,469	3,814,216	22,223,600	49,005	15,243,092	34,156,069
82	LINE TRANS - PRIMARY CUST	C50	63,362,516	52,094,660	1,405,576	3,215,806	9,256	29,618	3,994,628	0	12,059	2,028,747
83	LINE TRANS - SECOND DIRECT	DA368	35,431,232	0	0	0	0	14,022,768	0	0	19,352,982	0
84	LINE TRANS - SECOND DEMAND	D60	369,747,673	165,102,692	7,891,501	3,584,662	52,553	0	75,499,361	166,481	162,458	116,037,068
85	LINE TRANS - SECOND CUSTOMER	C60	183,252,136	150,763,036	4,067,768	9,306,610	26,786	0	11,560,538	0	306	5,871,235
86	LINES - SECONDARY DEMAND	D30	36,423,303	23,702,539	1,132,923	514,623	7,545	0	10,838,869	23,900	23,323	0
87	LINES - SECONDARY CUSTOMER	C30	18,051,900	15,343,023	413,973	947,126	2,726	0	1,176,506	0	31	0
88	SERVICES	CW369	74,123,210	59,450,076	1,601,186	3,905,191	11,065	220,591	5,616,328	0	317,126	2,997,199
89	METERS	CW370	124,763,852	74,586,799	1,987,439	7,061,560	16,250	3,083,729	22,648,055	560	2,140,242	12,324,084
90	STREET LIGHTS	DA373	6,708,087	0	0	0	0	14,118	0	0	173	0
91	INSTALL ON CUST PREMISES	DA371	4,787,668	0	0	0	0	3,819	0	4,781,112	2,737	0
92			0									
93	CUSTOMER ACCOUNTING		0									
94	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
95	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
96	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
97	MISC	C10	0	0	0	0	0	0	0	0	0	0
98			0									
99	CONSUMER INFORMATION		0									
100	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
101	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
102	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
103	MISC	C10	0	0	0	0	0	0	0	0	0	0
104			0									
105	MISCELLANEOUS		0									
106	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
107	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
108	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
109	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
110	OTHER	R01	0	0	0	0	0	0	0	0	0	0
111	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
112												
113	TOTALS	PAGE 2C	6,179,522,565	2,817,968,008	87,956,334	85,902,468	456,112	193,263,380	1,134,709,132	5,857,139	650,933,342	951,366,556



	IDAHO POWER COMPANY								
54	3CP/12CP CLASS COST OF SERVICE STUDY								
55	TWELVE MONTHS ENDING DECEMBER 31, 2023								
56	*** TABLE 1 - PLANT IN SERVICE ***								
	ALLOCATION TO CLASSES								
57				(K)	(L)	(M)	(N)	(O)	(P)
58	FUNCTION	ALLOCATION	TOTALS	UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
59		FACTOR		GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
60	PRODUCTION			(40)	(41)	(42)			
61	DEMAND - BASE-LOAD TOTAL		2,123,568,725						
62	DEMAND - Base-load Summer	D10BS	912,537,126	492,751	0	98,491	6,564,608	6,308,535	27,042,312
63	DEMAND - Peak	D10P	200,116,177	108,059	0	21,599	1,439,595	1,383,440	5,930,284
64	DEMAND - Base-load Non-Summer	D10BNS	1,211,031,599	971,964	0	201,068	19,940,877	10,266,336	46,046,292
65	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
66	ENERGY - Summer	E10S	0	0	0	0	0	0	0
67	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
68									
69	TRANSMISSION		0						
70	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
71	DEMAND - TRANSMISSION	D13	1,438,662,020	972,112	0	198,507	17,235,001	11,093,508	48,888,117
72	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
73	DEMAND - DIRECT	DA3509	84,425	0	0	0	0	0	0
74									
75	DISTRIBUTION								
76	SUBSTATIONS - GENERAL	D20	465,340,871	421,174	875,026	44,017	0	0	0
77	SUBSTATIONS - DIRECT	DA3602	21,701,923	0	0	0	0	1,634,335	20,062,099
78	LINES - PRIMARY DEMAND	D20	568,351,006	514,407	1,068,726	53,761	0	0	0
79	LINES - PRIMARY CUSTOMER	C20	281,682,735	782,031	1,401,355	360,214	0	0	0
80	LINES - SECONDARY DIRECT	DA3647	35,516,616	0	0	0	0	4,825,412	0
81	LINE TRANS - PRIMARY DEMAND	D50	127,846,492	115,712	240,402	12,093	0	0	0
82	LINE TRANS - PRIMARY CUST	C50	63,362,516	175,912	315,225	81,028	0	0	0
83	LINE TRANS - SECOND DIRECT	DA368	35,431,232	0	0	0	0	2,055,481	0
84	LINE TRANS - SECOND DEMAND	D60	369,747,673	393,104	816,709	41,084	0	0	0
85	LINE TRANS - SECOND CUSTOMER	C60	183,252,136	509,094	912,267	234,496	0	0	0
86	LINES - SECONDARY DEMAND	D30	36,423,303	56,435	117,249	5,898	0	0	0
87	LINES - SECONDARY CUSTOMER	C30	18,051,900	51,810	92,841	23,864	0	0	0
88	SERVICES	CW369	74,123,210	0	0	0	0	4,448	0
89	METERS	CW370	124,763,852	1,486	259,770	120,587	33,083	81,400	418,809
90	STREET LIGHTS	DA373	6,708,087	0	6,693,796	0	0	0	0
91	INSTALL ON CUST PREMISES	DA371	4,787,668	0	0	0	0	0	0
92									
93	CUSTOMER ACCOUNTING								
94	METER READING	CW902	0	0	0	0	0	0	0
95	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
96	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
97	MISC	C10	0	0	0	0	0	0	0
98									
99	CONSUMER INFORMATION								
100	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
101	SALES EXPENSE	C10	0	0	0	0	0	0	0
102	ADVERTISING	C10	0	0	0	0	0	0	0
103	MISC	C10	0	0	0	0	0	0	0
104									
105	MISCELLANEOUS								
106	DEMAND	D99U	0	0	0	0	0	0	0
107	ENERGY	E99U	0	0	0	0	0	0	0
108	CUSTOMER	C10	0	0	0	0	0	0	0
109	REVENUE	R02	0	0	0	0	0	0	0
110	OTHER	R01	0	0	0	0	0	0	0
111	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
113	TOTALS		6,179,522,565	5,566,052	12,793,366	1,496,706	45,213,165	37,652,894	148,387,912

115	IDAHO POWER COMPANY												PAGE 2D
116	3CP/12CP CLASS COST OF SERVICE STUDY												
117	TWELVE MONTHS ENDING DECEMBER 31, 2023												
118	*** TABLE 2 - ACCUMULATED RESERVE FOR DEPRECIATION ***												
119	ALLOCATION TO CIATION TO CLASSES												
120	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
121		FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION	
122	PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	
123	DEMAND - BASE-LOAD TOTAL		775,552,890										
124	DEMAND - Base-load Summer	D10BS	333,269,555	137,565,625	3,367,571	2,540,673	8,897	9,802,785	57,929,487	0	33,518,613	73,742,370	
125	DEMAND - Peak	D10P	69,317,877	28,612,746	700,433	528,443	1,851	2,038,915	12,048,953	0	6,971,651	15,337,928	
126	DEMAND - Base-load Non-Summer	D10BNS	442,283,334	194,131,375	5,397,226	4,449,954	22,584	17,728,523	106,150,392	0	65,077,963	21,048,213	
127	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0	
128	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0	
129	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0	
130	TRANSMISSION		0										
131	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0	
132	DEMAND - TRANSMISSION	D13	433,115,447	184,534,321	4,841,421	3,858,714	17,068	15,129,893	90,210,444	0	54,044,099	56,880,667	
133	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0	
134	DEMAND - DIRECT	DA3509	21,968	0	0	0	0	21,968	0	0	0	0	
135	DISTRIBUTION		0										
136	SUBSTATIONS - GENERAL	D20	94,499,470	35,922,441	1,717,004	779,938	11,434	2,819,329	16,426,875	36,222	11,267,138	25,246,922	
137	SUBSTATIONS - DIRECT	DA3602	1,380,982	0	0	0	0	0	0	0	349	0	
138	LINES - PRIMARY DEMAND	D20	199,786,215	75,945,490	3,630,007	1,648,907	24,174	5,960,490	34,728,907	76,580	23,820,439	53,375,823	
139	LINES - PRIMARY CUSTOMER	C20	99,016,852	81,408,530	2,196,500	5,025,353	14,464	46,285	6,242,421	0	18,845	3,170,330	
140	LINES - SECONDARY DIRECT	DA3647	11,284,088	0	0	0	0	3,015,700	0	139,749	6,595,544	0	
141	LINE TRANS - PRIMARY DEMAND	D50	33,700,274	12,810,613	612,316	278,140	4,078	1,005,425	5,858,130	12,918	4,018,072	9,003,523	
142	LINE TRANS - PRIMARY CUST	C50	16,702,329	13,732,127	370,509	847,685	2,440	7,807	1,052,982	0	3,179	534,777	
143	LINE TRANS - SECOND DIRECT	DA368	9,339,656	0	0	0	0	3,696,395	0	0	5,101,437	0	
144	LINE TRANS - SECOND DEMAND	D60	97,465,309	43,520,990	2,080,196	944,915	13,853	0	19,901,595	43,884	42,824	30,587,315	
145	LINE TRANS - SECOND CUSTOMER	C60	48,305,175	39,741,064	1,072,262	2,453,218	7,061	0	3,047,352	0	81	1,547,655	
146	LINES - SECONDARY DEMAND	D30	12,989,768	8,453,118	404,038	183,532	2,691	0	3,865,503	8,524	8,318	0	
147	LINES - SECONDARY CUSTOMER	C30	6,437,911	5,471,835	147,637	337,777	972	0	419,581	0	11	0	
148	SERVICES	CW369	45,312,003	36,342,221	978,815	2,387,269	6,764	134,848	3,433,298	0	193,861	1,832,207	
149	METERS	CW370	38,756,001	23,169,259	617,368	2,193,567	5,048	957,914	7,035,275	174	664,834	3,828,290	
150	STREET LIGHTS	DA373	175,721	0	0	0	0	370	0	0	5	0	
151	INSTALL ON CUST PREMISES	DA371	1,206,758	0	0	0	0	963	0	1,205,105	690	0	
152	CUSTOMER ACCOUNTING		0										
153	METER READING	CW902	0	0	0	0	0	0	0	0	0	0	
154	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0	
155	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0	
156	MISC	C10	0	0	0	0	0	0	0	0	0	0	
157	CONSUMER INFORMATION		0										
158	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0	
159	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0	
160	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0	
161	MISC	C10	0	0	0	0	0	0	0	0	0	0	
162	MISCELLANEOUS		0										
163	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0	
164	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0	
165	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0	
166	REVENUE	R02	0	0	0	0	0	0	0	0	0	0	
167	OTHER	R01	0	0	0	0	0	0	0	0	0	0	
168	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0	
169	TOTALS	PAGE 2D	1,994,366,693	921,361,756	28,133,301	28,458,084	143,379	62,367,609	368,351,197	1,523,155	211,347,951	296,136,020	

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**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

\*\*\* TABLE 2 - ACCUMULATED RESERVE FOR DEPRECIATION \*\*\*

FUNCTION	ALLOCATION FACTOR	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
PRODUCTION								
DEMAND - BASE-LOAD TOTAL		775,552,890						
DEMAND - Base-load Summer	D10BS	333,269,555	179,959	0	35,970	2,397,474	2,303,953	9,876,178
DEMAND - Peak	D10P	69,317,877	37,430	0	7,482	498,659	479,207	2,054,180
DEMAND - Base-load Non-Summer	D10BNS	442,283,334	354,973	0	73,432	7,282,649	3,749,390	16,816,661
ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
ENERGY - Summer	E10S	0	0	0	0	0	0	0
ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
TRANSMISSION		0						
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	433,115,447	292,659	0	59,761	5,188,672	3,339,749	14,717,980
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	21,968	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	94,499,470	85,530	177,697	8,939	0	0	0
SUBSTATIONS - DIRECT	DA3602	1,380,982	0	0	0	0	103,999	1,276,633
LINES - PRIMARY DEMAND	D20	199,786,215	180,824	375,678	18,898	0	0	0
LINES - PRIMARY CUSTOMER	C20	99,016,852	274,899	492,603	126,622	0	0	0
LINES - SECONDARY DIRECT	DA3647	11,284,088	0	0	0	0	1,533,096	0
LINE TRANS - PRIMARY DEMAND	D50	33,700,274	30,502	63,370	3,188	0	0	0
LINE TRANS - PRIMARY CUST	C50	16,702,329	46,370	83,093	21,359	0	0	0
LINE TRANS - SECOND DIRECT	DA368	9,339,656	0	0	0	0	541,824	0
LINE TRANS - SECOND DEMAND	D60	97,465,309	103,622	215,284	10,830	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	48,305,175	134,197	240,473	61,813	0	0	0
LINES - SECONDARY DEMAND	D30	12,989,768	20,127	41,815	2,103	0	0	0
LINES - SECONDARY CUSTOMER	C30	6,437,911	18,477	33,110	8,511	0	0	0
SERVICES	CW369	45,312,003	0	0	0	0	2,719	0
METERS	CW370	38,756,001	462	80,694	37,458	10,277	25,286	130,097
STREET LIGHTS	DA373	175,721	0	175,346	0	0	0	0
INSTALL ON CUST PREMISES	DA371	1,206,758	0	0	0	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
MISCELLANEOUS								
DEMAND	D99U	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0
OTHER	R01	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
TOTALS	PAGE 2D	1,994,366,693	1,760,030	1,979,162	476,366	15,377,730	12,079,222	44,871,729

175			IDAHO POWER COMPANY									PAGE 2E
176			3CP/12CP CLASS COST OF SERVICE STUDY									
177			TWELVE MONTHS ENDING DECEMBER 31, 2023									
178	*** TABLE 3 - AMORTIZATION RESERVE***		ALLOCATION TO CIATION TO CLASSES									
179			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
180	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
181		FACTOR		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
182	PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
183	DEMAND - BASE-LOAD TOTAL		28,321,108									
184	DEMAND - Base-load Summer	D10BS	12,170,109	5,023,527	122,975	92,779	325	357,971	2,115,429	0	1,224,010	2,692,873
185	DEMAND - Peak	D10P	583,298	240,771	5,894	4,447	16	17,157	101,390	0	58,665	129,066
186	DEMAND - Base-load Non-Summer	D10BNS	16,150,999	7,089,156	197,092	162,500	825	647,398	3,876,327	0	2,376,472	768,624
187	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
188	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
189	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
190			0									
191	TRANSMISSION		0									
192	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
193	DEMAND - TRANSMISSION	D13	4,193,406	1,786,654	46,874	37,360	165	146,487	873,414	0	523,253	550,716
194	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
195	DEMAND - DIRECT	DA3509	246	0	0	0	0	246	0	0	0	0
196			0									
197	DISTRIBUTION		0									
198	SUBSTATIONS - GENERAL	D20	1,356,374	515,603	24,645	11,195	164	40,467	235,779	520	161,720	362,375
199	SUBSTATIONS - DIRECT	DA3602	63,257	0	0	0	0	0	0	0	16	0
200	LINES - PRIMARY DEMAND	D20	1,656,627	629,740	30,100	13,673	200	49,424	287,972	635	197,519	442,592
201	LINES - PRIMARY CUSTOMER	C20	821,048	675,040	18,213	41,670	120	384	51,762	0	156	26,288
202	LINES - SECONDARY DIRECT	DA3647	103,524	0	0	0	0	27,667	0	1,282	60,510	0
203	LINE TRANS - PRIMARY DEMAND	D50	372,646	141,656	6,771	3,076	45	11,118	64,777	143	44,431	99,558
204	LINE TRANS - PRIMARY CUST	C50	184,689	151,845	4,097	9,373	27	86	11,644	0	35	5,913
205	LINE TRANS - SECOND DIRECT	DA368	103,275	0	0	0	0	40,874	0	0	56,410	0
206	LINE TRANS - SECOND DEMAND	D60	1,077,739	481,241	23,002	10,449	153	0	220,065	485	474	338,224
207	LINE TRANS - SECOND CUSTOMER	C60	534,143	439,443	11,857	27,127	78	0	33,697	0	1	17,113
208	LINES - SECONDARY DEMAND	D30	106,166	69,088	3,302	1,500	22	0	31,593	70	68	0
209	LINES - SECONDARY CUSTOMER	C30	52,618	44,722	1,207	2,761	8	0	3,429	0	0	0
210	SERVICES	CW369	216,054	173,285	4,667	11,383	32	643	16,370	0	924	8,736
211	METERS	CW370	363,661	217,405	5,793	20,583	47	8,988	66,014	2	6,238	35,922
212	STREET LIGHTS	DA373	19,553	0	0	0	0	41	0	0	1	0
213	INSTALL ON CUST PREMISES	DA371	13,955	0	0	0	0	11	0	13,936	8	0
214			0									
215	CUSTOMER ACCOUNTING		0									
216	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
217	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
218	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
219	MISC	C10	0	0	0	0	0	0	0	0	0	0
220			0									
221	CONSUMER INFORMATION		0									
222	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
223	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
224	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
225	MISC	C10	0	0	0	0	0	0	0	0	0	0
226			0									
227	MISCELLANEOUS		0									
228	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
229	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
230	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
231	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
232	OTHER	R01	0	0	0	0	0	0	0	0	0	0
233	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
234												
235	TOTALS	PAGE 2E	40,143,386	17,679,176	506,489	449,874	2,228	1,348,962	7,989,663	17,072	4,710,910	5,478,003

175								
176								
177								
178	*** TABLE 3 - AMORTIZATION RESERVE***							
179								
180	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)
181	FACTOR			UNMETERED	MUNICIPAL	TRAFFIC	SC	SC
182	PRODUCTION			GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT
183	DEMAND - BASE-LOAD TOTAL		28,321,108	(40)	(41)	(42)		MICRON
184	DEMAND - Base-load Summer	D10BS	12,170,109	6,572	0	1,314	87,549	84,134
185	DEMAND - Peak	D10P	583,298	315	0	63	4,196	4,032
186	DEMAND - Base-load Non-Summer	D10BNS	16,150,999	12,963	0	2,682	265,943	136,918
187	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
188	ENERGY - Summer	E10S	0	0	0	0	0	0
189	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0
190								
191	TRANSMISSION		0					
192	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
193	DEMAND - TRANSMISSION	D13	4,193,406	2,834	0	579	50,237	32,335
194	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
195	DEMAND - DIRECT	DA3509	246	0	0	0	0	0
196								
197	DISTRIBUTION							
198	SUBSTATIONS - GENERAL	D20	1,356,374	1,228	2,551	128	0	0
199	SUBSTATIONS - DIRECT	DA3602	63,257	0	0	0	0	58,477
200	LINES - PRIMARY DEMAND	D20	1,656,627	1,499	3,115	157	0	0
201	LINES - PRIMARY CUSTOMER	C20	821,048	2,279	4,085	1,050	0	0
202	LINES - SECONDARY DIRECT	DA3647	103,524	0	0	0	0	14,065
203	LINE TRANS - PRIMARY DEMAND	D50	372,646	337	701	35	0	0
204	LINE TRANS - PRIMARY CUST	C50	184,689	513	919	236	0	0
205	LINE TRANS - SECOND DIRECT	DA368	103,275	0	0	0	0	5,991
206	LINE TRANS - SECOND DEMAND	D60	1,077,739	1,146	2,381	120	0	0
207	LINE TRANS - SECOND CUSTOMER	C60	534,143	1,484	2,659	684	0	0
208	LINES - SECONDARY DEMAND	D30	106,166	164	342	17	0	0
209	LINES - SECONDARY CUSTOMER	C30	52,618	151	271	70	0	0
210	SERVICES	CW369	216,054	0	0	0	0	13
211	METERS	CW370	363,661	4	757	351	96	237
212	STREET LIGHTS	DA373	19,553	0	19,511	0	0	0
213	INSTALL ON CUST PREMISES	DA371	13,955	0	0	0	0	0
214								
215	CUSTOMER ACCOUNTING							
216	METER READING	CW902	0	0	0	0	0	0
217	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
218	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
219	MISC	C10	0	0	0	0	0	0
220								
221	CONSUMER INFORMATION							
222	CUSTOMER ASSIST	C10	0	0	0	0	0	0
223	SALES EXPENSE	C10	0	0	0	0	0	0
224	ADVERTISING	C10	0	0	0	0	0	0
225	MISC	C10	0	0	0	0	0	0
226								
227	MISCELLANEOUS							
228	DEMAND	D99U	0	0	0	0	0	0
229	ENERGY	E99U	0	0	0	0	0	0
230	CUSTOMER	C10	0	0	0	0	0	0
231	REVENUE	R02	0	0	0	0	0	0
232	OTHER	R01	0	0	0	0	0	0
233	SUBSTATION CIAC	CIAC	0	0	0	0	0	0
234								
235	TOTALS	PAGE 2E	40,143,386	31,489	37,290	7,485	408,021	282,490
								1,194,233

\*\*\* TABLE 4 - SUBSTATION CIAC \*\*\*

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
241	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
242		FACTOR		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
243	PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
244	DEMAND - BASE-LOAD TOTAL		0									
245	DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0	0	0	0	0
246	DEMAND - Peak	D10P	0	0	0	0	0	0	0	0	0	0
247	DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0	0	0	0	0
248	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
249	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
250	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
251			0									
252	TRANSMISSION		0									
253	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
254	DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0	0	0	0
255	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
256	DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0	0	0	0
257			0									
258	DISTRIBUTION		0									
259	SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0	0	0	0
260	SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0	0	0	0
261	LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0	0	0	0
262	LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0	0	0	0
263	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0	0	0	0
264	LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0	0	0	0
265	LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0	0	0	0
266	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0	0	0	0
267	LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0	0	0	0
268	LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0	0	0	0
269	LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0	0	0	0
270	LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0	0	0	0
271	SERVICES	CW369	0	0	0	0	0	0	0	0	0	0
272	METERS	CW370	0	0	0	0	0	0	0	0	0	0
273	STREET LIGHTS	DA373	0	0	0	0	0	0	0	0	0	0
274	INSTALL ON CUST PREMISES	DA371	0	0	0	0	0	0	0	0	0	0
275			0									
276	CUSTOMER ACCOUNTING		0									
277	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
278	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
279	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
280	MISC	C10	0	0	0	0	0	0	0	0	0	0
281			0									
282	CONSUMER INFORMATION		0									
283	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
284	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
285	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
286	MISC	C10	0	0	0	0	0	0	0	0	0	0
287			0									
288	MISCELLANEOUS		0									
289	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
290	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
291	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
292	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
293	OTHER	R01	0	0	0	0	0	0	0	0	0	0
294	SUBSTATION CIAC	CIAC	(42,770,847)	(4,292,179)	(205,156)	(472,238)	(6,923)	(1,519,756)	(2,598,489)	(4,296)	(15,762,857)	(3,041,944)
295												
296	TOTALS	PAGE 2F	(42,770,847)	(4,292,179)	(205,156)	(472,238)	(6,923)	(1,519,756)	(2,598,489)	(4,296)	(15,762,857)	(3,041,944)

236	IDAHO POWER COMPANY							
237	3CP/12CP CLASS COST OF SERVICE STUDY							
238	TWELVE MONTHS ENDING DECEMBER 31, 2023							
239	*** TABLE 4 - SUBSTATION CIAC ***							
240	ALLOCATION TO CLASSES							
241	FUNCTION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
242	FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
243	PRODUCTION		GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
244	DEMAND - Base-load Summer	0	(40)	(41)	(42)			
245	DEMAND - Base-load Summer	0	0	0	0	0	0	0
246	DEMAND - Peak	0	0	0	0	0	0	0
247	DEMAND - Base-load Non-Summer	0	0	0	0	0	0	0
248	ENERGY - POWER SUPPLY	0	0	0	0	0	0	0
249	ENERGY - Summer	0	0	0	0	0	0	0
250	ENERGY - Non-Summer	0	0	0	0	0	0	0
251								
252	TRANSMISSION	0	0	0	0	0	0	0
253	DEMAND - POWER SUPPLY	0	0	0	0	0	0	0
254	DEMAND - TRANSMISSION	0	0	0	0	0	0	0
255	DEMAND - SUBTRANSMISSION	0	0	0	0	0	0	0
256	DEMAND - DIRECT	0	0	0	0	0	0	0
257								
258	DISTRIBUTION							
259	SUBSTATIONS - GENERAL	0	0	0	0	0	0	0
260	SUBSTATIONS - DIRECT	0	0	0	0	0	0	0
261	LINES - PRIMARY DEMAND	0	0	0	0	0	0	0
262	LINES - PRIMARY CUSTOMER	0	0	0	0	0	0	0
263	LINES - SECONDARY DIRECT	0	0	0	0	0	0	0
264	LINE TRANS - PRIMARY DEMAND	0	0	0	0	0	0	0
265	LINE TRANS - PRIMARY CUST	0	0	0	0	0	0	0
266	LINE TRANS - SECOND DIRECT	0	0	0	0	0	0	0
267	LINE TRANS - SECOND DEMAND	0	0	0	0	0	0	0
268	LINE TRANS - SECOND CUSTOMER	0	0	0	0	0	0	0
269	LINES - SECONDARY DEMAND	0	0	0	0	0	0	0
270	LINES - SECONDARY CUSTOMER	0	0	0	0	0	0	0
271	SERVICES	0	0	0	0	0	0	0
272	METERS	0	0	0	0	0	0	0
273	STREET LIGHTS	0	0	0	0	0	0	0
274	INSTALL ON CUST PREMISES	0	0	0	0	0	0	0
275								
276	CUSTOMER ACCOUNTING							
277	METER READING	0	0	0	0	0	0	0
278	CUSTOMER ACCOUNTS	0	0	0	0	0	0	0
279	UNCOLLECTIBLES	0	0	0	0	0	0	0
280	MISC	0	0	0	0	0	0	0
281								
282	CONSUMER INFORMATION							
283	CUSTOMER ASSIST	0	0	0	0	0	0	0
284	SALES EXPENSE	0	0	0	0	0	0	0
285	ADVERTISING	0	0	0	0	0	0	0
286	MISC	0	0	0	0	0	0	0
287								
288	MISCELLANEOUS							
289	DEMAND	0	0	0	0	0	0	0
290	ENERGY	0	0	0	0	0	0	0
291	CUSTOMER	0	0	0	0	0	0	0
292	REVENUE	0	0	0	0	0	0	0
293	OTHER	0	0	0	0	0	0	0
294	SUBSTATION CIAC	(42,770,847)	(10,144)	(21,076)	(1,060)	0	(70,288)	(14,764,442)
295								
296	TOTALS	(42,770,847)	(10,144)	(21,076)	(1,060)	0	(70,288)	(14,764,442)

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297	IDAHO POWER COMPANY								
298	3CP/12CP CLASS COST OF SERVICE STUDY								
299	TWELVE MONTHS ENDING DECEMBER 31, 2023								
300	*** TABLE 5 - CUSTOMER ADVANCES FOR CONSTRUCTION ***								
301	ALLOCATION TO CLASSES								
302	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
303		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
304				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
305	DEMAND - BASE-LOAD TOTAL		0	(40)	(41)	(42)			
306	DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0	0
307	DEMAND - Peak	D10P	0	0	0	0	0	0	0
308	DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0	0
309	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
310	ENERGY - Summer	E10S	0	0	0	0	0	0	0
311	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
312									
313	TRANSMISSION		0						
314	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
315	DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0
316	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
317	DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0
318									
319	DISTRIBUTION								
320	SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0
321	SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0
322	LINES - PRIMARY DEMAND	D20	3,181,235	2,879	5,982	301	0	0	0
323	LINES - PRIMARY CUSTOMER	C20	1,576,665	4,377	7,844	2,016	0	0	0
324	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0
325	LINE TRANS - PRIMARY DEMAND	D50	128,427	116	241	12	0	0	0
326	LINE TRANS - PRIMARY CUST	C50	63,650	177	317	81	0	0	0
327	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0
328	LINE TRANS - SECOND DEMAND	D60	395,224	420	873	44	0	0	0
329	LINE TRANS - SECOND CUSTOMER	C60	195,879	544	975	251	0	0	0
330	LINES - SECONDARY DEMAND	D30	536,323	831	1,726	87	0	0	0
331	LINES - SECONDARY CUSTOMER	C30	265,809	763	1,367	351	0	0	0
332	SERVICES	CW369	1,032,307	0	0	0	0	62	0
333	METERS	CW370	706	0	1	1	0	0	2
334	STREET LIGHTS	DA373	10,184	0	10,163	0	0	0	0
335	INSTALL ON CUST PREMISES	DA371	1,051	0	0	0	0	0	0
336									
337	CUSTOMER ACCOUNTING								
338	METER READING	CW902	0	0	0	0	0	0	0
339	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
340	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
341	MISC	C10	0	0	0	0	0	0	0
342									
343	CONSUMER INFORMATION								
344	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
345	SALES EXPENSE	C10	0	0	0	0	0	0	0
346	ADVERTISING	C10	0	0	0	0	0	0	0
347	MISC	C10	0	0	0	0	0	0	0
348									
349	MISCELLANEOUS								
350	DEMAND	D99U	0	0	0	0	0	0	0
351	ENERGY	E99U	0	0	0	0	0	0	0
352	CUSTOMER	C10	0	0	0	0	0	0	0
353	REVENUE	R02	0	0	0	0	0	0	0
354	OTHER	R01	0	0	0	0	0	0	0
355	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
356									
357	TOTALS	PAGE 2H	7,387,459	10,108	29,490	3,144	0	62	2

358	IDAHO POWER COMPANY												PAGE 21
359	3CP/12CP CLASS COST OF SERVICE STUDY												
360	TWELVE MONTHS ENDING DECEMBER 31, 2023												
361	*** TABLE 6 - ACCUMULATED DEFERRED INCOME TAXES ***												
362	ALLOCATION TO CIATION TO CLASSES												
363	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
364		FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION	
365				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	
366	DEMAND - BASE-LOAD TOTAL		127,470,124										
367	DEMAND - Base-load Summer	D10BS	54,776,292	22,610,331	553,495	417,586	1,462	1,611,189	9,521,309	0	5,509,130	12,120,320	
368	DEMAND - Peak	D10P	12,012,248	4,958,366	121,380	91,575	321	353,328	2,087,990	0	1,208,133	2,657,943	
369	DEMAND - Base-load Non-Summer	D10BNS	72,693,832	31,907,496	887,090	731,396	3,712	2,913,866	17,446,913	0	10,696,235	3,459,491	
370	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0	
371	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0	
372	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0	
373			0										
374	TRANSMISSION		0										
375	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0	
376	DEMAND - TRANSMISSION	D13	86,357,660	36,793,775	965,317	769,378	3,403	3,016,706	17,986,805	0	10,775,700	11,341,275	
377	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0	
378	DEMAND - DIRECT	DA3509	5,068	0	0	0	0	5,068	0	0	0	0	
379			0										
380	DISTRIBUTION		0										
381	SUBSTATIONS - GENERAL	D20	25,205,345	9,581,403	457,967	208,029	3,050	751,985	4,381,454	9,661	3,005,224	6,733,978	
382	SUBSTATIONS - DIRECT	DA3602	350,573	0	0	0	0	0	0	0	89	0	
383	LINE - PRIMARY DEMAND	D20	33,343,743	12,675,083	605,838	275,198	4,035	994,789	5,796,154	12,781	3,975,563	8,908,271	
384	LINE - PRIMARY CUSTOMER	C20	16,525,627	13,586,849	366,590	838,717	2,414	7,725	1,041,842	0	3,145	529,119	
385	LINE - SECONDARY DIRECT	DA3647	2,131,934	0	0	0	0	569,764	0	26,403	1,246,114	0	
386	LINE TRANS - PRIMARY DEMAND	D50	7,642,983	2,905,356	138,869	63,080	925	228,023	1,328,582	2,930	911,270	2,041,935	
387	LINE TRANS - PRIMARY CUST	C50	3,787,970	3,114,349	84,029	192,249	553	1,771	238,809	0	721	121,284	
388	LINE TRANS - SECOND DIRECT	DA368	2,126,808	0	0	0	0	841,736	0	0	1,161,689	0	
389	LINE TRANS - SECOND DEMAND	D60	22,098,663	9,867,672	471,650	214,244	3,141	0	4,512,361	9,950	9,710	6,935,173	
390	LINE TRANS - SECOND CUSTOMER	C60	10,952,407	9,010,635	243,118	556,227	1,601	0	690,937	0	18	350,905	
391	LINE - SECONDARY DEMAND	D30	2,056,156	1,338,048	63,955	29,051	426	0	611,872	1,349	1,317	0	
392	LINE - SECONDARY CUSTOMER	C30	1,019,060	866,139	23,369	53,467	154	0	66,416	0	2	0	
393	SERVICES	CW369	4,198,735	3,367,570	90,700	221,211	627	12,495	318,139	0	17,964	169,777	
394	METERS	CW370	7,488,950	4,477,072	119,296	423,870	975	185,101	1,359,449	34	128,468	739,753	
395	STREET LIGHTS	DA373	400,190	0	0	0	0	842	0	0	10	0	
396	INSTALL ON CUST PREMISES	DA371	287,131	0	0	0	0	229	0	286,738	164	0	
397			0										
398	CUSTOMER ACCOUNTING		0										
399	METER READING	CW902	0	0	0	0	0	0	0	0	0	0	
400	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0	
401	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0	
402	MISC	C10	0	0	0	0	0	0	0	0	0	0	
403			0										
404	CONSUMER INFORMATION		0										
405	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0	
406	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0	
407	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0	
408	MISC	C10	0	0	0	0	0	0	0	0	0	0	
409			0										
410	MISCELLANEOUS		0										
411	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0	
412	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0	
413	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0	
414	REVENUE	R02	0	0	0	0	0	0	0	0	0	0	
415	OTHER	R01	0	0	0	0	0	0	0	0	0	0	
416	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0	
417													
418	TOTALS	PAGE 21	365,461,375	167,060,145	5,192,663	5,085,278	26,799	11,494,617	67,389,032	349,846	38,650,665	56,109,225	

358	IDAHO POWER COMPANY								
359	3CP/12CP CLASS COST OF SERVICE STUDY								
360	TWELVE MONTHS ENDING DECEMBER 31, 2023								
361	*** TABLE 6 - ACCUMULATED DEFERRED INCOME TAXES ***								
362	ALLOCATION TO CLASSES								
363	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
364		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
365				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
366				(40)	(41)	(42)			
367	DEMAND - Base-load Summer	D10BS	127,470,124	29,578	0	5,912	394,050	378,678	1,623,252
368	DEMAND - Peak	D10P	12,012,248	6,486	0	1,296	86,414	83,043	355,973
369	DEMAND - Base-load Non-Summer	D10BNS	72,693,832	58,343	0	12,069	1,196,979	616,251	2,763,992
370	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
371	ENERGY - Summer	E10S	0	0	0	0	0	0	0
372	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
373									
374	TRANSMISSION		0						
375	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
376	DEMAND - TRANSMISSION	D13	86,357,660	58,352	0	11,916	1,034,555	665,903	2,934,576
377	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
378	DEMAND - DIRECT	DA3509	5,068	0	0	0	0	0	0
379									
380	DISTRIBUTION								
381	SUBSTATIONS - GENERAL	D20	25,205,345	22,813	47,396	2,384	0	0	0
382	SUBSTATIONS - DIRECT	DA3602	350,573	0	0	0	0	26,401	324,083
383	LINES - PRIMARY DEMAND	D20	33,343,743	30,179	62,700	3,154	0	0	0
384	LINES - PRIMARY CUSTOMER	C20	16,525,627	45,880	82,214	21,133	0	0	0
385	LINES - SECONDARY DIRECT	DA3647	2,131,934	0	0	0	0	289,652	0
386	LINE TRANS - PRIMARY DEMAND	D50	7,642,983	6,918	14,372	723	0	0	0
387	LINE TRANS - PRIMARY CUST	C50	3,787,970	10,516	18,845	4,844	0	0	0
388	LINE TRANS - SECOND DIRECT	DA368	2,126,808	0	0	0	0	123,383	0
389	LINE TRANS - SECOND DEMAND	D60	22,098,663	23,495	48,812	2,455	0	0	0
390	LINE TRANS - SECOND CUSTOMER	C60	10,952,407	30,427	54,523	14,015	0	0	0
391	LINES - SECONDARY DEMAND	D30	2,056,156	3,186	6,619	333	0	0	0
392	LINES - SECONDARY CUSTOMER	C30	1,019,060	2,925	5,241	1,347	0	0	0
393	SERVICES	CW369	4,198,735	0	0	0	0	252	0
394	METERS	CW370	7,488,950	89	15,593	7,238	1,986	4,886	25,139
395	STREET LIGHTS	DA373	400,190	0	399,337	0	0	0	0
396	INSTALL ON CUST PREMISES	DA371	287,131	0	0	0	0	0	0
397									
398	CUSTOMER ACCOUNTING								
399	METER READING	CW902	0	0	0	0	0	0	0
400	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
401	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
402	MISC	C10	0	0	0	0	0	0	0
403									
404	CONSUMER INFORMATION								
405	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
406	SALES EXPENSE	C10	0	0	0	0	0	0	0
407	ADVERTISING	C10	0	0	0	0	0	0	0
408	MISC	C10	0	0	0	0	0	0	0
409									
410	MISCELLANEOUS								
411	DEMAND	D99U	0	0	0	0	0	0	0
412	ENERGY	E99U	0	0	0	0	0	0	0
413	CUSTOMER	C10	0	0	0	0	0	0	0
414	REVENUE	R02	0	0	0	0	0	0	0
415	OTHER	R01	0	0	0	0	0	0	0
416	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
417									
418	TOTALS	PAGE 2I	365,461,375	329,188	755,652	88,821	2,713,982	2,188,449	8,027,016

\*\*\* TABLE 7 - ACQUISITION ADJUSTMENT \*\*\*

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	IDAHO POWER COMPANY								
	3CP/12CP CLASS COST OF SERVICE STUDY								
	TWELVE MONTHS ENDING DECEMBER 31, 2023								
*** TABLE 7 - ACQUISITION ADJUSTMENT ***	ALLOCATION TO CLASSES								
			(K)	(L)	(M)	(N)	(O)	(P)	
FUNCTION	ALLOCATION	TOTALS	UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC	
	FACTOR		GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON	
			(40)	(41)	(42)				
DEMAND - BASE-LOAD TOTAL									
DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0	0	
DEMAND - Peak	D10P	0	0	0	0	0	0	0	
DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0	0	
ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	
ENERGY - Summer	E10S	0	0	0	0	0	0	0	
ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	
TRANSMISSION		0							
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	
DEMAND - TRANSMISSION	D13	628,247	425	0	87	7,526	4,844	21,349	
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	
DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0	
DISTRIBUTION									
SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0	
SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0	
LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0	
LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0	
LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0	
LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0	
LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0	
LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0	
LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0	
LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0	
LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0	
LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0	
SERVICES	CW369	0	0	0	0	0	0	0	
METERS	CW370	0	0	0	0	0	0	0	
STREET LIGHTS	DA373	0	0	0	0	0	0	0	
INSTALL ON CUST PREMISES	DA371	0	0	0	0	0	0	0	
CUSTOMER ACCOUNTING									
METER READING	CW902	0	0	0	0	0	0	0	
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	
CONSUMER INFORMATION									
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	
SALES EXPENSE	C10	0	0	0	0	0	0	0	
ADVERTISING	C10	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	
MISCELLANEOUS									
DEMAND	D99U	0	0	0	0	0	0	0	
ENERGY	E99U	0	0	0	0	0	0	0	
CUSTOMER	C10	0	0	0	0	0	0	0	
REVENUE	R02	0	0	0	0	0	0	0	
OTHER	R01	0	0	0	0	0	0	0	
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	
TOTALS	PAGE 2J	628,247	425	0	87	7,526	4,844	21,349	

IDAHO POWER COMPANY													PAGE 2K
3CP/12CP CLASS COST OF SERVICE STUDY													
TWELVE MONTHS ENDING DECEMBER 31, 2023													
*** TABLE 8 - WORKING CAPITAL ***													
ALLOCATION TO CIATION TO CLASSES													
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)		
FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION		
	FACTOR		(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)		
DEMAND - BASE-LOAD TOTAL		15,553,944											
DEMAND - Base-load Summer	D10BS	6,683,820	2,758,920	67,538	50,954	178	196,598	1,161,793	0	672,226	1,478,925		
DEMAND - Peak	D10P	1,465,738	605,021	14,811	11,174	39	43,113	254,777	0	147,417	324,323		
DEMAND - Base-load Non-Summer	D10BNS	8,870,124	3,893,363	108,243	89,245	453	355,551	2,128,878	0	1,305,158	422,128		
ENERGY - POWER SUPPLY	E10	23,609,967	0	0	0	0	0	0	0	0	0		
ENERGY - Summer	E10S	0	2,703,345	68,296	69,967	256	318,420	1,744,491	2,625	1,197,327	2,264,967		
ENERGY - Non-Summer	E10NS	0	6,092,997	179,865	153,323	717	613,400	3,569,400	5,701	2,500,656	513,645		
TRANSMISSION		0											
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0		
DEMAND - TRANSMISSION	D13	15,047,187	6,411,044	168,199	134,058	593	525,639	3,134,068	0	1,877,586	1,976,134		
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0		
DEMAND - DIRECT	DA3509	883	0	0	0	0	883	0	0	0	0		
DISTRIBUTION		0											
SUBSTATIONS - GENERAL	D20	10,475,525	3,982,101	190,335	86,458	1,268	312,530	1,820,964	4,015	1,248,993	2,798,691		
SUBSTATIONS - DIRECT	DA3602	488,543	0	0	0	0	0	0	0	124	0		
LINES - PRIMARY DEMAND	D20	12,794,439	4,863,599	232,468	105,597	1,548	381,714	2,224,062	4,904	1,525,476	3,418,222		
LINES - PRIMARY CUSTOMER	C20	6,341,104	5,213,455	140,665	321,827	926	2,964	399,769	0	1,207	203,030		
LINES - SECONDARY DIRECT	DA3647	799,533	0	0	0	0	213,677	0	9,902	467,326	0		
LINE TRANS - PRIMARY DEMAND	D50	2,878,018	1,094,032	52,292	23,753	348	85,864	500,287	1,103	343,145	768,905		
LINE TRANS - PRIMARY CUST	C50	1,426,386	1,172,729	31,642	72,393	208	667	89,925	0	271	45,670		
LINE TRANS - SECOND DIRECT	DA368	797,611	0	0	0	0	315,674	0	0	435,665	0		
LINE TRANS - SECOND DEMAND	D60	8,323,578	3,716,711	177,650	80,696	1,183	0	1,699,605	3,748	3,657	2,612,170		
LINE TRANS - SECOND CUSTOMER	C60	4,125,282	3,393,904	91,572	209,506	603	0	260,245	0	7	132,170		
LINES - SECONDARY DEMAND	D30	819,944	533,580	25,504	11,585	170	0	243,999	538	525	0		
LINES - SECONDARY CUSTOMER	C30	406,376	345,395	9,319	21,321	61	0	26,485	0	1	0		
SERVICES	CW369	1,668,625	1,338,311	36,045	87,912	249	4,966	126,432	0	7,139	67,471		
METERS	CW370	2,808,623	1,679,061	44,740	158,966	366	69,419	509,842	13	48,180	277,434		
STREET LIGHTS	DA373	151,009	0	0	0	0	318	0	0	4	0		
INSTALL ON CUST PREMISES	DA371	107,778	0	0	0	0	86	0	107,630	62	0		
CUSTOMER ACCOUNTING		0											
METER READING	CW902	0	0	0	0	0	0	0	0	0	0		
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0		
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	(0)	0	0		
MISC	C10	0	0	0	0	0	0	0	0	0	0		
CONSUMER INFORMATION		0											
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0		
SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0		
ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0		
MISC	C10	0	0	0	0	0	0	0	0	0	0		
MISCELLANEOUS		0											
DEMAND	D99U	0	0	0	0	0	0	0	0	0	0		
ENERGY	E99U	0	0	0	0	0	0	0	0	0	0		
CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0		
REVENUE	R02	0	0	0	0	0	0	0	0	0	0		
OTHER	R01	0	0	0	0	0	0	0	0	0	0		
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0		
TOTALS	PAGE 2K	110,090,091	49,797,567	1,639,182	1,688,736	9,167	3,441,483	19,895,022	140,180	11,782,152	17,303,885		

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**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

\*\*\* TABLE 8 - WORKING CAPITAL \*\*\*

FUNCTION	ALLOCATION	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
FACTOR								
DEMAND - BASE-LOAD TOTAL		15,553,944						
DEMAND - Base-load Summer	D10BS	6,683,820	3,609	0	721	48,082	46,206	198,070
DEMAND - Peak	D10P	1,465,738	791	0	158	10,544	10,133	43,436
DEMAND - Base-load Non-Summer	D10BNS	8,870,124	7,119	0	1,473	146,056	75,195	337,263
ENERGY - POWER SUPPLY	E10	23,609,967	0	0	0	0	0	0
ENERGY - Summer	E10S	0	7,079	11,360	1,416	86,241	81,952	299,069
ENERGY - Non-Summer	E10NS	0	15,019	26,387	3,107	276,237	184,975	617,726
TRANSMISSION		0						
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	15,047,187	10,167	0	2,076	180,264	116,029	511,328
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	883	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	10,475,525	9,481	19,698	991	0	0	0
SUBSTATIONS - DIRECT	DA3602	488,543	0	0	0	0	36,791	451,628
LINES - PRIMARY DEMAND	D20	12,794,439	11,580	24,059	1,210	0	0	0
LINES - PRIMARY CUSTOMER	C20	6,341,104	17,605	31,547	8,109	0	0	0
LINES - SECONDARY DIRECT	DA3647	799,533	0	0	0	0	108,627	0
LINE TRANS - PRIMARY DEMAND	D50	2,878,018	2,605	5,412	272	0	0	0
LINE TRANS - PRIMARY CUST	C50	1,426,386	3,960	7,096	1,824	0	0	0
LINE TRANS - SECOND DIRECT	DA368	797,611	0	0	0	0	46,272	0
LINE TRANS - SECOND DEMAND	D60	8,323,578	8,849	18,385	925	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	4,125,282	11,460	20,537	5,279	0	0	0
LINES - SECONDARY DEMAND	D30	819,944	1,270	2,639	133	0	0	0
LINES - SECONDARY CUSTOMER	C30	406,376	1,166	2,090	537	0	0	0
SERVICES	CW369	1,668,625	0	0	0	0	100	0
METERS	CW370	2,808,623	33	5,848	2,715	745	1,832	9,428
STREET LIGHTS	DA373	151,009	0	150,687	0	0	0	0
INSTALL ON CUST PREMISES	DA371	107,778	0	0	0	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
MISCELLANEOUS								
DEMAND	D99U	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0
OTHER	R01	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
TOTALS	PAGE 2K	110,090,091	111,796	325,745	30,946	748,168	708,114	2,467,948

541	IDAHO POWER COMPANY											PAGE 2L
542	3CP/12CP CLASS COST OF SERVICE STUDY											
543	TWELVE MONTHS ENDING DECEMBER 31, 2023											
544	*** TABLE 9 - DEFERRED PROGRAMS ***											
545	ALLOCATION TO CIATION TO CLASSES											
546	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
547	FACTOR	TOTALS		RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
548				RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
549	DEMAND - BASE-LOAD TOTAL		19,207,519	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
550	DEMAND - Base-load Summer	D10BS	8,253,830	3,406,982	83,402	62,923	220	242,778	1,434,695	0	830,130	1,826,320
551	DEMAND - Peak	D10P	6,539,110	2,699,187	66,075	49,851	175	192,341	1,136,639	0	657,672	1,446,905
552	DEMAND - Base-load Non-Summer	D10BNS	10,953,690	4,807,902	133,669	110,209	559	439,069	2,628,945	0	1,611,736	521,285
553	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
554	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
555	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
556			0									
557	TRANSMISSION		0									
558	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
559	DEMAND - TRANSMISSION	D13	3,273,907	1,394,889	36,596	29,168	129	114,366	681,898	0	408,518	429,959
560	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
561	DEMAND - DIRECT	DA3509	192	0	0	0	0	192	0	0	0	0
562			0									
563	DISTRIBUTION		0									
564	SUBSTATIONS - GENERAL	D20	1,058,958	402,546	19,241	8,740	128	31,593	184,079	406	126,259	282,916
565	SUBSTATIONS - DIRECT	DA3602	49,386	0	0	0	0	0	0	0	12	0
566	LINES - PRIMARY DEMAND	D20	1,293,374	491,655	23,500	10,675	156	38,587	224,828	496	154,209	345,544
567	LINES - PRIMARY CUSTOMER	C20	641,014	527,022	14,220	32,533	94	300	40,412	0	122	20,524
568	LINES - SECONDARY DIRECT	DA3647	80,824	0	0	0	0	21,600	0	1,001	47,241	0
569	LINE TRANS - PRIMARY DEMAND	D50	290,935	110,594	5,286	2,401	35	8,680	50,573	112	34,688	77,728
570	LINE TRANS - PRIMARY CUST	C50	144,192	118,550	3,199	7,318	21	67	9,090	0	27	4,617
571	LINE TRANS - SECOND DIRECT	DA368	80,629	0	0	0	0	31,911	0	0	44,041	0
572	LINE TRANS - SECOND DEMAND	D60	841,420	375,718	17,958	8,157	120	0	171,811	379	370	264,061
573	LINE TRANS - SECOND CUSTOMER	C60	417,020	343,086	9,257	21,179	61	0	26,308	0	1	13,361
574	LINES - SECONDARY DEMAND	D30	82,887	53,939	2,578	1,171	17	0	24,666	54	53	0
575	LINES - SECONDARY CUSTOMER	C30	41,080	34,916	942	2,155	6	0	2,677	0	0	0
576	SERVICES	CW369	168,679	135,288	3,644	8,887	25	502	12,781	0	722	6,821
577	METERS	CW370	283,920	169,734	4,523	16,070	37	7,018	51,539	1	4,870	28,045
578	STREET LIGHTS	DA373	15,265	0	0	0	0	32	0	0	0	0
579	INSTALL ON CUST PREMISES	DA371	10,895	0	0	0	0	9	0	10,880	6	0
580			0									
581	CUSTOMER ACCOUNTING		0									
582	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
583	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
584	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
585	MISC	C10	0	0	0	0	0	0	0	0	0	0
586			0									
587	CONSUMER INFORMATION		0									
588	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
589	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
590	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
591	MISC	C10	0	0	0	0	0	0	0	0	0	0
592			0									
593	MISCELLANEOUS		0									
594	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
595	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
596	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
597	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
598	OTHER	R01	0	0	0	0	0	0	0	0	0	0
599	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
600												
601	TOTALS	PAGE 2L	34,521,209	15,072,007	424,089	371,436	1,784	1,129,045	6,680,942	13,329	3,920,677	5,268,086



541	IDAHO POWER COMPANY								
542	3CP/12CP CLASS COST OF SERVICE STUDY								
543	TWELVE MONTHS ENDING DECEMBER 31, 2023								
544	*** TABLE 9 - DEFERRED PROGRAMS ***								
545	ALLOCATION TO CLASSES								
546	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
547		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
548				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
549	DEMAND - BASE-LOAD TOTAL		19,207,519	(40)	(41)	(42)			
550	DEMAND - Base-load Summer	D10BS	8,253,830	4,457	0	891	59,376	57,060	244,596
551	DEMAND - Peak	D10P	6,539,110	3,531	0	706	47,041	45,206	193,781
552	DEMAND - Base-load Non-Summer	D10BNS	10,953,690	8,791	0	1,819	180,364	92,858	416,485
553	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
554	ENERGY - Summer	E10S	0	0	0	0	0	0	0
555	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
556									
557	TRANSMISSION		0						
558	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
559	DEMAND - TRANSMISSION	D13	3,273,907	2,212	0	452	39,221	25,245	111,253
560	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
561	DEMAND - DIRECT	DA3509	192	0	0	0	0	0	0
562									
563	DISTRIBUTION								
564	SUBSTATIONS - GENERAL	D20	1,058,958	958	1,991	100	0	0	0
565	SUBSTATIONS - DIRECT	DA3602	49,386	0	0	0	0	3,719	45,655
566	LINES - PRIMARY DEMAND	D20	1,293,374	1,171	2,432	122	0	0	0
567	LINES - PRIMARY CUSTOMER	C20	641,014	1,780	3,189	820	0	0	0
568	LINES - SECONDARY DIRECT	DA3647	80,824	0	0	0	0	10,981	0
569	LINE TRANS - PRIMARY DEMAND	D50	290,935	263	547	28	0	0	0
570	LINE TRANS - PRIMARY CUST	C50	144,192	400	717	184	0	0	0
571	LINE TRANS - SECOND DIRECT	DA368	80,629	0	0	0	0	4,678	0
572	LINE TRANS - SECOND DEMAND	D60	841,420	895	1,859	93	0	0	0
573	LINE TRANS - SECOND CUSTOMER	C60	417,020	1,159	2,076	534	0	0	0
574	LINES - SECONDARY DEMAND	D30	82,887	128	267	13	0	0	0
575	LINES - SECONDARY CUSTOMER	C30	41,080	118	211	54	0	0	0
576	SERVICES	CW369	168,679	0	0	0	0	10	0
577	METERS	CW370	283,920	3	591	274	75	185	953
578	STREET LIGHTS	DA373	15,265	0	15,233	0	0	0	0
579	INSTALL ON CUST PREMISES	DA371	10,895	0	0	0	0	0	0
580									
581	CUSTOMER ACCOUNTING								
582	METER READING	CW902	0	0	0	0	0	0	0
583	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
584	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
585	MISC	C10	0	0	0	0	0	0	0
586									
587	CONSUMER INFORMATION								
588	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
589	SALES EXPENSE	C10	0	0	0	0	0	0	0
590	ADVERTISING	C10	0	0	0	0	0	0	0
591	MISC	C10	0	0	0	0	0	0	0
592									
593	MISCELLANEOUS								
594	DEMAND	D99U	0	0	0	0	0	0	0
595	ENERGY	E99U	0	0	0	0	0	0	0
596	CUSTOMER	C10	0	0	0	0	0	0	0
597	REVENUE	R02	0	0	0	0	0	0	0
598	OTHER	R01	0	0	0	0	0	0	0
599	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
600									
601	TOTALS	PAGE 2L	34,521,209	25,867	29,113	6,090	326,077	239,943	1,012,723

602			IDAHO POWER COMPANY									PAGE 2M
603			3CP/12CP CLASS COST OF SERVICE STUDY									
604			TWELVE MONTHS ENDING DECEMBER 31, 2023									
605	*** TABLE 10 - SUBSIDIARY RATE BASE ***		ALLOCATION TO CIATION TO CLASSES									
606			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
607	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
608		FACTOR		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
609				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
610	DEMAND - BASE-LOAD TOTAL		0									
611	DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0	0	0	0	0
612	DEMAND - Peak	D10P	0	0	0	0	0	0	0	0	0	0
613	DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0	0	0	0	0
614	ENERGY - POWER SUPPLY	E10	29,980,646	0	0	0	0	0	0	0	0	0
615	ENERGY - Summer	E10S	0	3,432,789	86,724	88,846	325	404,340	2,215,207	3,334	1,520,402	2,876,123
616	ENERGY - Non-Summer	E10NS	0	7,737,071	228,397	194,694	910	778,914	4,532,532	7,240	3,175,408	652,242
617			0									
618	TRANSMISSION		0									
619	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
620	DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0	0	0	0
621	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
622	DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0	0	0	0
623			0									
624	DISTRIBUTION		0									
625	SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0	0	0	0
626	SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0	0	0	0
627	LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0	0	0	0
628	LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0	0	0	0
629	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0	0	0	0
630	LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0	0	0	0
631	LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0	0	0	0
632	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0	0	0	0
633	LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0	0	0	0
634	LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0	0	0	0
635	LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0	0	0	0
636	LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0	0	0	0
637	SERVICES	CW369	0	0	0	0	0	0	0	0	0	0
638	METERS	CW370	0	0	0	0	0	0	0	0	0	0
639	STREET LIGHTS	DA373	0	0	0	0	0	0	0	0	0	0
640	INSTALL ON CUST PREMISES	DA371	0	0	0	0	0	0	0	0	0	0
641			0									
642	CUSTOMER ACCOUNTING		0									
643	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
644	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
645	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
646	MISC	C10	0	0	0	0	0	0	0	0	0	0
647			0									
648	CONSUMER INFORMATION		0									
649	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
650	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
651	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
652	MISC	C10	0	0	0	0	0	0	0	0	0	0
653			0									
654	MISCELLANEOUS		0									
655	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
656	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
657	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
658	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
659	OTHER	R01	0	0	0	0	0	0	0	0	0	0
660	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
661												
662	TOTALS	PAGE 2M	29,980,646	11,169,860	315,122	283,541	1,236	1,183,254	6,747,739	10,573	4,695,810	3,528,365

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**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

\*\*\* TABLE 10 - SUBSIDIARY RATE BASE \*\*\*

FUNCTION	ALLOCATION FACTOR	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
DEMAND - BASE-LOAD TOTAL		0						
DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0	0
DEMAND - Peak	D10P	0	0	0	0	0	0	0
DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0	0
ENERGY - POWER SUPPLY	E10	29,980,646	0	0	0	0	0	0
ENERGY - Summer	E10S	0	8,989	14,426	1,798	109,511	104,065	379,766
ENERGY - Non-Summer	E10NS	0	19,072	33,507	3,945	350,774	234,887	784,408
TRANSMISSION		0						
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0
SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0
LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0
LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0
LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0
LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0
LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0
LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0
LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0
LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0
LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0
SERVICES	CW369	0	0	0	0	0	0	0
METERS	CW370	0	0	0	0	0	0	0
STREET LIGHTS	DA373	0	0	0	0	0	0	0
INSTALL ON CUST PREMISES	DA371	0	0	0	0	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
MISCELLANEOUS								
DEMAND	D99U	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0
OTHER	R01	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
TOTALS	PAGE 2M	29,980,646	28,061	47,932	5,743	460,286	338,953	1,164,174

## ALLOCATION TO CLATION TO CLASSES

Exhibit No. 39  
Case No. IPC-E-23-11  
P. Goralski, IPC  
Page 23 of 48

663								
664								
665								
666	*** TABLE 11 - PLANT HELD FOR FUTURE USE ***							
667								
668	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)
669	FACTOR			UNMETERED	MUNICIPAL	TRAFFIC	SC	SC
670				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT
671				(40)	(41)	(42)		MICRON
672	DEMAND - BASE-LOAD TOTAL		0					
673	DEMAND - Base-load Summer	D10BS	0	0	0	0	0	0
674	DEMAND - Peak	D10P	0	0	0	0	0	0
675	DEMAND - Base-load Non-Summer	D10BNS	0	0	0	0	0	0
676	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
677	ENERGY - Summer	E10S	0	0	0	0	0	0
678	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0
679	TRANSMISSION		0					
680	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
681	DEMAND - TRANSMISSION	D13	2,640,221	1,784	0	364	31,630	20,359
682	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
683	DEMAND - DIRECT	DA3509	0	0	0	0	0	0
684								
685	DISTRIBUTION							
686	SUBSTATIONS - GENERAL	D20	5,316,573	4,812	9,997	503	0	0
687	SUBSTATIONS - DIRECT	DA3602	30	0	0	0	0	28
688	LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0
689	LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0
690	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0
691	LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0
692	LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0
693	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0
694	LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0
695	LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0
696	LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0
697	LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0
698	SERVICES	CW369	0	0	0	0	0	0
699	METERS	CW370	0	0	0	0	0	0
700	STREET LIGHTS	DA373	0	0	0	0	0	0
701	INSTALL ON CUST PREMISES	DA371	0	0	0	0	0	0
702								
703	CUSTOMER ACCOUNTING							
704	METER READING	CW902	0	0	0	0	0	0
705	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
706	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
707	MISC	C10	0	0	0	0	0	0
708								
709	CONSUMER INFORMATION							
710	CUSTOMER ASSIST	C10	0	0	0	0	0	0
711	SALES EXPENSE	C10	0	0	0	0	0	0
712	ADVERTISING	C10	0	0	0	0	0	0
713	MISC	C10	0	0	0	0	0	0
714								
715	MISCELLANEOUS							
716	DEMAND	D99U	0	0	0	0	0	0
717	ENERGY	E99U	0	0	0	0	0	0
718	CUSTOMER	C10	0	0	0	0	0	0
719	REVENUE	R02	0	0	0	0	0	0
720	OTHER	R01	0	0	0	0	0	0
721	SUBSTATION CIAC	CIAC	0	0	0	0	0	0
722								
723	TOTALS	PAGE 2N	7,956,825	6,596	9,997	867	31,630	20,361
								89,747

724	IDAHO POWER COMPANY											PAGE 4C
725	3CP/12CP CLASS COST OF SERVICE STUDY											
726	TWELVE MONTHS ENDING DECEMBER 31, 2023											
727	*** TABLE 12 - OTHER REVENUES ***											
728	ALLOCATION TO CIATION TO CLASSES											
729	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
730	FACTOR	TOTALS		RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
731				RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
732	DEMAND - BASE-LOAD TOTAL		1,105,981	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
733	DEMAND - Base-load Summer	D10BS	475,261	196,176	4,802	3,623	13	13,979	82,611	0	47,799	105,161
734	DEMAND - Peak	D10P	2,661	1,098	27	20	0	78	463	0	268	589
735	DEMAND - Base-load Non-Summer	D10BNS	630,720	276,842	7,697	6,346	32	25,282	151,376	0	92,805	30,016
736	ENERGY - POWER SUPPLY	E10	29,557,875	0	0	0	0	0	0	0	0	0
737	ENERGY - Summer	E10S	0	3,384,382	85,501	87,593	321	398,638	2,183,969	3,287	1,498,962	2,835,565
738	ENERGY - Non-Summer	E10NS	0	7,627,967	225,177	191,949	898	767,931	4,468,617	7,138	3,130,630	643,045
739			0									
740	TRANSMISSION		0									
741	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
742	DEMAND - TRANSMISSION	D13	60,109,852	25,610,564	671,916	535,531	2,369	2,099,800	12,519,841	0	7,500,501	7,894,173
743	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
744	DEMAND - DIRECT	DA3509	518	0	0	0	0	518	0	0	0	0
745			0									
746	DISTRIBUTION		0									
747	SUBSTATIONS - GENERAL	D20	299,274	113,764	5,438	2,470	36	8,929	52,023	115	35,682	79,955
748	SUBSTATIONS - DIRECT	DA3602	13,957	0	0	0	0	0	0	0	4	0
749	LINES - PRIMARY DEMAND	D20	2,502,919	951,444	45,477	20,657	303	74,673	435,083	959	298,422	668,692
750	LINES - PRIMARY CUSTOMER	C20	1,240,482	1,019,885	27,518	62,958	181	580	78,205	0	236	39,718
751	LINES - SECONDARY DIRECT	DA3647	107,956	0	0	0	0	28,852	0	1,337	63,100	0
752	LINE TRANS - PRIMARY DEMAND	D50	350,797	133,350	6,374	2,895	42	10,466	60,979	134	41,825	93,721
753	LINE TRANS - PRIMARY CUST	C50	173,860	142,942	3,857	8,824	25	81	10,961	0	33	5,567
754	LINE TRANS - SECOND DIRECT	DA368	97,220	0	0	0	0	38,477	0	0	53,103	0
755	LINE TRANS - SECOND DEMAND	D60	1,014,549	453,024	21,653	9,836	144	0	207,162	457	446	318,394
756	LINE TRANS - SECOND CUSTOMER	C60	502,825	413,678	11,162	25,536	73	0	31,721	0	1	16,110
757	LINES - SECONDARY DEMAND	D30	156,826	102,055	4,878	2,216	32	0	46,668	103	100	0
758	LINES - SECONDARY CUSTOMER	C30	77,725	66,062	1,782	4,078	12	0	5,066	0	0	0
759	SERVICES	CW369	203,386	163,125	4,393	10,715	30	605	15,411	0	870	8,224
760	METERS	CW370	80,239	47,969	1,278	4,541	10	1,983	14,566	0	1,376	7,926
761	STREET LIGHTS	DA373	18,406	0	0	0	0	39	0	0	0	0
762	INSTALL ON CUST PREMISES	DA371	13,137	0	0	0	0	10	0	13,119	8	0
763			0									
764	CUSTOMER ACCOUNTING		0									
765	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
766	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
767	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
768	MISC	C10	0	0	0	0	0	0	0	0	0	0
769			0									
770	CONSUMER INFORMATION		0									
771	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
772	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
773	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
774	MISC	C10	0	0	0	0	0	0	0	0	0	0
775			0									
776	MISCELLANEOUS		0									
777	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
778	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
779	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
780	MISC. REVENUE	R02	6,150,427	5,495,771	29,596	193,701	159	1,918	195,532	11,086	40	113,760
781	FACILITIES CHARGE REVENUE	DA454	9,859,316	0	0	0	0	3,309,023	0	74,734	5,557,903	0
782	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
783												
784	TOTALS	PAGE 4C	113,640,190	46,200,098	1,158,525	1,173,490	4,682	6,781,861	20,560,253	112,468	18,324,115	12,860,615

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**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

\*\*\* TABLE 12 - OTHER REVENUES \*\*\*

FUNCTION	ALLOCATION FACTOR	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
DEMAND - BASE-LOAD TOTAL		1,105,981						
DEMAND - Base-load Summer	D10BS	475,261	257	0	51	3,419	3,286	14,084
DEMAND - Peak	D10P	2,661	1	0	0	19	18	79
DEMAND - Base-load Non-Summer	D10BNS	630,720	506	0	105	10,385	5,347	23,981
ENERGY - POWER SUPPLY	E10	29,557,875	0	0	0	0	0	0
ENERGY - Summer	E10S	0	8,862	14,222	1,773	107,967	102,598	374,411
ENERGY - Non-Summer	E10NS	0	18,803	33,034	3,889	345,828	231,575	773,346
TRANSMISSION		0						
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	60,109,852	40,617	0	8,294	720,109	463,506	2,042,632
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	518	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	299,274	271	563	28	0	0	0
SUBSTATIONS - DIRECT	DA3602	13,957	0	0	0	0	1,051	12,903
LINES - PRIMARY DEMAND	D20	2,502,919	2,265	4,706	237	0	0	0
LINES - PRIMARY CUSTOMER	C20	1,240,482	3,444	6,171	1,586	0	0	0
LINES - SECONDARY DIRECT	DA3647	107,956	0	0	0	0	14,667	0
LINE TRANS - PRIMARY DEMAND	D50	350,797	318	660	33	0	0	0
LINE TRANS - PRIMARY CUST	C50	173,860	483	865	222	0	0	0
LINE TRANS - SECOND DIRECT	DA368	97,220	0	0	0	0	5,640	0
LINE TRANS - SECOND DEMAND	D60	1,014,549	1,079	2,241	113	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	502,825	1,397	2,503	643	0	0	0
LINES - SECONDARY DEMAND	D30	156,826	243	505	25	0	0	0
LINES - SECONDARY CUSTOMER	C30	77,725	223	400	103	0	0	0
SERVICES	CW369	203,386	0	0	0	0	12	0
METERS	CW370	80,239	1	167	78	21	52	269
STREET LIGHTS	DA373	18,406	0	18,367	0	0	0	0
INSTALL ON CUST PREMISES	DA371	13,137	0	0	0	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
MISCELLANEOUS								
DEMAND	D99U	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0
MISC. REVENUE	R02	6,150,427	15,092	91,849	1,924	0	0	0
FACILITIES CHARGE REVENUE	DA454	9,859,316	0	681	0	0	916,976	0
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
TOTALS	PAGE 4C	113,640,190	93,861	176,934	19,105	1,187,749	1,744,729	3,241,706

785	IDAHO POWER COMPANY											PAGE 3C
786	3CP/12CP CLASS COST OF SERVICE STUDY											
787	TWELVE MONTHS ENDING DECEMBER 31, 2023											
788	*** TABLE 13 - OPERATION & MAINTENANCE EXPENSES ***											
789	ALLOCATION TO CIATION TO CLASSES											
790	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
791		FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
792				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
793	DEMAND - BASE-LOAD TOTAL		138,136,693									
794	DEMAND - Base-load Summer	D10BS	59,359,916	24,502,340	599,811	452,529	1,585	1,746,011	10,318,043	0	5,970,128	13,134,536
795	DEMAND - Peak	D10P	16,516,367	6,817,557	166,892	125,912	441	485,812	2,870,903	0	1,661,135	3,654,567
796	DEMAND - Base-load Non-Summer	D10BNS	78,776,777	34,577,482	961,321	792,598	4,023	3,157,695	18,906,853	0	11,591,285	3,748,978
797	ENERGY - POWER SUPPLY	E10	492,817,416	0	0	0	0	0	0	0	0	0
798	ENERGY - Summer	E10S	0	56,427,674	1,425,561	1,460,441	5,347	6,646,475	36,413,240	54,800	24,992,144	47,277,280
799	ENERGY - Non-Summer	E10NS	0	127,180,821	3,754,364	3,200,359	14,966	12,803,679	74,505,086	119,005	52,196,879	10,721,459
800			0									
801	TRANSMISSION		0									
802	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
803	DEMAND - TRANSMISSION	D13	48,778,156	20,782,551	545,249	434,575	1,922	1,703,953	10,159,645	0	6,086,533	6,405,992
804	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
805	DEMAND - DIRECT	DA3509	3,521	0	0	0	0	3,521	0	0	0	0
806			0									
807	DISTRIBUTION		0									
808	SUBSTATIONS - GENERAL	D20	17,911,499	6,808,766	325,442	147,830	2,167	534,378	3,113,562	6,866	2,135,582	4,785,320
809	SUBSTATIONS - DIRECT	DA3602	814,448	0	0	0	0	0	0	0	206	0
810	LINES - PRIMARY DEMAND	D20	47,352,090	18,000,129	860,362	390,814	5,730	1,412,718	8,231,230	18,150	5,645,773	12,650,806
811	LINES - PRIMARY CUSTOMER	C20	23,468,360	19,294,945	520,601	1,191,078	3,428	10,970	1,479,540	0	4,466	751,412
812	LINES - SECONDARY DIRECT	DA3647	1,634,918	0	0	0	0	436,936	0	20,248	955,609	0
813	LINE TRANS - PRIMARY DEMAND	D50	1,990,925	756,818	36,174	16,432	241	59,398	346,083	763	237,377	531,905
814	LINE TRANS - PRIMARY CUST	C50	986,730	811,259	21,889	50,079	144	461	62,207	0	188	31,593
815	LINE TRANS - SECOND DIRECT	DA368	551,763	0	0	0	0	218,373	0	0	301,380	0
816	LINE TRANS - SECOND DEMAND	D60	5,757,998	2,571,107	122,893	55,823	818	0	1,175,735	2,593	2,530	1,807,019
817	LINE TRANS - SECOND CUSTOMER	C60	2,853,745	2,347,799	63,346	144,930	417	0	180,030	0	5	91,431
818	LINES - SECONDARY DEMAND	D30	3,301,093	2,148,193	102,678	46,641	684	0	982,341	2,166	2,114	0
819	LINES - SECONDARY CUSTOMER	C30	1,636,068	1,390,559	37,519	85,839	247	0	106,628	0	3	0
820	SERVICES	CW369	1,141,837	915,804	24,666	60,158	170	3,398	86,517	0	4,885	46,171
821	METERS	CW370	18,706,555	11,183,224	297,988	1,058,780	2,436	462,361	3,395,752	84	320,899	1,847,820
822	STREET LIGHTS	DA373	554,840	0	0	0	0	1,168	0	0	14	0
823	INSTALL ON CUST PREMISES	CWINSTAL	2,894,436	2,057,683	55,519	127,021	366	1,187	157,784	391,659	485	80,133
824			0									
825	CUSTOMER ACCOUNTING		0									
826	METER READING	CW902	3,681,466	2,818,451	55,951	220,902	536	104,762	238,482	0	42,766	194,122
827	CUSTOMER ACCOUNTS	CW903	32,460,816	26,554,621	716,476	1,639,218	4,718	129,538	2,036,213	0	52,881	1,034,129
828	UNCOLLECTIBLES	CW904	5,388,730	4,833,086	2,063	205,622	0	1,916	254,688	(3)	25,816	65,542
829	MISC	C10	0	0	0	0	0	0	0	0	0	0
830			0									
831	CONSUMER INFORMATION		0									
832	CUSTOMER ASSIST	C10	19,150,720	15,744,877	424,816	971,932	2,797	9,085	1,207,320	0	3,709	613,160
833	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
834	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
835	MISC	C10	0	0	0	0	0	0	0	0	0	0
836			0									
837	MISCELLANEOUS		0									
838	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
839	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
840	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
841	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
842	OTHER	INTFUND	332,773	212,346	5,770	8,754	26	2,878	16,293	26	11,394	75,286
843	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
844												
845	TOTALS	PAGE 3C	888,823,963	388,738,091	11,127,348	12,888,267	53,211	29,936,675	176,244,175	616,357	112,246,184	109,548,662



785	IDAHO POWER COMPANY								
786	3CP/12CP CLASS COST OF SERVICE STUDY								
787	TWELVE MONTHS ENDING DECEMBER 31, 2023								
788	*** TABLE 13 - OPERATION & MAINTENANCE EXPENSES ***								
789	ALLOCATION TO CLASSES								
790	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
791		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
792				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
793				(40)	(41)	(42)			
793	DEMAND - BASE-LOAD TOTAL		138,136,693						
794	DEMAND - Base-load Summer	D10BS	59,359,916	32,053	0	6,407	427,023	410,366	1,759,084
795	DEMAND - Peak	D10P	16,516,367	8,919	0	1,783	118,815	114,181	489,449
796	DEMAND - Base-load Non-Summer	D10BNS	78,776,777	63,226	0	13,079	1,297,140	667,818	2,995,280
797	ENERGY - POWER SUPPLY	E10	492,817,416	0	0	0	0	0	0
798	ENERGY - Summer	E10S	0	147,761	237,125	29,555	1,800,130	1,710,612	6,242,542
799	ENERGY - Non-Summer	E10NS	0	313,495	550,779	64,846	5,765,976	3,861,040	12,893,976
800									
801	TRANSMISSION		0						
802	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
803	DEMAND - TRANSMISSION	D13	48,778,156	32,960	0	6,730	584,357	376,128	1,657,563
804	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
805	DEMAND - DIRECT	DA3509	3,521	0	0	0	0	0	0
806									
807	DISTRIBUTION								
808	SUBSTATIONS - GENERAL	D20	17,911,499	16,211	33,681	1,694	0	0	0
809	SUBSTATIONS - DIRECT	DA3602	814,448	0	0	0	0	61,335	752,907
810	LINES - PRIMARY DEMAND	D20	47,352,090	42,858	89,041	4,479	0	0	0
811	LINES - PRIMARY CUSTOMER	C20	23,468,360	65,155	116,754	30,011	0	0	0
812	LINES - SECONDARY DIRECT	DA3647	1,634,918	0	0	0	0	222,126	0
813	LINE TRANS - PRIMARY DEMAND	D50	1,990,925	1,802	3,744	188	0	0	0
814	LINE TRANS - PRIMARY CUST	C50	986,730	2,739	4,909	1,262	0	0	0
815	LINE TRANS - SECOND DIRECT	DA368	551,763	0	0	0	0	32,010	0
816	LINE TRANS - SECOND DEMAND	D60	5,757,998	6,122	12,718	640	0	0	0
817	LINE TRANS - SECOND CUSTOMER	C60	2,853,745	7,928	14,207	3,652	0	0	0
818	LINES - SECONDARY DEMAND	D30	3,301,093	5,115	10,626	535	0	0	0
819	LINES - SECONDARY CUSTOMER	C30	1,636,068	4,696	8,414	2,163	0	0	0
820	SERVICES	CW369	1,141,837	0	0	0	0	69	0
821	METERS	CW370	18,706,555	223	38,949	18,080	4,960	12,205	62,794
822	STREET LIGHTS	DA373	554,840	0	553,658	0	0	0	0
823	INSTALL ON CUST PREMISES	CWINSTAL	2,894,436	6,948	12,451	3,201	0	0	0
824									
825	CUSTOMER ACCOUNTING								
826	METER READING	CW902	3,681,466	0	4,387	0	369	369	369
827	CUSTOMER ACCOUNTS	CW903	32,460,816	89,669	160,682	41,303	456	456	456
828	UNCOLLECTIBLES	CW904	5,388,730	0	0	0	0	0	0
829	MISC	C10	0	0	0	0	0	0	0
830									
831	CONSUMER INFORMATION								
832	CUSTOMER ASSIST	C10	19,150,720	53,167	95,272	24,489	32	32	32
833	SALES EXPENSE	C10	0	0	0	0	0	0	0
834	ADVERTISING	C10	0	0	0	0	0	0	0
835	MISC	C10	0	0	0	0	0	0	0
836									
837	MISCELLANEOUS								
838	DEMAND	D99U	0	0	0	0	0	0	0
839	ENERGY	E99U	0	0	0	0	0	0	0
840	CUSTOMER	C10	0	0	0	0	0	0	0
841	REVENUE	R02	0	0	0	0	0	0	0
842	OTHER	INTFUND	332,773	0	0	0	0	0	0
843	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
844									
845	TOTALS	PAGE 3C	888,823,963	901,046	1,947,396	254,097	9,999,258	7,468,743	26,854,451

846	IDAHO POWER COMPANY											PAGE 3D
847	3CP/12CP CLASS COST OF SERVICE STUDY											
848	TWELVE MONTHS ENDING DECEMBER 31, 2023											
849	*** TABLE 14 - DEPRECIATION EXPENSE ***											
850	ALLOCATION TO CIATION TO CLASSES											
851	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
852		FACTOR	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
853				RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
854	DEMAND - BASE-LOAD TOTAL		61,229,781	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
855	DEMAND - Base-load Summer	D10BS	26,311,580	10,860,785	265,869	200,586	702	773,928	4,573,524	0	2,646,289	5,821,949
856	DEMAND - Peak	D10P	6,492,310	2,679,869	65,602	49,494	173	190,965	1,128,504	0	652,965	1,436,550
857	DEMAND - Base-load Non-Summer	D10BNS	34,918,201	15,326,642	426,110	351,323	1,783	1,399,664	8,380,557	0	5,137,895	1,661,753
858	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
859	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
860	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
861			0									
862	TRANSMISSION		0									
863	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
864	DEMAND - TRANSMISSION	D13	28,824,414	12,281,007	322,203	256,803	1,136	1,006,915	6,003,626	0	3,596,707	3,785,485
865	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
866	DEMAND - DIRECT	DA3509	1,909	0	0	0	0	1,909	0	0	0	0
867			0									
868	DISTRIBUTION		0									
869	SUBSTATIONS - GENERAL	D20	9,040,007	3,436,412	164,252	74,610	1,094	269,703	1,571,428	3,465	1,077,837	2,415,171
870	SUBSTATIONS - DIRECT	DA3602	145,538	0	0	0	0	0	0	0	37	0
871	LINES - PRIMARY DEMAND	D20	12,917,578	4,910,408	234,705	106,613	1,563	385,387	2,245,467	4,951	1,540,158	3,451,121
872	LINES - PRIMARY CUSTOMER	C20	6,402,133	5,263,632	142,019	324,924	935	2,993	403,616	0	1,218	204,984
873	LINES - SECONDARY DIRECT	DA3647	849,132	0	0	0	0	226,933	0	10,516	496,317	0
874	LINE TRANS - PRIMARY DEMAND	D50	2,620,571	996,168	47,614	21,629	317	78,183	455,535	1,004	312,450	700,124
875	LINE TRANS - PRIMARY CUST	C50	1,298,792	1,067,826	28,811	65,917	190	607	81,881	0	247	41,585
876	LINE TRANS - SECOND DIRECT	DA368	726,262	0	0	0	0	287,436	0	0	396,693	0
877	LINE TRANS - SECOND DEMAND	D60	7,579,012	3,384,241	161,758	73,478	1,077	0	1,547,570	3,413	3,330	2,378,504
878	LINE TRANS - SECOND CUSTOMER	C60	3,756,265	3,090,310	83,380	190,765	549	0	236,966	0	6	120,347
879	LINES - SECONDARY DEMAND	D30	831,250	540,938	25,855	11,745	172	0	247,364	545	532	0
880	LINES - SECONDARY CUSTOMER	C30	411,979	350,158	9,448	21,615	62	0	26,850	0	1	0
881	SERVICES	CW369	1,329,707	1,066,483	28,724	70,056	199	3,957	100,752	0	5,689	53,767
882	METERS	CW370	6,073,947	3,631,150	96,756	343,782	791	150,127	1,102,588	27	104,195	599,980
883	STREET LIGHTS	DA373	227,907	0	0	0	0	480	0	0	6	0
884	INSTALL ON CUST PREMISES	CWINSTAL	193,695	137,700	3,715	8,500	24	79	10,559	26,210	32	5,363
885			0									
886	CUSTOMER ACCOUNTING		0									
887	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
888	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
889	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
890	MISC	C10	0	0	0	0	0	0	0	0	0	0
891			0									
892	CONSUMER INFORMATION		0									
893	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
894	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
895	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
896	MISC	C10	0	0	0	0	0	0	0	0	0	0
897			0									
898	MISCELLANEOUS		0									
899	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
900	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
901	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
902	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
903	OTHER	R01	0	0	0	0	0	0	0	0	0	0
904	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
905												
906	TOTALS	PAGE 3D	150,952,190	69,023,727	2,106,824	2,171,839	10,768	4,779,265	28,116,787	50,132	15,972,606	22,676,682

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IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023  
ALLOCATION TO CLASSES

FUNCTION	ALLOCATION FACTOR	TOTALS	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
DEMAND - BASE-LOAD TOTAL		61,229,781						
DEMAND - Base-load Summer	D10BS	26,311,580	14,208	0	2,840	189,280	181,897	779,723
DEMAND - Peak	D10P	6,492,310	3,506	0	701	46,704	44,883	192,394
DEMAND - Base-load Non-Summer	D10BNS	34,918,201	28,025	0	5,797	574,964	296,014	1,327,673
ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
ENERGY - Summer	E10S	0	0	0	0	0	0	0
ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
TRANSMISSION		0						
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	28,824,414	19,477	0	3,977	345,313	222,265	979,501
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	1,909	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	9,040,007	8,182	16,999	855	0	0	0
SUBSTATIONS - DIRECT	DA3602	145,538	0	0	0	0	10,960	134,541
LINES - PRIMARY DEMAND	D20	12,917,578	11,692	24,290	1,222	0	0	0
LINES - PRIMARY CUSTOMER	C20	6,402,133	17,774	31,850	8,187	0	0	0
LINES - SECONDARY DIRECT	DA3647	849,132	0	0	0	0	115,366	0
LINE TRANS - PRIMARY DEMAND	D50	2,620,571	2,372	4,928	248	0	0	0
LINE TRANS - PRIMARY CUST	C50	1,298,792	3,606	6,461	1,661	0	0	0
LINE TRANS - SECOND DIRECT	DA368	726,262	0	0	0	0	42,133	0
LINE TRANS - SECOND DEMAND	D60	7,579,012	8,058	16,741	842	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	3,756,265	10,435	18,699	4,807	0	0	0
LINES - SECONDARY DEMAND	D30	831,250	1,288	2,676	135	0	0	0
LINES - SECONDARY CUSTOMER	C30	411,979	1,182	2,119	545	0	0	0
SERVICES	CW369	1,329,707	0	0	0	0	80	0
METERS	CW370	6,073,947	72	12,647	5,871	1,611	3,963	20,389
STREET LIGHTS	DA373	227,907	0	227,422	0	0	0	0
INSTALL ON CUST PREMISES	CWINSTAL	193,695	465	833	214	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0
MISCELLANEOUS								
DEMAND	D99U	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0
OTHER	R01	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
TOTALS	PAGE 3D	150,952,190	130,341	365,665	37,901	1,157,872	917,560	3,434,221

907	IDAHO POWER COMPANY											PAGE 3E
908	3CP/12CP CLASS COST OF SERVICE STUDY											
909	TWELVE MONTHS ENDING DECEMBER 31, 2023											
910	*** TABLE 15 - AMORTIZATION OF LIMITED TERM PLANT ***											
911	ALLOCATION TO CIATION TO CLASSES											
912	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
913		FACTOR	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
914				RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
915	DEMAND - BASE-LOAD TOTAL		4,744,176	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
916	DEMAND - Base-load Summer	D10BS	2,038,661	841,510	20,600	15,542	54	59,965	354,364	0	205,039	451,093
917	DEMAND - Peak	D10P	48,412	19,984	489	369	1	1,424	8,415	0	4,869	10,712
918	DEMAND - Base-load Non-Summer	D10BNS	2,705,515	1,187,531	33,016	27,221	138	108,448	649,338	0	398,092	128,755
919	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
920	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
921	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
922			0									
923	TRANSMISSION		0									
924	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
925	DEMAND - TRANSMISSION	D13	348,044	148,288	3,890	3,101	14	12,158	72,491	0	43,429	45,708
926	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
927	DEMAND - DIRECT	DA3509	20	0	0	0	0	20	0	0	0	0
928			0									
929	DISTRIBUTION		0									
930	SUBSTATIONS - GENERAL	D20	112,576	42,794	2,045	929	14	3,359	19,569	43	13,422	30,076
931	SUBSTATIONS - DIRECT	DA3602	5,250	0	0	0	0	0	0	0	1	0
932	LINES - PRIMARY DEMAND	D20	137,497	52,267	2,498	1,135	17	4,102	23,901	53	16,394	36,734
933	LINES - PRIMARY CUSTOMER	C20	68,145	56,027	1,512	3,459	10	32	4,296	0	13	2,182
934	LINES - SECONDARY DIRECT	DA3647	8,592	0	0	0	0	2,296	0	106	5,022	0
935	LINE TRANS - PRIMARY DEMAND	D50	30,929	11,757	562	255	4	923	5,376	12	3,688	8,263
936	LINE TRANS - PRIMARY CUST	C50	15,329	12,603	340	778	2	7	966	0	3	491
937	LINE TRANS - SECOND DIRECT	DA368	8,572	0	0	0	0	3,392	0	0	4,682	0
938	LINE TRANS - SECOND DEMAND	D60	89,450	39,942	1,909	867	13	0	18,265	40	39	28,072
939	LINE TRANS - SECOND CUSTOMER	C60	44,333	36,473	984	2,251	6	0	2,797	0	0	1,420
940	LINES - SECONDARY DEMAND	D30	8,812	5,734	274	124	2	0	2,622	6	6	0
941	LINES - SECONDARY CUSTOMER	C30	4,367	3,712	100	229	1	0	285	0	0	0
942	SERVICES	CW369	17,932	14,382	387	945	3	53	1,359	0	77	725
943	METERS	CW370	30,183	18,044	481	1,708	4	746	5,479	0	518	2,981
944	STREET LIGHTS	DA373	1,623	0	0	0	0	3	0	0	0	0
945	INSTALL ON CUST PREMISES	CWINSTAL	1,158	823	22	51	0	0	63	157	0	32
946			0									
947	CUSTOMER ACCOUNTING		0									
948	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
949	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
950	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
951	MISC	C10	0	0	0	0	0	0	0	0	0	0
952			0									
953	CONSUMER INFORMATION		0									
954	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
955	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
956	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
957	MISC	C10	0	0	0	0	0	0	0	0	0	0
958			0									
959	MISCELLANEOUS		0									
960	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
961	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
962	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
963	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
964	OTHER	R01	0	0	0	0	0	0	0	0	0	0
965	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
966												
967	TOTALS	PAGE 3E	5,725,400	2,491,872	69,110	58,965	282	196,930	1,169,587	417	695,293	747,246

907	IDAHO POWER COMPANY								
908	3CP/12CP CLASS COST OF SERVICE STUDY								
909	TWELVE MONTHS ENDING DECEMBER 31, 2023								
910	*** TABLE 15 - AMORTIZATION OF LIMITED TERM PLANT ***								
911	ALLOCATION TO CLASSES								
912	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
913	FACTOR			UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
914				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
915	DEMAND - BASE-LOAD TOTAL		4,744,176	(40)	(41)	(42)			
916	DEMAND - Base-load Summer	D10BS	2,038,661	1,101	0	220	14,666	14,094	60,414
917	DEMAND - Peak	D10P	48,412	26	0	5	348	335	1,435
918	DEMAND - Base-load Non-Summer	D10BNS	2,705,515	2,171	0	449	44,549	22,936	102,870
919	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
920	ENERGY - Summer	E10S	0	0	0	0	0	0	0
921	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
922									
923	TRANSMISSION		0						
924	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
925	DEMAND - TRANSMISSION	D13	348,044	235	0	48	4,170	2,684	11,827
926	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
927	DEMAND - DIRECT	DA3509	20	0	0	0	0	0	0
928									
929	DISTRIBUTION								
930	SUBSTATIONS - GENERAL	D20	112,576	102	212	11	0	0	0
931	SUBSTATIONS - DIRECT	DA3602	5,250	0	0	0	0	395	4,853
932	LINES - PRIMARY DEMAND	D20	137,497	124	259	13	0	0	0
933	LINES - PRIMARY CUSTOMER	C20	68,145	189	339	87	0	0	0
934	LINES - SECONDARY DIRECT	DA3647	8,592	0	0	0	0	1,167	0
935	LINE TRANS - PRIMARY DEMAND	D50	30,929	28	58	3	0	0	0
936	LINE TRANS - PRIMARY CUST	C50	15,329	43	76	20	0	0	0
937	LINE TRANS - SECOND DIRECT	DA368	8,572	0	0	0	0	497	0
938	LINE TRANS - SECOND DEMAND	D60	89,450	95	198	10	0	0	0
939	LINE TRANS - SECOND CUSTOMER	C60	44,333	123	221	57	0	0	0
940	LINES - SECONDARY DEMAND	D30	8,812	14	28	1	0	0	0
941	LINES - SECONDARY CUSTOMER	C30	4,367	13	22	6	0	0	0
942	SERVICES	CW369	17,932	0	0	0	0	1	0
943	METERS	CW370	30,183	0	63	29	8	20	101
944	STREET LIGHTS	DA373	1,623	0	1,619	0	0	0	0
945	INSTALL ON CUST PREMISES	CWINSTAL	1,158	3	5	1	0	0	0
946									
947	CUSTOMER ACCOUNTING								
948	METER READING	CW902	0	0	0	0	0	0	0
949	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
950	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
951	MISC	C10	0	0	0	0	0	0	0
952									
953	CONSUMER INFORMATION								
954	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
955	SALES EXPENSE	C10	0	0	0	0	0	0	0
956	ADVERTISING	C10	0	0	0	0	0	0	0
957	MISC	C10	0	0	0	0	0	0	0
958									
959	MISCELLANEOUS								
960	DEMAND	D99U	0	0	0	0	0	0	0
961	ENERGY	E99U	0	0	0	0	0	0	0
962	CUSTOMER	C10	0	0	0	0	0	0	0
963	REVENUE	R02	0	0	0	0	0	0	0
964	OTHER	R01	0	0	0	0	0	0	0
965	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
966									
967	TOTALS	PAGE 3E	5,725,400	4,267	3,100	960	63,741	42,128	181,501

968			IDAHO POWER COMPANY									PAGE 3F
969			3CP/12CP CLASS COST OF SERVICE STUDY									
970			TWELVE MONTHS ENDING DECEMBER 31, 2023									
971	*** TABLE 16 - TAXES OTHER THAN INCOME ***		ALLOCATION TO CIATION TO CLASSES									
972			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
973	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
974		FACTOR		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY
975				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
976	DEMAND - BASE-LOAD TOTAL		8,477,654									
977	DEMAND - Base-load Summer	D10BS	3,643,006	1,503,745	36,811	27,772	97	107,155	633,234	0	366,396	806,086
978	DEMAND - Peak	D10P	991,152	409,124	10,015	7,556	26	29,154	172,284	0	99,685	219,312
979	DEMAND - Base-load Non-Summer	D10BNS	4,834,648	2,122,071	58,998	48,643	247	193,792	1,160,342	0	711,374	230,080
980	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
981	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
982	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
983			0									
984	TRANSMISSION		0									
985	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
986	DEMAND - TRANSMISSION	D13	7,560,424	3,221,214	84,511	67,357	298	264,106	1,574,705	0	943,389	992,904
987	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
988	DEMAND - DIRECT	DA3509	444	0	0	0	0	444	0	0	0	0
989			0									
990	DISTRIBUTION		0									
991	SUBSTATIONS - GENERAL	D20	1,875,874	713,083	34,084	15,482	227	55,965	326,084	719	223,660	501,167
992	SUBSTATIONS - DIRECT	DA3602	31,792	0	0	0	0	0	0	0	8	0
993	LINES - PRIMARY DEMAND	D20	2,516,018	956,424	45,715	20,766	304	75,064	437,360	964	299,984	672,191
994	LINES - PRIMARY CUSTOMER	C20	1,246,974	1,025,223	27,662	63,287	182	583	78,614	0	237	39,926
995	LINES - SECONDARY DIRECT	DA3647	157,228	0	0	0	0	42,019	0	1,947	91,899	0
996	LINE TRANS - PRIMARY DEMAND	D50	565,960	215,141	10,283	4,671	68	16,885	98,381	217	67,479	151,205
997	LINE TRANS - PRIMARY CUST	C50	280,498	230,617	6,222	14,236	41	131	17,684	0	53	8,981
998	LINE TRANS - SECOND DIRECT	DA368	156,850	0	0	0	0	62,077	0	0	85,673	0
999	LINE TRANS - SECOND DEMAND	D60	1,636,826	730,889	34,935	15,869	233	0	334,226	737	719	513,681
1000	LINE TRANS - SECOND CUSTOMER	C60	811,234	667,409	18,007	41,199	119	0	51,177	0	1	25,991
1001	LINES - SECONDARY DEMAND	D30	161,241	104,928	5,015	2,278	33	0	47,982	106	103	0
1002	LINES - SECONDARY CUSTOMER	C30	79,913	67,922	1,833	4,193	12	0	5,208	0	0	0
1003	SERVICES	CW369	328,134	263,178	7,088	17,288	49	977	24,863	0	1,404	13,268
1004	METERS	CW370	552,314	330,186	8,798	31,261	72	13,651	100,260	2	9,475	54,557
1005	STREET LIGHTS	DA373	29,696	0	0	0	0	62	0	0	1	0
1006	INSTALL ON CUST PREMISES	CWINSTAL	21,194	15,067	407	930	3	9	1,155	2,868	4	587
1007			0									
1008	CUSTOMER ACCOUNTING		0									
1009	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
1010	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
1011	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
1012	MISC	C10	0	0	0	0	0	0	0	0	0	0
1013			0									
1014	CONSUMER INFORMATION		0									
1015	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
1016	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
1017	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
1018	MISC	C10	0	0	0	0	0	0	0	0	0	0
1019			0									
1020	MISCELLANEOUS		0									
1021	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
1022	ENERGY	E99U	2,119,909	771,520	17,478	19,664	53	85,562	472,327	749	339,390	265,137
1023	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
1024	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
1025	OTHER	R01	0	0	0	0	0	0	0	0	0	0
1026	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
1027												
1028	TOTALS	PAGE 3F	29,601,331	13,347,740	407,862	402,452	2,065	947,637	5,535,886	8,310	3,240,936	4,495,074

968	IDAHO POWER COMPANY								
969	3CP/12CP CLASS COST OF SERVICE STUDY								
970	TWELVE MONTHS ENDING DECEMBER 31, 2023								
971	*** TABLE 16 - TAXES OTHER THAN INCOME ***								
972	ALLOCATION TO CLASSES								
973	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
974		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
975				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
976	DEMAND - BASE-LOAD TOTAL		8,477,654	(40)	(41)	(42)			
977	DEMAND - Base-load Summer	D10BS	3,643,006	1,967	0	393	26,207	25,185	107,958
978	DEMAND - Peak	D10P	991,152	535	0	107	7,130	6,852	29,372
979	DEMAND - Base-load Non-Summer	D10BNS	4,834,648	3,880	0	803	79,607	40,985	183,825
980	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
981	ENERGY - Summer	E10S	0	0	0	0	0	0	0
982	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
983									
984	TRANSMISSION		0						
985	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
986	DEMAND - TRANSMISSION	D13	7,560,424	5,109	0	1,043	90,573	58,298	256,916
987	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
988	DEMAND - DIRECT	DA3509	444	0	0	0	0	0	0
989									
990	DISTRIBUTION								
991	SUBSTATIONS - GENERAL	D20	1,875,874	1,698	3,527	177	0	0	0
992	SUBSTATIONS - DIRECT	DA3602	31,792	0	0	0	0	2,394	29,390
993	LINES - PRIMARY DEMAND	D20	2,516,018	2,277	4,731	238	0	0	0
994	LINES - PRIMARY CUSTOMER	C20	1,246,974	3,462	6,204	1,595	0	0	0
995	LINES - SECONDARY DIRECT	DA3647	157,228	0	0	0	0	21,361	0
996	LINE TRANS - PRIMARY DEMAND	D50	565,960	512	1,064	54	0	0	0
997	LINE TRANS - PRIMARY CUST	C50	280,498	779	1,395	359	0	0	0
998	LINE TRANS - SECOND DIRECT	DA368	156,850	0	0	0	0	9,099	0
999	LINE TRANS - SECOND DEMAND	D60	1,636,826	1,740	3,615	182	0	0	0
1000	LINE TRANS - SECOND CUSTOMER	C60	811,234	2,254	4,038	1,038	0	0	0
1001	LINES - SECONDARY DEMAND	D30	161,241	250	519	26	0	0	0
1002	LINES - SECONDARY CUSTOMER	C30	79,913	229	411	106	0	0	0
1003	SERVICES	CW369	328,134	0	0	0	0	20	0
1004	METERS	CW370	552,314	7	1,150	534	146	360	1,854
1005	STREET LIGHTS	DA373	29,696	0	29,633	0	0	0	0
1006	INSTALL ON CUST PREMISES	CWINSTAL	21,194	51	91	23	0	0	0
1007									
1008	CUSTOMER ACCOUNTING								
1009	METER READING	CW902	0	0	0	0	0	0	0
1010	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
1011	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
1012	MISC	C10	0	0	0	0	0	0	0
1013									
1014	CONSUMER INFORMATION								
1015	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
1016	SALES EXPENSE	C10	0	0	0	0	0	0	0
1017	ADVERTISING	C10	0	0	0	0	0	0	0
1018	MISC	C10	0	0	0	0	0	0	0
1019									
1020	MISCELLANEOUS								
1021	DEMAND	D99U	0	0	0	0	0	0	0
1022	ENERGY	E99U	2,119,909	1,980	3,379	405	33,289	24,885	84,090
1023	CUSTOMER	C10	0	0	0	0	0	0	0
1024	REVENUE	R02	0	0	0	0	0	0	0
1025	OTHER	R01	0	0	0	0	0	0	0
1026	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
1027									
1028	TOTALS	PAGE 3F	29,601,331	26,730	59,758	7,082	236,953	189,440	693,404

1029												
1030												
1031												
1032	*** TABLE 17 - REGULATORY DEBITS/CREDITS ***											
1033												
1034	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION	
1035		FACTOR		RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	LIGHTING	SEC/PRIM/TRA	SECONDARY	
1036				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
1037	DEMAND - BASE-LOAD TOTAL		0									
1038	DEMAND - Base-load Summer	D10BS	1,464,604	259,788	6,360	4,798	17	18,512	109,398	0	63,299	139,260
1039	DEMAND - Peak	D10P	387,790	160,070	3,918	2,956	10	11,406	67,406	0	39,002	85,806
1040	DEMAND - Base-load Non-Summer	D10BNS	0	366,610	10,192	8,404	43	33,480	200,461	0	122,897	39,749
1041	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
1042	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
1043	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
1044			0									
1045	TRANSMISSION		0									
1046	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
1047	DEMAND - TRANSMISSION	D13	481,088	204,974	5,378	4,286	19	16,806	100,202	0	60,030	63,181
1048	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
1049	DEMAND - DIRECT	DA3509	28	0	0	0	0	28	0	0	0	0
1050			0									
1051	DISTRIBUTION		0									
1052	SUBSTATIONS - GENERAL	D20	155,610	59,153	2,827	1,284	19	4,643	27,050	60	18,553	41,573
1053	SUBSTATIONS - DIRECT	DA3602	7,257	0	0	0	0	0	0	0	2	0
1054	LINES - PRIMARY DEMAND	D20	190,057	72,247	3,453	1,569	23	5,670	33,038	73	22,660	50,776
1055	LINES - PRIMARY CUSTOMER	C20	94,195	77,444	2,090	4,781	14	44	5,938	0	18	3,016
1056	LINES - SECONDARY DIRECT	DA3647	11,877	0	0	0	0	3,174	0	147	6,942	0
1057	LINE TRANS - PRIMARY DEMAND	D50	42,752	16,251	777	353	5	1,275	7,432	16	5,097	11,422
1058	LINE TRANS - PRIMARY CUST	C50	21,188	17,420	470	1,075	3	10	1,336	0	4	678
1059	LINE TRANS - SECOND DIRECT	DA368	11,848	0	0	0	0	4,689	0	0	6,472	0
1060	LINE TRANS - SECOND DEMAND	D60	123,644	55,210	2,639	1,199	18	0	25,247	56	54	38,803
1061	LINE TRANS - SECOND CUSTOMER	C60	61,280	50,415	1,360	3,112	9	0	3,866	0	0	1,963
1062	LINES - SECONDARY DEMAND	D30	12,180	7,926	379	172	3	0	3,625	8	8	0
1063	LINES - SECONDARY CUSTOMER	C30	6,037	5,131	138	317	1	0	393	0	0	0
1064	SERVICES	CW369	24,787	19,880	535	1,306	4	74	1,878	0	106	1,002
1065	METERS	CW370	41,721	24,942	665	2,361	5	1,031	7,574	0	716	4,121
1066	STREET LIGHTS	DA373	2,243	0	0	0	0	5	0	0	0	0
1067	INSTALL ON CUST PREMISES	CWINSTAL	1,601	1,138	31	70	0	1	87	217	0	44
1068			0									
1069	CUSTOMER ACCOUNTING		0									
1070	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
1071	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
1072	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
1073	MISC	C10	0	0	0	0	0	0	0	0	0	0
1074			0									
1075	CONSUMER INFORMATION		0									
1076	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
1077	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
1078	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
1079	MISC	C10	0	0	0	0	0	0	0	0	0	0
1080			0									
1081	MISCELLANEOUS		0									
1082	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
1083	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
1084	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
1085	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
1086	OTHER	R01	0	0	0	0	0	0	0	0	0	0
1087	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
1088												
1089	TOTALS	PAGE 3G	3,141,786	1,398,600	41,212	38,043	192	100,848	594,931	576	345,861	481,396



1029								
1030								
1031								
1032	*** TABLE 17 - REGULATORY DEBITS/CREDITS ***							
1033								
1034	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)
1035		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC
1036				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT
1037	DEMAND - BASE-LOAD TOTAL		0	(40)	(41)	(42)		
1038	DEMAND - Base-load Summer	D10BS	1,464,604	340	0	68	4,528	4,351
1039	DEMAND - Peak	D10P	387,790	209	0	42	2,790	2,681
1040	DEMAND - Base-load Non-Summer	D10BNS	0	670	0	139	13,753	7,081
1041	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
1042	ENERGY - Summer	E10S	0	0	0	0	0	0
1043	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0
1044								
1045	TRANSMISSION		0					
1046	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
1047	DEMAND - TRANSMISSION	D13	481,088	325	0	66	5,763	3,710
1048	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
1049	DEMAND - DIRECT	DA3509	28	0	0	0	0	0
1050								
1051	DISTRIBUTION							
1052	SUBSTATIONS - GENERAL	D20	155,610	141	293	15	0	0
1053	SUBSTATIONS - DIRECT	DA3602	7,257	0	0	0	547	6,709
1054	LINES - PRIMARY DEMAND	D20	190,057	172	357	18	0	0
1055	LINES - PRIMARY CUSTOMER	C20	94,195	262	469	120	0	0
1056	LINES - SECONDARY DIRECT	DA3647	11,877	0	0	0	1,614	0
1057	LINE TRANS - PRIMARY DEMAND	D50	42,752	39	80	4	0	0
1058	LINE TRANS - PRIMARY CUST	C50	21,188	59	105	27	0	0
1059	LINE TRANS - SECOND DIRECT	DA368	11,848	0	0	0	687	0
1060	LINE TRANS - SECOND DEMAND	D60	123,644	131	273	14	0	0
1061	LINE TRANS - SECOND CUSTOMER	C60	61,280	170	305	78	0	0
1062	LINES - SECONDARY DEMAND	D30	12,180	19	39	2	0	0
1063	LINES - SECONDARY CUSTOMER	C30	6,037	17	31	8	0	0
1064	SERVICES	CW369	24,787	0	0	0	1	0
1065	METERS	CW370	41,721	0	87	40	11	27
1066	STREET LIGHTS	DA373	2,243	0	2,238	0	0	0
1067	INSTALL ON CUST PREMISES	CWINSTAL	1,601	4	7	2	0	0
1068								
1069	CUSTOMER ACCOUNTING							
1070	METER READING	CW902	0	0	0	0	0	0
1071	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
1072	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
1073	MISC	C10	0	0	0	0	0	0
1074								
1075	CONSUMER INFORMATION							
1076	CUSTOMER ASSIST	C10	0	0	0	0	0	0
1077	SALES EXPENSE	C10	0	0	0	0	0	0
1078	ADVERTISING	C10	0	0	0	0	0	0
1079	MISC	C10	0	0	0	0	0	0
1080								
1081	MISCELLANEOUS							
1082	DEMAND	D99U	0	0	0	0	0	0
1083	ENERGY	E99U	0	0	0	0	0	0
1084	CUSTOMER	C10	0	0	0	0	0	0
1085	REVENUE	R02	0	0	0	0	0	0
1086	OTHER	R01	0	0	0	0	0	0
1087	SUBSTATION CIAC	CIAC	0	0	0	0	0	0
1088								
1089	TOTALS	PAGE 3G	3,141,786	2,559	4,285	643	26,845	20,698
								85,097

IDAHO POWER COMPANY												PAGE 3H
3CP/12CP CLASS COST OF SERVICE STUDY												
TWELVE MONTHS ENDING DECEMBER 31, 2023												
*** TABLE 18 - PROVISIONS FOR DEFERRED INCOME TAXES ***												
ALLOCATION TO CIATION TO CLASSES												
FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
	FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION	
			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	
DEMAND - BASE-LOAD TOTAL		(5,884,910)										
DEMAND - Base-load Summer	D10BS	(2,528,856)	(1,043,851)	(25,553)	(19,279)	(68)	(74,384)	(439,570)	0	(254,340)	(559,558)	
DEMAND - Peak	D10P	(554,569)	(228,913)	(5,604)	(4,228)	(15)	(16,312)	(96,396)	0	(55,776)	(122,709)	
DEMAND - Base-load Non-Summer	D10BNS	(3,356,054)	(1,473,072)	(40,954)	(33,766)	(171)	(134,524)	(805,471)	0	(493,813)	(159,714)	
ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0	
ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0	
ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0	
TRANSMISSION		0										
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0	
DEMAND - TRANSMISSION	D13	(3,986,872)	(1,698,657)	(44,566)	(35,520)	(157)	(139,272)	(830,396)	0	(497,481)	(523,592)	
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0	
DEMAND - DIRECT	DA3509	(234)	0	0	0	0	(234)	0	0	0	0	
DISTRIBUTION		0										
SUBSTATIONS - GENERAL	D20	(1,163,654)	(442,344)	(21,143)	(9,604)	(141)	(34,717)	(202,278)	(446)	(138,742)	(310,887)	
SUBSTATIONS - DIRECT	DA3602	(16,185)	0	0	0	0	0	0	0	(4)	0	
LINES - PRIMARY DEMAND	D20	(1,648,196)	(626,535)	(29,947)	(13,603)	(199)	(49,173)	(286,506)	(632)	(196,514)	(440,340)	
LINES - PRIMARY CUSTOMER	C20	(816,869)	(671,604)	(18,121)	(41,458)	(119)	(382)	(51,499)	0	(155)	(26,155)	
LINES - SECONDARY DIRECT	DA3647	(98,425)	0	0	0	0	(26,304)	0	(1,219)	(57,529)	0	
LINE TRANS - PRIMARY DEMAND	D50	(357,246)	(135,801)	(6,491)	(2,948)	(43)	(10,658)	(62,100)	(137)	(42,594)	(95,444)	
LINE TRANS - PRIMARY CUST	C50	(177,056)	(145,570)	(3,928)	(8,986)	(26)	(83)	(11,162)	0	(34)	(5,669)	
LINE TRANS - SECOND DIRECT	DA368	(98,188)	0	0	0	0	(38,860)	0	0	(53,632)	0	
LINE TRANS - SECOND DEMAND	D60	(1,033,747)	(461,597)	(22,063)	(10,022)	(147)	0	(211,082)	(465)	(454)	(324,419)	
LINE TRANS - SECOND CUSTOMER	C60	(512,340)	(421,506)	(11,373)	(26,020)	(75)	0	(32,321)	0	(1)	(16,415)	
LINES - SECONDARY DEMAND	D30	(113,272)	(73,712)	(3,523)	(1,600)	(23)	0	(33,707)	(74)	(73)	0	
LINES - SECONDARY CUSTOMER	C30	(56,139)	(47,715)	(1,287)	(2,945)	(8)	0	(3,659)	0	(0)	0	
SERVICES	CW369	(229,154)	(183,791)	(4,950)	(12,073)	(34)	(682)	(17,363)	0	(980)	(9,266)	
METERS	CW370	(345,766)	(206,707)	(5,508)	(19,570)	(45)	(8,546)	(62,766)	(2)	(5,931)	(34,155)	
STREET LIGHTS	DA373	(18,824)	0	0	0	0	(40)	0	0	(0)	0	
INSTALL ON CUST PREMISES	CWINSTAL	(13,292)	(9,449)	(255)	(583)	(2)	(5)	(725)	(1,799)	(2)	(368)	
CUSTOMER ACCOUNTING		0										
METER READING	CW902	0	0	0	0	0	0	0	0	0	0	
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0	
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	0	0	0	
CONSUMER INFORMATION		0										
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0	
SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0	
ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	0	0	0	
MISCELLANEOUS		0										
DEMAND	D99U	0	0	0	0	0	0	0	0	0	0	
ENERGY	E99U	0	0	0	0	0	0	0	0	0	0	
CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0	
REVENUE	R02	0	0	0	0	0	0	0	0	0	0	
OTHER	R01	0	0	0	0	0	0	0	0	0	0	
SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0	
TOTALS	PAGE 3H	(17,124,938)	(7,870,826)	(245,266)	(242,206)	(1,274)	(534,177)	(3,147,003)	(4,774)	(1,798,057)	(2,628,690)	

1090								
1091								
1092								
1093	*** TABLE 18 - PROVISIONS FOR DEFERRED INCOME TAXES ***							
1094								
1095	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)
1096		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC
1097				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT
1098				(40)	(41)	(42)		MICRON
1098	DEMAND - BASE-LOAD TOTAL		(5,884,910)					
1099	DEMAND - Base-load Summer	D10BS	(2,528,856)	(1,366)	0	(273)	(18,192)	(17,482)
1100	DEMAND - Peak	D10P	(554,569)	(299)	0	(60)	(3,989)	(3,834)
1101	DEMAND - Base-load Non-Summer	D10BNS	(3,356,054)	(2,694)	0	(557)	(55,261)	(28,450)
1102	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
1103	ENERGY - Summer	E10S	0	0	0	0	0	0
1104	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0
1105								
1106	TRANSMISSION		0					
1107	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
1108	DEMAND - TRANSMISSION	D13	(3,986,872)	(2,694)	0	(550)	(47,762)	(30,743)
1109	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
1110	DEMAND - DIRECT	DA3509	(234)	0	0	0	0	0
1111								
1112	DISTRIBUTION							
1113	SUBSTATIONS - GENERAL	D20	(1,163,654)	(1,053)	(2,188)	(110)	0	0
1114	SUBSTATIONS - DIRECT	DA3602	(16,185)	0	0	0	0	(1,219)
1115	LINES - PRIMARY DEMAND	D20	(1,648,196)	(1,492)	(3,099)	(156)	0	0
1116	LINES - PRIMARY CUSTOMER	C20	(816,869)	(2,268)	(4,064)	(1,045)	0	0
1117	LINES - SECONDARY DIRECT	DA3647	(98,425)	0	0	0	0	(13,372)
1118	LINE TRANS - PRIMARY DEMAND	D50	(357,246)	(323)	(672)	(34)	0	0
1119	LINE TRANS - PRIMARY CUST	C50	(177,056)	(492)	(881)	(226)	0	0
1120	LINE TRANS - SECOND DIRECT	DA368	(98,188)	0	0	0	0	(5,696)
1121	LINE TRANS - SECOND DEMAND	D60	(1,033,747)	(1,099)	(2,283)	(115)	0	0
1122	LINE TRANS - SECOND CUSTOMER	C60	(512,340)	(1,423)	(2,551)	(656)	0	0
1123	LINES - SECONDARY DEMAND	D30	(113,272)	(176)	(365)	(18)	0	0
1124	LINES - SECONDARY CUSTOMER	C30	(56,139)	(161)	(289)	(74)	0	0
1125	SERVICES	CW369	(229,154)	0	0	0	0	(14)
1126	METERS	CW370	(345,766)	(4)	(720)	(334)	(92)	(226)
1127	STREET LIGHTS	DA373	(18,824)	0	(18,784)	0	0	0
1128	INSTALL ON CUST PREMISES	CWINSTAL	(13,292)	(32)	(57)	(15)	0	0
1129								
1130	CUSTOMER ACCOUNTING							
1131	METER READING	CW902	0	0	0	0	0	0
1132	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
1133	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
1134	MISC	C10	0	0	0	0	0	0
1135								
1136	CONSUMER INFORMATION							
1137	CUSTOMER ASSIST	C10	0	0	0	0	0	0
1138	SALES EXPENSE	C10	0	0	0	0	0	0
1139	ADVERTISING	C10	0	0	0	0	0	0
1140	MISC	C10	0	0	0	0	0	0
1141								
1142	MISCELLANEOUS							
1143	DEMAND	D99U	0	0	0	0	0	0
1144	ENERGY	E99U	0	0	0	0	0	0
1145	CUSTOMER	C10	0	0	0	0	0	0
1146	REVENUE	R02	0	0	0	0	0	0
1147	OTHER	R01	0	0	0	0	0	0
1148	SUBSTATION CIAC	CIAC	0	0	0	0	0	0
1149								
1150	TOTALS	PAGE 3H	(17,124,938)	(15,575)	(35,952)	(4,223)	(125,296)	(101,036)
								(370,583)

IDAHO POWER COMPANY													PAGE 31
1152	3CP/12CP CLASS COST OF SERVICE STUDY												
1153	TWELVE MONTHS ENDING DECEMBER 31, 2023												
1154	*** TABLE 19 - INVESTMENT TAX CREDIT ADJUSTMENT ***												
	ALLOCATION TO CIATION TO CLASSES												
1155		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)		
1156	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION		
1157		FACTOR		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY	
1158				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	
1159	DEMAND - BASE-LOAD TOTAL		8,304,618										
1160	DEMAND - Base-load Summer	D10BS	3,568,649	1,473,052	36,060	27,206	95	104,968	620,309	0	358,917	789,633	
1161	DEMAND - Peak	D10P	782,592	323,035	7,908	5,966	21	23,019	136,032	0	78,709	173,164	
1162	DEMAND - Base-load Non-Summer	D10BNS	4,735,968	2,078,758	57,793	47,650	242	189,837	1,136,658	0	696,855	225,384	
1163	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0	
1164	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0	
1165	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0	
1166			0										
1167	TRANSMISSION		0										
1168	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0	
1169	DEMAND - TRANSMISSION	D13	5,626,160	2,397,097	62,890	50,125	222	196,537	1,171,832	0	702,032	738,879	
1170	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0	
1171	DEMAND - DIRECT	DA3509	330	0	0	0	0	330	0	0	0	0	
1172			0										
1173	DISTRIBUTION		0										
1174	SUBSTATIONS - GENERAL	D20	1,642,116	624,224	29,836	13,553	199	48,991	285,450	629	195,789	438,715	
1175	SUBSTATIONS - DIRECT	DA3602	22,840	0	0	0	0	0	0	0	6	0	
1176	LINES - PRIMARY DEMAND	D20	2,222,644	844,902	40,384	18,344	269	66,311	386,363	852	265,005	593,812	
1177	LINES - PRIMARY CUSTOMER	C20	1,101,574	905,679	24,436	55,908	161	515	69,448	0	210	35,270	
1178	LINES - SECONDARY DIRECT	DA3647	138,894	0	0	0	0	37,120	0	1,720	81,184	0	
1179	LINE TRANS - PRIMARY DEMAND	D50	499,968	190,055	9,084	4,126	60	14,916	86,910	192	59,611	133,574	
1180	LINE TRANS - PRIMARY CUST	C50	247,791	203,726	5,497	12,576	36	116	15,622	0	47	7,934	
1181	LINE TRANS - SECOND DIRECT	DA368	138,561	0	0	0	0	54,839	0	0	75,684	0	
1182	LINE TRANS - SECOND DEMAND	D60	1,445,968	645,665	30,861	14,019	206	0	295,255	651	635	453,785	
1183	LINE TRANS - SECOND CUSTOMER	C60	716,642	589,587	15,908	36,395	105	0	45,210	0	1	22,961	
1184	LINES - SECONDARY DEMAND	D30	142,440	92,693	4,431	2,013	30	0	42,387	93	91	0	
1185	LINES - SECONDARY CUSTOMER	C30	70,595	60,002	1,619	3,704	11	0	4,601	0	0	0	
1186	SERVICES	CW369	289,873	232,491	6,262	15,272	43	863	21,964	0	1,240	11,721	
1187	METERS	CW370	487,913	291,686	7,772	27,616	64	12,060	88,570	2	8,370	48,196	
1188	STREET LIGHTS	DA373	26,233	0	0	0	0	55	0	0	1	0	
1189	INSTALL ON CUST PREMISES	CWINSTAL	18,723	13,310	359	822	2	8	1,021	2,534	3	518	
1190			0										
1191	CUSTOMER ACCOUNTING		0										
1192	METER READING	CW902	0	0	0	0	0	0	0	0	0	0	
1193	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0	
1194	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0	
1195	MISC	C10	0	0	0	0	0	0	0	0	0	0	
1196			0										
1197	CONSUMER INFORMATION		0										
1198	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0	
1199	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0	
1200	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0	
1201	MISC	C10	0	0	0	0	0	0	0	0	0	0	
1202			0										
1203	MISCELLANEOUS		0										
1204	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0	
1205	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0	
1206	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0	
1207	REVENUE	R02	0	0	0	0	0	0	0	0	0	0	
1208	OTHER	R01	0	0	0	0	0	0	0	0	0	0	
1209	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0	
1210													
1211	TOTALS	PAGE 31	23,926,476	10,965,963	341,101	335,293	1,765	750,485	4,407,628	6,673	2,524,389	3,673,546	

1151								
1152								
1153								
1154	*** TABLE 19 - INVESTMENT TAX CREDIT ADJUSTMENT ***							
1155								
1156	FUNCTION	ALLOCATION	TOTALS	(K) UNMETERED	(L) MUNICIPAL	(M) TRAFFIC	(N) SC	(O) SC
1157		FACTOR		GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT
1158				(40)	(41)	(42)		MICRON
1159	DEMAND - BASE-LOAD TOTAL		8,304,618					
1160	DEMAND - Base-load Summer	D10BS	3,568,649	1,927	0	385	25,672	24,671
1161	DEMAND - Peak	D10P	782,592	423	0	84	5,630	5,410
1162	DEMAND - Base-load Non-Summer	D10BNS	4,735,968	3,801	0	786	77,983	40,148
1163	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
1164	ENERGY - Summer	E10S	0	0	0	0	0	0
1165	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0
1166								
1167	TRANSMISSION		0					
1168	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
1169	DEMAND - TRANSMISSION	D13	5,626,160	3,802	0	776	67,401	43,383
1170	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
1171	DEMAND - DIRECT	DA3509	330	0	0	0	0	0
1172								
1173	DISTRIBUTION							
1174	SUBSTATIONS - GENERAL	D20	1,642,116	1,486	3,088	155	0	0
1175	SUBSTATIONS - DIRECT	DA3602	22,840	0	0	0	0	1,720
1176	LINES - PRIMARY DEMAND	D20	2,222,644	2,012	4,179	210	0	0
1177	LINES - PRIMARY CUSTOMER	C20	1,101,574	3,058	5,480	1,409	0	0
1178	LINES - SECONDARY DIRECT	DA3647	138,894	0	0	0	0	18,871
1179	LINE TRANS - PRIMARY DEMAND	D50	499,968	453	940	47	0	0
1180	LINE TRANS - PRIMARY CUST	C50	247,791	688	1,233	317	0	0
1181	LINE TRANS - SECOND DIRECT	DA368	138,561	0	0	0	0	8,038
1182	LINE TRANS - SECOND DEMAND	D60	1,445,968	1,537	3,194	161	0	0
1183	LINE TRANS - SECOND CUSTOMER	C60	716,642	1,991	3,568	917	0	0
1184	LINES - SECONDARY DEMAND	D30	142,440	221	459	23	0	0
1185	LINES - SECONDARY CUSTOMER	C30	70,595	203	363	93	0	0
1186	SERVICES	CW369	289,873	0	0	0	0	17
1187	METERS	CW370	487,913	6	1,016	472	129	318
1188	STREET LIGHTS	DA373	26,233	0	26,177	0	0	0
1189	INSTALL ON CUST PREMISES	CWINSTAL	18,723	45	81	21	0	0
1190								
1191	CUSTOMER ACCOUNTING							
1192	METER READING	CW902	0	0	0	0	0	0
1193	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
1194	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
1195	MISC	C10	0	0	0	0	0	0
1196								
1197	CONSUMER INFORMATION							
1198	CUSTOMER ASSIST	C10	0	0	0	0	0	0
1199	SALES EXPENSE	C10	0	0	0	0	0	0
1200	ADVERTISING	C10	0	0	0	0	0	0
1201	MISC	C10	0	0	0	0	0	0
1202								
1203	MISCELLANEOUS							
1204	DEMAND	D99U	0	0	0	0	0	0
1205	ENERGY	E99U	0	0	0	0	0	0
1206	CUSTOMER	C10	0	0	0	0	0	0
1207	REVENUE	R02	0	0	0	0	0	0
1208	OTHER	R01	0	0	0	0	0	0
1209	SUBSTATION CIAC	CIAC	0	0	0	0	0	0
1210								
1211	TOTALS	PAGE 3I	23,926,476	21,651	49,777	5,857	176,815	142,577
								522,956

1212	IDAHO POWER COMPANY											PAGE 3J
1213	3CP/12CP CLASS COST OF SERVICE STUDY											
1214	TWELVE MONTHS ENDING DECEMBER 31, 2023											
1215	*** TABLE 20 - CONSTRUCTION WORK IN PROGRESS ***											
1216	ALLOCATION TO CIATION TO CLASSES											
1217	FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1218		FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
1219				(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
1220	DEMAND - BASE-LOAD TOTAL		6,537,444									
1221	DEMAND - Base-load Summer	D10BS	2,809,262	1,159,595	28,387	21,416	75	82,632	488,311	0	282,542	621,604
1222	DEMAND - Peak	D10P	0	0	0	0	0	0	0	0	0	0
1223	DEMAND - Base-load Non-Summer	D10BNS	3,728,182	1,636,411	45,495	37,510	190	149,441	894,784	0	548,568	177,424
1224	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
1225	ENERGY - Summer	E10S	0	0	0	0	0	0	0	0	0	0
1226	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0	0	0	0
1227												
1228	TRANSMISSION											
1229	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
1230	DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0	0	0	0
1231	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
1232	DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0	0	0	0
1233												
1234	DISTRIBUTION		0									
1235	SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0	0	0	0
1236	SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0	0	0	0
1237	LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0	0	0	0
1238	LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0	0	0	0
1239	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0	0	0	0
1240	LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0	0	0	0
1241	LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0	0	0	0
1242	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0	0	0	0
1243	LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0	0	0	0
1244	LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0	0	0	0
1245	LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0	0	0	0
1246	LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0	0	0	0
1247	SERVICES	CW369	0	0	0	0	0	0	0	0	0	0
1248	METERS	CW370	0	0	0	0	0	0	0	0	0	0
1249	STREET LIGHTS	DA373	0	0	0	0	0	0	0	0	0	0
1250	INSTALL ON CUST PREMISES	CWINSTAL	0	0	0	0	0	0	0	0	0	0
1251												
1252	CUSTOMER ACCOUNTING		0									
1253	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
1254	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
1255	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
1256	MISC	C10	0	0	0	0	0	0	0	0	0	0
1257												
1258	CONSUMER INFORMATION		0									
1259	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
1260	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
1261	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
1262	MISC	C10	0	0	0	0	0	0	0	0	0	0
1263												
1264	MISCELLANEOUS		0									
1265	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
1266	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
1267	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
1268	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
1269	OTHER	R01	0	0	0	0	0	0	0	0	0	0
1270	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0	0	0	0
1271												
1272	TOTALS	PAGE 3J	6,537,444	2,796,006	73,882	58,927	265	232,072	1,383,095	0	831,110	799,028

1212	IDAHO POWER COMPANY								
1213	3CP/12CP CLASS COST OF SERVICE STUDY								
1214	TWELVE MONTHS ENDING DECEMBER 31, 2023								
1215	*** TABLE 20 - CONSTRUCTION WORK IN PROGRESS ***								
1216	ALLOCATION TO CLASSES								
1217	FUNCTION	ALLOCATION	TOTALS	(K)	(L)	(M)	(N)	(O)	(P)
1218		FACTOR		UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
1219				GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
1220	DEMAND - BASE-LOAD TOTAL		6,537,444	(40)	(41)	(42)			
1221	DEMAND - Base-load Summer	D10BS	2,809,262	1,517	0	303	20,209	19,421	83,250
1222	DEMAND - Peak	D10P	0	0	0	0	0	0	0
1223	DEMAND - Base-load Non-Summer	D10BNS	3,728,182	2,992	0	619	61,388	31,605	141,754
1224	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0
1225	ENERGY - Summer	E10S	0	0	0	0	0	0	0
1226	ENERGY - Non-Summer	E10NS	0	0	0	0	0	0	0
1227									
1228	TRANSMISSION		0						
1229	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
1230	DEMAND - TRANSMISSION	D13	0	0	0	0	0	0	0
1231	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
1232	DEMAND - DIRECT	DA3509	0	0	0	0	0	0	0
1233									
1234	DISTRIBUTION								
1235	SUBSTATIONS - GENERAL	D20	0	0	0	0	0	0	0
1236	SUBSTATIONS - DIRECT	DA3602	0	0	0	0	0	0	0
1237	LINES - PRIMARY DEMAND	D20	0	0	0	0	0	0	0
1238	LINES - PRIMARY CUSTOMER	C20	0	0	0	0	0	0	0
1239	LINES - SECONDARY DIRECT	DA3647	0	0	0	0	0	0	0
1240	LINE TRANS - PRIMARY DEMAND	D50	0	0	0	0	0	0	0
1241	LINE TRANS - PRIMARY CUST	C50	0	0	0	0	0	0	0
1242	LINE TRANS - SECOND DIRECT	DA368	0	0	0	0	0	0	0
1243	LINE TRANS - SECOND DEMAND	D60	0	0	0	0	0	0	0
1244	LINE TRANS - SECOND CUSTOMER	C60	0	0	0	0	0	0	0
1245	LINES - SECONDARY DEMAND	D30	0	0	0	0	0	0	0
1246	LINES - SECONDARY CUSTOMER	C30	0	0	0	0	0	0	0
1247	SERVICES	CW369	0	0	0	0	0	0	0
1248	METERS	CW370	0	0	0	0	0	0	0
1249	STREET LIGHTS	DA373	0	0	0	0	0	0	0
1250	INSTALL ON CUST PREMISES	CWINSTAL	0	0	0	0	0	0	0
1251									
1252	CUSTOMER ACCOUNTING								
1253	METER READING	CW902	0	0	0	0	0	0	0
1254	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
1255	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
1256	MISC	C10	0	0	0	0	0	0	0
1257									
1258	CONSUMER INFORMATION								
1259	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
1260	SALES EXPENSE	C10	0	0	0	0	0	0	0
1261	ADVERTISING	C10	0	0	0	0	0	0	0
1262	MISC	C10	0	0	0	0	0	0	0
1263									
1264	MISCELLANEOUS								
1265	DEMAND	D99U	0	0	0	0	0	0	0
1266	ENERGY	E99U	0	0	0	0	0	0	0
1267	CUSTOMER	C10	0	0	0	0	0	0	0
1268	REVENUE	R02	0	0	0	0	0	0	0
1269	OTHER	R01	0	0	0	0	0	0	0
1270	SUBSTATION CIAC	CIAC	0	0	0	0	0	0	0
1271									
1272	TOTALS	PAGE 3J	6,537,444	4,509	0	922	81,598	51,026	225,005

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1276 \*\*\* TABLE 21 - STATE INCOME TAXES \*\*\*

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**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CIATION TO CLASSES**

FUNCTION	ALLOCATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
FACTOR	TOTALS	RESIDENTIAL	On Site Gen	GEN SRV	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
		RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRA	SECONDARY	
		(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	
DEMAND - Base-load Summer	D10BS	(383,179)	(118,263)	(1,799)	(1,751)	(2)	(15,224)	(83,343)	0	(64,889)	(62,353)
DEMAND - Peak	D10P	(91,720)	(28,308)	(431)	(419)	(0)	(3,644)	(19,949)	0	(15,532)	(14,925)
DEMAND - Base-load Non-Summer	D10BNS	(566,047)	(166,891)	(2,884)	(3,067)	(4)	(27,533)	(152,718)	0	(125,985)	(17,797)
ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
ENERGY - Summer	E10S	(15,494)	(3,334)	(52)	(69)	(0)	(709)	(3,601)	(1)	(3,326)	(2,749)
ENERGY - Non-Summer	E10NS	(27,978)	(7,515)	(138)	(152)	(0)	(1,367)	(7,368)	(2)	(6,946)	(623)
		0									
TRANSMISSION		0									
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	(720,621)	(218,835)	(3,536)	(3,635)	(5)	(32,117)	(177,395)	0	(143,004)	(65,739)
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	(57)	0	0	0	0	(57)	0	0	0	0
		0									
DISTRIBUTION		0									
SUBSTATIONS - GENERAL	D20	(250,558)	(74,595)	(2,216)	(1,298)	(5)	(10,576)	(57,086)	(18)	(52,687)	(51,565)
SUBSTATIONS - DIRECT	DA3602	(30,246)	0	0	0	0	0	0	0	(6)	0
LINES - PRIMARY DEMAND	D20	(238,999)	(71,154)	(2,114)	(1,238)	(5)	(10,089)	(54,453)	(17)	(50,257)	(49,186)
LINES - PRIMARY CUSTOMER	C20	(94,933)	(76,272)	(1,279)	(3,774)	(3)	(78)	(9,788)	0	(40)	(2,921)
LINES - SECONDARY DIRECT	DA3647	(27,110)	0	0	0	0	(6,002)	0	(37)	(16,362)	0
LINE TRANS - PRIMARY DEMAND	D50	(61,868)	(18,419)	(547)	(321)	(1)	(2,612)	(14,096)	(5)	(13,010)	(12,733)
LINE TRANS - PRIMARY CUST	C50	(24,575)	(19,744)	(331)	(977)	(1)	(20)	(2,534)	0	(10)	(756)
LINE TRANS - SECOND DIRECT	DA368	(28,321)	0	0	0	0	(9,612)	0	0	(16,535)	0
LINE TRANS - SECOND DEMAND	D60	(157,241)	(62,570)	(1,859)	(1,089)	(5)	0	(47,884)	(15)	(139)	(43,253)
LINE TRANS - SECOND CUSTOMER	C60	(71,027)	(57,136)	(958)	(2,827)	(2)	0	(7,332)	0	(0)	(2,188)
LINES - SECONDARY DEMAND	D30	(13,939)	(7,651)	(227)	(133)	(1)	0	(5,855)	(2)	(17)	0
LINES - SECONDARY CUSTOMER	C30	(5,967)	(4,953)	(83)	(245)	(0)	0	(636)	0	(0)	0
SERVICES	CW369	(14,235)	(10,983)	(184)	(578)	(0)	(74)	(1,736)	0	(132)	(545)
METERS	CW370	(50,838)	(26,393)	(437)	(2,003)	(1)	(1,971)	(13,412)	(0)	(1,705)	(4,289)
STREET LIGHTS	DA373	(2,328)	0	0	0	0	(13)	0	0	(0)	0
INSTALL ON CUST PREMISES	DA371	(452)	0	0	0	0	(3)	0	(447)	(2)	0
		0									
CUSTOMER ACCOUNTING		0									
METER READING	CW902	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	(0)	(0)
CUSTOMER ACCOUNTS	CW903	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	(0)	(0)
UNCOLLECTIBLES	CW904	(0)	(0)	(0)	(0)	0	(0)	(0)	0	(0)	(0)
MISC	C10	0	0	0	0	0	0	0	0	0	0
		0									
CONSUMER INFORMATION		0									
CUSTOMER ASSIST	C10	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	(0)	(0)
SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0	0	0	0
		0									
MISCELLANEOUS		0									
DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0	0	0	0
OTHER	INTFUND	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
SUBSTATION CIAC	CIAC	49,300	2,332	69	206	1	1,492	2,363	1	19,288	1,626
TOTALS		(2,828,435)	(968,684)	(19,005)	(23,371)	(36)	(120,210)	(656,822)	(544)	(491,297)	(329,996)



1273								
1274								
1275								
1276	*** TABLE 21 - STATE INCOME TAXES ***							
1277		(A)	(K)	(L)	(M)	(N)	(O)	(P)
1278	FUNCTION	ALLOCATION TOTALS	UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
1279		FACTOR	GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
1280	PRODUCTION		(40)	(41)	(42)			
1281	DEMAND - Base-load Summer	D10BS	(383,179)	(210)	0	(29)	(6,723)	(5,522)
1282	DEMAND - Peak	D10P	(91,720)	(50)	0	(7)	(1,609)	(1,322)
1283	DEMAND - Base-load Non-Summer	D10BNS	(566,047)	(415)	0	(60)	(20,422)	(8,986)
1284	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
1285	ENERGY - Summer	E10S	(15,494)	(12)	(10)	(2)	(347)	(282)
1286	ENERGY - Non-Summer	E10NS	(27,978)	(25)	(22)	(4)	(1,111)	(636)
1287								
1288	TRANSMISSION							
1289	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
1290	DEMAND - TRANSMISSION	D13	(720,621)	(468)	0	(67)	(19,888)	(10,940)
1291	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
1292	DEMAND - DIRECT	DA3509	(57)	0	0	0	0	0
1293								
1294	DISTRIBUTION							
1295	SUBSTATIONS - GENERAL	D20	(250,558)	(242)	(251)	(18)	0	0
1296	SUBSTATIONS - DIRECT	DA3602	(30,246)	0	0	0	(2,332)	(27,907)
1297	LINES - PRIMARY DEMAND	D20	(238,999)	(230)	(240)	(17)	0	0
1298	LINES - PRIMARY CUSTOMER	C20	(94,933)	(350)	(314)	(113)	0	0
1299	LINES - SECONDARY DIRECT	DA3647	(27,110)	0	0	0	(4,708)	0
1300	LINE TRANS - PRIMARY DEMAND	D50	(61,868)	(60)	(62)	(4)	0	0
1301	LINE TRANS - PRIMARY CUST	C50	(24,575)	(91)	(81)	(29)	0	0
1302	LINE TRANS - SECOND DIRECT	DA368	(28,321)	0	0	0	(2,174)	0
1303	LINE TRANS - SECOND DEMAND	D60	(157,241)	(203)	(211)	(15)	0	0
1304	LINE TRANS - SECOND CUSTOMER	C60	(71,027)	(262)	(235)	(84)	0	0
1305	LINES - SECONDARY DEMAND	D30	(13,939)	(25)	(26)	(2)	0	0
1306	LINES - SECONDARY CUSTOMER	C30	(5,967)	(23)	(20)	(7)	0	0
1307	SERVICES	CW369	(14,235)	0	0	0	(2)	0
1308	METERS	CW370	(50,838)	(1)	(63)	(41)	(38)	(403)
1309	STREET LIGHTS	DA373	(2,328)	0	(2,315)	0	0	0
1310	INSTALL ON CUST PREMISES	CWINSTAL	(452)	0	0	0	0	0
1311								
1312	CUSTOMER ACCOUNTING							
1313	METER READING	CW902	(0)	0	(0)	0	(0)	(0)
1314	CUSTOMER ACCOUNTS	CW903	(0)	(0)	(0)	(0)	(0)	(0)
1315	UNCOLLECTIBLES	CW904	(0)	0	0	0	0	0
1316	MISC	C10	0	0	0	0	0	0
1317								
1318	CONSUMER INFORMATION							
1319	CUSTOMER ASSIST	C10	(0)	(0)	(0)	(0)	(0)	(0)
1320	SALES EXPENSE	C10	0	0	0	0	0	0
1321	ADVERTISING	C10	0	0	0	0	0	0
1322	MISC	C10	0	0	0	0	0	0
1323								
1324	MISCELLANEOUS							
1325	DEMAND	D99U	0	0	0	0	0	0
1326	ENERGY	E99U	0	0	0	0	0	0
1327	CUSTOMER	C10	0	0	0	0	0	0
1328	REVENUE	R02	0	0	0	0	0	0
1329	OTHER	INTFUND	(0)	(0)	(0)	(0)	(0)	(0)
1330	SUBSTATION CIAC	0	49,300	7	8	1	0	106
1331								
1332	TOTALS		(2,828,435)	(2,659)	(3,843)	(497)	(50,139)	(36,879)

1333												
1334												
1335												
1336	*** TABLE 22 - FEDERAL INCOME TAXES ***											
1337												
1338	FUNCTION	ALLOCATION	TOTALS	RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION	
1339		FACTOR		RESIDENTIAL	GEN SRV	GEN SRV	GEN SRV	GEN SRV	LIGHTING	SEC/PRIM/TRA	SECONDARY	
1340	PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
1341	DEMAND - Base-load Summer	D10BS	5,288,935	1,632,350	24,835	24,167	24	210,137	1,150,364	0	895,648	860,644
1342	DEMAND - Peak	D10P	1,265,989	390,728	5,945	5,785	6	50,300	275,357	0	214,387	206,008
1343	DEMAND - Base-load Non-Summer	D10BNS	7,813,019	2,303,558	39,803	42,327	61	380,036	2,107,934	0	1,738,943	245,653
1344	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0	0	0	0	0
1345	ENERGY - Summer	E10S	213,866	46,022	723	955	1	9,793	49,701	11	45,902	37,926
1346	ENERGY - Non-Summer	E10NS	386,177	103,729	1,903	2,092	3	18,865	101,694	24	95,867	8,601
1347			0									
1348	TRANSMISSION		0									
1349	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
1350	DEMAND - TRANSMISSION	D13	9,946,572	2,992,926	48,801	50,168	63	443,306	2,448,543	0	1,973,854	907,374
1351	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
1352	DEMAND - DIRECT	DA3509	789	0	0	0	0	789	0	0	0	0
1353			0									
1354	DISTRIBUTION		0									
1355	SUBSTATIONS - GENERAL	D20	3,458,399	1,029,618	30,586	17,920	75	145,984	787,948	252	727,230	711,741
1356	SUBSTATIONS - DIRECT	DA3602	417,480	0	0	0	0	0	0	0	87	0
1357	LINES - PRIMARY DEMAND	D20	3,298,856	982,120	29,175	17,093	71	139,249	751,598	240	693,682	678,906
1358	LINES - PRIMARY CUSTOMER	C20	1,310,339	1,052,767	17,654	52,095	43	1,081	135,098	0	549	40,325
1359	LINES - SECONDARY DIRECT	DA3647	374,195	0	0	0	0	82,843	0	515	225,847	0
1360	LINE TRANS - PRIMARY DEMAND	D50	853,955	254,235	7,552	4,425	18	36,047	194,562	62	179,569	175,744
1361	LINE TRANS - PRIMARY CUST	C50	339,199	272,523	4,570	13,485	11	280	34,972	0	142	10,439
1362	LINE TRANS - SECOND DIRECT	DA368	390,912	0	0	0	0	132,668	0	0	228,234	0
1363	LINE TRANS - SECOND DEMAND	D60	2,170,366	863,643	25,656	15,031	63	0	660,930	211	1,914	597,008
1364	LINE TRANS - SECOND CUSTOMER	C60	980,364	788,633	13,224	39,024	32	0	101,202	0	4	30,207
1365	LINES - SECONDARY DEMAND	D30	192,396	105,609	3,137	1,838	8	0	80,821	26	234	0
1366	LINES - SECONDARY CUSTOMER	C30	82,364	68,363	1,146	3,383	3	0	8,773	0	0	0
1367	SERVICES	CW369	196,481	151,600	2,538	7,983	6	1,016	23,968	0	1,821	7,517
1368	METERS	CW370	701,699	364,298	6,033	27,648	18	27,209	185,122	1	23,540	59,204
1369	STREET LIGHTS	DA373	32,134	0	0	0	0	179	0	0	3	0
1370	INSTALL ON CUST PREMISES		6,242	0	0	0	0	37	0	6,173	33	0
1371			0									
1372	CUSTOMER ACCOUNTING		0									
1373	METER READING	CW902	0	0	0	0	0	0	0	0	0	0
1374	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
1375	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	(0)	0	0
1376	MISC	C10	0	0	0	0	0	0	0	0	0	0
1377			0									
1378	CONSUMER INFORMATION		0									
1379	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
1380	SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
1381	ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
1382	MISC	C10	0	0	0	0	0	0	0	0	0	0
1383			0									
1384	MISCELLANEOUS		0									
1385	DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
1386	ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
1387	CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
1388	REVENUE	R02	0	0	0	0	0	0	0	0	0	0
1389	OTHER	DA454	0	0	0	0	0	0	0	0	0	0
1390	SUBSTATION CIAC	CIAC	(680,484)	(32,192)	(956)	(2,839)	(12)	(20,592)	(32,616)	(8)	(266,231)	(22,440)
1391												
1392	TOTALS		39,040,245	13,370,532	262,324	322,579	494	1,659,227	9,065,970	7,507	6,781,260	4,554,856

1333								
1334								
1335								
1336	*** TABLE 22 - FEDERAL INCOME TAXES ***							
1337								
1338	FUNCTION	ALLOCATION TOTALS	UNMETERED	MUNICIPAL	TRAFFIC	SC	SC	SC
1339	FACTOR		GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON
1340	PRODUCTION		(40)	(41)	(42)			
1341	DEMAND - Base-load Summer	D10BS	5,288,935	2,904	0	405	92,797	318,445
1342	DEMAND - Peak	D10P	1,265,989	695	0	97	22,212	76,225
1343	DEMAND - Base-load Non-Summer	D10BNS	7,813,019	5,729	0	827	281,883	542,233
1344	ENERGY - POWER SUPPLY	E10	0	0	0	0	0	0
1345	ENERGY - Summer	E10S	213,866	164	132	23	4,789	13,835
1346	ENERGY - Non-Summer	E10NS	386,177	348	306	50	15,340	28,576
1347								
1348	TRANSMISSION							
1349	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0
1350	DEMAND - TRANSMISSION	D13	9,946,572	6,456	0	920	274,505	648,649
1351	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0
1352	DEMAND - DIRECT	DA3509	789	0	0	0	0	0
1353								
1354	DISTRIBUTION							
1355	SUBSTATIONS - GENERAL	D20	3,458,399	3,334	3,469	243	0	0
1356	SUBSTATIONS - DIRECT	DA3602	417,480	0	0	0	32,194	385,198
1357	LINES - PRIMARY DEMAND	D20	3,298,856	3,180	3,309	232	0	0
1358	LINES - PRIMARY CUSTOMER	C20	1,310,339	4,835	4,339	1,555	0	0
1359	LINES - SECONDARY DIRECT	DA3647	374,195	0	0	0	64,990	0
1360	LINE TRANS - PRIMARY DEMAND	D50	853,955	823	857	60	0	0
1361	LINE TRANS - PRIMARY CUST	C50	339,199	1,252	1,123	403	0	0
1362	LINE TRANS - SECOND DIRECT	DA368	390,912	0	0	0	30,010	0
1363	LINE TRANS - SECOND DEMAND	D60	2,170,366	2,797	2,910	204	0	0
1364	LINE TRANS - SECOND CUSTOMER	C60	980,364	3,622	3,250	1,165	0	0
1365	LINES - SECONDARY DEMAND	D30	192,396	342	356	25	0	0
1366	LINES - SECONDARY CUSTOMER	C30	82,364	314	282	101	0	0
1367	SERVICES	CW369	196,481	0	0	0	32	0
1368	METERS	CW370	701,699	10	864	559	1,108	5,558
1369	STREET LIGHTS	DA373	32,134	0	31,953	0	0	0
1370	INSTALL ON CUST PREMISES	CWINSTAL	6,242	0	0	0	0	0
1371								
1372	CUSTOMER ACCOUNTING							
1373	METER READING	CW902	0	0	0	0	0	0
1374	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0
1375	UNCOLLECTIBLES	CW904	0	0	0	0	0	0
1376	MISC	C10	0	0	0	0	0	0
1377								
1378	CONSUMER INFORMATION							
1379	CUSTOMER ASSIST	C10	0	0	0	0	0	0
1380	SALES EXPENSE	C10	0	0	0	0	0	0
1381	ADVERTISING	C10	0	0	0	0	0	0
1382	MISC	C10	0	0	0	0	0	0
1383			0					
1384	MISCELLANEOUS		0					
1385	DEMAND	D99U	0	0	0	0	0	0
1386	ENERGY	E99U	0	0	0	0	0	0
1387	CUSTOMER	C10	0	0	0	0	0	0
1388	REVENUE	R02	0	0	0	0	0	0
1389	OTHER	INTFUND	0	0	0	0	0	0
1390	SUBSTATION CIAC	0	(680,484)	(103)	(108)	(8)	0	(300,909)
1391								
1392	TOTALS		39,040,245	36,701	53,040	6,863	692,053	1,717,811

**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

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\*\*\* TABLE 23 - ALLOCATION FACTOR SUMMARY \*\*\*

FUNCTION	FACTOR NAME	(A) TOTAL FACTOR	(B) RESIDENTIAL	(C) On Site Gen	(D) GEN SRV	(E) GEN SRV On Site Gen	(F) GEN SRV PRIM & TRAN	(G) GEN SRV SECONDARY	(H) AREA LIGHTING	(I) LG POWER SEC/PRIM/TRAN	(J) IRRIGATION SECONDARY
PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
DEMAND - Base-load Summer	D10BS	0.4297	0.1774	0.0043	0.0033	0.0000	0.0126	0.0747	0.0000	0.0432	0.0951
DEMAND - Peak	D10P	1.0000	0.4128	0.0101	0.0076	0.0000	0.0294	0.1738	0.0000	0.1006	0.2213
DEMAND - Base-load Non-Summer	D10BNS	0.5703	0.2503	0.0070	0.0057	0.0000	0.0229	0.1369	0.0000	0.0839	0.0271
DEMAND - BASE-LOAD TOTAL	D10B	1.0000	0.4277	0.0113	0.0090	0.0000	0.0355	0.2116	0.0000	0.1271	0.1222
ENERGY - POWER SUPPLY	E10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENERGY - Summer	E10S	0.3751	0.1145	0.0029	0.0030	0.0000	0.0135	0.0739	0.0001	0.0507	0.0959
ENERGY - Non-Summer	E10NS	0.6249	0.2581	0.0076	0.0065	0.0000	0.0260	0.1512	0.0002	0.1059	0.0218
ENERGY - ANNUAL	E10	1.0000	0.3726	0.0105	0.0095	0.0000	0.0395	0.2251	0.0004	0.1566	0.1177
TRANSMISSION											
DEMAND - POWER SUPPLY	D11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DEMAND - TRANSMISSION	D13	1.0000	0.4261	0.0112	0.0089	0.0000	0.0349	0.2083	0.0000	0.1248	0.1313
DEMAND - SUBTRANSMISSION	D15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DEMAND - DIRECT	DA3509	1,189	0	0	0	0	1,189	0	0	0	0
DISTRIBUTION											
SUBSTATIONS - GENERAL	D20	3,880,868	1,475,249	70,513	32,030	470	115,783	674,613	1,488	462,715	1,036,831
SUBSTATIONS - DIRECT	DA3602	18,842,265	0	0	0	0	0	0	0	4,766	0
LINES - PRIMARY DEMAND	D20	3,880,868	1,475,249	70,513	32,030	470	115,783	674,613	1,488	462,715	1,036,831
LINES - PRIMARY CUSTOMER	C20	599,002	492,481	13,288	30,401	88	280	37,764	0	114	19,179
LINES - SECONDARY DIRECT	DA3647	30,302,718	0	0	0	0	8,098,475	0	375,286	17,711,924	0
LINE TRANS - PRIMARY DEMAND	D50	3,880,868	1,475,249	70,513	32,030	470	115,783	674,613	1,488	462,715	1,036,831
LINE TRANS - PRIMARY CUST	C50	599,002	492,481	13,288	30,401	88	280	37,764	0	114	19,179
LINE TRANS - SECOND DIRECT	DA368	30,269,678	0	0	0	0	11,979,958	0	0	16,533,677	0
LINE TRANS - SECOND DEMAND	D60	3,303,822	1,475,249	70,513	32,030	470	0	674,613	1,488	1,452	1,036,831
LINE TRANS - SECOND CUSTOMER	C60	598,609	492,481	13,288	30,401	88	0	37,764	0	1	19,179
LINES - SECONDARY DEMAND	D30	2,266,991	1,475,249	70,513	32,030	470	0	674,613	1,488	1,452	0
LINES - SECONDARY CUSTOMER	C30	579,430	492,481	13,288	30,401	88	0	37,764	0	1	0
SERVICES	CW369	66,979,720	53,720,684	1,446,874	3,528,835	9,999	199,332	5,075,064	0	286,563	2,708,349
METERS	CW370	97,044,854	58,015,722	1,545,886	5,492,681	12,640	2,398,611	17,616,298	435	1,664,741	9,586,021
STREET LIGHTS	DA373	5,478,881	0	0	0	0	11,531	0	0	141	0
INSTALL ON CUST PREMISES	DA371	4,591,211	0	0	0	0	3,662	0	4,584,924	2,625	0
INSTALL ON CUST PREM	CWINSTAL	1,324,335	941,483	25,402	58,118	167	543	72,193	179,202	222	36,665
CUSTOMER ACCOUNTING											
METER READING	CW902	1,772,999	1,357,370	26,946	106,387	258	50,454	114,853	0	20,596	93,489
CUSTOMER ACCOUNTS	CW903	16,082,040	13,155,938	354,963	812,117	2,337	64,177	1,008,800	0	26,199	512,338
UNCOLLECTIBLES	CW904	5,389,398	4,833,685	2,063	205,647	0	1,917	254,719	(3)	25,819	65,550
MISC	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
CONSUMER INFORMATION											
CUSTOMER ASSIST	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
SALES EXPENSE	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
ADVERTISING	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
MISC	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
MISCELLANEOUS											
DEMAND	D99U	23,186,898	0	0	0	0	1,565,362	11,142,321	0	4,706,101	4,065,427
ENERGY	E99U	14,907,835,244	5,425,559,433	122,912,496	138,285,160	370,708	601,699,182	3,321,544,618	5,267,423	2,386,695,635	1,864,522,772
CUSTOMER	C10	599,011	492,481	13,288	30,401	88	284	37,764	0	116	19,179
MISC. REVENUE	R02	4,327,695	3,867,051	20,825	136,296	112	1,349	137,585	7,800	28	80,047
RETAIL SALES REVENUE	R01	1,116,166,332	501,479,142	11,567,368	16,102,622	43,713	36,446,763	230,482,910	1,261,853	125,751,566	140,327,749
REVENUE - OPEN	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	(42,770,847)	(4,292,179)	(205,156)	(472,238)	(6,923)	(1,519,756)	(2,598,489)	(4,296)	(15,762,856)	(3,041,944)
FACILITIES CHARGE REVENUE	DA454	9,862,380	0	0	0	0	3,310,051	0	74,757	5,559,630	0
INTERVENOR FUNDING	INTFUND	291,838	186,225	5,060	7,677	23	2,524	14,289	23	9,992	66,025

**IDAHO POWER COMPANY**  
**3CP/12CP CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**  
**ALLOCATION TO CLASSES**

\*\*\* TABLE 23 - ALLOCATION FACTOR SUMMARY \*\*\*

FUNCTION	FACTOR NAME	TOTAL FACTOR	(K) UNMETERED GEN SERVICE	(L) MUNICIPAL ST LIGHT	(M) TRAFFIC CONTROL	(N) DOE/INL	(O) JR SIMPLOT	(P) SC MICRON
PRODUCTION			(40)	(41)	(42)			
DEMAND - Base-load Summer	D10BS	0.4297	0.0002	0.0000	0.0000	0.0031	0.0030	0.0127
DEMAND - Peak	D10P	1.0000	0.0005	0.0000	0.0001	0.0072	0.0069	0.0296
DEMAND - Base-load Non-Summer	D10BNS	0.5703	0.0005	0.0000	0.0001	0.0094	0.0048	0.0217
DEMAND - BASE-LOAD TOTAL	D10B	1.0000	0.0007	0.0000	0.0001	0.0125	0.0078	0.0344
ENERGY - POWER SUPPLY	E10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENERGY - Summer	E10S	0.3751	0.0003	0.0005	0.0001	0.0037	0.0035	0.0127
ENERGY - Non-Summer	E10NS	0.6249	0.0006	0.0011	0.0001	0.0117	0.0078	0.0262
ENERGY - ANNUAL	E10	1.0000	0.0009	0.0016	0.0002	0.0154	0.0113	0.0388
TRANSMISSION		0.0000						
DEMAND - POWER SUPPLY	D11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DEMAND - TRANSMISSION	D13	1.0000	0.0007	0.0000	0.0001	0.0120	0.0077	0.0340
DEMAND - SUBTRANSMISSION	D15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DEMAND - DIRECT	DA3509	1,189	0	0	0	0	0	0
DISTRIBUTION								
SUBSTATIONS - GENERAL	D20	3,880,868	3,513	7,298	367	0	0	0
SUBSTATIONS - DIRECT	DA3602	18,842,265	0	0	0	0	1,418,979	17,418,519
LINES - PRIMARY DEMAND	D20	3,880,868	3,513	7,298	367	0	0	0
LINES - PRIMARY CUSTOMER	C20	599,002	1,663	2,980	766	0	0	0
LINES - SECONDARY DIRECT	DA3647	30,302,718	0	0	0	0	4,117,033	0
LINE TRANS - PRIMARY DEMAND	D50	3,880,868	3,513	7,298	367	0	0	0
LINE TRANS - PRIMARY CUST	C50	599,002	1,663	2,980	766	0	0	0
LINE TRANS - SECOND DIRECT	DA368	30,269,678	0	0	0	0	1,756,043	0
LINE TRANS - SECOND DEMAND	D60	3,303,822	3,513	7,298	367	0	0	0
LINE TRANS - SECOND CUSTOMER	C60	598,609	1,663	2,980	766	0	0	0
LINES - SECONDARY DEMAND	D30	2,266,991	3,513	7,298	367	0	0	0
LINES - SECONDARY CUSTOMER	C30	579,430	1,663	2,980	766	0	0	0
SERVICES	CW369	66,979,720	0	0	0	0	4,020	0
METERS	CW370	97,044,854	1,156	202,057	93,796	25,733	63,315	325,761
STREET LIGHTS	DA373	5,478,881	0	5,467,209	0	0	0	0
INSTALL ON CUST PREMISES	DA371	4,591,211	0	0	0	0	0	0
INSTALL ON CUST PREM	CWINSTAL	1,324,335	3,179	5,697	1,464	0	0	0
CUSTOMER ACCOUNTING								
METER READING	CW902	1,772,999	0	2,113	0	178	178	178
CUSTOMER ACCOUNTS	CW903	16,082,040	44,425	79,607	20,463	226	226	226
UNCOLLECTIBLES	CW904	5,389,398	0	0	0	0	0	0
MISC	C10	599,011	1,663	2,980	766	1	1	1
CONSUMER INFORMATION								
CUSTOMER ASSIST	C10	599,011	1,663	2,980	766	1	1	1
SALES EXPENSE	C10	599,011	1,663	2,980	766	1	1	1
ADVERTISING	C10	599,011	1,663	2,980	766	1	1	1
MISC	C10	599,011	1,663	2,980	766	1	1	1
MISCELLANEOUS								
DEMAND	D99U	23,186,898	0	0	0	422,686	267,258	1,017,744
ENERGY	E99U	14,907,835,244	13,925,301	23,760,014	2,847,961	234,100,000	175,000,001	591,344,540
CUSTOMER	C10	599,011	1,663	2,980	766	1	1	1
MISC. REVENUE	R02	4,327,695	10,620	64,629	1,354	0	0	0
RETAIL SALES REVENUE	R01	1,116,166,332	1,144,288	3,463,322	165,609	10,547,708	7,759,368	29,622,353
REVENUE - OPEN	0	0	0	0	0	0	0	0
SUBSTATION CIAC	CIAC	(42,770,847)	(10,144)	(21,076)	(1,060)	0	(70,288)	(14,764,441)
FACILITIES CHARGE REVENUE	DA454	9,862,380	0	681	0	0	917,261	0
INTERVENOR FUNDING	INTFUND							

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 40**

IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023 ALLOCATION TO CLASSES											
6 FUNCTION	ALLOCATION	(A) TOTAL RATE BASE	(B) RESIDENTIAL	(C) RESIDENTIAL On Site Gen	(D) GEN SRV	(E) GEN SRV On Site Gen	(F) GEN SRV PRIM & TRAN	(G) GEN SRV SECONDARY	(H) AREA LIGHTING	(I) LG POWER SEC/PRIM/TRAN	(J) IRRIGATION SECONDARY
7	FACTOR		(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
8 PRODUCTION											
9 DEMAND - Base-load Summer	D10BS	527,258,819	217,639,709	5,327,764	4,019,546	14,076	15,508,781	91,649,034	0	53,029,099	116,666,267
10 DEMAND - Peak	D10P	126,207,603	52,095,451	1,275,283	962,141	3,369	3,712,268	21,937,622	0	12,693,340	27,925,886
11 DEMAND - Base-load Non-Summer	D10BNS	699,727,248	307,131,203	8,538,838	7,040,179	35,730	28,047,927	167,938,323	0	102,958,489	33,299,940
12 ENERGY - POWER SUPPLY	E10	53,590,613	0	0	0	0	0	0	0	0	0
13 ENERGY - Summer	E10S	20,103,456	6,136,134	155,020	158,813	581	722,760	3,959,697	5,959	2,717,729	5,141,089
14 ENERGY - Non-Summer	E10NS	33,487,157	13,830,068	408,262	348,018	1,627	1,392,315	8,101,932	12,941	5,676,063	1,165,887
15			0	0	0	0	0	0	0	0	0
16 TRANSMISSION											
17 DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
18 DEMAND - TRANSMISSION	D13	936,585,068	399,043,928	10,469,269	8,344,228	36,909	32,717,447	195,074,444	0	116,866,985	123,000,884
19 DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
20 DEMAND - DIRECT	DA3509	58,219	0	0	0	0	58,219	0	0	0	0
21											
22 DISTRIBUTION											
23 SUBSTATIONS - GENERAL	D20	361,130,739	137,277,995	6,561,549	2,980,540	43,696	10,774,097	62,775,481	138,424	43,057,489	96,481,383
24 SUBSTATIONS - DIRECT	DA3602	20,445,071	0	0	0	0	0	0	0	5,172	0
25 LINES - PRIMARY DEMAND	D20	344,470,998	130,945,065	6,258,851	2,843,042	41,680	10,277,065	59,879,512	132,039	41,071,154	92,030,489
26 LINES - PRIMARY CUSTOMER	C20	170,724,661	140,364,428	3,787,201	8,664,703	24,939	79,804	10,763,170	0	32,492	5,466,277
27 LINES - SECONDARY DIRECT	DA3647	22,877,428	0	0	0	0	6,114,048	0	283,327	13,371,845	0
28 LINE TRANS - PRIMARY DEMAND	D50	89,171,115	33,896,953	1,620,191	735,961	10,790	2,660,361	15,500,646	34,180	10,631,840	23,823,373
29 LINE TRANS - PRIMARY CUST	C50	44,194,456	36,335,287	980,370	2,242,979	6,456	20,658	2,786,197	0	8,411	1,415,022
30 LINE TRANS - SECOND DIRECT	DA368	24,739,733	0	0	0	0	9,791,349	0	0	13,513,152	0
31 LINE TRANS - SECOND DEMAND	D60	257,875,737	115,148,739	5,503,825	2,500,076	36,652	0	52,656,053	116,110	113,304	80,928,554
32 LINE TRANS - SECOND CUSTOMER	C60	127,806,834	105,147,731	2,837,012	6,490,775	18,682	0	8,062,748	0	214	4,094,817
33 LINES - SECONDARY DEMAND	D30	21,637,720	14,080,790	673,027	305,718	4,482	0	6,438,966	14,198	13,855	0
34 LINES - SECONDARY CUSTOMER	C30	10,723,958	9,114,716	245,926	562,652	1,619	0	698,918	0	19	0
35 SERVICES	CW369	25,201,414	20,212,644	544,393	1,327,740	3,762	74,999	1,909,515	0	107,821	1,019,028
36 METERS	CW370	81,247,077	48,571,435	1,294,234	4,598,536	10,582	2,008,145	14,748,569	365	1,393,740	8,025,528
37 STREET LIGHTS	DA373	6,268,714	0	0	0	0	13,193	0	0	162	0
38 INSTALL ON CUST PREMISES	DA371	3,397,445	0	0	0	0	2,710	0	3,392,793	1,942	0
39	CWINSTAL		0	0	0	0	0	0	0	0	0
40 CUSTOMER ACCOUNTING											
41 METER READING	CW902	0	0	0	0	0	0	0	0	0	0
42 CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
43 UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	(0)	0	0
44 MISC	C10	0	0	0	0	0	0	0	0	0	0
45											
46 CONSUMER INFORMATION											
47 CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
48 SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
49 ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
50 MISC	C10	0	0	0	0	0	0	0	0	0	0
51											
52 MISCELLANEOUS											
53 DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
54 ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
55 CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
56 REVENUE	R02	0	0	0	0	0	0	0	0	0	0
57 OTHER	R01	0	0	0	0	0	0	0	0	0	0
58 SUBSTATION CIAC	CIAC	(42,770,847)	(4,292,179)	(205,156)	(472,238)	(6,923)	(1,519,756)	(2,598,489)	(4,296)	(15,762,857)	(3,041,944)
59											
60 TOTALS		3,912,569,823	1,782,680,096	56,275,860	53,653,411	288,712	122,456,391	722,282,341	4,126,040	401,501,460	617,442,481

IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023 **** SUMMARY OF RATE BASE *** ALLOCATION TO CLASSES									
FUNCTION	ALLOCATION	TOTAL	(K) UNMETERED	(L) MUNICIPAL	(M) TRAFFIC	(N) SC	(O) SC	(P) SC	
	FACTOR	RATE BASE	GEN SERVICE	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON	
PRODUCTION			(40)	(41)	(42)				
DEMAND - Base-load	D10BS	527,258,819	284,709	0	56,908	3,792,994	3,645,036	15,624,896	
DEMAND - Peak	D10P	126,207,603	68,150	0	13,622	907,912	872,496	3,740,062	
DEMAND - Not in Use	D10BNS	699,727,248	561,596	0	116,176	11,521,727	5,931,831	26,605,289	
ENERGY - POWER SUPPLY	E10	53,590,613	0	0	0	0	0	0	
ENERGY - Summer	E10S	20,103,456	16,068	25,786	3,214	195,752	186,018	678,835	
ENERGY - Non-Summer	E10NS	33,487,157	34,090	59,894	7,052	627,011	419,862	1,402,134	
	0	0	0	0	0	0	0	0	
TRANSMISSION									
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	
DEMAND - TRANSMISSION	D13	936,585,068	632,856	0	129,230	11,220,178	7,221,998	31,826,711	
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	
DEMAND - DIRECT	DA3509	58,219	0	0	0	0	0	0	
		0							
DISTRIBUTION		0							
SUBSTATIONS - GENERAL	D20	361,130,739	326,855	679,070	34,160	0	0	0	
SUBSTATIONS - DIRECT	DA3602	20,445,071	0	0	0	0	1,539,683	18,900,216	
LINES - PRIMARY DEMAND	D20	344,470,998	311,776	647,743	32,584	0	0	0	
LINES - PRIMARY CUSTOMER	C20	170,724,661	473,980	849,345	218,322	0	0	0	
LINES - SECONDARY DIRECT	DA3647	22,877,428	0	0	0	0	3,108,207	0	
LINE TRANS - PRIMARY DEMAND	D50	89,171,115	80,708	167,677	8,435	0	0	0	
LINE TRANS - PRIMARY CUST	C50	44,194,456	122,696	219,865	56,516	0	0	0	
LINE TRANS - SECOND DIRECT	DA368	24,739,733	0	0	0	0	1,435,233	0	
LINE TRANS - SECOND DEMAND	D60	257,875,737	274,165	569,603	28,653	0	0	0	
LINE TRANS - SECOND CUSTOMER	C60	127,806,834	355,061	636,249	163,546	0	0	0	
LINES - SECONDARY DEMAND	D30	21,637,720	33,526	69,653	3,504	0	0	0	
LINES - SECONDARY CUSTOMER	C30	10,723,958	30,778	55,153	14,177	0	0	0	
SERVICES	CW369	25,201,414	0	0	0	0	1,512	0	
METERS	CW370	81,247,077	968	169,164	78,527	21,544	53,008	272,731	
STREET LIGHTS	DA373	6,268,714	0	6,255,359	0	0	0	0	
INSTALL ON CUST PREMISES	DA371	3,397,445	0	0	0	0	0	0	
	CWINSTAL	0	0	0	0	0	0	0	
CUSTOMER ACCOUNTING		0							
METER READING	CW902	0	0	0	0	0	0	0	
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	
		0							
CONSUMER INFORMATION									
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	
SALES EXPENSE	C10	0	0	0	0	0	0	0	
ADVERTISING	C10	0	0	0	0	0	0	0	
MISC	C10	0	0	0	0	0	0	0	
MISCELLANEOUS									
DEMAND	D99U	0	0	0	0	0	0	0	
ENERGY	E99U	0	0	0	0	0	0	0	
CUSTOMER	C10	0	0	0	0	0	0	0	
REVENUE	R02	0	0	0	0	0	0	0	
OTHER	R01	0	0	0	0	0	0	0	
SUBSTATION CIAC	CIAC	(42,770,847)	(10,144)	(21,076)	(1,060)	0	(70,288)	(14,764,442)	
		0							
TOTALS		3,912,569,823	3,597,837	10,383,484	963,563	28,287,118	24,344,597	84,286,431	



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IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023

ALLOCATION TO CLASSES

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
FUNCTION	ALLOCATION	TOTAL	RESIDENTIAL	RESIDENTIAL		GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
	FACTOR	EXPENSES	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRAN	SECONDARY
PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
DEMAND - Base-load Summer	D10BS	95,831,586	39,556,965	968,344	730,570	2,558	2,818,789	16,657,611	0	9,638,270	21,204,602
DEMAND - Peak	D10P	24,664,054	10,180,726	249,222	188,026	658	725,468	4,287,148	0	2,480,589	5,457,402
DEMAND - Base-load Non-Summer	D10BNS	127,178,474	55,822,434	1,551,971	1,279,583	6,494	5,097,833	30,523,522	0	18,713,154	6,052,409
ENERGY - POWER SUPPLY	E10	492,817,416	0	0	0	0	0	0	0	0	0
ENERGY - Summer	E10S	184,870,685	56,427,674	1,425,561	1,460,441	5,347	6,646,475	36,413,240	54,800	24,992,144	47,277,280
ENERGY - Non-Summer	E10NS	307,946,730	127,180,821	3,754,364	3,200,359	14,966	12,803,679	74,505,086	119,005	52,196,879	10,721,459
TRANSMISSION											
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	87,631,416	37,336,474	979,555	780,726	3,453	3,061,202	18,252,106	0	10,934,639	11,508,556
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	6,018	0	0	0	0	6,018	0	0	0	0
DISTRIBUTION											
SUBSTATIONS - GENERAL	D20	29,574,028	11,242,087	537,344	244,085	3,578	882,322	5,140,863	11,336	3,526,101	7,901,136
SUBSTATIONS - DIRECT	DA3602	1,010,940	0	0	0	0	0	0	0	256	0
LINES - PRIMARY DEMAND	D20	63,687,687	24,209,842	1,157,171	525,637	7,706	1,900,080	11,070,853	24,412	7,593,460	17,015,101
LINES - PRIMARY CUSTOMER	C20	31,564,512	25,951,345	700,198	1,601,978	4,611	14,755	1,989,954	0	6,007	1,010,635
LINES - SECONDARY DIRECT	DA3647	2,702,216	0	0	0	0	722,174	0	33,466	1,579,444	0
LINE TRANS - PRIMARY DEMAND	D50	5,393,859	2,050,388	98,003	44,517	653	160,922	937,616	2,068	643,108	1,441,049
LINE TRANS - PRIMARY CUST	C50	2,673,272	2,197,880	59,301	135,675	391	1,250	168,534	0	509	85,593
LINE TRANS - SECOND DIRECT	DA368	1,495,666	0	0	0	0	591,946	0	0	816,952	0
LINE TRANS - SECOND DEMAND	D60	15,599,151	6,965,458	332,932	151,232	2,217	0	3,185,215	7,024	6,854	4,895,446
LINE TRANS - SECOND CUSTOMER	C60	7,731,158	6,360,487	171,614	392,633	1,130	0	487,723	0	13	247,699
LINES - SECONDARY DEMAND	D30	4,343,745	2,826,701	135,109	61,373	900	0	1,292,614	2,850	2,781	0
LINES - SECONDARY CUSTOMER	C30	2,152,821	1,829,768	49,369	112,952	325	0	140,307	0	4	0
SERVICES	CW369	2,903,116	2,328,427	62,712	152,951	433	8,640	219,970	0	12,421	117,389
METERS	CW370	25,546,867	15,272,525	406,952	1,445,937	3,327	631,430	4,637,456	115	438,240	2,523,501
STREET LIGHTS	DA373	823,719	0	0	0	0	1,734	0	0	21	0
INSTALL ON CUST PREMISES	CWINSTAL	3,117,516	2,216,273	59,798	136,811	394	1,279	169,944	421,845	522	86,309
CUSTOMER ACCOUNTING											
METER READING	CW902	3,681,466	2,818,451	55,951	220,902	536	104,762	238,482	0	42,766	194,122
CUSTOMER ACCOUNTS	CW903	32,460,816	26,554,621	716,476	1,639,218	4,718	129,538	2,036,213	0	52,881	1,034,129
UNCOLLECTIBLES	CW904	5,388,730	4,833,086	2,063	205,622	0	1,916	254,688	(3)	25,816	65,542
MISC	C10	0	0	0	0	0	0	0	0	0	0
CONSUMER INFORMATION											
CUSTOMER ASSIST	C10	19,150,720	15,744,877	424,816	971,932	2,797	9,085	1,207,320	0	3,709	613,160
SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0	0	0	0
MISCELLANEOUS											
DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
ENERGY	E99U	2,119,909	771,520	17,478	19,664	53	85,562	472,327	749	339,390	265,137
CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
REVENUE	R02	0	0	0	0	0	0	0	0	0	0
OTHER	INTFUND	332,773	212,346	5,770	8,754	26	2,878	16,293	26	11,394	75,286
RETAIL SALES REVENUE		0	0	0	0	0	0	0	0	0	0
TOTALS		1,091,583,652	480,891,174	13,922,074	15,711,579	67,274	36,409,736	214,305,086	677,692	134,058,322	139,792,943

61	IDAHO POWER COMPANY								
62	3CP/12CP CLASS COST OF SERVICE STUDY								
63	TWELVE MONTHS ENDING DECEMBER 31, 2023								
64	*** SUMMARY OF EXPENSES EXCLUDING INCOME TAXES ***								
65	ALLOCATION TO CLASSES								
66	FUNCTION	ALLOCATION	TOTAL	(K)	(L)	(M)	(N)	(O)	(P)
67		FACTOR	EXPENSES	GEN SERVICE	ST LIGHT	TRAFFIC CONTROL	SC DOE/INL	SC JR SIMPLOT	SC MICRON
68	PRODUCTION			(40)	(41)	(42)			
69	DEMAND - Base-load	D10BS	95,831,586	51,747	0	10,343	689,393	662,501	2,839,893
70	DEMAND - Peak	D10P	24,664,054	13,318	0	2,662	177,428	170,507	730,900
71	DEMAND - Not in Use	D10BNS	127,178,474	102,072	0	21,115	2,094,124	1,078,136	4,835,627
72	ENERGY - POWER SUPPLY	E10	492,817,416	0	0	0	0	0	0
73	ENERGY - Summer	E10S	184,870,685	147,761	237,125	29,555	1,800,130	1,710,612	6,242,542
74	ENERGY - Non-Summer	E10NS	307,946,730	313,495	550,779	64,846	5,765,976	3,861,040	12,893,976
75			0						
76	TRANSMISSION								
77	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
78	DEMAND - TRANSMISSION	D13	87,631,416	59,213	0	12,091	1,049,814	675,725	2,977,861
79	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
80	DEMAND - DIRECT	DA3509	6,018	0	0	0	0	0	0
81									
82	DISTRIBUTION								
83	SUBSTATIONS - GENERAL	D20	29,574,028	26,767	55,611	2,797	0	0	0
84	SUBSTATIONS - DIRECT	DA3602	1,010,940	0	0	0	0	76,132	934,552
85	LINES - PRIMARY DEMAND	D20	63,687,687	57,643	119,758	6,024	0	0	0
86	LINES - PRIMARY CUSTOMER	C20	31,564,512	87,632	157,032	40,364	0	0	0
87	LINES - SECONDARY DIRECT	DA3647	2,702,216	0	0	0	0	367,133	0
88	LINE TRANS - PRIMARY DEMAND	D50	5,393,859	4,882	10,143	510	0	0	0
89	LINE TRANS - PRIMARY CUST	C50	2,673,272	7,422	13,299	3,419	0	0	0
90	LINE TRANS - SECOND DIRECT	DA368	1,495,666	0	0	0	0	86,768	0
91	LINE TRANS - SECOND DEMAND	D60	15,599,151	16,585	34,456	1,733	0	0	0
92	LINE TRANS - SECOND CUSTOMER	C60	7,731,158	21,478	38,487	9,893	0	0	0
93	LINES - SECONDARY DEMAND	D30	4,343,745	6,730	13,983	703	0	0	0
94	LINES - SECONDARY CUSTOMER	C30	2,152,821	6,179	11,072	2,846	0	0	0
95	SERVICES	CW369	2,903,116	0	0	0	0	174	0
96	METERS	CW370	25,546,867	304	53,191	24,692	6,774	16,668	85,756
97	STREET LIGHTS	DA373	823,719	0	821,964	0	0	0	0
98	INSTALL ON CUST PREMISES	CWINSTAL	3,117,516	7,484	13,411	3,447	0	0	0
99									
100	CUSTOMER ACCOUNTING								
101	METER READING	CW902	3,681,466	0	4,387	0	369	369	369
102	CUSTOMER ACCOUNTS	CW903	32,460,816	89,669	160,682	41,303	456	456	456
103	UNCOLLECTIBLES	CW904	5,388,730	0	0	0	0	0	0
104	MISC	C10	0	0	0	0	0	0	0
105									
106	CONSUMER INFORMATION								
107	CUSTOMER ASSIST	C10	19,150,720	53,167	95,272	24,489	32	32	32
108	SALES EXPENSE	C10	0	0	0	0	0	0	0
109	ADVERTISING	C10	0	0	0	0	0	0	0
110	MISC	C10	0	0	0	0	0	0	0
111									
112	MISCELLANEOUS								
113	DEMAND	D99U	0	0	0	0	0	0	0
114	ENERGY	E99U	2,119,909	1,980	3,379	405	33,289	24,885	84,090
115	CUSTOMER	C10	0	0	0	0	0	0	0
116	REVENUE	R02	0	0	0	0	0	0	0
117	OTHER	INTFUND	332,773	0	0	0	0	0	0
118	SUBSTATION CIAC	0	0	0	0	0	0	0	0
119		0							
120	TOTALS		1,091,583,652	1,075,528	2,394,029	303,240	11,617,785	8,731,137	31,626,052

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IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023  
ALLOCATION TO CLASSES

FUNCTION	ALLOCATION FACTOR	(A) TOTAL OTHER REVENUES	(B) RESIDENTIAL	(C) RESIDENTIAL On Site Gen	(D) GEN SRV	(E) GEN SRV On Site Gen	(F) GEN SRV PRIM & TRAN	(G) GEN SRV SECONDARY	(H) AREA LIGHTING	(I) LG POWER SEC/PRIM/TRAN	(J) IRRIGATION SECONDARY
PRODUCTION			(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)
DEMAND - Base-load Summer	D10BS	475,261	196,176	4,802	3,623	13	13,979	82,611	0	47,799	105,161
DEMAND - Peak	D10P	2,661	1,098	27	20	0	78	463	0	268	589
DEMAND - Base-load Non-Summer	D10BNS	630,720	276,842	7,697	6,346	32	25,282	151,376	0	92,805	30,016
ENERGY - POWER SUPPLY	E10	29,557,875	0	0	0	0	0	0	0	0	0
ENERGY - Summer	E10S	11,088,051	3,384,382	85,501	87,593	321	398,638	2,183,969	3,287	1,498,962	2,835,565
ENERGY - Non-Summer	E10NS	18,469,824	7,627,967	225,177	191,949	898	767,931	4,468,617	7,138	3,130,630	643,045
TRANSMISSION											
DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0	0	0	0
DEMAND - TRANSMISSION	D13	60,109,852	25,610,564	671,916	535,531	2,369	2,099,800	12,519,841	0	7,500,501	7,894,173
DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0	0	0	0
DEMAND - DIRECT	DA3509	518	0	0	0	0	518	0	0	0	0
DISTRIBUTION											
SUBSTATIONS - GENERAL	D20	299,274	113,764	5,438	2,470	36	8,929	52,023	115	35,682	79,955
SUBSTATIONS - DIRECT	DA3602	13,957	0	0	0	0	0	0	0	4	0
LINES - PRIMARY DEMAND	D20	2,502,919	951,444	45,477	20,657	303	74,673	435,083	959	298,422	668,692
LINES - PRIMARY CUSTOMER	C20	1,240,482	1,019,885	27,518	62,958	181	580	78,205	0	236	39,718
LINES - SECONDARY DIRECT	DA3647	107,956	0	0	0	0	28,852	0	1,337	63,100	0
LINE TRANS - PRIMARY DEMAND	D50	350,797	133,350	6,374	2,895	42	10,466	60,979	134	41,825	93,721
LINE TRANS - PRIMARY CUST	C50	173,860	142,942	3,857	8,824	25	81	10,961	0	33	5,567
LINE TRANS - SECOND DIRECT	DA368	97,220	0	0	0	0	38,477	0	0	53,103	0
LINE TRANS - SECOND DEMAND	D60	1,014,549	453,024	21,653	9,836	144	0	207,162	457	446	318,394
LINE TRANS - SECOND CUSTOMER	C60	502,825	413,678	11,162	25,536	73	0	31,721	0	1	16,110
LINES - SECONDARY DEMAND	D30	156,826	102,055	4,878	2,216	32	0	46,668	103	100	0
LINES - SECONDARY CUSTOMER	C30	77,725	66,062	1,782	4,078	12	0	5,066	0	0	0
SERVICES	CW369	203,386	163,125	4,393	10,715	30	605	15,411	0	870	8,224
METERS	CW370	80,239	47,969	1,278	4,541	10	1,983	14,566	0	1,376	7,926
STREET LIGHTS	DA373	18,406	0	0	0	0	39	0	0	0	0
INSTALL ON CUST PREMISES	DA371	13,137	0	0	0	0	10	0	13,119	8	0
CUSTOMER ACCOUNTING											
METER READING	CW902	0	0	0	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0	0	0	0
UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0	0	0	0
CONSUMER INFORMATION											
CUSTOMER ASSIST	C10	0	0	0	0	0	0	0	0	0	0
SALES EXPENSE	C10	0	0	0	0	0	0	0	0	0	0
ADVERTISING	C10	0	0	0	0	0	0	0	0	0	0
MISC	C10	0	0	0	0	0	0	0	0	0	0
MISCELLANEOUS											
DEMAND	D99U	0	0	0	0	0	0	0	0	0	0
ENERGY	E99U	0	0	0	0	0	0	0	0	0	0
CUSTOMER	C10	0	0	0	0	0	0	0	0	0	0
MISC. REVENUE	R02	6,150,427	5,495,771	29,596	193,701	159	1,918	195,532	11,086	40	113,760
FACILITIES CHARGE REVENUE	DA454	9,859,316	0	0	0	0	3,309,023	0	74,734	5,557,903	0
RETAIL SALES REVENUE		0									
TOTALS		113,640,190	46,200,098	1,158,525	1,173,490	4,682	6,781,861	20,560,253	112,468	18,324,115	12,860,615

121	IDAHO POWER COMPANY								
122	3CP/12CP CLASS COST OF SERVICE STUDY								
123	TWELVE MONTHS ENDING DECEMBER 31, 2023								
124	*** SUMMARY OF OTHER REVENUES ***								
125	ALLOCATION TO CLASSES								
126	FUNCTION	ALLOCATION	TOTAL OTHER	(K)	(L)	(M)	(N)	(O)	(P)
127		FACTOR	REVENUES	UNMETERED GEN SERVICE	MUNICIPAL ST LIGHT	TRAFFIC CONTROL	SC DOE/INL	SC JR SIMPLOT	SC MICRON
128	PRODUCTION			(40)	(41)	(42)			
129	DEMAND - Base-load	D10BS	475,261	257	0	51	3,419	3,286	14,084
130	DEMAND - Peak	D10P	2,661	1	0	0	19	18	79
131	DEMAND - Not in Use	D10BNS	630,720	506	0	105	10,385	5,347	23,981
132	ENERGY - POWER SUPPLY	E10	29,557,875	0	0	0	0	0	0
133	ENERGY - Summer	E10S	11,088,051	8,862	14,222	1,773	107,967	102,598	374,411
134	ENERGY - Non-Summer	E10NS	18,469,824	18,803	33,034	3,889	345,828	231,575	773,346
135			0						
136	TRANSMISSION								
137	DEMAND - POWER SUPPLY	D11	0	0	0	0	0	0	0
138	DEMAND - TRANSMISSION	D13	60,109,852	40,617	0	8,294	720,109	463,506	2,042,632
139	DEMAND - SUBTRANSMISSION	D15	0	0	0	0	0	0	0
140	DEMAND - DIRECT	DA3509	518	0	0	0	0	0	0
141			0						
142	DISTRIBUTION								
143	SUBSTATIONS - GENERAL	D20	299,274	271	563	28	0	0	0
144	SUBSTATIONS - DIRECT	DA3602	13,957	0	0	0	0	1,051	12,903
145	LINES - PRIMARY DEMAND	D20	2,502,919	2,265	4,706	237	0	0	0
146	LINES - PRIMARY CUSTOMER	C20	1,240,482	3,444	6,171	1,586	0	0	0
147	LINES - SECONDARY DIRECT	DA3647	107,956	0	0	0	0	14,667	0
148	LINE TRANS - PRIMARY DEMAND	D50	350,797	318	660	33	0	0	0
149	LINE TRANS - PRIMARY CUST	C50	173,860	483	865	222	0	0	0
150	LINE TRANS - SECOND DIRECT	DA368	97,220	0	0	0	0	5,640	0
151	LINE TRANS - SECOND DEMAND	D60	1,014,549	1,079	2,241	113	0	0	0
152	LINE TRANS - SECOND CUSTOMER	C60	502,825	1,397	2,503	643	0	0	0
153	LINES - SECONDARY DEMAND	D30	156,826	243	505	25	0	0	0
154	LINES - SECONDARY CUSTOMER	C30	77,725	223	400	103	0	0	0
155	SERVICES	CW369	203,386	0	0	0	0	12	0
156	METERS	CW370	80,239	1	167	78	21	52	269
157	STREET LIGHTS	DA373	18,406	0	18,367	0	0	0	0
158	INSTALL ON CUST PREMISES	DA371	13,137	0	0	0	0	0	0
159									
160	CUSTOMER ACCOUNTING								
161	METER READING	CW902	0	0	0	0	0	0	0
162	CUSTOMER ACCOUNTS	CW903	0	0	0	0	0	0	0
163	UNCOLLECTIBLES	CW904	0	0	0	0	0	0	0
164	MISC	C10	0	0	0	0	0	0	0
165									
166	CONSUMER INFORMATION								
167	CUSTOMER ASSIST	C10	0	0	0	0	0	0	0
168	SALES EXPENSE	C10	0	0	0	0	0	0	0
169	ADVERTISING	C10	0	0	0	0	0	0	0
170	MISC	C10	0	0	0	0	0	0	0
171									
172	MISCELLANEOUS								
173	DEMAND	D99U	0	0	0	0	0	0	0
174	ENERGY	E99U	0	0	0	0	0	0	0
175	CUSTOMER	C10	0	0	0	0	0	0	0
176	REVENUE	R02	6,150,427	15,092	91,849	1,924	0	0	0
177	OTHER	DA454	0	0	681	0	0	916,976	0
178	SUBSTATION CIAC		0	0					
179									
180	TOTALS		113,640,190	93,861	176,934	19,105	1,187,749	1,744,729	3,241,706

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 41**

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IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023

\*\*\* TRANSFER ADJUSTMENT\*\*\*

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
SOURCES			RESIDENTIAL		GEN SRV	GEN SRV	GEN SRV	AREA	LG POWER	IRRIGATION
& NOTES	TOTAL	RESIDENTIAL	On Site Gen	GEN SRV	On Site Gen	PRIM & TRAN	SECONDARY	LIGHTING	SEC/PRIM/TRAN	SECONDARY
		(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-P/S/T)	(24-S)
NORMALIZED SALES (KWH)	14,907,835,244	5,425,559,433	122,912,496	138,285,160	370,708	601,699,182	3,321,544,618	5,267,423	2,386,695,635	1,864,522,772
NORMALIZED REVENUE (\$)	1,116,166,332	501,479,142	11,567,368	16,102,622	43,713	36,446,763	230,482,910	1,261,853	125,751,566	140,327,749
ENERGY EFFICIENCY COLLECTION AT CURRENT % 3.10%	34,601,156	15,545,853	358,588	499,181	1,355	1,129,850	7,144,970	39,117	3,898,299	4,350,160
EE TRANSFER ADJUSTMENT	\$ 3,474,555	3,474,555	1,561,073	36,008	50,126	136	113,456	717,479	3,928	391,457
PCA RATE TRANSER ADJUSTMENT PER KWH	\$ 0.011465	170,912,271	62,201,834	1,409,142	1,585,383	4,250	6,898,237	38,080,159	60,389	27,362,495
PCA EIM TRANSFER ADJUSTMENT	\$ 2,456,681	2,456,681	894,085	20,255	22,788	61	99,155	547,362	868	393,307
TOTAL BASE REVENUE TRANSFER	176,843,508	64,656,991	1,465,405	1,658,298	4,447	7,110,848	39,344,999	65,185	28,147,259	22,120,084
PROPOSED REQUIRED REVENUE	1,404,314,821	625,504,833	19,752,112	20,117,882	101,442	42,439,422	270,718,015	737,644	162,848,079	194,263,258
TARGET EE FUNDING	\$ 31,126,601									
TARGET EE COLLECTION PERCENTAGE	2.22%									
ROUNDED EE COLLECTION PERCENTAGE	2.25%									
OVER/(UNDER) AT ROUNDED EE COLLECTION %	\$ 470,482									

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IDAHO POWER COMPANY  
CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023

Page 1

SOURCES & NOTES	TOTAL	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
NORMALIZED SALES (KWH)	14,907,835,244	13,925,301	23,760,014	2,847,961	234,100,000	175,000,001	591,344,540
NORMALIZED REVENUE (\$)	1,116,166,332	1,144,288	3,463,322	165,609	10,547,708	7,759,368	29,622,353
ENERGY EFFICIENCY COLLECTION AT CURRENT %	34,601,156	35,473	107,363	5,134	326,979	240,540	918,293
EE TRANSFER ADJUSTMENT	3,474,555	3,562	10,781	516	32,834	24,154	92,213
PCA RATE TRANSER ADJUSTMENT PER KWH	170,912,271	159,648	272,399	32,651	2,683,861	2,006,304	6,779,525
PCA EIM TRANSFER ADJUSTMENT	2,456,681	2,295	3,915	469	38,578	28,838	97,448
TOTAL BASE REVENUE TRANSFER	176,843,508	165,505	287,095	33,636	2,755,273	2,059,297	6,969,186
PROPOSED REQUIRED REVENUE	1,404,314,821	1,342,227	2,825,017	433,379	14,236,899	9,789,500	39,205,110
TARGET EE FUNDING							
TARGET EE COLLECTION PERCENTAGE							
ROUNDED EE COLLECTION PERCENTAGE							
OVER/(UNDER) AT ROUNDED EE COLLECTION %							

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 42**



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IDAHO POWER COMPANY  
3CP/12CP CLASS COST OF SERVICE STUDY  
TWELVE MONTHS ENDING DECEMBER 31, 2023

\*\*\* REVENUE REQUIREMENT SUMMARY \*\*\*

SOURCES & NOTES	(A) TOTAL	(B) RESIDENTIAL (1)	(C) RESIDENTIAL On Site Gen (6)	(D) GEN SRV (7)	(E) GEN SRV On Site Gen (8)	(F) GEN SRV PRIM & TRAN (9-P/T)	(G) GEN SRV SECONDARY (9-S)	(H) AREA LIGHTING (15)	(I) LG POWER SEC/PRIM/TRAN (19-S/P/T)	(J) IRRIGATION SECONDARY (24-S)
TOTAL RATE BASE	3,912,569,823	1,782,680,096	56,275,860	53,653,411	288,712	122,456,391	722,282,341	4,126,040	401,501,460	617,442,481
REVENUES FROM RATES										
RETAIL	1,116,166,332	501,479,142	11,567,368	16,102,622	43,713	36,446,763	230,482,910	1,261,853	125,751,566	140,327,749
RETAIL - TRANSFER ADJUSTMENT	176,843,508	64,656,991	1,465,405	1,658,298	4,447	7,110,848	39,344,999	65,185	28,147,259	22,120,084
TOTAL SALES REVENUES	1,293,009,840	566,136,133	13,032,773	17,760,920	48,160	43,557,610	269,827,909	1,327,038	153,898,825	162,447,833
TOTAL OTHER OPERATING REVENUES	113,640,190	46,200,098	1,158,525	1,173,490	4,682	6,781,861	20,560,253	112,468	18,324,115	12,860,615
TOTAL REVENUES	1,406,650,030	612,336,231	14,191,298	18,934,410	52,842	50,339,471	290,388,162	1,439,506	172,222,939	175,308,448
OPERATING EXPENSES										
WITHOUT INC TAX	1,091,583,652	480,891,174	13,922,074	15,711,579	67,274	36,409,736	214,305,086	677,692	134,058,322	139,792,943
OPERATING INCOME										
BEFORE INCOME TAXES	315,066,378	131,445,058	269,225	3,222,831	(14,432)	13,929,735	76,083,076	761,814	38,164,617	35,515,505
TOTAL FEDERAL INCOME TAX	39,040,245	13,370,532	262,324	322,579	494	1,659,227	9,065,970	7,507	6,781,260	4,554,856
TOTAL STATE INCOME TAX	(2,828,435)	(968,684)	(19,005)	(23,371)	(36)	(120,210)	(656,822)	(544)	(491,297)	(329,996)
TOTAL OPERATING EXPENSES	1,127,795,462	493,293,021	14,165,393	16,010,788	67,732	37,948,754	222,714,233	684,655	140,348,285	144,017,803
TOTAL OPERATING INCOME	278,854,568	119,043,210	25,905	2,923,623	(14,890)	12,390,717	67,673,928	754,851	31,874,654	31,290,645
ADD: IERCO OPERATING INCOME	E10 1,759,534	655,548	18,494	16,641	73	69,444	396,018	621	275,592	207,076
CONSOLIDATED OPER INCOME	280,614,102	119,698,758	44,400	2,940,263	(14,817)	12,460,161	68,069,946	755,471	32,150,247	31,497,721
RATES OF RETURN	7.172	6.715	0.079	5.480	-5.132	10.175	9.424	18.310	8.008	5.101
RATES OF RETURN - INDEX	1.000	0.936	0.011	0.764	-0.716	1.419	1.314	2.553	1.116	0.711
AVERAGE MILLS/KWH	80.52	92.43	94.11	116.45	117.92	60.57	69.39	239.56	52.69	75.26
REVENUE REQUIREMENT CALCULATION										
RATE OF RETURN REQUIRED	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702
REVENUE REQUIREMENT ADJUSTMENTS	Exhibit No. 46 83,386,821	35,663,794	942,384	751,627	3,385	2,960,144	17,641,736	0	10,601,024	10,191,807
REQUIRED REVENUE	1,404,314,821	625,504,833	19,752,112	20,117,882	101,442	42,439,422	270,718,015	737,644	162,848,079	194,263,258
REVENUE DEFICIENCY	111,304,981	59,368,700	6,719,340	2,356,962	53,282	(1,118,189)	890,106	(589,394)	8,949,254	31,815,425
PERCENT CHANGE REQUIRED	8.61%	10.49%	51.56%	13.27%	110.64%	-2.57%	0.33%	-44.41%	5.82%	19.59%
RETURN AT CLAIMED ROR	301,346,128	137,302,021	4,334,367	4,132,386	22,237	9,431,591	55,630,186	317,788	30,923,642	47,555,420
EARNINGS DEFICIENCY	20,732,026	17,603,263	4,289,967	1,192,122	37,054	(3,028,570)	(12,439,761)	(437,684)	(1,226,604)	16,057,699
REVENUE REQUIREMENT FOR RATE DESIGN										
TOTAL IDAHO SALES REVENUES	1,293,009,840	566,136,133	13,032,773	17,760,920	48,160	43,557,610	269,827,909	1,327,038	153,898,825	162,447,833
REQUESTED CHANGE IN REVENUE (%)	8.61%	10.49%	51.56%	13.27%	110.64%	-2.57%	0.33%	-44.41%	5.82%	19.59%
RETAIL SALES REVENUE REQUIRED	1,404,314,821	625,504,833	19,752,112	20,117,882	101,442	42,439,422	270,718,015	737,644	162,848,079	194,263,258
RATE OF RETURN AT REQUIRED REVENUE	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702	7.702
REQUESTED AVERAGE MILLS/KWH	94.20	115.29	160.70	145.48	273.64	70.53	81.50	140.04	68.23	104.19
ACTUAL RATE OF RETURN (SALES REVENUE ONLY)	4.22	4.09	-2.01	3.26	-6.78	4.58	6.52	15.57	3.37	2.98
REQUESTED RATE OF RETURN (SALES REVENUE ONLY)	7.07	7.42	9.93	7.65	11.68	3.67	6.65	1.28	5.60	8.14

**IDAHO POWER COMPANY**  
**CLASS COST OF SERVICE STUDY**  
**TWELVE MONTHS ENDING DECEMBER 31, 2023**

Page 1

\*\*\* REVENUE REQUIREMENT SUMMARY \*\*\*

	SOURCES & NOTES	TOTAL	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)	(N) SC DOE/INL	(O) SC JR SIMPLOT	(P) SC MICRON
10	TOTAL RATE BASE	3,912,569,823	3,597,837	10,383,484	963,563	28,287,118	24,344,597	84,286,431
12	REVENUES FROM RATES							
13	RETAIL	1,116,166,332	1,144,288	3,463,322	165,609	10,547,708	7,759,368	29,622,353
14	RETAIL - TRANSFER ADJUSTMENT	176,843,508	165,505	287,095	33,636	2,755,273	2,059,297	6,969,186
16	TOTAL SALES REVENUES	1,293,009,840	1,309,792	3,750,417	199,244	13,302,981	9,818,665	36,591,539
18	TOTAL OTHER OPERATING REVENUES	113,640,190	93,861	176,934	19,105	1,187,749	1,744,729	3,241,706
20	TOTAL REVENUES	1,406,650,030	1,403,653	3,927,351	218,349	14,490,730	11,563,394	39,833,245
22	OPERATING EXPENSES	0						
23	WITHOUT INC TAX	1,091,583,652	1,075,528	2,394,029	303,240	11,617,785	8,731,137	31,626,052
25	OPERATING INCOME	0						
26	BEFORE INCOME TAXES	315,066,378	328,125	1,533,322	(84,891)	2,872,945	2,832,256	8,207,193
28	TOTAL FEDERAL INCOME TAX	39,040,245	36,701	53,040	6,863	692,053	509,028	1,717,811
29	TOTAL STATE INCOME TAX	(2,828,435)	(2,659)	(3,843)	(497)	(50,139)	(36,879)	(124,454)
31	TOTAL OPERATING EXPENSES	1,127,795,462	1,109,570	2,443,226	309,606	12,259,699	9,203,286	33,219,409
33	TOTAL OPERATING INCOME	278,854,568	294,083	1,484,125	(91,256)	2,231,030	2,360,107	6,613,835
35	ADD: IERCO OPERATING INCOME	E10 1,759,534	1,647	2,813	337	27,014	19,893	68,324
36	CONSOLIDATED OPER INCOME	280,614,102	295,730	1,486,938	(90,919)	2,258,044	2,380,000	6,682,159
38	RATES OF RETURN	7.172	8.220	14.320	-9.436	7.983	9.776	7.928
39	RATES OF RETURN - INDEX	1.000	1.146	1.997	-1.316	1.113	1.363	1.105
40	AVERAGE MILLS/KWH	80.522	82.17	145.76	58.15	45.06	44.34	50.09
42	REVENUE REQUIREMENT CALCULATION							
43	RATE OF RETURN REQUIRED	7.702	7.702	7.702	7.702	7.702	7.702	7.702
45	REVENUE REQUIREMENT ADJUSTMENTS	83,386,821	57,515	0	11,763	1,040,799	650,851	2,869,993
47	REQUIRED REVENUE	1,404,314,821	1,342,227	2,825,017	433,379	14,236,899	9,789,500	39,205,110
48	REVENUE DEFICIENCY	111,304,981	32,435	(925,400)	234,134	933,918	(29,165)	2,613,571
49	PERCENT CHANGE REQUIRED	8.61%	2.48%	-24.67%	117.51%	7.02%	-0.30%	7.14%
50	RETURN AT CLAIMED ROR	301,346,128	277,105	799,736	74,214	2,178,674	1,875,021	6,491,741
51	EARNINGS DEFICIENCY	20,732,026	(18,625)	(687,202)	165,133	(79,370)	(504,979)	(190,418)
53	REVENUE REQUIREMENT FOR RATE DESIGN							
54	TOTAL IDAHO SALES REVENUES	1,293,009,840	1,309,792	3,750,417	199,244	13,302,981	9,818,665	36,591,539
56	REQUESTED CHANGE IN REVENUE (%)	8.61%	2.48%	-24.67%	117.51%	7.02%	-0.30%	7.14%
58	RETAIL SALES REVENUE REQUIRED	1,404,314,821	1,342,227	2,825,017	433,379	14,236,899	9,789,500	39,205,110
59	RATE OF RETURN AT REQUIRED REVENUE	7.702	7.702	7.702	7.702	7.702	7.702	7.702
60	REQUESTED AVERAGE MILLS/KWH	94.20	96.39	118.90	152.17	60.82	55.94	66.30
62	ACTUAL RATE OF RETURN (SALES REVENUE ONLY)	4.22	5.57	12.59	-11.45	3.69	2.53	4.00
63	REQUESTED RATE OF RETURN (SALES REVENUE ONLY)	7.07	6.47	3.68	12.85	6.99	2.41	7.10

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 43**

IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023										
UNIT COSTS										
FUNCTION	(A) RETURN @ 6.715%	(B) OPERATING EXPENSES	(C) REVENUE DEFICIENCY	(D) REVENUE REQUIREMENT ADJUSTMENTS	(E) REVENUE REQUIREMENT	(F) BILLING UNITS	(G) UNIT COSTS (\$/EA CH)	(H) SUMMER (\$/KWH)	(I) NON-SUMMER (\$/KWH)	(J) SERVICE (\$/CUS 1/MO)
PRODUCTION										
DEMAND - Base-load Summer	14,613,504	41,071,053	2,149,106	14,790,945	73,173,355	1,762,822,293	0.04151	0.041509		
DEMAND - Peak	3,497,970	10,543,147	514,422		14,732,749	1,762,822,293	0.00836	0.00836		
DEMAND - Base-load Non-Summer	20,622,446	57,959,101	3,032,800	20,872,849	103,261,582	3,662,737,141	0.02819		0.02819	
ENERGY - POWER SUPPLY	0	0	0		0	5,425,559,433	0.00000			
ENERGY - Summer	412,013	56,470,362	60,592		53,378,121	1,762,822,293	0.03028	0.03028		
ENERGY - Non-Summer	928,625	127,277,035	136,566		120,307,516	3,662,737,141	0.03285		0.03285	
ENERGY - ANNUAL		0					0.0538			
TRANSMISSION		0								
DEMAND - POWER SUPPLY	0		0		0	0	0.00000			
DEMAND - TRANSMISSION	26,793,962	40,112,565	3,940,402		46,602,187	5,425,559,433	0.00859	0.00859	0.00859	
DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000			
DEMAND - DIRECT	0	0	0		0	0	0.00000			
DISTRIBUTION		0								
SUBSTATIONS - GENERAL	9,217,585	12,197,110	1,355,566		23,126,364	5,425,559,433	0.00426	0.00426	0.00426	
SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000			
LINES - PRIMARY DEMAND	8,792,358	25,120,808	1,293,031		34,702,943	5,425,559,433	0.00640	0.00640	0.00640	
LINES - PRIMARY CUSTOMER	9,424,825	26,927,840	1,386,043		37,199,254	5,909,767	6.29454			6.29454
LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000			
LINE TRANS - PRIMARY DEMAND	2,276,024	2,286,204	334,719		4,879,618	5,425,559,433	0.00090	0.00090	0.00090	
LINE TRANS - PRIMARY CUST	2,439,747	2,450,659	358,797		5,230,627	5,909,767	0.88508			0.88508
LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000			
LINE TRANS - SECOND DEMAND	7,731,707	7,766,531	1,137,048		16,576,386	5,425,559,433	0.00306	0.00306	0.00306	
LINE TRANS - SECOND CUSTOM	7,060,186	7,091,985	1,038,292		15,136,678	5,909,767	2.56130			2.56130
LINES - SECONDARY DEMAND	945,460	2,924,659	139,042		3,955,301	5,425,559,433	0.00073	0.00073	0.00073	
LINES - SECONDARY CUSTOMER	612,011	1,893,177	90,004		2,560,328	5,909,767	0.43324			0.43324
SERVICES	1,357,186	2,469,043	199,592		3,931,879	5,909,767	0.66532			0.66532
METERS	3,261,348	15,610,429	479,624		19,469,679	5,909,767	3.29449			3.29449
STREET LIGHTS	0	0	0		0	0	0.00000			
INSTALL ON CUST PREMISES	0	2,216,273	0		2,216,273	5,909,767	0.37502			0.37502
CUSTOMER ACCOUNTING		0								
METER READING	0	2,818,451	0		2,818,451	5,909,767	0.47691			0.47691
CUSTOMER ACCOUNTS	0	26,554,621	0		26,554,621	5,909,767	4.49335			4.49335
UNCOLLECTIBLES	0	4,833,086	0		4,833,086	5,909,767	0.81781			0.81781
MISC	0	0	0		0	5,909,767	0.00000			
CONSUMER INFORMATION		0								
CUSTOMER ASSIST	0	15,744,877	0		15,744,877	5,909,767	2.66421			2.66421
SALES EXPENSE	0	0	0		0	5,909,767	0.00000			
ADVERTISING	0	0	0		0	5,909,767	0.00000			
MISC	0	0	0		0	5,909,767	0.00000			
MISCELLANEOUS		0								
DEMAND	0	0	0		0	0	0.00000			
ENERGY	0	771,520	0		771,520	5,425,559,433	0.00014	0.000142	0.000142	
CUSTOMER	0	0	0		0	5,909,767	0.00000			
REVENUE	0	0	0		(5,495,771)	5,909,767	(0.92995)			(0.9299)
OTHER	0	212,346	0		212,346	5,909,767	0.03593			0.0359
SUBSTATION CIAC	(288,200)	(29,860)	(42,384)		(375,135)	5,909,767	(0.06348)			(0.0635)
TOTALS	119,698,758	493,293,021	17,603,263	35,663,794	625,504,833			0.104220	0.085113	22.00378

IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023										
UNIT COSTS										
FUNCTION	(A) RETURN @ U.U/Y%	(B) OPERATING EXPENSES	(C) REVENUE DEFICIENCY	(D) REVENUE REQUIREMENT ADJUSTMENTS	(E) REVENUE REQUIREMENT	(F) BILLING UNITS	(G) UNIT COSTS (\$/EA CH)	(H) SUMMER (\$/KWH)	(I) NON-SUMMER (\$/KWH)	(J) SERVICE (\$/CUS I/MO)
61 PRODUCTION										
62 DEMAND - Base-load Summer	4,203	991,380	406,141	362,079	1,899,777	35,810,327	0.05305	0.053051		
63 DEMAND - Peak	1,006	254,735	97,216		386,628	35,810,327	0.01080	0.01080		
64 DEMAND - Base-load Non-Summer	6,737	1,588,890	650,925	580,305	3,044,784	87,102,169	0.03496		0.03496	
65 ENERGY - POWER SUPPLY	0	0	0		0	122,912,496	0.00000			
66 ENERGY - Summer	122	1,426,231	11,817		1,351,676	35,810,327	0.03775	0.03775		
67 ENERGY - Non-Summer	322	3,756,129	31,122		3,559,780	87,102,169	0.04087		0.04087	
68 ENERGY - ANNUAL		0					0.0679			
69 TRANSMISSION		0								
70 DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000			
71 DEMAND - TRANSMISSION	8,260	1,024,821	798,083		1,435,880	122,912,496	0.01168	0.01168	0.01168	
72 DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000			
73 DEMAND - DIRECT	0	0	0		0	0	0.00000			
74 DISTRIBUTION										
75 SUBSTATIONS - GENERAL	5,177	565,714	500,194		1,239,024	122,912,496	0.01008	0.01008	0.01008	
76 SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000			
77 LINES - PRIMARY DEMAND	4,938	1,184,232	477,119		1,786,191	122,912,496	0.01453	0.01453	0.01453	
78 LINES - PRIMARY CUSTOMER	2,988	716,573	288,702		1,080,816	159,453	6.77829			6.77829
79 LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000			
80 LINE TRANS - PRIMARY DEMAND	1,278	105,009	123,509		266,233	122,912,496	0.00217	0.00217	0.00217	
81 LINE TRANS - PRIMARY CUST	773	63,540	74,735		161,096	159,453	1.01031			1.01031
82 LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000			
83 LINE TRANS - SECOND DEMAND	4,342	356,729	419,562		904,408	122,912,496	0.00736	0.00736	0.00736	
84 LINE TRANS - SECOND CUSTOM	2,238	183,880	216,268		466,188	159,453	2.92368			2.92368
85 LINES - SECONDARY DEMAND	531	138,019	51,306		202,761	122,912,496	0.00165	0.00165	0.00165	
86 LINES - SECONDARY CUSTOMER	194	50,433	18,747		74,090	159,453	0.46465			0.46465
87 SERVICES	430	65,066	41,500		116,986	159,453	0.73367			0.73367
88 METERS	1,021	412,547	98,661		545,149	159,453	3.41888			3.41888
89 STREET LIGHTS	0	0	0		0	0	0.00000			
90 INSTALL ON CUST PREMISES	0	59,798	0		59,798	159,453	0.37502			0.37502
91 CUSTOMER ACCOUNTING										
92 METER READING	0	55,951	0		55,951	159,453	0.35089			0.35089
93 CUSTOMER ACCOUNTS	0	716,476	0		716,476	159,453	4.49335			4.49335
94 UNCOLLECTIBLES	0	2,063	0		2,063	159,453	0.01294			0.01294
95 MISC	0	0	0		0	159,453	0.00000			
96 CONSUMER INFORMATION										
97 CUSTOMER ASSIST	0	424,816	0		424,816	159,453	2.66421			2.66421
98 SALES EXPENSE	0	0	0		0	159,453	0.00000			
99 ADVERTISING	0	0	0		0	159,453	0.00000			
100 MISC	0	0	0		0	159,453	0.00000			
101 MISCELLANEOUS		0								
102 DEMAND	0	0	0		0	0	0.00000			
103 ENERGY	0	17,478	0		17,478	122,912,496	0.00014	0.000142	0.000142	
104 CUSTOMER	0	0	0		0	159,453	0.00000			
105 REVENUE	0	0	0		(29,596)	159,453	(0.18561)			(0.1856)
106 OTHER	0	5,770	0		5,770	159,453	0.03618			0.0362
107 SUBSTATION CIAC	(162)	(887)	(15,639)		(22,109)	159,453	(0.13866)			(0.1387)
108 TOTALS	44,400	14,165,393	4,289,967	942,384	19,752,112			0.149204	0.123436	22.93780

121	IDAHO POWER COMPANY										
122	3CP/12CP CLASS COST OF SERVICE STUDY										
123	*** SMALL GENERAL SERVICE - SCHEDULE 7 ***										
124	UNIT COSTS										
125		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
126	FUNCTION	RETURN @	OPERATING	REVENUE	REVENUE	REVENUE	BILLING	UNIT COSTS	SUMMER	NON-SUMMER	SERVICE
127		5.480%	EXPENSES	DEFICIENCY	REQUIREMENT ADJUSTMENTS	REQUIREMENT	UNITS	(\$/EA CH)	(\$/KWH)	(\$/KWH)	(\$/CUST/MO)
128	PRODUCTION										
129	DEMAND - Base-load Summer	220,275	752,986	89,310	273,171	1,363,076	45,603,878	0.02989	0.029889		
130	DEMAND - Peak	52,726	193,391	21,378		274,885	45,603,878	0.00603	0.006028		
131	DEMAND - Base-load Non-Summe	385,809	1,318,844	156,425	478,455	2,387,408	92,681,282	0.02576		0.025759	
132	ENERGY - POWER SUPPLY	0	0	0		0	138,285,160	0.00000			
133	ENERGY - Summer	8,703	1,461,327	3,529		1,381,974	45,603,878	0.03030	0.030304		
134	ENERGY - Non-Summer	19,072	3,202,300	7,733		3,028,409	92,681,282	0.03268		0.032676	
135	ENERGY - ANNUAL		0					0.05115			
136	TRANSMISSION		0								
137	DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000			
138	DEMAND - TRANSMISSION	457,273	827,259	185,400		998,664	138,285,160	0.00722	0.007222	0.007222	
139	DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000			
140	DEMAND - DIRECT	0	0	0		0	0	0.00000			
141											
142	DISTRIBUTION		0								
143	SUBSTATIONS - GENERAL	163,337	260,707	66,224		510,752	138,285,160	0.00369	0.00369	0.00369	
144	SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000			
145	LINES - PRIMARY DEMAND	155,802	541,492	63,169		761,701	138,285,160	0.00551	0.00551	0.00551	
146	LINES - PRIMARY CUSTOMER	474,835	1,650,298	192,521		2,321,428	364,810	6.36338			6.363385
147	LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000			
148	LINE TRANS - PRIMARY DEMANC	40,331	48,622	16,352		108,078	138,285,160	0.00078	0.00078	0.00078	
149	LINE TRANS - PRIMARY CUST	122,918	148,184	49,837		329,388	364,810	0.90290			0.902904
150	LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000			
151	LINE TRANS - SECOND DEMAND	137,007	165,174	55,549		367,149	138,285,160	0.00266	0.00266	0.00266	
152	LINE TRANS - SECOND CUSTOM	355,701	428,830	144,218		953,202	364,810	2.61287			2.612872
153	LINES - SECONDARY DEMAND	16,754	63,077	6,793		86,763	138,285,160	0.00063	0.00063	0.00063	
154	LINES - SECONDARY CUSTOMER	30,834	116,089	12,502		159,680	364,810	0.43771			0.437707
155	SERVICES	72,762	160,355	29,501		262,128	364,810	0.71853			0.71853
156	METERS	252,005	1,471,582	102,175		1,856,636	364,810	5.08932			5.08932
157	STREET LIGHTS	0	0	0		0	0	0.00000			
158	INSTALL ON CUST PREMISES	0	136,811	0		136,811	364,810	0.37502			0.37502
159			0								
160	CUSTOMER ACCOUNTING		0								
161	METER READING	0	220,902	0		220,902	364,810	0.60553			0.60553
162	CUSTOMER ACCOUNTS	0	1,639,218	0		1,639,218	364,810	4.49335			4.49335
163	UNCOLLECTIBLES	0	205,622	0		205,622	364,810	0.56364			0.56364
164	MISC	0	0	0		0	364,810	0.00000			
165											
166	CONSUMER INFORMATION		0								
167	CUSTOMER ASSIST	0	971,932	0		971,932	364,810	2.66421			2.66421
168	SALES EXPENSE	0	0	0		0	364,810	0.00000			
169	ADVERTISING	0	0	0		0	364,810	0.00000			
170	MISC	0	0	0		0	364,810	0.00000			
171											
172	MISCELLANEOUS		0								
173	DEMAND	0	0	0		0	0	0.00000			
174	ENERGY	0	19,664	0		19,664	138,285,160	0.00014	0.000142	0.000142	
175	CUSTOMER	0	0	0		0	364,810	0.00000			
176	REVENUE	0	0	0		(193,701)	364,810	(0.53096)			(0.5310)
177	OTHER	0	8,754	0		8,754	364,810	0.02400			0.02400
178	SUBSTATION CIAC	(25,879)	(2,634)	(10,493)		(42,642)	364,810	(0.11689)			(0.11689)
179											
180	TOTALS	2,940,263	16,010,788	1,192,122	751,627	20,117,882			0.086851	0.079064	24.202608

181	IDAHO POWER COMPANY										
182	3CP/12CP CLASS COST OF SERVICE STUDY										
183	*** SMALL GENERAL SERVICE ON SITE GENERATION - SCHEDULE 8 ***										
184	UNIT COSTS										
185	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
186	FUNCTION	RETURN @	OPERATING	REVENUE	REVENUE	REVENUE	BILLING	UNIT COSTS	SUMMER	NON-SUMMER	SERVICE
187		-5.132%	EXPENSES	DEFICIENCY	REQUIREMENT ADJUSTMENTS	REQUIREMENT	UNITS	(\$/EA CH)	(\$/KWH)	(\$/KWH)	(\$/CUST/MO)
188	PRODUCTION										
189	DEMAND - Base-load Summer	(722)	2,581	1,807	957	5,235	110,080	0.04756	0.047557		
190	DEMAND - Peak	(173)	664	432		1,073	110,080	0.00975	0.009749		
191	DEMAND - Base-load Non-Summe	(1,834)	6,551	4,586	2,428	13,288	260,628	0.05099		0.050986	
192	ENERGY - POWER SUPPLY	0	0	0		0	370,708	0.00000			
193	ENERGY - Summer	(30)	5,348	75		5,079	110,080	0.04614	0.046139		
194	ENERGY - Non-Summer	(84)	14,969	209		14,216	260,628	0.05454		0.054544	
195	ENERGY - ANNUAL		0					0.09079			
196	TRANSMISSION		0								
197	DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000			
198	DEMAND - TRANSMISSION	(1,894)	3,512	4,737		5,628	370,708	0.01518	0.015181	0.015181	
199	DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000			
200	DEMAND - DIRECT	0	0	0		0	0	0.00000			
201	0										
202	DISTRIBUTION		0								
203	SUBSTATIONS - GENERAL	(2,243)	3,648	5,608		8,921	370,708	0.02406	0.02406	0.02406	
204	SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000			
205	LINES - PRIMARY DEMAND	(2,139)	7,772	5,349		12,534	370,708	0.03381	0.03381	0.03381	
206	LINES - PRIMARY CUSTOMER	(1,280)	4,650	3,201		7,499	1,050	7.14228			7.142275
207	LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000			
208	LINE TRANS - PRIMARY DEMAND	(554)	670	1,385		1,938	370,708	0.00523	0.00523	0.00523	
209	LINE TRANS - PRIMARY CUST	(331)	401	829		1,160	1,050	1.10453			1.104530
210	LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000			
211	LINE TRANS - SECOND DEMAND	(1,881)	2,275	4,704		6,585	370,708	0.01776	0.01776	0.01776	
212	LINE TRANS - SECOND CUSTOM	(959)	1,160	2,398		3,356	1,050	3.19634			3.196343
213	LINES - SECONDARY DEMAND	(230)	907	575		1,419	370,708	0.00383	0.00383	0.00383	
214	LINES - SECONDARY CUSTOMER	(83)	328	208		513	1,050	0.48829			0.488285
215	SERVICES	(193)	439	483		866	1,050	0.82487			0.82487
216	METERS	(543)	3,344	1,358		4,620	1,050	4.39954			4.39954
217	STREET LIGHTS	0	0	0		0	0	0.00000			
218	INSTALL ON CUST PREMISES	0	394	0		394	1,050	0.37502			0.37502
219											
220	CUSTOMER ACCOUNTING		0								
221	METER READING	(0)	536	0		536	1,050	0.51071			0.51071
222	CUSTOMER ACCOUNTS	(0)	4,718	0		4,718	1,050	4.49335			4.49335
223	UNCOLLECTIBLES	0	0	0		0	1,050	0.00000			0.00000
224	MISC	0	0	0		0	1,050	0.00000			
225											
226	CONSUMER INFORMATION		0								
227	CUSTOMER ASSIST	(0)	2,797	0		2,797	1,050	2.66421			2.66421
228	SALES EXPENSE	0	0	0		0	1,050	0.00000			
229	ADVERTISING	0	0	0		0	1,050	0.00000			
230	MISC	0	0	0		0	1,050	0.00000			
231											
232	MISCELLANEOUS		0								
233	DEMAND	0	0	0		0	0	0.00000			
234	ENERGY	0	53	0		53	370,708	0.00014	0.000142	0.000142	
235	CUSTOMER	0	0	0		0	1,050	0.00000			
236	REVENUE	0	0	0		(159)	1,050	(0.15148)			(0.1515)
237	OTHER	(0)	26	0		26	1,050	0.02516			0.02516
238	SUBSTATION CIAC	355	(11)	(889)		(852)	1,050	(0.81161)			(0.81161)
239											
240	TOTALS	(14,817)	67,732	37,054	3,385	101,442.212			0.203461	0.205546	24.261194

IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023													
UNIT COSTS													
FUNCTION	(A) RETURN @ 9.42%	(B) OPERATING EXPENSES	(C) REVENUE DEFICIENCY	(D) REVENUE REQUIREMENT ADJUSTMENTS	(E) REVENUE REQUIREMENT	(F) BILLING UNITS	(G) UNIT COSTS (\$/EACH)	(H) SUMMER (\$/KW)	(I) NON-SUMMER (\$/KW)	(J) SUMMER (\$/KWH)	(K) NON-SUMMER (\$/KWH)	(L) SERVICE (\$/CUS1/MO)	(M) BASIC (\$/KW)
PRODUCTION													
DEMAND - Base-load Summer	8,637,266	17,724,632	(1,578,458)	6,228,532	30,382,237	3,897,816	7.79468	7.79468					
DEMAND - Peak	2,067,464	4,542,556	(377,828)		6,100,767	3,897,816	1.56518	1.56518					
DEMAND - Base-load Non-Summer	15,826,986	32,478,738	(2,892,377)	11,413,204	55,672,620	7,244,505	7.68481		7.68481				
ENERGY - POWER SUPPLY	0	0	0		0	3,321,544,618	0.00000						
ENERGY - Summer	373,173	36,459,341	(68,197)		34,426,701	1,143,297,617	0.03011			0.030112			
ENERGY - Non-Summer	763,549	74,599,413	(139,538)		70,440,430	2,178,247,001	0.03234				0.032338		
ENERGY - ANNUAL		0					0.03157						
TRANSMISSION		0											
DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000						
DEMAND - TRANSMISSION	18,384,372	20,523,253	(3,359,738)		21,863,494	11,142,321	1.96220	1.96220	1.96220				
DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000						
DEMAND - DIRECT	0	0	0		0	0	0.00000						
DISTRIBUTION		0											
SUBSTATIONS - GENERAL	5,916,140	5,871,725	(1,081,173)		10,279,913	15,010,667	0.68484						0.68484
SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000						
LINES - PRIMARY DEMAND	5,643,216	11,767,998	(1,031,296)		15,587,367	15,010,667	1.03842						1.03842
LINES - PRIMARY CUSTOMER	1,014,352	2,115,264	(185,372)		2,801,784	453,162	6.18274					6.18274	
LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000						
LINE TRANS - PRIMARY DEMAND	1,460,825	1,118,082	(266,965)		2,158,427	15,010,667	0.14379						0.14379
LINE TRANS - PRIMARY CUST	262,579	200,972	(47,986)		387,971	453,162	0.85614					0.85614	
LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000						
LINE TRANS - SECOND DEMAND	4,962,457	3,798,262	(906,887)		7,332,323	15,010,667	0.48847						0.48847
LINE TRANS - SECOND CUSTOM	759,856	581,594	(138,863)		1,122,733	453,162	2.47755					2.47755	
LINES - SECONDARY DEMAND	606,827	1,367,580	(110,897)		1,778,401	15,010,667	0.11848						0.11848
LINES - SECONDARY CUSTOMER	65,868	148,444	(12,037)		193,037	453,162	0.42598					0.42598	
SERVICES	179,958	242,201	(32,887)		362,462	453,162	0.79985						0.79985
METERS	1,389,947	4,809,166	(254,012)		5,842,489	453,162	12.89272					12.89272	
STREET LIGHTS	0	0	0		0	0	0.00000						0.00000
INSTALL ON CUST PREMISES	0	169,944	0		169,944	453,162	0.37502					0.37502	
CUSTOMER ACCOUNTING		0											
METER READING	0	238,482	(0)		238,482	453,162	0.52626					0.52626	
CUSTOMER ACCOUNTS	0	2,036,213	(0)		2,036,213	453,162	4.49335					4.49335	
UNCOLLECTIBLES	0	254,688	(0)		254,688	453,162	0.56202					0.56202	
MISC	0	0	0		0	453,162	0.00000						
CONSUMER INFORMATION		0											
CUSTOMER ASSIST	0	1,207,320	(0)		1,207,320	453,162	2.66421					2.66421	
SALES EXPENSE	0	0	0		0	453,162	0.00000						
ADVERTISING	0	0	0		0	453,162	0.00000						
MISC	0	0	0		0	453,162	0.00000						
MISCELLANEOUS		0											
DEMAND	0	0	0		0	0	0.00000						
ENERGY	0	472,327	0		472,327	3,321,544,618	0.00014			0.000142	0.000142		
CUSTOMER	0	0	0		0	453,162	0.00000						
REVENUE	0	0	0		(195,532)	453,162	(0.43148)					(0.43148)	
OTHER	0	16,293	(0)		16,293	15,010,667	0.00109					0.00109	
SUBSTATION CIAC	(244,889)	(30,253)	44,753		(214,876)	15,010,667	(0.01431)						(0.01431)
TOTALS	68,069,946	222,714,233	(12,439,761)	17,641,736	270,718,015			11.32206	9.64701	0.030254	0.032480	31.8254	2.45969



IDAHO POWER COMPANY 3CP/12CP CLASS COST OF SERVICE STUDY TWELVE MONTHS ENDING DECEMBER 31, 2023													
UNIT COSTS													
FUNCTION	(A) RETURN @ 10.18%	(B) OPERATING EXPENSES	(C) REVENUE DEFICIENCY	(D) REVENUE REQUIREMENT ADJUSTMENTS	(E) REVENUE REQUIREMENT	(F) BILLING UNITS	(G) UNIT COSTS (\$/EA/CH)	(H) SUMMER (\$/KWH)	(I) NON-SUMMER (\$/KWH)	(J) SUMMER (\$/KWH)	(K) NON-SUMMER (\$/KWH)	(L) SERVICE (\$/CUST/MO)	(M) BASIC (\$/KWH)
PRODUCTION													
DEMAND - Base-load Summer	1,578,047	3,013,701	(383,560)	1,053,987	5,115,246	566,997	9.02164	9.02164					
DEMAND - Peak	377,730	772,123	(91,811)		1,026,140	566,997	1.80978	1.80978					
DEMAND - Base-load Non-Summer	2,853,928	5,450,336	(693,676)	1,906,156	9,251,020	998,364	9.26618		9.26618				
ENERGY - POWER SUPPLY	0	0	0		0	601,699,182	0.00000						
ENERGY - Summer	73,542	6,655,558	(17,875)		6,282,661	216,006,603	0.02909	0.029086					
ENERGY - Non-Summer	141,671	12,821,177	(34,434)		12,102,833	385,692,579	0.03138				0.031379		
ENERGY - ANNUAL		0					0.03056						
TRANSMISSION		0											
DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000						
DEMAND - TRANSMISSION	3,329,060	3,472,391	(809,162)		3,612,018	1,565,362	2.30747	2.30747	2.30747				
DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000						
DEMAND - DIRECT	5,924	6,750	(1,440)		10,217	1,565,362	0.00653	0.00653	0.00653				
DISTRIBUTION		0											
SUBSTATIONS - GENERAL	1,096,284	1,017,729	(266,463)		1,746,260	1,952,328	0.89445						0.89445
SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000						
LINES - PRIMARY DEMAND	1,045,710	2,029,241	(254,171)		2,658,007	1,952,328	1.36146						1.36146
LINES - PRIMARY CUSTOMER	8,120	15,758	(1,974)		20,640	3,410	6.05301					6.05301	
LINES - SECONDARY DIRECT	622,116	799,015	(151,212)		1,188,654	1,952,328	0.60884						0.60884
LINE TRANS - PRIMARY DEMAND	270,697	194,357	(65,796)		365,986	1,952,328	0.18746						0.18746
LINE TRANS - PRIMARY CUST	2,102	1,509	(511)		2,842	3,410	0.83345					0.83345	
LINE TRANS - SECOND DIRECT	996,288	715,003	(242,158)		1,346,719	1,952,328	0.68980						0.68980
LINE TRANS - SECOND DEMAND	0	0	0		0	1,952,328	0.00000						
LINE TRANS - SECOND CUSTOM	0	0	0		0	3,410	0.00000						
LINES - SECONDARY DEMAND	0	0	0		0	1,952,328	0.00000						
LINES - SECONDARY CUSTOMER	0	0	0		0	3,410	0.00000						
SERVICES	7,631	9,582	(1,855)		14,110	3,410	4.13810					4.13810	
METERS	204,332	656,668	(49,665)		792,137	3,410	232.30506					232.30506	
STREET LIGHTS	1,342	1,899	(326)		2,764	3,410	0.81050					0.81050	
INSTALL ON CUST PREMISES	276	1,313	(67)		1,488	3,410	0.43633					0.43633	
CUSTOMER ACCOUNTING		0											
METER READING	0	104,762	(0)		104,762	3,410	30.72304					30.72304	
CUSTOMER ACCOUNTS	0	129,538	(0)		129,538	3,410	37.98894					37.98894	
UNCOLLECTIBLES	0	1,916	(0)		1,916	3,410	0.56202						
MISC	0	0	0		0	3,410	0.00000						
CONSUMER INFORMATION		0											
CUSTOMER ASSIST	0	9,085	(0)		9,085	3,410	2.66421					2.66421	
SALES EXPENSE	0	0	0		0	3,410	0.00000						
ADVERTISING	0	0	0		0	3,410	0.00000						
MISC	0	0	0		0	3,410	0.00000						
MISCELLANEOUS		0											
DEMAND	0	0	0		0	0	0.00000						
ENERGY	0	85,562	0		85,562	601,699,182	0.00014	0.000142	0.000142				
CUSTOMER	0	0	0		0	3,410	0.00000						
REVENUE	0	0	0		(1,918)	3,410	(0.56240)					(0.56240)	
OTHER	0	2,878	(0)		(3,306,145)	1,952,328	(1.69344)						(1.69344)
SUBSTATION CIAC	(154,638)	(19,100)	37,586		(123,124)	1,952,328	(0.06307)						(0.06307)
TOTALS	12,460,161	37,948,754	(3,028,570)	2,960,144	42,439,422			13.14541	11.58017	0.029228	0.031522	315.39024	1.98551

541	IDAHO POWER COMPANY												
542	3CP/12CP CLASS COST OF SERVICE STUDY												
543	*** LARGE POWER - SCHEDULE 19 S/P/T ***												
544	UNIT COSTS												
545	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
546	FUNCTION	RETURN @	OPERATING	REVENUE	REVENUE	REVENUE	BILLING	UNIT COSTS	SUMMER	NON-SUMMER	SUMMER	NON-SUMMER	SERVICE
547		8.01%	EXPENSES	DEFICIENCY	REQUIREMENT ADJUSTMENTS	REQUIREMENT	UNITS	(\$/EACH)	(\$/KW)	(\$/KW)	(\$/KWH)	(\$/KWH)	(\$/CUS1/MO)
548	PRODUCTION												
549	DEMAND - Base-load Summer	4,246,307	10,469,029	(162,006)	3,603,894	18,053,270	1,625,074	11.10920	11.10920				
550	DEMAND - Peak	1,016,420	2,679,444	(38,779)		3,643,376	1,625,074	2.24198	2.24198				
551	DEMAND - Base-load Non-Summe	8,244,405	20,326,112	(314,543)	6,997,130	35,051,273	3,081,027	11.37649		11.37649			
552	ENERGY - POWER SUPPLY	0	0	0		0	2,386,695,635	0.00000					
553	ENERGY - Summer	217,622	25,034,721	(8,303)		23,652,969	815,019,158	0.02902	0.029021				
554	ENERGY - Non-Summer	454,511	52,285,801	(17,341)		49,399,969	1,571,676,477	0.03143			0.031431		
555	ENERGY - ANNUAL		0					0.03061					
556	TRANSMISSION		0										
557	DEMAND - POWER SUPPLY	0		0		0	0	0.00000					
558	DEMAND - TRANSMISSION	9,358,129	12,765,489	(357,034)		14,142,328	4,706,101	3.00511	3.00511	3.00511			
559	DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000					
560	DEMAND - DIRECT	0	0	0		0	0	0.00000					
561													
562	DISTRIBUTION		0										
563	SUBSTATIONS - GENERAL	3,447,830	4,200,644	(131,542)		7,435,654	5,315,392	1.39889					1.39889
564	SUBSTATIONS - DIRECT	414	337	(16)		726	5,315,392	0.00014					0.00014
565	LINES - PRIMARY DEMAND	3,288,774	8,236,885	(125,474)		11,058,271	5,315,392	2.08042					2.08042
566	LINES - PRIMARY CUSTOMER	2,602	6,516	(99)		8,748	1,392	6.28469				6.28469	
567	LINES - SECONDARY DIRECT	1,070,751	1,788,929	(40,852)		2,741,568	5,315,392	0.51578					0.51578
568	LINE TRANS - PRIMARY DEMAND	851,345	809,667	(32,481)		1,575,448	5,315,392	0.29639					0.29639
569	LINE TRANS - PRIMARY CUST	674	641	(26)		1,246	1,392	0.89537				0.89537	
570	LINE TRANS - SECOND DIRECT	1,082,066	1,028,650	(41,283)		2,002,021	5,315,392	0.37665					0.37665
571	LINE TRANS - SECOND DEMAND	9,073	8,629	(346)		16,790	5,315,392	0.00316					0.00316
572	LINE TRANS - SECOND CUSTOM	17	16	(1)		32	1,392	0.02273				0.02273	
573	LINES - SECONDARY DEMAND	1,109	2,998	(42)		3,951	5,315,392	0.00074					0.00074
574	LINES - SECONDARY CUSTOME	1	4	(0)		5	1,392	0.00379					0.00379
575	SERVICES	8,634	14,110	(329)		21,430	1,392	15.39492					15.39492
576	METERS	111,604	460,074	(4,258)		564,568	1,392	405.58024					405.58024
577	STREET LIGHTS	13	24	(0)		36	1,392	0.02557					0.02557
578	INSTALL ON CUST PREMISES	156	552	(6)		692	1,392	0.49747					0.49747
579													
580	CUSTOMER ACCOUNTING		0										
581	METER READING	0	42,766	(0)		42,766	1,392	30.72304					30.72304
582	CUSTOMER ACCOUNTS	0	52,881	(0)		52,881	1,392	37.98894					37.98894
583	UNCOLLECTIBLES	0	25,816	(0)		25,816	1,392	18.54586					18.54586
584	MISC	0	0	0		0	1,392	0.00000					
585													
586	CONSUMER INFORMATION		0										
587	CUSTOMER ASSIST	0	3,709	(0)		3,709	1,392	2.66421				2.66421	
588	SALES EXPENSE	0	0	0		0	1,392	0.00000					
589	ADVERTISING	0	0	0		0	1,392	0.00000					
590	MISC	0	0	0		0	1,392	0.00000					
591													
592	MISCELLANEOUS		0										
593	DEMAND	0	0	0		0	0	0.00000					
594	ENERGY	0	339,390	0		339,390	2,386,695,635	0.00014			0.00014	0.00014	
595	CUSTOMER	0	0	0		0	1,392	0.00000					
596	REVENUE	0	0	0		(40)	1,392	(0.02846)				(0.02846)	
597	OTHER	0	11,394	(0)		(5,546,509)	5,315,392	(1.04348)					(1.04348)
598	SUBSTATION CIAC	(1,262,211)	(246,943)	48,156		(1,444,306)	5,315,392	(0.27172)					(0.27172)
599													
600	TOTALS	32,150,247	140,348,285	(1,226,604)	10,601,024	162,848,079			16.35628	14.38160	0.02916	0.03157	518.59836
													3.35697

661	IDAHO POWER COMPANY											
662	3CP/12CP CLASS COST OF SERVICE STUDY											
663	*** IRRIGATION - SCHEDULE 24 SECONDARY ***											
664	(Production-related revenue and billing units are for June - September)											
665	UNIT COSTS											
666	FUNCTION	RETURN @	OPERATING	REVENUE	REVENUE	REVENUE	BILLING	UNIT COSTS	IN-SEASON	IN-SEASON	OUT-SEASON	SERVICE
667		5.10%	EXPENSES	DEFICIENCY	REQUIREMENT ADJUSTMENTS	REQUIREMENT	UNITS	(\$/EACH)	(\$/KW)	(\$/KWH)	(\$/KWH)	(\$/CUST/MO)
668	PRODUCTION											
669	DEMAND - Base-load Summer	5,951,520	22,002,893	3,034,115	7,928,720	39,863,773	4,065,427	9.80556	9.80556			
670	DEMAND - Peak	1,424,589	5,648,485	726,263		8,050,485	4,065,427	1.98023	1.98023			
671	DEMAND - Base-load Non-Summer	1,698,737	6,280,264	866,025	2,263,087	11,378,278	4,065,427	2.79879	2.79879			
672	ENERGY - POWER SUPPLY	0	0	0		0	1,864,522,772	0.00000				
673	ENERGY - Summer	262,263	47,312,458	133,703		44,750,407	1,508,526,794	0.02966		0.029665		
674	ENERGY - Non-Summer	59,476	10,729,437	30,321		10,148,419	355,995,978	0.02851			0.028507	
675	ENERGY - ANNUAL		0				1,864,522,772	0.00000				
676	TRANSMISSION		0									
677	DEMAND - POWER SUPPLY	0	0	0		0	0	0.00000				
678	DEMAND - TRANSMISSION	6,274,670	12,350,192	3,198,859		15,038,335	4,065,427	3.69908	3.69908			
679	DEMAND - SUBTRANSMISSION	0	0	0		0	0	0.00000				
680	DEMAND - DIRECT	0	0	0		0	0	0.00000				
681												
682	DISTRIBUTION		0									
683	SUBSTATIONS - GENERAL	4,921,825	8,561,312	2,509,171		16,782,081	4,065,427	4.12800	4.12800			
684	SUBSTATIONS - DIRECT	0	0	0		0	0	0.00000				
685	LINES - PRIMARY DEMAND	4,694,770	17,644,822	2,393,418		24,893,925	4,065,427	6.12332	6.12332			
686	LINES - PRIMARY CUSTOMER	278,852	1,048,038	142,160		1,478,609	230,147	6.42463				6.42463
687	LINES - SECONDARY DIRECT	0	0	0		0	0	0.00000				
688	LINE TRANS - PRIMARY DEMAND	1,215,307	1,604,060	619,570		3,559,971	4,065,427	0.87567	0.87567			
689	LINE TRANS - PRIMARY CUST	72,185	95,275	36,800		211,449	230,147	0.91876				0.91876
690	LINE TRANS - SECOND DIRECT	0	0	0		0	0	0.00000				
691	LINE TRANS - SECOND DEMAND	4,128,425	5,449,201	2,104,692		12,093,453	4,065,427	2.97471	2.97471			
692	LINE TRANS - SECOND CUSTOM	208,890	275,718	106,493		611,904	230,147	2.65875				2.65875
693	LINES - SECONDARY DEMAND	0	0	0		0	4,065,427	0.00000				
694	LINES - SECONDARY CUSTOMER	0	0	0		0	230,147	0.00000				
695	SERVICES	51,984	124,361	26,502		203,809	230,147	0.88556				0.88556
696	METERS	409,408	2,578,416	208,718		3,260,962	230,147	14.16905				14.16905
697	STREET LIGHTS	0	0	0		0	4,065,427	0.00000				
698	INSTALL ON CUST PREMISES	0	86,309	0		86,309	230,147	0.37502				0.37502
699			0									
700	CUSTOMER ACCOUNTING		0									
701	METER READING	0	194,122	0		194,122	230,147	0.84347				0.84347
702	CUSTOMER ACCOUNTS	0	1,034,129	0		1,034,129	230,147	4.49335				4.49335
703	UNCOLLECTIBLES	0	65,542	0		65,542	230,147	0.28478				0.28478
704	MISC	0	0	0		0	230,147	0.00000				
705												
706	CONSUMER INFORMATION		0									
707	CUSTOMER ASSIST	0	613,160	0		613,160	230,147	2.66421				2.66421
708	SALES EXPENSE	0	0	0		0	230,147	0.00000				
709	ADVERTISING	0	0	0		0	230,147	0.00000				
710	MISC	0	0	0		0	230,147	0.00000				
711												
712	MISCELLANEOUS		0									
713	DEMAND	0	0	0		0	0	0.00000				
714	ENERGY	0	265,137	0		265,137	1,864,522,772	0.00014		0.000142	0.000142	
715	CUSTOMER	0	0	0		0	230,147	0.00000				
716	REVENUE	0	0	0		(113,760)	230,147	(0.49430)				(0.49430)
717	OTHER	0	75,286	0		75,286	230,147	0.32712				0.32712
718	SUBSTATION CIAC	(155,179)	(20,815)	(79,111)		(282,527)	4,065,427	(0.06949)	(0.06949)			
719												
720	TOTALS	31,497,721	144,017,803	16,057,699	10,191,807	194,263,258			32.31586	0.029807	0.028649	33.5504

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 44**

# Idaho 2023 Marginal Cost Study

The concept and design of the 2023 Marginal Cost Study is from the National Economic Research Associates Inc (NERA) marginal cost model. The NERA model is constantly being refined but the basic concepts and methods have remained the same since Idaho Power began using this method. In this analysis, generation capacity, transmission capacity and energy marginal costs are quantified for use in the Company's class cost-of-service model.

The following is a list of attachments:

- Schedule 1, Marginal Cost of Energy
- Schedule 2, page 1 of 2: Annual Generation Capacity Cost
- Schedule 2, page 2 of 2: Seasonalized Generation Capacity Marginal Costs
- Schedule 3, page 1 of 2: Annual Transmission Marginal Costs
- Schedule 3, page 2 of 2: Seasonalized Transmission Marginal Costs

## I. MARGINAL COST OF ENERGY

The marginal cost of energy was determined from the simulated hourly operation of the Company's power supply system over 37 streamflow conditions for the five-year period 2023 through 2027. Base case net power supply expenses were quantified, and the model was run a second time with fifty megawatts (MW) of load added across all hours. The difference in monthly power supply expenses between the base run and the base-plus-50-MW run was averaged over the five-year period and was divided by the difference in monthly megawatt hours to produce an average monthly marginal cost per megawatt hour. A 2023 test year net power supply run was used for the 2023 base marginal cost run. For the years 2024 through 2027, updated loads along with current resource considerations at the time of the study were used. The 2023 test year gas prices were used, adjusted for each of the years using the Bureau of Labor Statistics: Produce Price Index; Moody's Analytics. Coal plant operating characteristics, with the exception of coal costs, from the 2023 analysis were used for the entire period, 2023 – 2027.

## II. GENERATION CAPACITY MARGINAL COSTS

The annual generation capacity marginal costs were derived from the surrogate capacity resource identified in the Company's most recently acknowledged Integrated Resource Plan (IRP), the 2021 IRP, a 170-MW simple cycle combustion turbine. Plant investment included in the Company's application was used and fixed operating and maintenance costs were obtained from the 2021 IRP Technical Appendix, p. 43. The carrying charge rate reflects the 2023 test year weighted cost of capital and a resource life of 32 years, from the Company's 2022 Depreciation Study. General plant, A&G and materials & supplies

loading factors were derived from an average of historic data for the period 2018 through 2022. The reserve margin is 15.5% (2021 IRP, p. 140).

### III. SEASONALIZATION OF GENERATION CAPACITY MARGINAL COSTS

The seasonalization of generation capacity marginal costs is based on information from the 2021 IRP. The Company plans new peaking generation capacity based on monthly peak hour load surplus/deficiency data, assuming 50<sup>th</sup> percentile water plus and 50<sup>th</sup> percentile plus 15.5% reserve margin load criteria used for planning purposes (2021 IRP Technical Appendix, p. 20-24). On this basis, during the five years 2023 through 2027, the IRP identifies the months of June through September as months which experience deficiencies. These are the months that are assigned generation capacity costs in the marginal cost analysis. The relative sizes of the five-year average monthly deficiencies were used to define the share of annual capacity cost assigned to each month.

### IV. TRANSMISSION MARGINAL COSTS

The marginal cost of transmission reflects planned investment that has being included in the capital budget for the next ten years. The investment costs are for the years 2023 through 2032. The carrying charge rate reflects the 2023 test year weighted cost of capital and a resource life of 53 years, from the Company's 2022 Depreciation Study. General plant, administrative & general and materials & supplies loading factors were derived from an average of historic data for the period 2018 through 2022. Demand related transmission O&M was estimated using historic data for the period 2018 through 2022.

### V. SEASONALIZATION OF TRANSMISSION MARGINAL COSTS

Because the resource integration portion of marginal transmission investment is driven by the need for new generation resources, as identified in the 2021 IRP, these costs are assigned to months in the same manner as marginal generation capacity costs. The investment in the remainder of the network is driven by peak load growth on the system, irrespective of the introduction of new resources onto the grid. Therefore, that portion of marginal transmission costs is assigned to the months based on relative monthly peak load growth from 2023 through 2032. The two portions are summed, by month. This method results in the assignment of marginal transmission capacity costs to each of the twelve months of the year.

**Idaho Power Company  
Marginal Cost Analysis 2023  
Marginal Cost of Energy - Dollars/MWh**

Line		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg.
	Marginal Generation Cost at Generation 1/	\$67.78	\$31.10	\$35.53	\$27.36	\$24.55	\$30.89	\$41.93	\$45.21	\$40.71	\$41.07	\$64.31	\$85.21	\$44.79
(2)	Marginal Fuel Inventory	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	\$32.22	
(3)	Cost of Capital & Taxes for Fuel Inventory (2) x 9.54% 2/	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	\$3.07	
(4)	Marginal Variable O & M 3/	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	\$4.82	
(5)	Marginal energy cost at Generation Level	\$75.67	\$38.99	\$43.42	\$35.26	\$32.44	\$38.78	\$49.82	\$53.10	\$48.61	\$48.96	\$72.20	\$93.10	
	Average System Loss Factor Coefficients at: 4/													
(6)	Transmission	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	
(7)	Distribution Station	1.036	1.036	1.036	1.036	1.036	1.036	1.036	1.036	1.036	1.036	1.036	1.036	
(8)	Distribution Primary	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	
(9)	Distribution Secondary	1.076	1.076	1.076	1.076	1.076	1.076	1.076	1.076	1.076	1.076	1.076	1.076	
	Marginal Energy Cost at Service Level													
(10)	Power Supply (5)	\$75.67	\$38.99	\$43.42	\$35.26	\$32.44	\$38.78	\$49.82	\$53.10	\$48.61	\$48.96	\$72.20	\$93.10	\$52.53
(11)	Transmission (6) x (5)	\$77.87	\$40.13	\$44.68	\$36.28	\$33.38	\$39.91	\$51.27	\$54.64	\$50.02	\$50.38	\$74.30	\$95.80	\$54.06
(12)	Distribution Station (7) x (5)	\$78.40	\$40.40	\$44.99	\$36.53	\$33.61	\$40.18	\$51.62	\$55.01	\$50.36	\$50.73	\$74.80	\$96.45	\$54.42
(13)	Distribution Primary (8) x (5)	\$79.53	\$40.98	\$45.64	\$37.06	\$34.09	\$40.76	\$52.36	\$55.81	\$51.08	\$51.46	\$75.89	\$97.85	\$55.21
(14)	Distribution Secondary (9) x (5)	\$81.42	\$41.96	\$46.72	\$37.94	\$34.90	\$41.73	\$53.61	\$57.14	\$52.30	\$52.68	\$77.69	\$100.18	\$56.52

1/ Aurora Power Supply Model 2023 to 2027

2/ Schedule 14. Based on 2023 Test Year Cost of Capital

3/ 2021 IRP Technical Appendix, pg. 43

4/ Schedule 15

**IDAHO POWER COMPANY  
MARGINAL COST ANALYSIS 2023  
ANNUAL GENERATION CAPACITY COST: DOLLARS PER KW**

(1) Investment (\$/kw) 1/	\$1,032.52
(2) General Plant Loading (1) x 1.09 2/	\$1,123.24
(3) Economic Carrying Charge Rate 3/	7.09%
(4) A&G Loading .39% 4/	0.39%
(5) Total Carrying Charge	7.48%
(6) Annual Cost (\$/kw) (2) x (5)	\$84.06
(7) Demand related fixed O&M 5/	\$1.02
(8) A&G loading (7) x 1.556 6/	\$1.59
(9) Marginal Demand Related Costs (6) + (8)	\$85.64
Working Capital	
(10) Materials & Supplies (2) x 1.08%	\$12.15
(11) Revenue Requirement for Materials & Supplies (10) x 9.54%	\$1.16
(12) Total Marginal Demand Related Costs (9) + (11) rounded	\$86.80
(13) Adjusted for reserve margin (15.5%) 7/	<b>\$100.00</b>

Notes

- 1/ Total Investment of 2021 IRP Surrogate Resource - 170 MW SCCT \$175,528,850 / 170 MW  
2/ Schedule 14. Average general plant loading 2018-2022  
3/ Schedule 13. Based on 2023 Test Year Cost of Capital  
4/ Average A & G expenses 2018 - 2022 applicable to plant related expenses, Schedule 14  
5/ Estimated cost of a simple cycle combustion turbine , IPCo 2021 IRP Technical Appendix, p.43  
6/ Average A & G expenses 2018 - 2022 applicable to non-plant related expenses, Schedule 14  
7/ IPCO 2021 IRP p. 140



**IDAHO POWER COMPANY**  
**Marginal Cost Analysis 2023**  
**Seasonalized Generation Capacity Marginal Costs**

		(1)	(2)	(3)
		<u>% Share</u>	<u>\$/kw/year</u>	<u>Monthly</u>
		<u>of Total 1/</u>	<u>\$100.00</u>	<u>Marginal</u>
	<u>Month</u>			<u>Cost</u>
				(1) X (2)
(1)	<b>Jan</b>	0.00%		0.00
(2)	<b>Feb</b>	0.00%		0.00
(3)	<b>Mar</b>	0.00%		0.00
(4)	<b>Apr</b>	0.00%		0.00
(5)	<b>May</b>	0.00%		0.00
(6)	<b>Jun</b>	8.35%		8.35
(7)	<b>Jul</b>	52.64%		52.64
(8)	<b>Aug</b>	38.20%		38.20
(9)	<b>Sep</b>	0.81%		0.81
(10)	<b>Oct</b>	0.00%		0.00
(11)	<b>Nov</b>	0.00%		0.00
(12)	<b>Dec</b>	0.00%		0.00
(13)	<b>Sum</b>	100.00%		100.00

Notes

1/ G & T Assignment Factors Workpaper

Seasonalized based on average monthly share of peak hour deficiencies  
for the five year period 2018-2022. Source: 2021 IRP Technical Appendix, p. 20-24

**IDAHO POWER COMPANY**  
**Marginal Cost Analysis 2023**  
**Annual Transmission Marginal Costs**  
**Dollars/kw**

	Integration of New Resources	Planned System Expansion	Total
	(1)	(2)	(1) + (2)
(1) Investment (\$/kw)	\$0.00	\$2,028.90	
(2) With General Plant Loading (1) x 1.09 1/	\$0.00	\$2,207.15	
(3) Economic Carrying Charge Rate 2/	6.01%	6.01%	
(4) A&G Loading .39% 3/	0.39%	0.39%	
(5) Total Carrying Charge	6.40%	6.40%	
(6) Annual Cost (\$/kw) (2) x (5)	\$0.00	\$141.33	
(7) Demand related O&M 4/	\$6.63	\$6.63	
(8) With A&G loading (7) x 1.556 5/	\$10.32	\$10.32	
(9) Marginal Demand Related Costs (6) + (8)	\$10.32	\$151.65	
Working Capital			
(10) Materials & Supplies (2) x 1.08%	\$0.00	\$23.87	
(11) Revenue Requirement and Taxes for Materials & Supplies (10) x 9.54% 6/	\$0.00	\$2.28	
(12) Total Marginal Demand Related Costs (9) + (11) Rounded	\$10.32	\$153.93	
(13) Total Annual Transmission Marginal Costs (rounded)	<b>\$10.00</b>	<b>\$154.00</b>	<b>\$ 164.00</b>

Notes:

- 1/ Average general plant loading 2018 - 2022, Schedule 14
- 2/ Schedule 13. Based on 2023 Test Year Cost of Capital
- 3/ Average A & G expenses 2018 - 2022 applicable to plant related expenses, Schedule 14
- 4/ Average O&M 2018 - 2022 w/o accts. 565 & 567
- 5/ Average A & G expenses 2018 - 2022 applicable to non-plant related expenses, Schedule 14
- 6/ Schedule 14. Based on 2023 Test Year Cost of Capital

**IDAHO POWER COMPANY**  
**Marginal Cost Analysis 2023**  
**Seasonalized Transmission Marginal Costs**  
**Dollars /kw**

<b>Integration of New Resources</b>			<b>Planned System Expansion</b>			<b>TOTAL</b>
	(1)	(2)	(3)	(4)	(5)	(6)
	<u>% Share</u>	<u>\$/kw/year 2/</u>	<u>Monthly</u>	<u>% Share</u>	<u>\$/kw/year 4/</u>	<u>Monthly</u>
<b>Month</b>	<b>of Total 1/</b>	<b>\$10.00</b>	<b>Marginal</b>	<b>of Total 3/</b>	<b>\$154.00</b>	<b>Marginal</b>
			<b>Cost</b>			<b>Cost</b>
			(1) X (2)			(1) X (2)
(1) <b>Jan</b>	0.00%		\$0.00	8.17%		\$12.58
(2) <b>Feb</b>	0.00%		\$0.00	7.51%		\$11.56
(3) <b>Mar</b>	0.00%		\$0.00	7.05%		\$10.86
(4) <b>Apr</b>	0.00%		\$0.00	6.56%		\$10.10
(5) <b>May</b>	0.00%		\$0.00	8.11%		\$12.49
(6) <b>Jun</b>	8.35%		\$0.84	9.15%		\$14.09
(7) <b>Jul</b>	52.64%		\$5.26	10.13%		\$15.60
(8) <b>Aug</b>	38.20%		\$3.82	11.05%		\$17.02
(9) <b>Sep</b>	0.81%		\$0.08	9.07%		\$13.97
(10) <b>Oct</b>	0.00%		\$0.00	7.62%		\$11.73
(11) <b>Nov</b>	0.00%		\$0.00	7.79%		\$12.00
(12) <b>Dec</b>	0.00%		\$0.00	7.79%		\$12.00
(13) <b>Sum</b>	100.00%		\$10.00	100.00%		\$154.00
						(3) + (6)
						164.00

Notes:

- 1/ Seasonalized based on average monthly share of peak hour deficiencies for the five year period 2023-2027. Source: 2021 IRP Technical Appendix, p. 20-24  
G & T Assignment Factors Workpaper
- 2/ Schedule 3, page 1 of 2
- 3/ Seasonalized based on monthly share of peak hour load growth between 2023 and 2027  
Source: 2021 IRP Technical Appendix p. 7-9  
G & T Assignment Factors Workpaper
- 4/ Schedule 3, page 1 of 2

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 45**

IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Residential (1)	Residential-NM (6)	General Service (7)	General Service-NM (8)	General Service (9-Primary&T)	General Service (9-Secondary)	Area Lighting (15)	Large Power Service 19-Primary&S&T	Irrigation Service (24-Secondary)
<b>CAPACITY RELATED ALLOCATION FACTORS</b>											
<u>Twelve Monthly Coincident Demands @ Generation Level</u>											
January		2,219,506	1,059,967	33,825	26,060	144	87,097	550,946	0	322,498	3,678
February		2,128,273	1,017,411	26,118	23,231	140	86,836	526,891	0	303,816	3,793
March		2,153,910	1,065,567	32,460	20,874	126	84,566	500,037	0	293,747	10,593
April		1,714,832	606,276	11,880	16,245	56	80,529	447,538	0	297,198	126,497
May		2,455,950	852,080	17,668	16,521	37	83,006	467,273	0	311,436	583,628
June		3,496,120	1,398,626	30,306	23,965	83	96,031	549,051	0	331,549	922,557
July		3,224,178	1,333,855	40,293	22,450	93	89,908	527,617	0	340,400	731,125
August		3,071,846	1,224,174	20,317	28,269	81	97,972	601,580	0	311,064	643,282
September		2,995,520	1,321,784	38,299	22,803	84	92,225	544,526	0	303,108	532,555
October		1,851,866	746,802	12,987	18,144	55	85,827	487,716	0	320,397	66,683
November		2,043,833	911,858	29,509	21,995	131	85,869	517,204	0	324,362	8,370
December		2,402,388	1,188,925	42,647	27,676	178	86,519	575,421	0	323,609	4,385
Total		29,758,221	12,727,324	336,308	268,233	1,208	1,056,385	6,295,799	0	3,783,183	3,637,146
Ratio		1.0000	0.4277	0.0113	0.0090	0.0000	0.0355	0.2116	0.0000	0.1271	0.1222
<b>Actual</b>	<b>D10BS</b>	<b>0.4297</b>	<b>0.1774</b>	<b>0.0043</b>	<b>0.0033</b>	<b>0.0000</b>	<b>0.0126</b>	<b>0.0747</b>	<b>0.0000</b>	<b>0.0432</b>	<b>0.0951</b>
<b>Actual</b>	<b>D10BNS</b>	<b>0.5703</b>	<b>0.2503</b>	<b>0.0070</b>	<b>0.0057</b>	<b>0.0000</b>	<b>0.0229</b>	<b>0.1369</b>	<b>0.0000</b>	<b>0.0839</b>	<b>0.0271</b>

Four Monthly Coincident Demands (June - September) @ Generation Level

Power Supply Service - Generation

January	0.00	0	0	0	0	0	0	0	0	0	0
February	0.00	0	0	0	0	0	0	0	0	0	0
March	0.00	0	0	0	0	0	0	0	0	0	0
April	0.00	0	0	0	0	0	0	0	0	0	0
May	0.00	0	0	0	0	0	0	0	0	0	0
June	1.00	3,496,120	1,398,626	30,306	23,965	83	96,031	549,051	0	331,549	922,557
July	1.00	3,224,178	1,333,855	40,293	22,450	93	89,908	527,617	0	340,400	731,125
August	1.00	3,071,846	1,224,174	20,317	28,269	81	97,972	601,580	0	311,064	643,282
September	1.00	2,995,520	1,321,784	38,299	22,803	84	92,225	544,526	0	303,108	532,555
October	0.00	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0
Total		12,787,663	5,278,439	129,215	97,486	341	376,136	2,222,774	0	1,286,120	2,829,519
<b>Ratio</b>	<b>D10P</b>	<b>1.0000</b>	<b>0.4128</b>	<b>0.0101</b>	<b>0.0076</b>	<b>0.0000</b>	<b>0.0294</b>	<b>0.1738</b>	<b>0.0000</b>	<b>0.1006</b>	<b>0.2213</b>

IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Unmetered Service (40)	Municipal Street Light (41)	Traffic Control (42)	Total Tariff Customers	DOE/INL	Simplot	Micron	Total Special Contracts
<b>CAPACITY RELATED ALLOCATION FACTORS</b>										
<u>Twelve Monthly Coincident Demands @ Generation</u>										
January		2,219,506	1,639	0	365	2,086,219	41,611	15,260	76,416	133,287
February		2,128,273	1,666	0	367	1,990,268	38,260	23,348	76,398	138,005
March		2,153,910	1,674	0	319	2,009,963	43,356	22,419	78,172	143,946
April		1,714,832	1,682	0	367	1,588,268	25,426	22,150	78,988	126,564
May		2,455,950	1,700	0	341	2,333,690	18,122	16,075	88,063	122,260
June		3,496,120	1,710	0	332	3,354,210	24,712	22,336	94,861	141,910
July		3,224,178	1,717	0	348	3,087,806	19,117	23,051	94,204	136,372
August		3,071,846	1,734	0	345	2,928,817	24,020	22,223	96,786	143,029
September		2,995,520	1,744	0	355	2,857,483	24,142	20,794	93,101	138,037
October		1,851,866	1,750	0	348	1,740,708	22,980	4,157	84,021	111,158
November		2,043,833	1,754	0	357	1,901,409	40,726	20,506	81,191	142,423
December		2,402,388	1,756	0	353	2,251,468	48,957	19,950	82,012	150,920
Total		29,758,221	20,526	0	4,198	28,130,310	371,430	232,269	1,024,213	1,627,911
Ratio		1.0000	0.0007	0.0000	0.0001	0.9453	0.0125	0.0078	0.0344	0.0547
<b>Actual</b>	<b>D10BS</b>	<b>0.4297</b>	<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.3149</b>	<b>0.0031</b>	<b>0.0030</b>	<b>0.0127</b>	<b>0.0188</b>
<b>Actual</b>	<b>D10BNS</b>	<b>0.5703</b>	<b>0.0005</b>	<b>0.0000</b>	<b>0.0001</b>	<b>0.6304</b>	<b>0.0094</b>	<b>0.0048</b>	<b>0.0217</b>	<b>0.0359</b>

Four Monthly Coincident Demands (June - Septem

Power Supply Service - Generation

January	0.00	0	0	0	0	0	0	0	0	0
February	0.00	0	0	0	0	0	0	0	0	0
March	0.00	0	0	0	0	0	0	0	0	0
April	0.00	0	0	0	0	0	0	0	0	0
May	0.00	0	0	0	0	0	0	0	0	0
June	1.00	3,496,120	1,710	0	332	3,354,211	24,712	22,336	94,861	141,910
July	1.00	3,224,178	1,717	0	348	3,087,807	19,117	23,051	94,204	136,372
August	1.00	3,071,846	1,734	0	345	2,928,818	24,020	22,223	96,786	143,029
September	1.00	2,995,520	1,744	0	355	2,857,484	24,142	20,794	93,101	138,037
October	0.00	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0
Total		12,787,663	6,905	0	1,380	12,228,320	91,992	88,403	378,952	559,348
<b>Ratio</b>	<b>D10P</b>	<b>1.0000</b>	<b>0.0005</b>	<b>0.0000</b>	<b>0.0001</b>	<b>0.9563</b>	<b>0.0072</b>	<b>0.0069</b>	<b>0.0296</b>	<b>0.0437</b>

IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Residential (1)	Residential-NM (6)	General Service (7)	General Service-NM (8)	General Service (9-Primary&T)	General Service (9-Secondary)	Area Lighting (15)	Large Power Service 19-Primary&S&T	Irrigation Service (24-Secondary)
<b>CAPACITY RELATED ALLOCATION FACTORS</b>											
<u>Monthly Coincident Demands @ Generation Level</u>											
January		2,219,506	1,059,967	33,825	26,060	144	87,097	550,946	0	322,498	3,678
February		2,128,273	1,017,411	26,118	23,231	140	86,836	526,891	0	303,816	3,793
March		2,153,910	1,065,567	32,460	20,874	126	84,566	500,037	0	293,747	10,593
April		1,714,832	606,276	11,880	16,245	56	80,529	447,538	0	297,198	126,497
May		2,455,950	852,080	17,668	16,521	37	83,006	467,273	0	311,436	583,628
June		3,496,120	1,398,626	30,306	23,965	83	96,031	549,051	0	331,549	922,557
July		3,224,178	1,333,855	40,293	22,450	93	89,908	527,617	0	340,400	731,125
August		3,071,846	1,224,174	20,317	28,269	81	97,972	601,580	0	311,064	643,282
September		2,995,520	1,321,784	38,299	22,803	84	92,225	544,526	0	303,108	532,555
October		1,851,866	746,802	12,987	18,144	55	85,827	487,716	0	320,397	66,683
November		2,043,833	911,858	29,509	21,995	131	85,869	517,204	0	324,362	8,370
December		2,402,388	1,188,925	42,647	27,676	178	86,519	575,421	0	323,609	4,385
Total		29,758,221	12,727,324	336,308	268,233	1,208	1,056,385	6,295,799	0	3,783,183	3,637,146
Actual	D13	1.0000	0.4277	0.0113	0.0090	0.0000	0.0355	0.2116	0.0000	0.1271	0.1222
<u>Monthly Coincident Demands Weighted by Marginal Transmission Costs</u>											
<u>Transmission Service</u>											
January	12.58	27,921,395	13,334,385	425,516	327,837	1,816	1,095,681	6,930,903	0	4,057,027	46,263
February	11.56	24,602,849	11,761,266	301,928	268,545	1,618	1,003,823	6,090,855	0	3,512,114	43,849
March	10.86	23,391,472	11,572,055	352,516	226,696	1,365	918,389	5,430,405	0	3,190,092	115,039
April	10.10	17,319,812	6,123,386	119,984	164,075	562	813,347	4,520,134	0	3,001,703	1,277,623
May	12.49	30,674,832	10,642,476	220,669	206,351	466	1,036,742	5,836,238	0	3,889,835	7,289,519
June	14.93	52,197,081	20,881,487	452,464	357,803	1,239	1,433,747	8,197,327	0	4,950,032	13,773,771
July	20.86	67,256,368	27,824,213	840,508	468,301	1,945	1,875,483	11,006,092	0	7,100,737	15,251,270
August	20.84	64,017,298	25,511,788	423,410	589,116	1,682	2,041,737	12,536,924	0	6,482,564	13,406,005
September	14.05	42,087,065	18,571,060	538,103	320,381	1,187	1,295,757	7,650,590	0	4,258,664	7,482,397
October	11.73	21,722,403	8,759,991	152,340	212,823	646	1,006,753	5,720,906	0	3,758,256	782,188
November	12.00	24,526,002	10,942,301	354,108	263,946	1,571	1,030,422	6,206,445	0	3,892,345	100,439
December	12.00	28,828,673	14,267,096	511,761	332,109	2,131	1,038,231	6,905,055	0	3,883,302	52,621
Total		424,545,087	180,191,502	4,693,306	3,737,982	16,228	14,590,112	87,031,875	0	51,976,671	59,620,984
Weighted	D13	1.0000	0.4244	0.0111	0.0088	0.0000	0.0344	0.2050	0.0000	0.1224	0.1404
Average	D13	1.0000	0.4261	0.0112	0.0089	0.0000	0.0349	0.2083	0.0000	0.1248	0.1313

IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Unmetered Service (40)	Municipal Street Light (41)	Traffic Control (42)	Total Tariff Customers	DOE/INL	Simplot	Micron	Total Special Contracts
<b>CAPACITY RELATED ALLOCATION FACTORS</b>										
<u>Monthly Coincident Demands @ Generation Level</u>										
January		2,219,506	1,639	0	365	2,086,219	41,611	15,260	76,416	133,287
February		2,128,273	1,666	0	367	1,990,268	38,260	23,348	76,398	138,005
March		2,153,910	1,674	0	319	2,009,963	43,356	22,419	78,172	143,946
April		1,714,832	1,682	0	367	1,588,268	25,426	22,150	78,988	126,564
May		2,455,950	1,700	0	341	2,333,690	18,122	16,075	88,063	122,260
June		3,496,120	1,710	0	332	3,354,210	24,712	22,336	94,861	141,910
July		3,224,178	1,717	0	348	3,087,806	19,117	23,051	94,204	136,372
August		3,071,846	1,734	0	345	2,928,817	24,020	22,223	96,786	143,029
September		2,995,520	1,744	0	355	2,857,483	24,142	20,794	93,101	138,037
October		1,851,866	1,750	0	348	1,740,708	22,980	4,157	84,021	111,158
November		2,043,833	1,754	0	357	1,901,409	40,726	20,506	81,191	142,423
December		2,402,388	1,756	0	353	2,251,468	48,957	19,950	82,012	150,920
Total		29,758,221	20,526	0	4,198	28,130,310	371,430	232,269	1,024,213	1,627,911
Actual	D13	1.0000	0.0007	0.0000	0.0001	0.9453	0.0125	0.0078	0.0344	0.0547
<u>Monthly Coincident Demands Weighted by Marginal</u>										
<u>Transmission Service</u>										
January	12.58	27,921,395	20,613	0	4,592	26,244,644	523,466	191,968	961,317	1,676,751
February	11.56	24,602,849	19,254	0	4,244	23,007,508	442,280	269,902	883,158	1,595,341
March	10.86	23,391,472	18,179	0	3,467	21,828,214	470,844	243,467	848,947	1,563,258
April	10.10	17,319,812	16,988	0	3,708	16,041,519	256,800	223,716	797,778	1,278,293
May	12.49	30,674,832	21,236	0	4,255	29,147,800	226,344	200,778	1,099,911	1,527,033
June	14.93	52,197,081	25,525	0	4,957	50,078,367	368,956	333,476	1,416,282	2,118,714
July	20.86	67,256,368	35,825	0	7,256	64,411,650	398,785	480,838	1,965,095	2,844,718
August	20.84	64,017,298	36,133	0	7,193	61,036,572	500,572	463,129	2,017,025	2,980,726
September	14.05	42,087,065	24,506	0	4,991	40,147,649	339,202	292,151	1,308,063	1,939,416
October	11.73	21,722,403	20,529	0	4,079	20,418,522	269,559	48,761	985,561	1,303,881
November	12.00	24,526,002	21,045	0	4,288	22,816,923	488,712	246,077	974,290	1,709,079
December	12.00	28,828,673	21,075	0	4,241	27,017,633	587,488	239,404	984,148	1,811,040
Total		424,545,087	280,908	0	57,269	402,197,002	4,873,008	3,233,668	14,241,574	22,348,249
Weighted	D13	1.0000	0.0007	0.0000	0.0001	0.9474	0.0115	0.0076	0.0335	0.0526
Average	D13	1.0000	0.0007	0.0000	0.0001	0.9463	0.0120	0.0077	0.0340	0.0537



IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Residential (1)	Residential-NM (6)	General Service (7)	General Service-NM (8)	General Service (9-Primary&T)	General Service (9-Secondary)	Area Lighting (15)	Large Power Service 19-Primary&S&T	Irrigation Service (24-Secondary)
<b>ENERGY RELATED ALLOCATION FACTORS</b>											
<u>Monthly Energy Requirements @ Generation Level (Mwh)</u>											
January		1,339,623	613,557	18,646	15,518	69	51,586	322,133	502	216,762	2,731
February		1,151,180	517,912	13,901	12,560	57	47,876	277,873	494	188,849	2,544
March		1,126,738	467,115	11,175	11,857	44	49,767	281,844	488	204,917	7,866
April		1,085,807	383,562	9,819	10,317	40	47,597	262,403	481	196,073	90,909
May		1,265,221	377,025	8,834	10,563	33	52,044	278,339	478	205,140	246,792
June		1,508,697	417,114	9,376	11,507	31	55,727	288,432	473	207,113	433,104
July		1,822,178	584,744	13,970	14,033	46	59,674	332,590	467	216,864	511,136
August		1,661,681	517,117	14,052	13,171	51	57,105	326,117	466	219,632	424,401
September		1,290,902	393,931	10,782	10,890	53	53,727	290,009	461	206,713	242,301
October		1,134,186	414,280	10,654	10,889	37	51,925	290,936	455	213,986	49,520
November		1,168,943	492,048	16,499	11,934	68	50,708	291,311	449	206,082	6,015
December		1,382,693	644,092	22,800	15,398	97	52,892	328,184	441	214,399	3,256
Total		15,937,848	5,822,497	160,508	148,636	626	630,627	3,570,172	5,657	2,496,527	2,020,576
Ratio		1.0000	0.3653	0.0101	0.0093	0.0000	0.0396	0.2240	0.0004	0.1566	0.1268
Actual	E10S	0.3942	0.1200	0.0030	0.0031	0.0000	0.0142	0.0776	0.0001	0.0534	0.1011
Actual	E10NS	0.6058	0.2453	0.0070	0.0062	0.0000	0.0254	0.1464	0.0002	0.1033	0.0257
<u>Monthly Energy Requirements Weighted by Marginal Energy Costs</u>											
<u>Power Supply Service - Generation</u>											
January	75.67	101,369,282	46,427,842	1,410,965	1,174,254	5,245	3,903,511	24,375,828	38,004	16,402,383	206,653
February	38.99	44,884,525	20,193,371	542,015	489,709	2,205	1,866,681	10,834,272	19,266	7,363,215	99,201
March	43.42	48,922,967	20,282,115	485,228	514,842	1,920	2,160,888	12,237,662	21,197	8,897,479	341,562
April	35.26	38,285,551	13,524,385	346,213	363,774	1,393	1,678,260	9,252,323	16,977	6,913,525	3,205,443
May	32.44	41,043,756	12,230,691	286,560	342,652	1,080	1,688,314	9,029,322	15,506	6,654,726	8,005,916
June	38.78	58,507,256	16,175,683	363,613	446,254	1,191	2,161,081	11,185,392	18,345	8,031,825	16,795,788
July	49.82	90,780,891	29,131,939	695,989	699,106	2,276	2,972,962	16,569,652	23,253	10,804,150	25,464,795
August	53.10	88,235,264	27,458,929	746,138	699,364	2,720	3,032,276	17,316,803	24,751	11,662,458	22,535,714
September	48.61	62,750,753	19,148,993	524,124	529,362	2,568	2,611,682	14,097,331	22,419	10,048,308	11,778,242
October	48.96	55,529,723	20,283,158	521,597	533,107	1,827	2,542,228	14,244,237	22,300	10,476,733	2,424,484
November	72.20	84,397,712	35,525,889	1,191,215	861,633	4,932	3,661,112	21,032,656	32,451	14,879,142	434,293
December	93.10	128,728,703	59,964,996	2,122,668	1,433,589	9,042	4,924,241	30,553,958	41,070	19,960,536	303,174
Total		843,436,384	320,347,991	9,236,326	8,087,644	36,399	33,203,234	190,729,435	295,539	132,094,480	91,595,266
Ratio		1.0000	0.3798	0.0110	0.0096	0.0000	0.0394	0.2261	0.0004	0.1566	0.1086
Weighted	E10S	0.3560	0.1090	0.0028	0.0028	0.0000	0.0128	0.0702	0.0001	0.0481	0.0908
Weighted	E10NS	0.6440	0.2708	0.0082	0.0068	0.0000	0.0266	0.1560	0.0002	0.1085	0.0178
Average	E10S	0.3751	0.1145	0.0029	0.0030	0.0000	0.0135	0.0739	0.0001	0.0507	0.0959
Average	E10NS	0.6249	0.2581	0.0076	0.0065	0.0000	0.0260	0.1512	0.0002	0.1059	0.0218
Total Ratio		1.0000	0.3726	0.0105	0.0095	0.0000	0.0395	0.2251	0.0004	0.1566	0.1177

IDAHO POWER COMPANY  
DEVELOPMENT OF DEMAND AND ENERGY ALLOCATORS - RT DEL  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2023

Month	Multiplier/ Marginal Cost	Total IPUC Jurisdiction	Unmetered Service (40)	Municipal Street Light (41)	Traffic Control (42)	Total Tariff Customers	DOE/INL	Simplot	Micron	Total Special Contracts
<b>ENERGY RELATED ALLOCATION FACTORS</b>										
<b>Monthly Energy Requirements @ Generation Level</b>										
January		1,339,623	1,194	2,464	266	1,245,429	26,342	15,027	<b>52,825</b>	94,194
February		1,151,180	1,214	2,284	267	1,065,830	24,284	15,195	<b>45,871</b>	85,350
March		1,126,738	1,220	2,083	233	1,038,609	22,741	16,844	<b>48,544</b>	88,129
April		1,085,807	1,226	2,284	267	1,004,976	19,242	16,373	<b>45,216</b>	80,831
May		1,265,221	1,239	2,070	248	1,182,804	16,979	15,618	<b>49,820</b>	82,417
June		1,508,697	1,246	2,006	242	1,426,371	16,258	15,049	<b>51,018</b>	82,326
July		1,822,178	1,251	2,005	253	1,737,033	15,126	16,429	<b>53,590</b>	85,145
August		1,661,681	1,263	2,018	251	1,575,645	14,715	16,366	<b>54,956</b>	86,036
September		1,290,902	1,271	2,046	259	1,212,443	15,332	10,364	<b>52,763</b>	78,460
October		1,134,186	1,275	2,046	253	1,046,256	21,403	14,664	<b>51,863</b>	87,930
November		1,168,943	1,278	2,096	260	1,078,749	22,844	14,135	<b>53,215</b>	90,194
December		1,382,693	1,280	2,117	257	1,285,215	25,622	15,238	<b>56,618</b>	97,478
Total		15,937,848	14,956	25,518	3,059	14,899,359	240,889	181,300	616,300	1,038,489
Ratio		1.0000	0.0009	0.0016	0.0002	0.9348	0.0151	0.0114	0.0387	0.0652
Actual	E10S	0.3942	0.0003	0.0005	0.0001	0.3734	0.0039	0.0037	0.0133	0.0208
Actual	E10NS	0.6058	0.0006	0.0011	0.0001	0.5614	0.0113	0.0077	0.0253	0.0443
<b>Monthly Energy Requirements Weighted by Margin:</b>										
<b>Power Supply Service - Generation</b>										
January	75.67	101,369,282	90,345	186,437	20,124	94,241,591	1,993,329	1,137,067	3,997,295	7,127,691
February	38.99	44,884,525	47,319	89,040	10,429	41,556,723	946,849	592,437	1,788,516	3,327,802
March	43.42	48,922,967	52,959	90,449	10,101	45,096,402	987,410	731,357	2,107,798	3,826,566
April	35.26	38,285,551	43,212	80,522	9,431	35,435,459	678,483	577,304	1,594,305	2,850,092
May	32.44	41,043,756	40,190	67,143	8,053	38,370,152	550,783	506,652	1,616,170	2,673,604
June	38.78	58,507,256	48,310	77,810	9,381	55,314,672	630,493	583,596	1,978,495	3,192,584
July	49.82	90,780,891	62,343	99,879	12,627	86,538,970	753,592	818,493	2,669,835	4,241,921
August	53.10	88,235,264	67,084	107,168	13,354	83,666,760	781,351	869,010	2,918,143	4,568,504
September	48.61	62,750,753	61,778	99,451	12,581	58,936,835	745,293	503,809	2,564,816	3,813,918
October	48.96	55,529,723	62,435	100,167	12,406	51,224,678	1,047,901	717,932	2,539,212	4,305,045
November	72.20	84,397,712	92,263	151,321	18,799	77,885,706	1,649,322	1,020,530	3,842,154	6,512,006
December	93.10	128,728,703	119,139	197,107	23,973	119,653,493	2,385,418	1,418,651	5,271,142	9,075,210
Total		843,436,384	787,375	1,346,492	161,260	787,921,441	13,150,224	9,476,838	32,887,881	55,514,943
Ratio		1.0000	0.0009	0.0016	0.0002	0.9342	0.0156	0.0112	0.0390	0.0658
Weighted	E10S	0.3560	0.0003	0.0005	0.0001	0.3373	0.0035	0.0033	0.0120	0.0188
Weighted	E10NS	0.6440	0.0006	0.0011	0.0001	0.5969	0.0121	0.0079	0.0270	0.0471
Average	E10S	0.3751	0.0003	0.0005	0.0001	0.3553	0.0037	0.0035	0.0127	0.0198
Average	E10NS	0.6249	0.0006	0.0011	0.0001	0.5792	0.0117	0.0078	0.0262	0.0457
Total Ratio		1.0000	0.0009	0.0016	0.0002	0.9345	0.0154	0.0113	0.0388	0.0655

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 46**

**IDAHO POWER COMPANY  
REVENUE REQUIREMENT ADJUSTMENTS  
TWELVE MONTHS ENDING DECEMBER 31, 2023  
ALLOCATION TO CLASSES**

	RESIDENTIAL	RES. OS	GEN SRV	GEN SRV OS	LRG SVR	LRG SRV - SEC	LIGHTING	IND	IRR	UNMETERED	ST LIGHT	CONTROL	DOE/INL	JR SIMPLOT	MICRON	Total IPUC
	(1)	(6)	(7)	(8)	(9-P/T)	(9-S)	(15)	(19-S/P/T)	(24-S)	(40)	(41)	(42)	(30)	(29)	(26)	Jurisdiction
Bridger	\$ 28,903,005	\$ 763,736	\$ 609,141	\$ 2,743	\$ 2,398,989	\$ 14,297,391	\$ -	\$ 8,591,387	\$ 8,259,745	\$ 46,612	\$ -	\$ 9,533	\$ 843,495	\$ 527,469	\$ 2,325,928	\$ 67,579,174
Valmy	\$ 15,806,391	\$ 417,670	\$ 333,125	\$ 1,500	\$ 1,311,952	\$ 7,818,915	\$ -	\$ 4,698,433	\$ 4,517,065	\$ 25,491	\$ -	\$ 5,213	\$ 461,288	\$ 288,461	\$ 1,271,997	\$ 36,957,501
Storage ADITC	\$ (9,045,603)	\$ (239,022)	\$ (190,639)	\$ (859)	\$ (750,797)	\$ (4,474,570)	\$ -	\$ (2,688,796)	\$ (2,585,004)	\$ (14,588)	\$ -	\$ (2,983)	\$ (263,984)	\$ (165,079)	\$ (727,932)	\$ (21,149,854)
	\$ 35,663,794	\$ 942,384	\$ 751,627	\$ 3,385	\$ 2,960,144	\$ 17,641,736	\$ -	\$ 10,601,024	\$ 10,191,807	\$ 57,515	\$ -	\$ 11,763	\$ 1,040,799	\$ 650,851	\$ 2,869,993	\$ 83,386,821
Total D10BS	\$ 14,790,945	\$ 362,079	\$ 273,171	\$ 957	\$ 1,053,987	\$ 6,228,532	\$ -	\$ 3,603,894	\$ 7,928,720	\$ 19,349	\$ -	\$ 3,867	\$ 257,774	\$ 247,719	\$ 1,061,879	\$ 35,832,874
Total D10BNS	\$ 20,872,849	\$ 580,305	\$ 478,455	\$ 2,428	\$ 1,906,156	\$ 11,413,204	\$ -	\$ 6,997,130	\$ 2,263,087	\$ 38,166	\$ -	\$ 7,895	\$ 783,025	\$ 403,131	\$ 1,808,114	\$ 47,553,947
	\$ 35,663,794	\$ 942,384	\$ 751,627	\$ 3,385	\$ 2,960,144	\$ 17,641,736	\$ -	\$ 10,601,024	\$ 10,191,807	\$ 57,515	\$ -	\$ 11,763	\$ 1,040,799	\$ 650,851	\$ 2,869,993	\$ 83,386,821

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 47**

IDAHO POWER COMPANY  
CCOS ALTERNATE SCENARIOS  
TWELVE MONTHS ENDING DECEMBER 31, 2023

2023 Class Cost-of-Service Alternate Scenarios Revenue Requirement Summary														
				<u>Small</u> <u>General</u>	<u>Small General</u> <u>Service On-</u> <u>Site Gen*</u>	<u>L. Gen Service</u> <u>- Prim. &amp;</u> <u>Tran.</u>	<u>Large Gen</u> <u>Service -Sec.</u>	<u>Large Power</u> <u>Service</u>	<u>Irrigation</u>	<u>DOE</u>	<u>Simplot</u>	<u>Micron</u>	<u>Lighting</u>	
	<u>Total Idaho</u>	<u>Residential</u>	<u>Residential</u> <u>On-Site Gen</u>											
Total Sales Revenue (NM)	\$1,293.0M	\$566.1M	\$13.0M	\$17.8M	\$48,160	\$43.6M	\$269.8M	\$153.9M	\$162.4M	\$13.3M	\$9.8M	\$36.6M	\$6.6M	
2011 Methodology	Revenue Requirement	\$1,404,314,821	\$622.7M	\$19.6M	\$20.1M	\$100,951	\$42.3M	\$269.6M	\$162.8M	\$198.6M	\$14.1M	\$9.9M	\$39.1M	\$5.4M
	Revenue Deficiency / (Excess)	\$111,304,981	\$56.5M	\$6.6M	\$2.3M	\$52,791	(\$1.2M)	(\$0.2M)	\$8.9M	\$36.1M	\$0.8M	\$0.0M	\$2.5M	(\$1.2M)
	% Change Required	8.61%	9.98%	50.56%	13.08%	109.62%	-2.85%	-0.07%	5.79%	22.23%	6.15%	0.45%	6.96%	-18.05%
FV Classification Increm. Impact	Revenue Requirement	\$0	\$2.5M	\$0.1M	\$0.0M	\$470	\$0.1M	\$1.0M	\$0.0M	(\$3.7M)	\$0.1M	(\$0.1M)	\$0.0M	(\$0.1M)
	% Change Required	0.00%	0.43%	0.71%	0.19%	0.98%	0.24%	0.36%	0.02%	-2.27%	0.78%	-0.75%	0.13%	-0.92%
June - Sept. Summer Increm. Impact	Revenue Requirement	\$0	\$0.7M	\$0.1M	(\$0.0M)	\$37	\$0.0M	\$0.2M	\$0.0M	(\$1.1M)	\$0.0M	\$0.0M	\$0.0M	\$0.0M
	% Change Required	0.00%	0.12%	0.50%	0.00%	0.08%	0.08%	0.07%	0.01%	-0.65%	0.16%	0.01%	0.10%	0.02%
Combined Impact	Revenue Requirement	\$0	\$2.8M	\$0.1M	\$0.0M	\$491	\$0.1M	\$1.1M	\$0.0M	(\$4.3M)	\$0.1M	(\$0.1M)	\$0.1M	(\$0.1M)
	Revenue Deficiency / (Excess)	(\$0)	\$2,849,947	\$129,954	\$33,859	\$491	\$122,526	\$1,077,809	\$39,582	(\$4,303,585)	\$115,680	(\$73,376)	\$66,675	(\$59,565)
	% Change Required	0.00%	0.50%	1.00%	0.19%	1.02%	0.28%	0.40%	0.03%	-2.65%	0.87%	-0.75%	0.18%	-0.90%

\*\$ values in millions except for Small General Service On-Site Generation

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 48**

Idaho Power Company  
Before the Idaho Public Utilities Commission  
Revenue Allocation Summary  
12 Months Ending December 31, 2023  
Proformed Normalized Sales and Revenue

Line No.	Tariff Description	Rate Schedule No.	2023 Average Number of Customers	2023 Sales Normalized (kWh)	Proformed Normalized Revenue	Average Mills per kWh	Base Revenue Transfer
<u>Uniform Tariff Schedules</u>							
1	Residential Service	1,3,5	492,481	5,425,559,433	501,479,142	92.43	64,656,991
2	<u>Residential Service - On Site Gen</u>	6	<u>13,288</u>	<u>122,912,496</u>	<u>11,567,368</u>	<u>94.11</u>	<u>1,465,405</u>
3	<b>Combined Residential</b>		<b>505,768</b>	<b>5,548,471,929</b>	<b>513,046,510</b>	<b>92.47</b>	<b>66,122,396</b>
4	Small General Service	7	30,401	138,285,160	16,102,622	116.45	1,658,298
5	<u>Small General Service - On Site Gen</u>	8	<u>88</u>	<u>370,708</u>	<u>43,713</u>	<u>117.92</u>	<u>4,447</u>
6	<b>Combined Small General Service</b>		<b>30,488</b>	<b>138,655,868</b>	<b>16,146,335</b>	<b>116.45</b>	<b>1,662,745</b>
7	Large General Service - Prim. & Trans.	9P, 9T	284	601,699,182	36,446,763	60.57	7,110,848
8	Large General Service - Secondary	9S	37,764	3,321,544,618	230,482,910	69.39	39,344,999
9	Dusk/Dawn Lighting	15	0	5,267,423	1,261,853	239.56	65,185
10	Large Power Service	19S, 19P, 19T	116	2,386,695,635	125,751,566	52.69	28,147,259
11	Irrigation Service	24	19,179	1,864,522,772	140,327,749	75.26	22,120,084
12	Unmetered Service	40	1,663	13,925,301	1,144,288	82.17	165,505
13	Municipal Street Lighting	41	2,980	23,760,014	3,463,322	145.76	287,095
14	Traffic Control Lighting	42	<u>766</u>	<u>2,847,961</u>	<u>165,609</u>	<u>58.15</u>	<u>33,636</u>
15	<i>Total Idaho Rates</i>		599,008	13,907,390,703	1,068,236,903	76.81	165,059,752
<u>Special Contracts</u>							
16	Micron	26	1	591,344,540	29,622,353	50.09	6,969,186
17	Simplot	29	1	175,000,001	7,759,368	44.34	2,059,297
18	DOE/INL	30	<u>1</u>	<u>234,100,000</u>	<u>10,547,708</u>	<u>45.06</u>	<u>2,755,273</u>
19	<i>Total Specials</i>		3	1,000,444,541	47,929,429	47.91	11,783,756
20	Total Idaho Retail Sales*		599,011	14,907,835,244	1,116,166,332	74.87	176,843,508

\*Sales exclude Black Mesa sales



Idaho Power Company  
Before the Idaho Public Utilities Commission  
Revenue Allocation Summary  
12 Months Ending December 31, 2023  
4CP/12CP Cost-of-Service Results

Line No.	Tariff Description	Rate Schedule No.	COS Percent Change	COS Retail Sales W/ Trnsfr. Adj.	COS Revenue Change	Revenue Allocation at COS	Average Mills per kWh
<u>Uniform Tariff Schedules</u>							
1	Residential Service	1,3,5	10.49%	566,136,133	59,368,700	625,504,833	115.29
2	<u>Residential Service - On Site Gen</u>	6	<u>51.56%</u>	<u>13,032,773</u>	<u>6,719,340</u>	<u>19,752,112</u>	<u>160.70</u>
3	<b>Combined Residential</b>		<b>11.41%</b>	<b>579,168,906</b>	<b>66,088,040</b>	<b>645,256,946</b>	<b>116.29</b>
4	Small General Service	7	13.27%	17,760,920	2,356,962	20,117,882	145.48
5	<u>Small General Service - On Site Gen</u>	8	<u>110.64%</u>	<u>48,160</u>	<u>53,282</u>	<u>101,442</u>	<u>273.64</u>
6	<b>Combined Small General Service</b>		<b>13.53%</b>	<b>17,809,080</b>	<b>2,410,244</b>	<b>20,219,324</b>	<b>145.82</b>
7	Large General Service - Prim. & Trans.	9P, 9T	-2.57%	43,557,610	(1,118,189)	42,439,422	70.53
8	Large General Service - Secondary	9S	0.33%	269,827,909	890,106	270,718,015	81.50
9	Dusk/Dawn Lighting	15	-44.41%	1,327,038	(589,394)	737,644	140.04
10	Large Power Service	19S, 19P, 19T	5.82%	153,898,825	8,949,254	162,848,079	68.23
11	Irrigation Service	24	19.59%	162,447,833	31,815,425	194,263,258	104.19
12	Unmetered Service	40	2.48%	1,309,792	32,435	1,342,227	96.39
13	Municipal Street Lighting	41	-24.67%	3,750,417	(925,400)	2,825,017	118.90
14	Traffic Control Lighting	42	<u>117.51%</u>	<u>199,244</u>	<u>234,134</u>	<u>433,379</u>	<u>152.17</u>
15	<b>Total Idaho Rates</b>		<b>8.74%</b>	<b>1,233,296,655</b>	<b>107,786,657</b>	<b>1,341,083,312</b>	<b>96.43</b>
<u>Special Contracts</u>							
16	Micron	26	7.14%	36,591,539	2,613,571	39,205,110	66.30
17	Simplot	29	-0.30%	9,818,665	(29,165)	9,789,500	55.94
18	DOE/INL	30	<u>7.02%</u>	<u>13,302,981</u>	<u>933,918</u>	<u>14,236,899</u>	<u>60.82</u>
19	<b>Total Specials</b>		<b>5.89%</b>	<b>59,713,185</b>	<b>3,518,324</b>	<b>63,231,509</b>	<b>63.20</b>
<b>20</b>	<b>Total Idaho Retail Sales*</b>		<b>8.61%</b>	<b>1,293,009,840</b>	<b>111,304,981</b>	<b>1,404,314,821</b>	<b>94.20</b>

\*Sales exclude Black Mesa sales

Idaho Power Company  
Before the Idaho Public Utilities Commission  
Revenue Allocation Summary  
12 Months Ending December 31, 2023  
First Pass Revenue Allocation

Line No.	Tariff Description	Rate Schedule No.	First Pass Percent Change	First Pass Revenue Change	First Pass Revenue Allocation
<u>Uniform Tariff Schedules</u>					
1	Residential Service	1,3,5			
2	<u>Residential Service - On Site Gen</u>	6			
3	<b>Combined Residential</b>	1,3,5,6	11.41%	66,088,040	645,256,946
4	Small General Service	7			
5	<u>Small General Service - On Site Gen</u>	8			
6	<b>Combined Small General Service</b>	7,8	12.91%	2,299,564	20,108,644
7	Large General Service - Prim. & Trans.	9P, 9T	0.00%	0	43,557,610
8	Large General Service - Secondary	9S	0.33%	890,106	270,718,015
9	Dusk/Dawn Lighting	15	0.00%	0	1,327,038
10	Large Power Service	19S, 19P, 19T	5.82%	8,949,254	162,848,079
11	Irrigation Service	24	12.91%	20,975,772	183,423,605
12	Unmetered Service	40	2.48%	32,435	1,342,227
13	Municipal Street Lighting	41	0.00%	0	3,750,417
14	Traffic Control Lighting	42	12.91%	<u>25,727</u>	<u>224,972</u>
15	<i>Total Idaho Rates</i>		8.05%	99,260,898	1,332,557,553
<u>Special Contracts</u>					
16	Micron	26	7.14%	2,613,571	39,205,110
17	Simplot	29	0.00%	0	9,818,665
18	DOE/INL	30	<u>7.02%</u>	<u>933,918</u>	<u>14,236,899</u>
19	<i>Total Specials</i>		5.94%	3,547,489	63,260,674
20	Total Idaho Retail Sales*		7.95%	102,808,387	1,395,818,227
21	Revenue Requirement Shortfall				8,496,594

\*Sales exclude Black Mesa sales

Idaho Power Company  
Before the Idaho Public Utilities Commission  
Revenue Allocation Summary  
12 Months Ending December 31, 2023  
Second Pass Revenue Allocation

Line No.	Tariff Description	Rate Schedule No.	Second Pass Revenue Change	Second Pass Percent Change	Second Pass Revenue Allocation
	<u>Uniform Tariff Schedules</u>				
1	Residential Service	1,3,5			
2	<u>Residential Service - On Site Gen</u>	6			
3	<b>Combined Residential</b>	1,3,5,6	4,836,319	12.25%	650,093,265
4	Small General Service	7			
5	<u>Small General Service - On Site Gen</u>	8			
6	<b>Combined Small General Service</b>	7,8	0	12.91%	20,108,644
7	Large General Service - Prim. & Trans.	9P, 9T	0	0.00%	43,557,610
8	Large General Service - Secondary	9S	2,029,081	1.08%	272,747,096
9	Dusk/Dawn Lighting	15	0	0.00%	1,327,038
10	Large Power Service	19S, 19P, 19T	1,220,576	6.61%	164,068,656
11	Irrigation Service	24	0	12.91%	183,423,605
12	Unmetered Service	40	10,060	3.24%	1,352,288
13	Municipal Street Lighting	41	0	0.00%	3,750,417
14	Traffic Control Lighting	42	0	12.91%	<u>224,972</u>
15	<i>Total Idaho Rates</i>		8,096,037	8.70%	1,340,653,590
	<u>Special Contracts</u>				
16	Micron	26	293,849	7.95%	39,498,960
17	Simplot	29	0	0.00%	9,818,665
18	DOE/INL	30	<u>106,708</u>	<u>7.82%</u>	<u>14,343,607</u>
19	<i>Total Specials</i>		400,558	6.61%	63,661,231
20	Total Idaho Retail Sales		8,496,594	8.61%	1,404,314,821
21	Revenue Requirement Shortfall				-

\*Sales exclude Black Mesa sales

Idaho Power Company  
Before the Idaho Public Utilities Commission  
Revenue Allocation Summary  
12 Months Ending December 31, 2023  
Final Revenue Allocation

Line No.	Tariff Description	Rate Schedule No.	Final Percent Change	Final Revenue Change	Final Revenue Allocation	Average Mills per kWh	Cost of Service Index
<u>Uniform Tariff Schedules</u>							
1	Residential Service	1,3,5					
2	<u>Residential Service - On Site Gen</u>	<u>6</u>					
3	<b>Combined Residential</b>		<b>12.25%</b>	<b>\$70,924,359</b>	<b>650,093,265</b>	<b>117.17</b>	<b>101%</b>
4	Small General Service	7					
5	<u>Small General Service - On Site Gen</u>	<u>8</u>					
6	<b>Combined Small General Service</b>		<b>12.91%</b>	<b>\$2,299,564</b>	<b>20,108,644</b>	<b>145.03</b>	<b>99%</b>
7	Large General Service - Prim. & Trans.	9P, 9T	0.00%	\$0	43,557,610	72.39	103%
8	Large General Service - Secondary	9S	1.08%	\$2,919,187	272,747,096	82.11	101%
9	Dusk/Dawn Lighting	15	0.00%	\$0	1,327,038	251.93	180%
10	Large Power Service	19S, 19P, 19T	6.61%	\$10,169,831	164,068,656	68.74	101%
11	Irrigation Service	24	12.91%	\$20,975,772	183,423,605	98.38	94%
12	Unmetered Service	40	3.24%	\$42,495	1,352,288	97.11	101%
13	Municipal Street Lighting	41	0.00%	\$0	3,750,417	157.85	133%
14	Traffic Control Lighting	42	<u>12.91%</u>	<u>\$25,727</u>	<u>224,972</u>	<u>78.99</u>	52%
15	<i>Total Idaho Rates</i>		8.70%	\$107,356,935	1,340,653,590	96.40	
<u>Special Contracts</u>							
16	Micron	26	7.95%	\$2,907,421	39,498,960	66.80	101%
17	Simplot	29	0.00%	\$0	9,818,665	56.11	100%
18	DOE/INL	30	<u>7.82%</u>	<u>\$1,040,626</u>	<u>14,343,607</u>	<u>61.27</u>	101%
19	<i>Total Specials</i>		6.61%	\$3,948,046	63,661,231	63.63	
20	Total Idaho Retail Sales*		8.61%	\$111,304,981	1,404,314,821	94.20	

\*Sales exclude Black Mesa sales

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 49**

**IDAHO POWER COMPANY**  
**Development of Sales Based Adjustment Rate**  
**2023 Test Year**

**Table I**  
**Derivation of Energy-Related Generation Function Revenue Requirement**

	A	B	C	D	E	F
	Rate Base	Expenses	Income Tax	A&G Expense Exclusion	Other Revenue	Subsidiary Income
Source	Ex. 38, L. 12	Ex. 38, L. 72 & 114	Table II, Col. E	See Note 1	See Note 2	Ex. 42, L. 35
Generation Function Energy-Related	53,590,613	494,937,324	495,994	1,855,842	29,557,875	1,759,534

	G	H	I	J	K
	Current Return	Desired Return	Revenue Short-Fall	Tax Gross-up	Total Revenue Requirement
Source	A x 7.172% (3)	A x 7.702% (4)	H-G	I x 1.34662 - I	B+C-D-E-F+H+J
Generation Function Energy-Related	3,843,519	4,127,549	284,030	98,451	\$466,486,067

Notes:

- (1) Exhibit 37, Lines 499-558. The portion of the overall A&G exclusion associated with the energy-related generation function (Table 5; FERC accounts 900-935; 416)
- (2) Exhibit 38, Line 132
- (3) Exhibit 42, Line 38
- (4) Exhibit 42, Line 43

**IDAHO POWER COMPANY**  
**Development of Sales Based Adjustment Rate**  
**2023 Test Year**

**Table II**  
**Derivation of Energy-Related Generation Function Revenue Requirement**

	A	B	C	D	E
	Total Federal Income Tax	Total State Income Tax	Energy-Related Generation Function Rate Base	Total Rate Base	Allocated Income Taxes
Source	Ex. 42, L. 28	Ex 42, L. 29	Ex. 38, L. 12	Ex. 38, L. 60	(A + B) x (C / D)
Generation Function Energy-Related	39,040,245	(2,828,435)	53,590,613	3,912,569,823	495,994

**IDAHO POWER COMPANY**  
**Development of Sales Based Adjustment Rate**  
**2023 Test Year**

**Table III**  
**Derivation of Energy-Related Generation Function Revenue Requirement**

	A	B	C
	Energy-Related Generation Function Revenue Requirement	2023 Test Year Idaho Retail Sales (MWh)	Sales Based Adjusted Rate (\$/MWh)
Source	Table I, Col K.	Ex. 39, Table 23, L. 55 / 1000	A / B
Generation Function Energy-Related	\$466,486,067	14,907,835	\$31.29



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 50**

**IDAHO POWER COMPANY**  
**Development of Fixed Cost Adjustment Rate**  
**2023 Test Year**  
**Table I**  
**Class Cost of Service Functionalized Costs**  
**Based Upon GRC Filing - IPC-E-23-11 - Filed June 01, 2023**

		A	B	C	D	E	F	
Line		Rate	COS			Distribution and		
No.	Uniform Tariff Schedules	Schedule	Revenue	Generation	Transmission	Customer	Total	
		No.	Requirement	Fixed Costs	Fixed Costs	Fixed Costs	Fixed Costs	
							Fixed Cost	
							% of Total Cost	
							B+C+D	
							E ÷ A	
1	Residential Service	1, 3 & 5	625,504,833	191,167,686	46,602,187	213,277,804	451,047,677	72.1%
2	Residential Service - On Site Gen	6	19,752,112	5,331,189	1,435,880	8,056,109	14,823,178	75.0%
3	Small General Service	7	20,117,882	4,025,369	998,664	10,663,801	15,687,835	78.0%
4	Small General Service - On Site Gen	8	101,442	19,596	5,628	56,871	82,095	80.9%
5	Large General Service	9	313,157,436	107,548,029	25,485,729	56,313,163	189,346,922	60.5%
6	Dusk/Dawn Lighting	15	737,644	-	-	573,342	573,342	77.7%
7	Large Power Service	19	162,848,079	56,747,920	14,142,328	18,565,502	89,455,750	54.9%
8	Irrigation Service	24	194,263,258	59,292,537	15,038,335	64,768,424	139,099,295	71.6%
9	Unmetered Service	40	1,342,227	301,332	72,191	530,532	904,055	67.4%
10	Municipal Street Lighting	41	2,825,017	-	-	2,078,765	2,078,765	73.6%
11	Traffic Control Lighting	42	433,379	72,432	22,281	248,391	343,103	79.2%
12	Special Contracts	26, 29, & 30	63,231,509	24,687,354	6,257,439	1,587,849	32,532,642	51.5%
13	Total FCA Tariff Schedules		1,404,314,821				935,974,660	

**IDAHO POWER COMPANY**  
**Development of Fixed Cost Adjustment Rate**  
**2023 Test Year**  
**Table II**  
**Identification of Interclass Revenue Subsidy**  
**Based Upon GRC Filing - IPC-E-23-11 - Filed June 01, 2023**

			A	B	C	D	E	F	G
Line		Schedule	Proposed	COS		Revenue		Fixed Cost	Fixed Cost
No.	Uniform Tariff Schedules	No.	Base Rate	Revenue	Difference	Short-Fall	Revenue	% of	Portion of Rev.
			Revenue	Requirement		Identifier	Short-Fall	Total Cost	Short-Fall
				Table I, Col. A	A - B			Table I, Col. F	E x F
1	Residential Service	1, 3 & 5	635,369,891	625,504,833	9,865,057				
2	Residential Service - On Site Gen	6	14,723,374	19,752,112	(5,028,738)	X	(5,028,738)	75.0%	(3,773,869)
3	Small General Service	7	20,053,424	20,117,882	(64,458)	X	(64,458)	78.0%	(50,264)
4	Small General Service - On Site Gen	8	55,219	101,442	(46,223)	X	(46,223)	80.9%	(37,407)
5	Large General Service	9	316,304,706	313,157,436	3,147,270				
6	Dusk/Dawn Lighting	15	1,327,038	737,644	589,394				
7	Large Power Service	19	164,068,656	162,848,079	1,220,576				
8	Irrigation Service	24	183,423,605	194,263,258	(10,839,653)	X	(10,839,653)	71.6%	(7,761,571)
9	Unmetered Service	40	1,352,288	1,342,227	10,060				
10	Municipal Street Lighting	41	3,750,417	2,825,017	925,400				
11	Traffic Control Lighting	42	224,972	433,379	(208,407)	X	(208,407)	79.2%	(164,995)
12	Special Contracts	26, 29, & 30	63,661,231	63,231,509	429,722				
13	Total Uniform Tariff Schedules		1,404,314,821	1,404,314,821	0		(16,187,479)		(11,788,106)

<b>Weighted Average Fixed Cost % of Short-Fall <sup>a</sup></b>
<b>72.8%</b>

**Notes:**

(a) The "Weighted Average Fixed Cost % of Short-Fall" is calculated by dividing the total "Fixed Cost Portion of Rev. Short-Fall" (Col. G) by the total "Revenue Short-Fall" (Col. E)

**IDAHO POWER COMPANY**  
**Development of Fixed Cost Adjustment Rate**  
**2023 Test Year**

**Table III**  
**Derivation of Fixed Cost per Customer and Fixed Cost per Energy Rates**  
**Based Upon GRC Filing - IPC-E-23-11 - Filed June 01, 2023**

Line No.	Uniform Tariff Schedules	Schedule No.	A	B	C	D	E	F
			2023 Avg. Number of Customers	2023 Sales Normalized (kWh)	COS Fixed Cost	COS Variable Cost	Share of Revenue Short-Fall/Subsidy	Total Base Rate Revenue
					Table I, Col. E	Table I, Col. A - Col. C	Table II, Col. C	C+D+E
1	Residential Service	1, 3 & 5	492,481	5,425,559,433	451,047,677	174,457,157	9,865,057	635,369,891
2	Residential Service - On Site Gen	6	13,288	122,912,496	14,823,178	4,928,934	(5,028,738)	14,723,374
3	Small General Service	7	30,401	138,285,160	15,687,835	4,430,047	(64,458)	20,053,424
4	Small General Service - On Site Gen	8	88	370,708	82,095	19,347	(46,223)	55,219

Line No.	Uniform Tariff Schedules	Schedule No.	G	H	I	J	K	L
			COS Fixed Cost Revenue from Fixed Charges	COS Fixed Cost Revenue from Energy Charges	Fixed Cost Share of Revenue Short-Fall/Subsidy	Total Fixed Cost Revenue from Energy Charges	Calculation of FCC (\$/Cust./Yr.)	Calculation of FCE (\$/kWh)
					C-G	E x 72.8	H + I	J ÷ A
1 (Cont.)	Residential Service	1, 3 & 5*	91,198,683	359,848,994	7,183,968	367,032,962	<b>\$ 745.27</b>	<b>\$ 0.067649</b>
2 (Cont.)	Residential Service - On Site Gen	6	2,445,141	12,378,037	(3,662,046)	8,715,991	<b>\$ 655.94</b>	<b>\$ 0.070912</b>
3 (Cont.)	Small General Service	7	7,374,576	8,313,259	(46,940)	8,266,319	<b>\$ 271.91</b>	<b>\$ 0.059777</b>
4 (Cont.)	Small General Service - On Site Gen	8	21,216	60,879	(33,661)	27,218	<b>\$ 311.07</b>	<b>\$ 0.073423</b>

\* FCE not applicable to Residential I05; see I05 FCE determination

**IDAHO POWER COMPANY**  
**Development of Fixed Cost Adjustment Rate**  
**2023 Test Year**  
**Derivation of Fixed Cost per Customer and Fixed Cost per Energy Rates**  
**Based Upon GRC Filing - IPC-E-23-11 - Filed June 01, 2023**

		A	B	C	D	E	F
		2023	2023 Sales			Distribution and	
		Avg. Number of	Normalized	Generation	Transmission	Customer	Total
		Customers	(kWh)	Fixed Costs	Fixed Costs	Fixed Costs	Fixed Costs
Uniform Tariff Schedules		Schedule No.					C + D + E
1	Residential Service	1, 3 & 5	492,481	5,425,559,433	191,167,686	46,602,187	213,277,804
2	Residential Service Fixed Cost Proportions	1, 3 & 5			42.4%	10.3%	47.3%
3	Residential On-Site Gen Service	6	13,288	122,912,496	5,331,189	1,435,880	8,056,109
4	Residential On-Site Gen Service Fixed Cost Proportions	6			36.0%	9.7%	54.3%
5	Small General Service	7	30,401	138,285,160	4,025,369	998,664	10,663,801
6	Small General Service Fixed Cost Proportions	7			25.7%	6.4%	68.0%
7	Small General Service On-Site Gen	8	88	370,708	19,596	5,628	56,871
8	Small General Service On-Site Gen Fixed Cost Proportions	8			23.9%	6.9%	69.3%

		G	H	I	J	K	L
		Fixed Cost	Distribution	COS Fixed Cost	Total Fixed Cost	Calculation of	Calculation of
		Share of Revenue	Share of	Revenue from	Revenue from	FCC - Dist	FCE - Dist
		Short-Fall/Subsidy	Short-Fall/Subsidy	Fixed Charges	Energy Charges	(\$/Cust./Yr.)	(\$/kWh)
Uniform Tariff Schedules		Schedule No.	(Proportion E) x G		E + H + I	J ÷ A	J ÷ B
1 (Cont.)	Residential Service	1, 3 & 5*	7,183,968	3,396,938	91,198,683	125,476,059	\$ 254.78 \$ 0.023127
3 (Cont.)	Residential On-Site Gen Service	6	(3,662,046)	(1,990,251)	2,445,141	3,620,717	\$ 272.49 \$ 0.029458
5 (Cont.)	Small General Service	7	(46,940)	(31,907)	7,374,576	3,257,318	\$ 107.15 \$ 0.023555
7 (Cont.)	Small General Service On-Site Gen	8	(33,661)	(23,318)	21,216	12,337	\$ 140.99 \$ 0.033278

\* FCE not applicable to Residential I05; see I05 FCE determination

**IDAHO POWER COMPANY**  
**Development of Fixed Cost Adjustment Rate**  
**2023 Test Year**  
**Derivation of Fixed Cost per Energy Rates - Schedule 5**  
**Based Upon GRC Filing - IPC-E-23-11 - Filed June 01, 2023**

	Existing <u>January 1, 2024</u>	New Customer <u>January 1, 2024</u>
Avg Customers	986.31	986.31
FCC	\$ 745.27	\$ 254.78
Total Fixed Cost Recovery	\$ 735,070	\$ 251,291.64
 FCE	 \$ 0.067649	 \$ 0.023127
Total kWh	16,947,350	16,947,350
Fixed Cost Recovery in Energy	\$ 1,146,469	\$ 391,941
 <b>Revenue Collection</b>		
Service Charge	\$177,623	\$ 177,623
 Summer Energy	 \$ 587,925	 \$ 587,925
Non-Summer Energy	\$ 1,138,777	\$ 1,138,777
Total Energy Collection	\$ 1,726,702	\$ 1,726,702
 Total Revenue	 \$ 1,904,324	 \$ 1,904,324
 Energy in Energy	 \$ 580,233	 \$ 1,334,761
 Summer Share Energy in Energy	 \$ 178,320.66	 \$ 410,206.69
SONP Energy in Energy Rate	\$ 0.084817	\$ 0.195113
SOFP Energy in Energy Rate	\$ 0.021204	\$ 0.048778
 <i>Check</i>	 <i>\$ 178,320.66</i>	 <i>\$ 410,206.69</i>
 Non-Summer Energy in Energy	 \$ 401,912.16	 \$ 924,553.86
NSONP Energy in Energy Rate	\$ 0.047556	\$ 0.109397
NSOFP Energy in Energy Rate	\$ 0.031704	\$ 0.072931
 <i>Check</i>	 <i>\$ 401,912.16</i>	 <i>\$ 924,553.86</i>
 SONP Rate	 \$ 0.279642	 \$ 0.279642
SOFP Rate	\$ 0.069911	\$ 0.069911
NSONP Rate	\$ 0.134745	\$ 0.134745
NSOFP Rate	\$ 0.089830	\$ 0.089830
 SONP FCE Rate	 \$ 0.194825	 \$ 0.084529
SOFP FCE Rate	\$ 0.048707	\$ 0.021133
NSONP FCE Rate	\$ 0.087189	\$ 0.025348
NSOFP FCE Rate	\$ 0.058126	\$ 0.016899

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI**  
**TESTIMONY**

**EXHIBIT NO. 51**

**Idaho Power Company**  
**State of Idaho**  
**Calculation of Proposed Rates**  
**Filed June 1, 2023**  
**IPC-E-23-11**

**Micron**  
**Schedule 26**

<b>Line No.</b>	<b>Description</b>	<b>Test Year Billing Units</b>	<b>Current Base Rate</b>	<b>Test Year Base Revenue</b>	<b>Proposed Effective Rate</b>	<b>Proposed Effective Revenue</b>	<b>Revenue Difference</b>	<b>Percent Change</b>
1	Contract Demand (\$/kW)	918,000	\$ 1.67	\$ 1,533,060	\$ 3.11	\$ 2,854,980	\$ 1,321,920	86.23%
2	Billed kW (\$/kW)	1,017,744	\$ 10.98	11,174,829	\$ 18.12	18,441,469	7,266,639	65.03%
3	Excess Demand kW (\$/kW)	-	\$ 0.291	-	\$ 1.244	-	-	0.00%
4	Embedded Energy Fixed Cost Charge (\$/kWh)	101,867,460	\$ 0.002632	268,115	\$ -	-	(268,115)	-100.00%
5	Billed kWh (\$/kWh)	591,344,540	\$ 0.028150	16,646,349	\$ 0.030782	18,202,511	1,556,162	9.35%
6	<u>Transfer Adjustment</u>			<u>6,969,186</u>		<u>-</u>		
7	Subtotal			\$ 36,591,539		\$ 39,498,960	\$ 2,907,421	7.95%



Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11

Simplot  
Schedule 29

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue	Revenue Difference	Percent Change
1	Contract Demand (\$/kW)	300,000	\$ 2.31	\$ 693,000	\$ 3.11	\$ 933,000	\$ 240,000	34.63%
1	Billed kW (\$/kW)	267,258	\$ 7.88	2,105,993	\$ 13.43	3,589,135	1,483,142	70.42%
2	Excess Demand kW (\$/kW)	-	\$ 0.292	-	\$ 1.244	-	-	
3	Billed kWh (\$/kWh)	175,000,001	\$ 0.028345	4,960,375	\$ 0.030266	5,296,530	336,155	6.78%
4	<u>Transfer Adjustment</u>			<u>2,059,297</u>		<u>-</u>	<u>(2,059,297)</u>	
5	Subtotal			\$ 9,818,665		\$ 9,818,665	\$ -	0.00%

**Idaho Power Company**  
**State of Idaho**  
**Calculation of Proposed Rates**  
**Filed June 1, 2023**  
**IPC-E-23-11**

**Department of Energy**  
**Schedule 30**

<b>Line No.</b>	<b>Description</b>	<b>Test Year Billing Units</b>	<b>Current Base Rate</b>	<b>Test Year Base Revenue</b>	<b>Proposed Effective Rate</b>	<b>Proposed Effective Revenue</b>	<b>Revenue Difference</b>	<b>Percent Change</b>
1	Contract Demand (\$/kW)	-	\$ -	\$ -	\$ -	\$ -	\$ -	
2	Billed kW (\$/kW)	422,686	\$ 8.50	3,592,831	\$ 16.90	7,143,781	3,550,950	98.83%
3	Excess Demand kW (\$/kW)	-	\$ -	-	\$ -	-	-	
4	Billed kWh (\$/kWh)	234,100,000	\$ 0.029709	6,954,877	\$ 0.030755	7,199,826	244,949	3.52%
5	<u>Transfer Adjustment</u>			<u>2,755,273</u>		<u>-</u>	<u>(2,755,273)</u>	
6	Subtotal			\$ 13,302,981		\$ 14,343,607	\$ 1,040,626	7.82%

Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11

Simplot Caldwell  
Schedule 32

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue	Revenue Difference	Percent Change
1	Summer Contract Demand (\$/kW)	88,000	\$ 1.78	\$ 156,640	\$ 3.11	\$ 273,680	\$ 117,040	74.72%
2	Non-Summer Contract Demand (\$/kW)	156,000	\$ 1.78	\$ 277,680	\$ 3.11	\$ 485,160	\$ 207,480	74.72%
3	Summer Billed kW (\$/kW)	87,371	\$ 14.87	1,299,213	\$ 19.71	1,721,983	\$ 422,770	32.54%
4	Non-Summer Billed kW (\$/kW)	153,465	\$ 8.65	1,327,469	\$ 16.32	2,504,297	\$ 1,176,827	88.65%
5	Summer Excess Demand kW (\$/kW)	-	\$ 0.298	-	\$ 1.244	-	\$ -	
6	Non-Summer Excess Demand kW (\$/kW)	-	\$ 0.298	-	\$ 1.244	-	\$ -	
7	Summer Energy Charge (\$/kWh)	56,000,000	\$ 0.031252	1,750,112	\$ 0.029262	1,638,653	\$ (111,459)	-6.37%
8	Non-Summer Energy Charge (\$/kWh)	106,000,000	\$ 0.030664	3,250,384	\$ 0.031591	3,348,649	\$ 98,265	3.02%
9	<u>Transfer Adjustment</u>			1,904,406		-	\$ (1,904,406)	
10	Subtotal			\$ 9,965,904		\$ 9,972,422	\$ 6,518	0.07%

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Lamb Weston - Block 2 Billing Demand  
Schedule 34**

<b>Line No.</b>		
1	Annual Cost (\$)	\$ 12,100,144
2	Proposed 19P Revenue	\$ (8,867,527)
3	Remaining Cost for Block 2 capacity	\$ 3,232,617
4	Contract Demand (\$/kW)	\$3.11
5	Contract Demand Billing Determinant (kW)	144,000
6	less Contract Demand recovery	\$ (447,840)
7	Block 2 Billed Demand Capacity Cost	\$ 2,784,777
8	Block 2 Demand Billing Determinant (kW)	117,000
9	<b>Billed Demand Charge (\$/kW)</b>	<b>\$ 23.80</b>

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Brisbie - Block 2 Billing Demand  
Schedule 33**

<b>Line No.</b>			
1	Annual Cost (\$)	\$	9,603,080
2	Proposed 19T Revenue	\$	(6,580,994)
3	Remaining Cost for Block 2 capacity	\$	3,022,087
4	Contract Demand (\$/kW)		(\$3.11)
5	Contract Demand Billing Determinant (kW)		120,000
6	less Contract Demand recovery	\$	(373,200)
7	Block 2 Billed Demand Capacity Cost	\$	2,648,887
8	Block 2 Demand Billing Determinant (kW)		120,000
9	<b>Billed Demand Charge (\$/kW)</b>	<b>\$</b>	<b>22.07</b>

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Derivation of Contract Demand Charge**

**OATT + Ancillary Services**

SOURCE

OATT Transmission Demand Charge	2.6183 \$/kw month	August 26, 2022 OATT Final Informational Filing (FERC) for rates effective Oct 1, 2022 thru Sept 30, 2023
Ancillary Services		
Scheduling System Control & Dispatch	0	OATT Schedule 1 (Included in Transmission Demand Charge)
Reactive Supply & Voltage Control	0	OATT Schedule 2 (Included in Transmission Demand Charge)
Regulation and Frequency Response	0.0980 \$/kw month	OATT Schedule 3 (\$6.53 x 1.5%)
Operating Reserve - Spinning	0.1959 \$/kw month	OATT Schedule 5 (\$6.53 x (1.5% + 1.5%))
Operating Reserve - Supplemental	<u>0.1959</u> \$/kw month	OATT Schedule 6 (\$6.53 x (1.5% + 1.5%))

<b>TOTAL</b>	<b>3.11 \$/kw month</b>
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OATT Transmission Demand Charge - Firm Point-To-Point Transmission Services Provided Under Schedule 7:

[https://www.oasis.oati.com/woa/docs/PCO/PCOdocs/Effective\\_Rate\\_2022-08-26.xlsx](https://www.oasis.oati.com/woa/docs/PCO/PCOdocs/Effective_Rate_2022-08-26.xlsx)

Schedule 3, 5, 6:

[https://www.oasis.oati.com/woa/docs/PCO/PCOdocs/IPC\\_OATT\\_Issued\\_2023-01-27.pdf](https://www.oasis.oati.com/woa/docs/PCO/PCOdocs/IPC_OATT_Issued_2023-01-27.pdf)

**Idaho Power Company**  
**State of Idaho**  
**Calculation of Proposed Rates**  
**Filed June 1, 2023**  
**IPC-E-23-11**

**Derivation of Daily Excess Demand Charge**

<u>CONTRACT DEMAND CHARGE</u>		\$3.11	
Contract Demand --->	10,000	1,000	<--- Incremental MW above Contract Demand
		1	<--- Number of months for recovery
	Contract Demand Revenue		
	<u>(Contract MW)</u>	<u>(Incremental MW)</u>	
Contract Demand Revenue	\$373,200	\$410,520	
	Difference	\$37,320	\$1.244
<b>DAILY EXCESS DEMAND CHARGE</b>			<b>\$1.244</b>

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**GORALSKI, DI  
TESTIMONY**

**EXHIBIT NO. 52**



## **Memorandum**

Date: 2/16/2023

From: Yao Yin, Utilities Analyst, Idaho Public Utilities Commission

To: Connie Aschenbrenner, Idaho Power Company

Subject: Investigation in Methods to determine Marginal Cost of Energy for Schedule 20.

### **Background**

Order No. 35428 directed Idaho Power to evaluate and compare other methods for determining a marginal cost of energy in addition to the use of Avoided Cost Averages in the Integrated Resource Plan for setting the Schedule 20 energy rate, before the next general rate case is developed and filed.

On January 31, 2013, Idaho Power met with Staff and discussed potential methods for determining marginal cost of energy for the Schedule 20 energy rate and possibly for other customers using marginal cost of energy for their energy rates. As a result of the meeting, Staff agreed to develop some criteria for the Company to consider for developing a method.

### **Criteria**

Although this list may not be exhaustive, Staff identified the following criteria that could be used for determining the final method:

- The resources used in a model for determining marginal cost should be based on the resources that are highly likely to exist during the rate period.
- The amount of incremental load used to determine the marginal cost rate should reflect the amount of incremental load for the portion of load that will be priced at marginal cost.
- The marginal cost rates should have enough granularity to reflect time difference (e.g. seasonality, time of day) value of Marginal Cost within the Company's system to provide accurate price signals.
- If the marginal cost rates are based on a forecast, due to the lack of Marginal Costs being true-up in the PCA, they should be updated often enough that they reflect current conditions or find a way to true up the marginal cost to actual marginal cost.
- If market costs are used, cost of transmission transaction and wheeling costs should be included.

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION    )  
OF IDAHO POWER COMPANY FOR         ) CASE NO. IPC-E-23-11  
AUTHORITY TO INCREASE ITS RATES    )  
AND CHARGES FOR ELECTRIC SERVICE    )  
IN THE STATE OF IDAHO AND FOR       )  
ASSOCIATED REGULATORY ACCOUNTING   )  
TREATMENT.                            )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

GRANT T. ANDERSON

1           Q.     Please state your name, business address, and  
2     present position with Idaho Power Company ("Idaho Power" or  
3     "Company").

4           A.     My name is Grant T. Anderson. My business  
5     address is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6     employed by Idaho Power as a Regulatory Consultant in the  
7     Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     In May of 2013, I received a Bachelor of Science  
10    degree in Microbiology from Oregon State University. In May of  
11    2015, I earned a Master of Business Administration degree from  
12    Boise State University. In addition, I have attended the  
13    electric utility ratemaking course The Basics: Practical  
14    Regulatory Training for the Electric Industry, a course  
15    offered through New Mexico State University's Center for  
16    Public Utilities.

17          Q.     Please describe your work experience with Idaho  
18    Power.

19          A.     In 2018, I was hired as a Regulatory Analyst in  
20    the Company's Regulatory Affairs Department. My primary  
21    responsibilities as a Regulatory Analyst included supporting  
22    the Company's Commercial and Industrial customer classes' rate  
23    design and general support of tariff rules and regulations. In  
24    2021, I was promoted to my current position as a Regulatory  
25    Consultant. My responsibilities expanded to include the

1 development of complex cost-related studies and support of the  
2 Company's Residential and Small General Service ("R&SGS") and  
3 on-site generation customer classes' rate design.

4 Q. What is the purpose of your testimony in this  
5 matter?

6 A. My testimony will address the Company's rate  
7 design proposals for residential, on-site generation, large  
8 commercial, and industrial customers.

9 Q. How is your testimony organized?

10 A. My testimony is organized as follows:

- 11 • First, I describe the Company's proposed rate changes for  
12 residential service under Schedule 1, Residential Service  
13 Standard Plan ("Schedule 1"), Schedule 3, Master-Metered  
14 Mobile Home Park Residential Service ("Schedule 3"), and  
15 Schedule 5, Residential Service Time-of-Use ("Schedule  
16 5").
- 17 • Second, I describe the Company's proposed Residential  
18 Price Modernization Plan for all residential service  
19 customers.
- 20 • Third, I describe the Company's proposed rate changes for  
21 on-site generation under Schedule 6, Residential Service  
22 On-Site Generation ("Schedule 6") and Schedule 8, Small  
23 General Service On-Site Generation ("Schedule 8").
- 24 • Fourth, I describe the Company's proposed rate changes for  
25 large commercial customers taking primary and transmission

1 service under Schedule 9, Large General Service ("Schedule  
2 9") and for industrial customers taking service under  
3 Schedule 19, Large Power Service ("Schedule 19").

4 • Lastly, I will address updates to Schedule 68,  
5 Interconnections to Customer Distributed Energy Resources  
6 ("Schedule 68").

7 Q. Are you sponsoring any exhibits?

8 A. Yes. I am sponsoring the following exhibits:

9	<u>Exhibit</u>	<u>Description</u>
10	Exhibit No. 53	Calculation of Proposed Rates
11	Exhibit No. 54	Typical Monthly Billing Comparison
12	Exhibit No. 55	Residential Price Modernization Plan
13	Exhibit No. 56	Schedule 6/8 Non-Legacy Bill Comparison

14 I. **RESIDENTIAL RATE DESIGN**

15 Q. What are the Company's residential service  
16 schedules?

17 A. Idaho Power has four residential service  
18 schedules, Schedules 1, 3, 5, and 6. Schedule 1 is available  
19 to all customers taking service for general domestic use.  
20 Schedule 3 is available only to master-metered mobile home  
21 parks included on the Company's list of "grandfathered" mobile  
22 home parks. Schedule 5 is an optional, time-of-use pricing  
23 program with an on-peak and off-peak time-of-use period.  
24 Schedule 6 is an optional net metering service that I will  
25 more fully describe later in my testimony.

1           Q.       What is the annual revenue requirement to be  
2 recovered from residential service customers?

3           A.       The annual revenue requirement to be recovered  
4 from residential service customers, which includes Schedules  
5 1, 3, 5, and 6, is \$650,093,265, as shown on page 5 of Company  
6 Witness Mr. Paul Goralski's Exhibit No. 48, representing a  
7 12.25 percent increase.

8           Q.       What are the changes the Company is proposing to  
9 the current rate design for residential service?

10          A.       For the residential service schedules, the  
11 Company is proposing to adjust each of the billing components  
12 to move closer to its cost of service. This includes a  
13 proposal to initially increase the Service Charge from the  
14 existing \$5.00 per month to \$15.00 for all residential  
15 schedules. Also, for Schedule 5, the Company is proposing  
16 modifications to the definitions of on- and off-peak to better  
17 align with the Company's hours of highest risk as informed by  
18 its Integrated Resource Plan ("IRP") as described in more  
19 detail in the Direct Testimony of Company Witness Ms. Connie  
20 Aschenbrenner.

21          Q.       Where does the Company show a comparison of the  
22 present and proposed rates within each of the Company's  
23 service schedules?

24          A.       Pages 1-5 of Exhibit No. 53 shows a comparison  
25 of the present and proposed rates for each of the residential

1 service schedules, which I will describe later in my  
2 testimony.

3 **A. Schedule 1, Residential Service Standard Plan**

4 Q. Could you please describe the present rate  
5 structure under Schedule 1 for residential service?

6 A. Yes. Residential service under Schedule 1 has a  
7 present Service Charge of \$5.00 per month and seasonal  
8 inclining block tiered rates where the price of energy is  
9 higher when a customer uses more than a given threshold during  
10 a monthly billing period. Table 1 provides a summary of the  
11 present base tariff rates under Schedule 1.

12 **Table 1**  
13 Schedule 1 Residential Energy Rates - Present

	<u>Summer</u>	<u>Non-Summer</u>
<b>Energy Charge, per kWh</b>		
First 800 kWh	8.6518 ¢	8.0390 ¢
<b>801-2,000 kWh</b>	<b>10.4033 ¢</b>	<b>8.8627 ¢</b>
All Additional kWh Over 2,000	12.3585 ¢	9.8154 ¢

14  
15 Q. How does the Company propose to spread the  
16 proposed revenue increase for Schedule 1 to the rates within  
17 that schedule?

18 A. The Company proposes to increase the Energy  
19 Charges - while slightly decreasing the price differential  
20 between the three energy blocks - and increase the Service  
21 Charge from \$5.00 per month to \$15.00 per month. The proposed  
22 Energy Charges are summarized below in Table 2. I will discuss

1 the justification and rationale for the increase in the  
2 Service Charge later in my testimony.

3 **Table 2**

4 Schedule 1 Residential Energy Rates - Proposed

	<u>Summer</u>	<u>Non-Summer</u>
<b>Energy Charge, per kWh</b>		
First 800 kWh	10.2985 ¢	9.3050 ¢
<b>801-2,000 kWh</b>	<b>11.7937 ¢</b>	<b>10.0034 ¢</b>
All Additional kWh Over 2,000	13.9291 ¢	10.7014 ¢

5

6 Q. How will the proposal impact a residential  
7 customer with average consumption?

8 A. Inclusive of the increase to the Service Charge,  
9 the proposed bill changes for a customer on Schedule 1 using  
10 an average of 950 kilowatt hours ("kWh") per month is \$12.26  
11 per month, or a 12.8 percent change in their electric bill.  
12 The present average monthly bill for 950 kWh is \$95.73, and  
13 that would increase to \$107.99. Page 1 of Exhibit No. 54 shows  
14 the bill comparison table for the bill change across different  
15 average monthly usage levels. The largest increase across the  
16 different usage levels shown is a \$17.98 per month increase,  
17 or a 3.2 percent change in their electric bill, for a customer  
18 using 5,000 kWh.

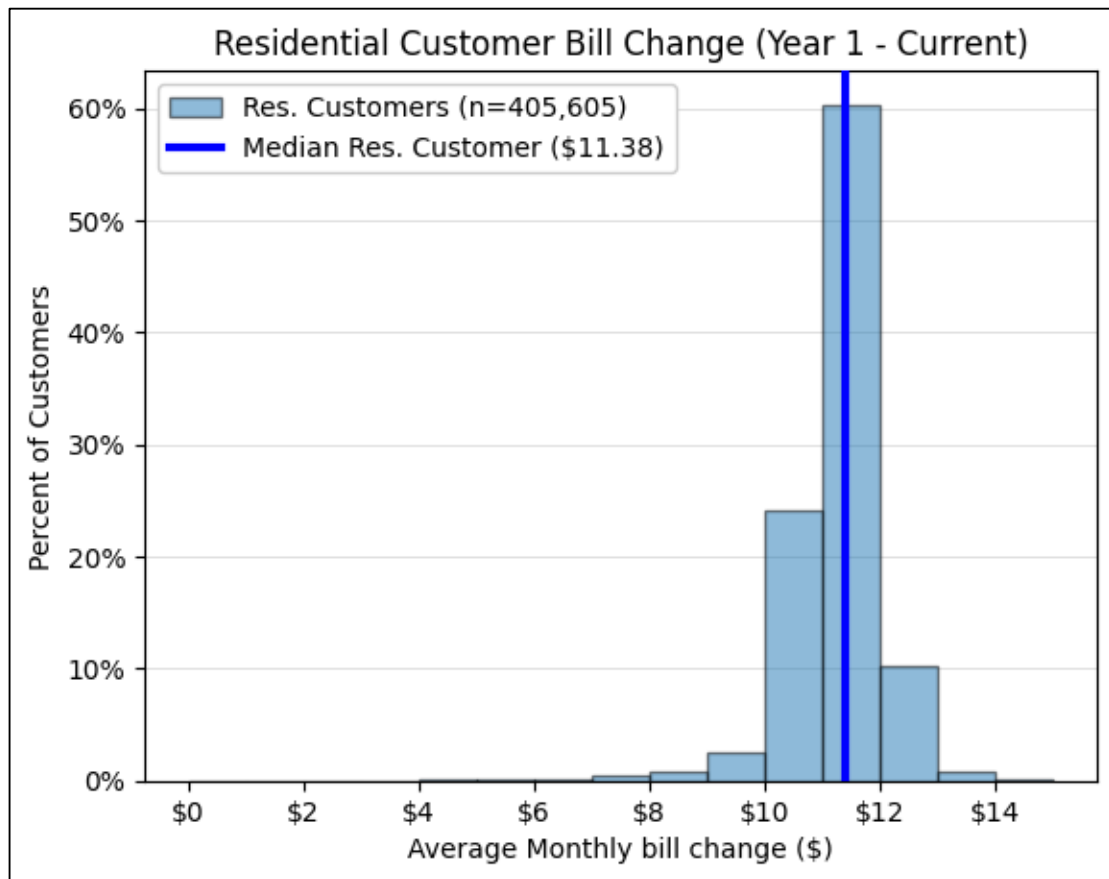
19 Q. Did the Company evaluate the distribution of  
20 customer bill impacts for residential customers?

21 A. Yes. Figure 1 shows the distribution of Schedule  
22 1 bill impacts reflective of the overall increase in revenue  
23 from the residential class of 12.25 percent and a \$15.00



1 Service Charge. The median average monthly bill increase in  
2 the first year of the transition is \$11.38. Based on  
3 historical 2022 energy consumption, 89 percent of residential  
4 customers would have an average monthly bill increase of \$12  
5 or less.

6 **Figure 1**  
7 Residential Price Modernization Bill Impact  
8 Year 1 vs Current

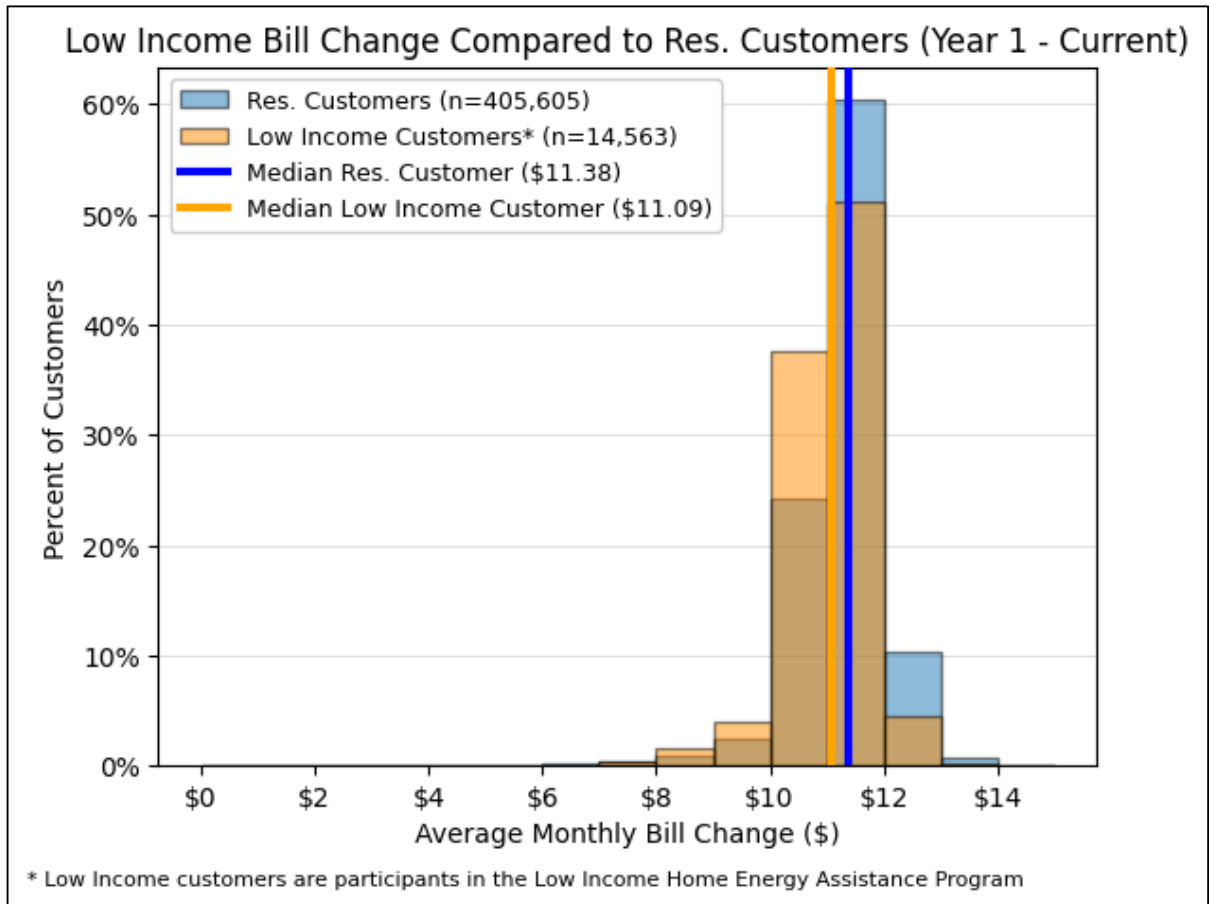


9  
10 Q. Did the Company evaluate the distribution of  
11 customer bill impacts for low-income residential customers?

12 A. Yes. The Company prepared some of the same bill  
13 impact information, but specific to low-income customers.  
14 Because the Company does not track income information for its

1 customers, this impact analysis relied on those customers  
2 identified as having received energy assistance through the  
3 Low-Income Home Energy Assistance Program ("LIHEAP") as a  
4 proxy for a low-income customer segment. Figure 2 shows the  
5 distribution of low-income customer bill impacts reflective of  
6 the overall increase in revenue from the residential class of  
7 12.25 percent and a \$15.00 Service Charge. The median average  
8 monthly bill increase in the first year of the transition is  
9 \$11.09. Approximately 95 percent of the low-income customer  
10 segment shown would have an average monthly bill increase of  
11 \$12 or less as a result of the year one changes requested in  
12 this case.  
13 //

1 **Figure 2**  
 2 Residential Price Modernization Bill Impact - Low Income  
 3 Year 1 vs. Current



4  
 5 As shown in Figure 2, these low-income customers are not  
 6 disproportionately negatively impacted under the Company's  
 7 residential rate design proposal.

8 Q. Does the Company propose any other changes to  
 9 Schedule 1?

10 A. Yes. The Company is proposing additional  
 11 increases to the Service Charge while commensurately  
 12 flattening the inclining block structure in 2025 and 2026. I  
 13 will address this in more detail later in my testimony when  
 14 describing the Company's proposed Residential Price

1 Modernization Plan. These additional proposed changes are  
2 designed to be revenue neutral relative to rates as proposed  
3 for 2024 in this docket.

4 ***B. Schedule 3, Master-Metered Mobile-Home Park Residential***  
5 ***Service***

6 Q. Do you propose any rate design changes for  
7 Schedule 3?

8 A. No. The only change to Schedule 3 is an increase  
9 in the Service Charge from \$5.00 to \$15.00 per month and a  
10 uniform decrease in the Energy Charge to achieve the required  
11 revenue for that schedule. The Company's proposed rate design  
12 for Schedule 3 is shown on page 4 of Exhibit No. 53.

13 ***C. Schedule 5, Residential Service Time-of-Use Plan***

14 Q. Could you please describe the present rate  
15 structure under Schedule 5 for residential service?

16 A. Yes. Residential service under Schedule 5,  
17 currently has an on-peak and off-peak time block in both the  
18 summer and non-summer seasons. In the summer, the on-peak  
19 block is eight hours long and in the non-summer, the on-peak  
20 block is 14 hours long. The off-peak rate is the same for both  
21 summer and non-summer seasons. The summer on-peak rate is  
22 currently 1.7x higher than the off-peak rate, and the non-  
23 summer on-peak rate is 1.3x higher than the off-peak rate.  
24 Table 3 provides a summary of the present base tariff rates  
25 under Schedule 5.

26 //

1 **Table 3**

2 Schedule 5 Residential Time-of-Use Energy Rates - Present

	<u>Summer</u>	<u>Non-Summer</u>
<b>Energy Charge, per kWh</b>		
On-Peak	12.8910 ¢	9.5159 ¢
<b>Off-Peak</b>	<b>7.3899 ¢</b>	<b>7.3899 ¢</b>
<i>On:Off Differential</i>	<i>1.7x</i>	<i>1.3x</i>

3  
4 Q. How does the Company propose to spread the  
5 proposed revenue increase to Schedule 5 rates?

6 A. The Company proposes to shorten the on-peak  
7 periods, increase the price differential between on-peak and  
8 off-peak Energy Charge time blocks, and increase the Service  
9 Charge from \$5.00 per month to \$15.00 per month, consistent  
10 with all other residential service schedules. Table 4  
11 summarizes the proposed Energy Charges.

12 **Table 4**

13 Schedule 5 Residential Time-of-Use Energy Rates - Proposed

	<u>Summer</u>	<u>Non-Summer</u>
<b>Energy Charge, per kWh</b>		
On-Peak	27.9642 ¢	13.4745 ¢
<b>Off-Peak</b>	<b>6.9911 ¢</b>	<b>8.9830 ¢</b>
<i>On:Off Differential</i>	<i>4.0x</i>	<i>1.5x</i>

14  
15 Q. How will the proposal impact a residential time-  
16 of-use customer with average consumption?

17 A. Inclusive of the increase to the Service Charge,  
18 the proposed bill change for a Schedule 5 residential customer  
19 using an average of 1,400 kWh per month is \$17.59 per month,  
20 or a 12.5 percent change in their electric bill. The present  
21 bill for 1,400 kWh is \$140.25 and would increase to \$157.84.

1 Page 3 of Exhibit No. 54 shows the bill comparison table for  
2 the bill change across different average monthly usage levels.  
3 The largest dollar increase across the different usage levels  
4 shown is a \$37.10 per month increase, or 7.6 percent for a  
5 customer using 5,000 kWh per month.

6 This average monthly bill comparison assumes no change  
7 in usage. Presumably, a customer will respond to the price  
8 signal between the new on- and off-peak time-of-use blocks,  
9 resulting in the opportunity to reduce their energy bill.

10 Q. Did the Company evaluate the time-of-use periods  
11 for Schedule 5?

12 A. Yes. As I will describe later in my testimony,  
13 the Company is proposing changes to the definitions of the  
14 time blocks commensurate with increasing the price  
15 differential between on- and off-peak. I will describe the  
16 proposed changes to the time blocks as part of the Company's  
17 Residential Price Modernization Plan.

18 Q. Are you proposing any other changes to Schedule  
19 5?

20 A. Similar to Schedule 1, there are additional  
21 revenue neutral rate changes that I will describe in the  
22 context of the Residential Price Modernization Plan.

23 //

1                   **II.     RESIDENTIAL PRICE MODERNIZATION PLAN**

2     **A.     *Residential Price Modernization Plan Overview***

3                 Q.       What is the Company's Residential Price  
4     Modernization Plan?

5                 A.       The Company proposes a three-year transition  
6     period to modify the structure of its residential rates to  
7     include the following:

- 8         1.     Increase the Service Charge for residential service  
9               under Schedules 1, 3, 5, and 6 to \$35.00 per month and  
10              lower Energy Charges commensurately. If the Company  
11              files a general rate case during the Residential Price  
12              Modernization Plan transition the rates would be updated  
13              to reflect any Commission approved rate changes.
- 14         2.     Eliminate inclining block tiered rates for Schedules 1  
15               and 6, resulting in Energy Charges that are flat for  
16               each season.
- 17         3.     Update the time periods for on- and off-peak periods for  
18               Schedule 5 to better reflect the hours of system risk.

19               Q.       When does the Company propose these changes  
20     occur?

21               A.       The first Service Charge increase is included  
22     with the proposed revenue increase in this proceeding. The  
23     second- and third-year changes would go into effect on January  
24     1, 2025, and January 1, 2026, respectively. As I previously

1 described, the Company proposes to update the on- and off-peak  
2 periods under Schedule 5 effective January 1, 2024.

3 Q. Does the first year of the Residential Price  
4 Modernization Plan include more than just the transitioning?

5 A. Yes. The first year of the Residential Price  
6 Modernization Plan also includes the increase in revenue  
7 requirement. However, the second and third year of the  
8 Residential Price Modernization Plan transition is revenue  
9 neutral relative to the first year and does not increase the  
10 Company's Commission-approved revenue requirement as proposed  
11 in this docket.

12 **B. Fixed Service Charge**

13 Q. What is the Service Charge?

14 A. The Service Charge is a flat fixed amount that a  
15 customer pays every month irrespective of usage.

16 Q. How much is the Service Charge for residential  
17 service?

18 A. For residential service, the Service Charge is  
19 presently \$5.00 per month.

20 Q. What proportion of a residential customer's cost  
21 of service is related to fixed costs?

22 A. On average, the cost of service for a  
23 residential customer is \$105.84 per month, and \$29.52 or about  
24 28 percent of this value is energy related. The remaining  
25 \$76.32 or about 72 percent is fixed and not energy related.



1           Q.     What proportion of revenues from residential  
2 customers is recovered through the fixed Service Charge?

3           A.     For Schedule 1, only about five percent of  
4 revenue is collected through the Service Charge. For Schedule  
5 5, only about three percent of revenue is collected through  
6 the Service Charge.

7           Q.     What Service Charge does the Company propose for  
8 the end of the three-year transition?

9           A.     The Company proposes the Service Charge be set  
10 at \$35.00 for all residential service schedules.

11          Q.     Why is the Company proposing the same Service  
12 Charge for both Schedule 1 and Schedule 5?

13          A.     Schedule 5 is an optional rate schedule that  
14 residential customers can choose to take service under. The  
15 Company would like residential customers to opt-in to time-of-  
16 use residential service because they want the opportunity to  
17 save money by shifting usage to off-peak periods - not because  
18 a Service Charge benefits them under a particular residential  
19 service offering. Therefore, having the same Service Charge  
20 for both Schedule 1 and Schedule 5 would prevent customers  
21 from choosing one schedule or the other based upon the dynamic  
22 between the fixed and volumetric charges.

23          Q.     How does \$35.00 per month compare to the fixed  
24 service or customer charge for other electric utilities in  
25 Idaho?

A. At \$35.00 per month, the Company's residential Service Charge would be within the range of the fixed monthly rates that other Idaho electric utilities charge for residential customers. Table 5 below shows the fixed monthly residential charges for all Idaho electric utilities with more than 1,000 customers.

**Table 5**

Fixed Monthly Residential Charges for Idaho Electric Utilities with More Than 1,000 Customers

<b>Utility</b>	<b>Price</b>
Avista	\$ 7.00
<b>City of Idaho Falls</b>	<b>20.00</b>
Fall River Rural Electric Cooperative	39.00
<b>Inland Power &amp; Light Company</b>	<b>26.55</b>
Kootenai Electric Cooperative	32.50
<b>Lower Valley Energy</b>	<b>16.00</b>
Northern Lights	30.00
<b>Raft Rural Electric Cooperative</b>	<b>22.50</b>
Rocky Mountain Power	8.00
<b>Salmon River Electric Cooperative</b>	<b>43.00</b>
United Electric Cooperative	22.00
<b>Average</b>	<b>\$ 24.23</b>
<b><i>Note: All fixed monthly charges available from each utility's website as of May 22, 2023.</i></b>	

Avista and Rocky Mountain Power have proposed similar changes to their fixed residential charges in current dockets. If both were approved as filed, the final year of their respective

1 transition periods would increase the average fixed monthly  
2 residential charge in Table 5 from \$24.23 to \$28.32.<sup>1</sup>

3 **C. Tiered Energy Charges**

4 Q. How do the Company's current tiered energy  
5 charges work for Schedule 1?

6 A. Schedule 1 customers are subject to seasonal  
7 inclining block tiered rates where the price of energy is  
8 higher when a customer uses more than a given threshold during  
9 a monthly billing period. Additionally, energy charges vary in  
10 price by season, with higher energy pricing in the summer  
11 season of June through August and lower pricing in the non-  
12 summer season of September through May.

13 **D. Time-of-Use**

14 Q. What are the current time-of-use periods for  
15 Schedule 5 and what changes does the Company propose?

16 A. Currently, the on-peak period for Schedule 5 is  
17 weekdays from 1 p.m. to 9 p.m. during summer months and from 7  
18 a.m. to 9 p.m. during non-summer months excluding holidays.  
19 The off-peak period is during all other hours. The summer  
20 season is defined as June through August and the non-summer  
21 season is defined as September through May.

---

<sup>1</sup> In the Matter of the Application of Avista Corporation for the Authority to Increase its Rates and Charges for Electric Natural Gas Customers in the State of Idaho, Case Nos. AVU-E-23-01 and AVU-G-23-01, Miller Direct at 27(proposing Schedule 1 basic charge increasing from \$7 to \$35 over 5 years). In the Matter of the Application of Rocky Mountain Power for Authority to Implement the Residential Rate Modernization Plan, Case No. PAC-E-22-15, Meredith Direct at 2-3 (proposing basic charge increasing from \$9 to \$29.25 over 5 years).

1           As described in the Direct Testimony of Ms.  
2   Aschenbrenner, the Company is proposing the time-of-use  
3   definitions for applicable rate classes be updated to better  
4   align with hours of highest risk as informed by Idaho Power's  
5   IRP. Specifically for Schedule 5, the on-peak period proposed  
6   is Monday to Saturday from 7 p.m. to 11 p.m. during the summer  
7   months. During the non-summer months the on-peak period would  
8   be Monday to Saturday from 7 a.m. to 9 a.m. and 6 p.m. to 9  
9   p.m.

10           The Company is also proposing to modify the summer  
11   season for all rate classes to June through September, which  
12   is described in more detail in the Direct Testimony of Ms.  
13   Aschenbrenner.

14           Q.     What are the current price differentials between  
15   on- and off-peak?

16           A.     The current summer on-peak rate is 12.8910 cents  
17   per kWh and the off-peak rate is 7.3899 cents per kWh,  
18   resulting in a 1.7x differential between on- and off-peak. The  
19   current non-summer on-peak rate is 9.5159 cents per kWh,  
20   resulting in a 1.3x differential between on- and off-peak.

21           Q.     What price differentials is the Company  
22   proposing in its Residential Price Modernization Plan?

23           A.     The Company is proposing an on-peak to off-peak  
24   price ratio of 4.0x for the summer and 1.5x for the non-  
25   summer.

1           Q.       How did the Company develop its recommended  
2 pricing structure for residential time-of-use?

3           A.       Ms. Aschenbrenner directed me to develop an  
4 offering in a manner that would be most effective at promoting  
5 a response to the price signal. From evaluating industry  
6 trends I found a common theme: as the price ratio increases,  
7 customers shift usage in greater amounts, but at a declining  
8 rate. A database of customer response to time-varying rates  
9 conducted by Brattle<sup>2</sup> shows a relationship between price  
10 response and price ratio where a 4.0x peak to off-peak price  
11 ratio could provide a peak impact of approximately 10 percent.  
12 For the non-summer season, the Company selected a 1.5  
13 differential to only moderately increase the existing  
14 differential to send a price signal to customers during the  
15 more narrowly defined hours of highest system risk during the  
16 non-summer season. I believe this design will elicit customer  
17 adoption, incentivize customers to shift load outside of the  
18 highest risk hours, and provide customers an opportunity to  
19 reduce their electric bills.

20 ***E.   Rate Design Calculations***

21           Q.       What prices does the Company propose for the  
22 three-year Residential Price Modernization Plan?

---

<sup>2</sup> The Brattle Group, *Arcturus 2.0: A Meta-analysis of Time-varying Rates for Electricity*, *The Electricity Journal*, vol. 30, issue 10 (Dec. 2017).

1           A.       Exhibit No. 55 shows the proposed prices,  
2   billing determinants, and anticipated revenue for the  
3   Residential Price Modernization Plan. It is important to note,  
4   the anticipated residential revenue for each year of the  
5   transition does not increase in years two or three of the  
6   plan. Rather, in each successive year of the transition  
7   period, the revenue from the Service Charge increases and  
8   revenue from the Energy Charge decreases commensurately, which  
9   ensures a revenue neutral proposal. Additionally, for  
10   Schedules 1 and 6, the differences between the three energy  
11   blocks are eliminated by the final transition year. Table 6  
12   summarizes the proposed prices for Schedules 1 and 6 for each  
13   year of the transition.

14   **Table 6**

15   Proposed Schedule 1 and 6 Prices by Transition Year

<b>Description</b>	<b>Transition Year</b>			
	<b>Current</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
<b>Service Charge</b>	<b>\$ 5.00</b>	<b>\$ 15.00</b>	<b>\$ 25.00</b>	<b>\$ 35.00</b>
<i>Summer Energy Charges</i>				
<b>First 800 kWh</b>	<b>8.6518 ¢</b>	<b>10.2985 ¢</b>	<b>9.5182 ¢</b>	<b>8.7379 ¢</b>
<b>801-2,000 kWh</b>	<b>10.4033 ¢</b>	<b>11.7937 ¢</b>	<b>10.2658 ¢</b>	<b>8.7379 ¢</b>
<b>All Additional kWh</b>	<b>12.3585 ¢</b>	<b>13.9291 ¢</b>	<b>11.5634 ¢</b>	<b>8.7379 ¢</b>
<i>Non-Summer Energy Charges</i>				
<b>First 800 kWh</b>	<b>8.0390 ¢</b>	<b>9.3050 ¢</b>	<b>8.3859 ¢</b>	<b>7.4669 ¢</b>
<b>801-2,000 kWh</b>	<b>8.8627 ¢</b>	<b>10.0034 ¢</b>	<b>8.7351 ¢</b>	<b>7.4669 ¢</b>
<b>All Additional kWh</b>	<b>9.8154 ¢</b>	<b>10.7014 ¢</b>	<b>9.0306 ¢</b>	<b>7.4669 ¢</b>

16  
17   //

Table 7 summarizes the proposed prices for Schedule 5 for each year of the transition.

**Table 7**

Proposed Schedule 5 Prices by Transition Year

<b>Description</b>	<b>Transition Year</b>			
	<b>Current</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
<b>Service Charge</b>	<b>\$ 5.00</b>	<b>\$ 15.00</b>	<b>\$ 25.00</b>	<b>\$ 35.00</b>
<i>Summer Energy Charges</i>				
<b>On-Peak</b>	<b>12.8910 ¢</b>	<b>27.9642 ¢</b>	<b>26.0477 ¢</b>	<b>24.1307 ¢</b>
<b>Off-Peak</b>	<b>7.3899 ¢</b>	<b>6.9911 ¢</b>	<b>6.5119 ¢</b>	<b>6.0327 ¢</b>
<b>On-Off Differential</b>	<b>1.7x</b>	<b>4.0x</b>	<b>4.0x</b>	<b>4.0x</b>
<i>Non-Summer Energy Charges</i>				
<b>On-Peak</b>	<b>9.5159 ¢</b>	<b>13.4745 ¢</b>	<b>12.5509 ¢</b>	<b>11.6273 ¢</b>
<b>Off-Peak</b>	<b>7.3899 ¢</b>	<b>8.9830 ¢</b>	<b>8.3672 ¢</b>	<b>7.7515 ¢</b>
<b>On-Off Differential</b>	<b>1.3x</b>	<b>1.5x</b>	<b>1.5x</b>	<b>1.5x</b>

Q. How were prices for the three-year Residential Price Modernization transition determined?

A. The \$35.00 Service Charge was determined by taking residential revenue from Schedules 1, 3, and 5, and multiplying by the proportion of cost of service related to all other fixed costs besides generation and transmission costs and dividing by the number of monthly billings. The resulting \$36.09 was rounded down to \$35.00. To determine prices for the transition, the Service Charge was increased by one-third of the difference between the present \$5.00 Service Charge and \$35.00 in each year of the transition.

Flat seasonal Energy Charges in the final year of the transition were determined by applying the seasonal differential and solving for the remaining revenue required

1 for the class after removing the proposed Service Charge  
2 revenue. Prices for each transition year were determined by  
3 decreasing the Energy Charge by one-third of the difference  
4 between the present and final transition year price in each  
5 subsequent period.

6 To determine the proposed Schedule 5 Energy Charges,  
7 the final transition year on- and off-peak Energy Charges were  
8 set to reflect a 4:1 differential while also reflecting the  
9 increase in recovery from the higher Service Charge.

10 Q. Why is the Company proposing to modify the on-  
11 and off-peak price differential?

12 A. The proposal is intended to send a more  
13 meaningful price signal to customers to shift energy usage to  
14 off-peak hours. Providing this price signal in conjunction  
15 with the shorter window of time for the on-peak period  
16 furthers two distinct objectives: (1) incenting customers to  
17 shift usage from highest risk hours, and (2) creating an  
18 opportunity for customers to reduce bills.

19 ***F. Customer Bill Impacts***

20 Q. How would the Company's proposed rate increase  
21 and the Residential Price Modernization Plan impact customers  
22 at different usage levels?

23 A. Page 1 of Exhibit No. 54 shows a bill comparison  
24 table for the bill impact of the first year of the transition  
25 for Schedule 1 customers across different usage levels and



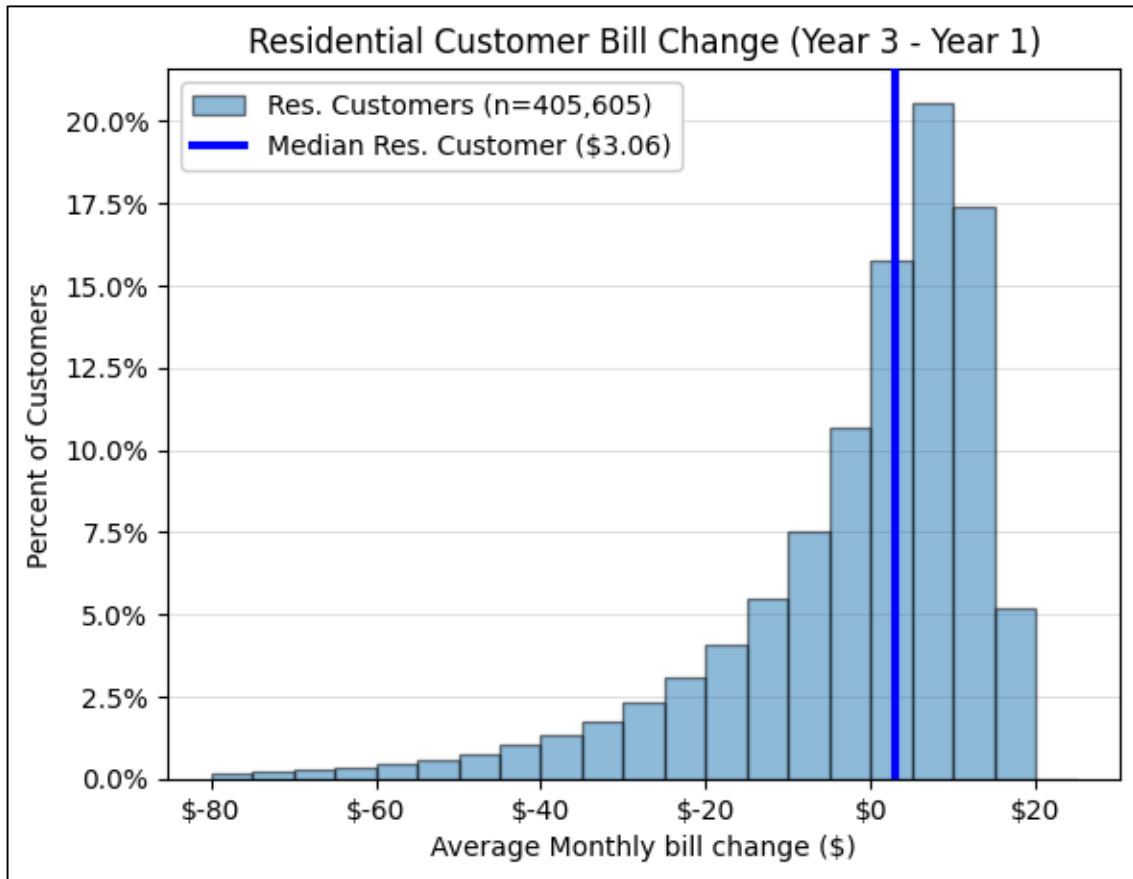
1 page 2 shows the same for the change from the first year to  
2 the final year of the transition. The largest change shown  
3 over the transition is for a customer using 150 kWh, which  
4 would see a \$10.38 per month increase in the first year. The  
5 increase for a customer using 150 kWh for the entire  
6 transition period is \$27.76 per month. The difference between  
7 these values demonstrates the need to make the changes in  
8 price over the requested three-year period to moderate  
9 customer impacts. Pages 3 and 4 of Exhibit No. 54 shows the  
10 same information, except for the proposed transition for  
11 Schedule 5.

12 Q. Did the Company evaluate the distribution of  
13 customer bill impacts for the full transition of the  
14 Residential Price Modernization Plan?

15 A. Yes. Figure 3 shows the distribution for the  
16 final year of the transition period for Schedule 1 customers,  
17 as compared to the first year. The changes implemented in  
18 years two and three will be revenue neutral and the median  
19 average monthly bill increase in the final year of the  
20 transition, compared to the first year, is \$3.06. Based on  
21 historical 2022 energy consumption, 86 percent of residential  
22 customers would have an average monthly bill increase of \$12  
23 or less between year one and year three of the plan.

24 //

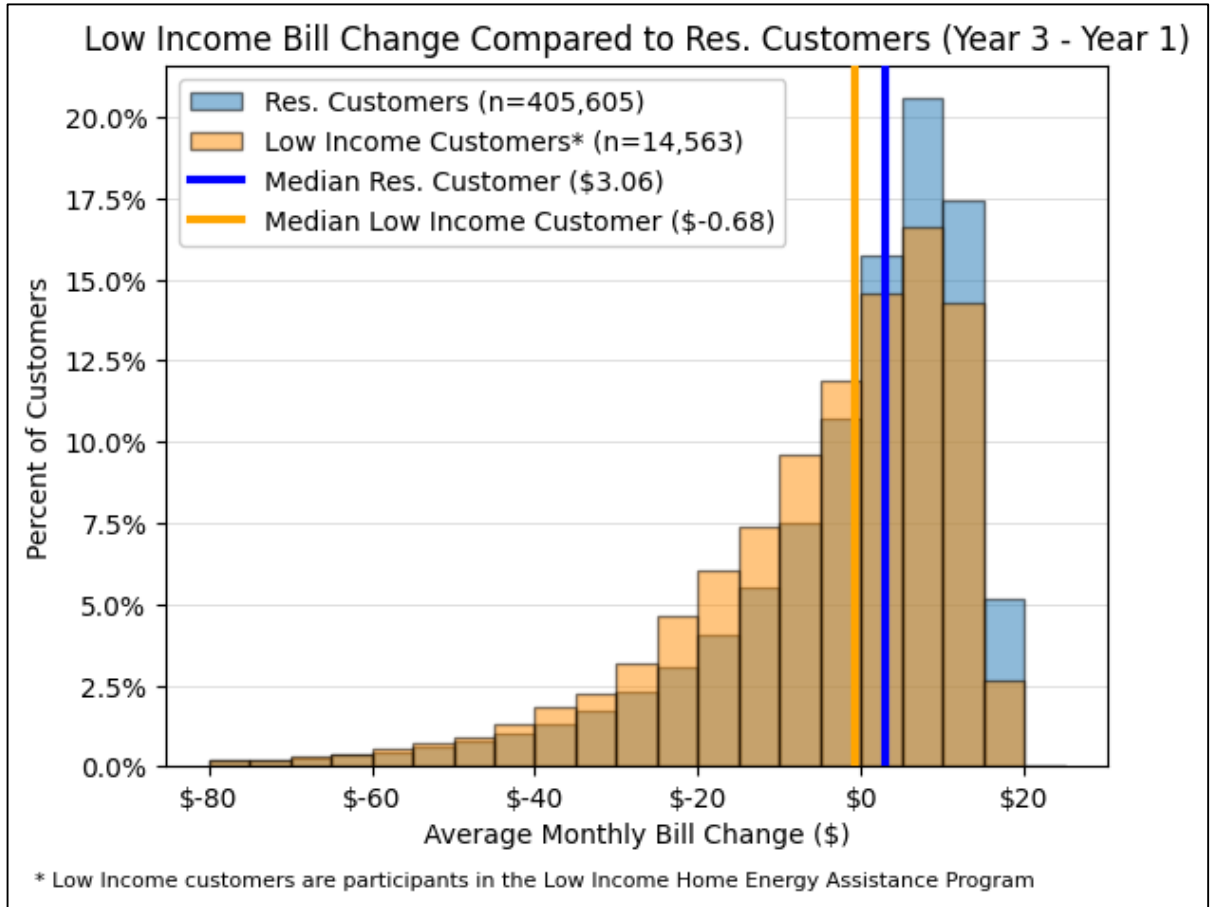
1 **Figure 3**  
 2 Residential Price Modernization Bill Impact  
 3 *Final Year of Transition vs. Year 1*



4  
 5 Q. Did the Company similarly evaluate the  
 6 distribution of low-income customer bill impacts for the full  
 7 transition of the Residential Price Modernization Plan?

8 A. Yes. Figure 4 shows the distribution for the  
 9 final year of the transition for the low-income customer  
 10 segment, compared to other residential customers. The median  
 11 average monthly bill change in the final year of the  
 12 transition, compared to the first year, is a \$0.68 decrease  
 13 and 90 percent of the low-income residential customer segment  
 14 would have an average monthly bill increase of \$12 or less.

1 **Figure 4**  
2 Residential Price Modernization Bill Impact - Low Income  
3 *Final Year of Transition vs. Year 1*



4  
5 As shown in Figure 4, these low-income customers are not  
6 disproportionately negatively impacted under the Company's  
7 Residential Price Modernization Plan.

### 8 **III. ON-SITE GENERATION RATE DESIGN**

9 Q. What are the Company's on-site generation  
10 service schedules?

11 A. Idaho Power has three on-site generation service  
12 schedules; however, only Schedules 6 and 8 are separate  
13 customer classes with their own rate design and cost  
14 allocation. The third on-site generation service is under

1 Schedule 84, Customer Energy Production Net Metering Service  
2 ("Schedule 84"), where customers take their retail electric  
3 service under the applicable standard service schedule (e.g.,  
4 Schedules 9, 19, or 24). For purposes of rate design  
5 discussion, on-site generation rate design for these customer  
6 classes is addressed under the applicable standard service  
7 schedule.

8 Q. What is the revenue requirement to be recovered  
9 from Schedules 6 and 8?

10 A. The annual revenue target to be recovered from  
11 Schedules 6 and 8 is \$14,723,344 and \$55,219, as shown on page  
12 3 and 6 of Exhibit No. 53. As noted in the Direct Testimony of  
13 Ms. Aschenbrenner, the Class Cost-of-Service ("CCOS") study  
14 allocated costs to Schedules 6 and 8 are higher than revenue  
15 collection under rates that mirror the Service Charge and  
16 Energy Charges for the respective standard service under  
17 Schedules 1 and 7.

18 Q. What is the current rate design structure for  
19 on-site generation service under Schedules 6 and 8?

20 A. Schedules 6 and 8 rate design currently mirrors  
21 the structure and rates for residential and small general  
22 customers without on-site generation on Schedules 1 and 7,  
23 respectively. Both rate structures currently have a \$5.00  
24 Service Charge and an inclining block Energy Charge.

1           Q.     Please summarize the Company's proposed rate  
2 design changes for Schedules 6 and 8.

3           A.     For Schedule 6, the Company is proposing in this  
4 case to retain the linkage with rates under Schedule 1. In  
5 addition, customers taking service under Schedule 6 will also  
6 have the option to elect to take time-of-use rates which would  
7 retain a linkage with rates under Schedule 5. All Schedule 6  
8 rates, under the standard or time-of-use option would follow  
9 the Service Charge transition under the Company's Residential  
10 Price Modernization Plan.

11           For Schedule 8, the Company is proposing in this case  
12 to retain the linkage with rates under Schedule 7. As  
13 described in the Direct Testimony of Company Witness Mr. Zack  
14 Thompson, the Company is proposing an increase in the Schedule  
15 7 Service Charge from \$5.00 to \$20.00 per month.

16           Q.     Why is Idaho Power requesting to maintain the  
17 relationship with the respective applicable retail service  
18 schedules?

19           A.     The Company acknowledges that its proposal for  
20 these on-site generation schedules does not address that, as  
21 informed by the CCOS, the cost to serve these customers is  
22 higher than standard service. However, similar to the  
23 rationale for suggesting a three-year transition for the  
24 Residential Price Modernization Plan, the Company is proposing

1 that residential rates be modified with gradualism in mind to  
2 moderate bill impacts on individual customers.

3 After the final year of the three-year transition, the  
4 Company will explore whether circumstances warrant further  
5 rate design modifications for on-site generation customer  
6 classes. For example, if all costs related to the distribution  
7 system and customer service were collected through the Service  
8 Charge for Schedule 6, the Service Charge would equate to  
9 approximately \$50 per month. The Company suggests evaluating  
10 further movement towards the cost to serve in a future case  
11 after or near the end of the transition period for the  
12 Company's Residential Price Modernization Plan.

13 Q. Have you prepared an exhibit that illustrates  
14 the rate design proposal for revenue recovery of Schedules 6  
15 and 8?

16 A. Yes. Exhibit No. 53 shows the proposed prices,  
17 billing determinants, and anticipated revenue for Schedules 6  
18 and 8. These rates align with the proposed rates for Schedules  
19 1 and 7, respectively.

20 Q. Have you prepared an exhibit that shows the  
21 billing impact of this rate design proposal on customers  
22 receiving service under Schedules 6 and 8?

23 A. Yes. Exhibit No. 54 shows bill comparisons for  
24 the proposed transition period for rates under Schedules 1 and  
25 5, which would be applicable to customers taking service under

1 Schedule 6. Pages 1 and 3 of Exhibit No. 54 shows a bill  
2 comparison for the first year of the transition for customers  
3 across different usage levels.

4 Additionally, Exhibit No. 56 shows a comparison for  
5 non-legacy Schedule 6 and 8 customers with 12 months of  
6 billing data in 2022 under the existing and proposed rates.  
7 The average monthly increase shown for Schedule 6 non-legacy  
8 customers is an 18 percent increase and for Schedule 8 is a 43  
9 percent decrease.

10 **IV. LARGE GENERAL SERVICE - SCHEDULE 9 (PRIMARY/TRANSMISSION)**

11 Q. What is the revenue requirement for Schedule 9  
12 customers taking service at the Primary and Transmission  
13 levels?

14 A. The annual revenue requirement for Schedule 9  
15 Primary and Transmission level customers as shown on page 5 of  
16 Mr. Goralski's Exhibit No. 48 is \$43,557,610.

17 Q. What is the current rate structure for Schedule  
18 9 Primary and Transmission Service?

19 A. All customers taking service under Schedule 9  
20 Primary or Transmission Service pay seasonal time-of use  
21 Energy Charges, seasonal Demand Charges, a summer On-Peak  
22 Demand Charge, a Basic Charge, and a Service Charge. Customers  
23 may also pay a Facilities Charge for Company-owned facilities  
24 installed beyond Idaho Power's Point of Delivery.

1           Q.     Have you prepared an exhibit that illustrates  
2     the rate design proposal for Primary and Transmission Service  
3     under Schedule 9?

4           A.     Yes. The rate design proposal for Schedule 9  
5     Primary and Transmission Service is located on pages 7 and 8  
6     of Exhibit No. 53 and targets the revenue shown on page 5 of  
7     Mr. Goralski's Exhibit No. 48. For all rate components, the  
8     Company is proposing rates that represent a uniform 30 percent  
9     movement towards the costs to serve that rate component, and  
10    the Energy Charges are informed by the marginal price of  
11    energy for each time-of-use period. The costs to serve each  
12    rate component are indicated on page 6 of Mr. Goralski's  
13    Exhibit No. 43.

14          Q.     What other changes is the Company proposing for  
15    Schedule 9 Primary and Transmission Service rate design?

16          A.     In addition to the incremental movement towards  
17    the costs to serve each of the rate components, the Company is  
18    proposing to change the definition of the time-of-use periods.

19          Q.     What definition for on/mid/off-peak does the  
20    Company propose for Schedule 9?

21          A.     The Company proposes to change the definition of  
22    the TOU periods for the summer season as follows:

- 23               • On-Peak: 7:00 p.m. to 11:00 p.m. Monday through  
24               Saturday, except holidays



- 1           • Mid-Peak: 3:00 p.m. to 7:00 p.m. and 11:00 p.m.  
2           to 12:00 a.m. Monday through Saturday, except  
3           holidays
- 4           • Off-Peak: 12:00 a.m. to 3:00 p.m. Monday through  
5           Saturday and all hours on Sunday and holidays.

6   For the non-summer season, the Company proposes to change the  
7   definition of the time-of-use periods to the following:

- 8           • On-Peak: 6:00 a.m. to 9:00 a.m. and 5:00 p.m. to  
9           8:00 p.m. Monday through Saturday, except  
10          holidays
- 11          • Mid-Peak: 9:00 a.m. to 12:00 p.m., 4:00 p.m. to  
12          5:00 p.m., and 8:00 p.m. to 10:00 p.m. Monday  
13          through Saturday, except holidays
- 14          • Off-Peak: 10:00 p.m. to 6:00 a.m. and 12:00 p.m.  
15          to 4:00 p.m. Monday through Saturday and all  
16          hours on Sunday and holidays

17          Q.     Why is the Company proposing to modify the  
18   definition of time-of-use hours?

19          A.     Similar to the change in the definition of hours  
20   for residential time-of-use, the proposal better aligns these  
21   definitions with hours of highest risk on the Company's  
22   system. Aligning these hours with highest risk is consistent  
23   with the evaluation performed in the development of the  
24   Company's 2023 IRP.

1           Q.       Have you prepared an exhibit that shows the  
2     billing impact of this rate design proposal on customers  
3     receiving Primary Service under Schedule 9?

4           A.       Yes, page 5 of Exhibit No. 54 shows the billing  
5     comparisons between the existing rates and proposed rates for  
6     Schedule 9 Primary Service.

7                   **V.    LARGE POWER SERVICE, SCHEDULE 19**

8           Q.       What is the revenue requirement to be recovered  
9     from Large Power Service customers taking service under  
10    Schedule 19?

11          A.       The annual revenue requirement for Schedule 19  
12    customers as shown on page 5 of Mr. Goralski's Exhibit No. 48  
13    is \$164,068,656, representing a 6.61 percent increase.

14          Q.       What is the current rate structure for customers  
15    taking service on Schedule 19?

16          A.       Service under Schedule 19, similar to service  
17    under Schedule 9, is provided at Secondary, Primary, and  
18    Transmission Service levels. All customers taking service  
19    under Schedule 19 pay seasonal time-of-use Energy Charges,  
20    seasonal Demand Charges, a summer On-Peak Demand Charge, a  
21    Basic Charge, and a Service Charge. Customers taking Primary  
22    or Transmission Service may also pay a Facilities Charge for  
23    Company-owned facilities installed beyond Idaho Power's Point  
24    of Delivery. In addition, Schedule 19 includes a 1,000

1 kilowatts per month minimum Billing Demand and Basic Load  
2 Capacity.

3 Q. Have you prepared an exhibit that illustrates  
4 the proposed rate design to recover the annual revenue  
5 requirement for Schedule 19?

6 A. Yes. The rate design proposal for Schedule 19 is  
7 shown on pages 9-11 of Exhibit No. 53 and targets the proposed  
8 class revenue increase. For all rate components, the Company  
9 is proposing rates that represent a uniform 30 percent  
10 movement towards the costs to serve that rate component, and  
11 the Energy Charges are informed by the marginal price of  
12 energy for each time-of-use period. The costs to serve each  
13 rate component are indicated on page 7 of Mr. Goralski's  
14 Exhibit No. 43.

15 Q. What definition for on/mid/off-peak does the  
16 Company propose for Schedule 19?

17 A. The Company proposes the same definition for  
18 on/mid/off-peak as described for Schedule 9.

19 Q. Have you prepared an exhibit that shows the  
20 billing comparisons between the existing rates and the  
21 proposed rates for Schedule 19 Primary Service customers?

22 A. Page 6 of Exhibit No. 54 shows the billing  
23 comparisons between the existing rates and the proposed rates  
24 for Schedule 19 Primary Service customers. The higher load

1 factor customers will see a lower overall increase as compared  
2 to low load factor customers.

3 **VI. UPDATES TO SCHEDULE 68**

4 Q. What other changes are addressed in your direct  
5 testimony?

6 A. In addition to the rate design proposals  
7 described herein, I will address the proposed revisions to  
8 Schedule 68. Attachment to the Application Nos. 1 and 2 show  
9 the revisions in clean and legislative format, respectively,  
10 for each of the respective tariff schedules.

11 Q. What is Schedule 68?

12 A. Schedule 68 is Idaho Power's tariff schedule  
13 that applies to the construction, operation, and maintenance  
14 of all interconnections to customer Distributed Energy  
15 Resources ("DER" or "DERs") interconnected in parallel -  
16 meaning operating and receiving voltage from Idaho Power's  
17 system.

18 Q. What changes is the Company proposing to  
19 Schedule 68?

20 A. The Company has proposed an update to the return  
21 trip charge and a modification to the applicability section  
22 regarding regenerative drives. Additionally, the Company has  
23 proposed several miscellaneous revisions to improve the  
24 administration of the interconnection process. Pages 68-1 to

1 68-13 in Attachment Nos. 1 and 2 show these administrative  
2 improvements.

3 Q. What is the return trip charge?

4 A. A return trip charge is billed to the customer  
5 each time Company personnel are dispatched to the job site but  
6 are unable to conduct the on-site inspection due to one or  
7 more conditions not being met that had been certified as  
8 complete by the customer or installer on the System  
9 Verification Form.

10 Q. Why is the Company updating the return trip  
11 charge?

12 A. The return trip charge of \$61.00 was last  
13 updated in 2020 based on meter technician miles driven, number  
14 of inspections, vehicle rates, and labor rates. The updated  
15 return trip charge calculation includes the miles and number  
16 of inspections for the years 2020 through 2022 and updates the  
17 Company's vehicle and labor rates for 2023.

18 Q. What is the change in the return trip charge?

19 A. The updated calculations result in a decrease to  
20 the return trip charge in Schedule 68 from \$61.00 to \$52.00.  
21 The change in the return trip charge is primarily driven by a  
22 reduction in the average miles per inspection and efficiency  
23 gains in time per inspection.

24 Q. What is a regenerative drive?

1           A.     A regenerative drive allows electrical energy  
2 generated by a motor under braking conditions to be used  
3 again, or regenerated, rather than being completely lost to  
4 heat. Applications that involve frequent starts and stops,  
5 constant deceleration, or overhauling loads are candidates for  
6 this use case. Examples include elevators, downhill conveyers,  
7 and flywheels. The period of time during which regeneration  
8 routes electricity back to the utility is small, based on the  
9 limited amount of energy available from the driven load.

10           Q.     Why does the Company believe a revision to  
11 Schedule 68 is needed for regenerative drives?

12           A.     Regenerative drives provide a source of electric  
13 power independent from the bulk power system and is considered  
14 a Distributed Energy Resource ("DER") connected in parallel  
15 with the Company's system and pursuant to Schedule 68 is  
16 subject to the smart inverter requirements therein.

17           As described to me, regenerative drives do not  
18 typically raise the same concerns as other DERs with respect  
19 to grid stability and reliability that are addressed with  
20 smart inverters. For example, regenerative drives operate  
21 infrequently and only for a few seconds at a time. These short  
22 operations are not long enough to expect a change in reactive  
23 power output to meet the voltage/reactive power capability  
24 threshold for smart inverters. In addition, regenerative  
25 drives cannot function with the loss of utility source - if

1 the grid loses power the drive will automatically also be de-  
2 energized and won't be able to begin regenerating or continue  
3 regenerating, which effectively eliminates the risk of that it  
4 will contribute to an island condition and obviates the need  
5 for anti-islanding protection.

6 Q. What changes does the Company propose to  
7 accommodate the installation of regenerative drives?

8 A. To account for installations that are within the  
9 scope of Schedule 68 but do not implicate the same challenges  
10 that smart inverters are intended to address, the Company  
11 proposes to amend the Applicability section to address other  
12 technologies that use similar methods to generate electricity  
13 in parallel with the Company's system, including but not  
14 limited to regenerative drives used in elevators and other  
15 energy recapture systems.

16 Specifically, the Company proposes to evaluate the  
17 following criteria to determine whether a regenerative drive  
18 or other energy recapture system can be interconnected outside  
19 of the IEEE 1547 requirements: (1) magnitude of exports; (2)  
20 duration of the exports; and (3) ability of DER to operate  
21 during the loss of the utility source.

22 Q. Does this conclude your direct testimony in this  
23 case?

24 A. Yes, it does.

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**DECLARATION OF GRANT T. ANDERSON**

I, Grant T. Anderson, declare under penalty of perjury under the laws of the state of Idaho:

1. My name is Grant T. Anderson. I am employed by Idaho Power Company as a Regulatory Consultant in the Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 53 through 56 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed: Grant T. Anderson  
GRANT T. ANDERSON



**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**ANDERSON, DI**  
**TESTIMONY**

**EXHIBIT NO. 53**

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Residential Service  
Schedule 1 and Schedule 6**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	6,057,159	\$ 5.00	\$ 30,285,794	\$ 15.00	\$ 90,857,381
2	Minimum Charge	72,347	2.00	144,694	3.00	217,041
3	Summer Energy (Jun-Aug)					
4	First 800 kWh	879,383,006	\$ 0.086518	\$ 76,082,459		
5	801-2,000 kWh	440,951,703	0.104033	45,873,529		
6	All Additional kWh	<u>86,252,522</u>	<u>0.123585</u>	<u>10,659,518</u>		
7	Subtotal - Summer Energy	1,406,587,230	\$ 0.094282	\$ 132,615,505		
8	Non-Summer Energy (Sep-May)					
9	First 800 kWh	2,579,932,201	\$ 0.080390	\$ 207,400,750		
10	801-2,000 kWh	1,101,608,616	0.088627	97,632,267		
11	All Additional kWh	<u>438,920,446</u>	<u>0.098154</u>	<u>43,081,797</u>		
12	Subtotal - Non-Summer Energy	<u>4,120,461,263</u>	\$ 0.084484	\$ 348,114,814		
13	Subtotal - Total Energy	5,527,048,493		\$ 480,730,319		
14	Summer Energy (Jun-Sep)					
15	First 800 kWh	1,158,501,794			\$ 0.102985	\$ 119,308,307
16	801-2,000 kWh	534,019,069			0.117937	62,980,607
17	All Additional kWh	<u>99,239,843</u>			<u>0.139291</u>	<u>13,823,217</u>
18	Subtotal - Summer Energy	1,791,760,706			\$ 0.109452	\$ 196,112,131
19	Non-Summer Energy (Oct-May)					
20	First 800 kWh	2,305,593,411			\$ 0.093050	\$ 214,535,467
21	801-2,000 kWh	1,007,012,144			0.100034	100,735,453
22	All Additional kWh	<u>422,682,232</u>			<u>0.107014</u>	<u>45,232,916</u>
23	Subtotal - Non-Summer Energy	<u>3,735,287,787</u>			\$ 0.096513	\$ 360,503,836
24	Subtotal - Total Energy	5,527,048,493				\$ 556,615,967
25	Transfer Adjustment Revenue			\$ 65,867,385		
26	Total Adjusted Base Revenue			\$ 577,028,192		\$ 647,690,389

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**Idaho Power Company  
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**Residential Service  
Schedule 1**

<b>Line No.</b>	<b>Description</b>	<b>Test Year Billing Units</b>	<b>Current Base Rate</b>	<b>Test Year Base Revenue</b>	<b>Proposed Effective Rate</b>	<b>Proposed Effective Revenue</b>
1	Service Charge	5,897,706	\$ 5.00	\$ 29,488,531	\$ 15.00	\$ 88,465,592
2	Minimum Charge	70,865	2.00	141,730	3.00	212,595
3	Summer Energy (Jun-Aug)					
4	First 800 kWh	861,147,615	\$ 0.086518	\$ 74,504,769		
5	801-2,000 kWh	433,910,571	0.104033	45,141,018		
6	All Additional kWh	<u>83,411,640</u>	<u>0.123585</u>	<u>10,308,428</u>		
7	Subtotal - Summer Energy	1,378,469,826	\$ 0.094274	\$ 129,954,215		
8	Non-Summer Energy (Sep-May)					
9	First 800 kWh	2,525,398,940	\$ 0.080390	\$ 203,016,821		
10	801-2,000 kWh	1,077,473,224	0.088627	95,493,219		
11	All Additional kWh	<u>422,794,007</u>	<u>0.098154</u>	<u>41,498,923</u>		
12	Subtotal - Non-Summer Energy	<u>4,025,666,171</u>	\$ 0.084460	\$ 340,008,963		
13	Subtotal - Total Energy	5,404,135,997		\$ 469,963,178		
14	Summer Energy (Jun-Sep)					
15	First 800 kWh	1,132,664,858			\$ 0.102985	\$ 116,647,490
16	801-2,000 kWh	526,078,657			0.117937	62,044,139
17	All Additional kWh	<u>97,206,864</u>			<u>0.139291</u>	<u>13,540,041</u>
18	Subtotal - Summer Energy	1,755,950,379			\$ 0.109474	\$ 192,231,670
19	Non-Summer Energy (Oct-May)					
20	First 800 kWh	2,253,877,358			\$ 0.093050	\$ 209,723,288
21	801-2,000 kWh	985,186,843			0.100034	98,552,181
22	All Additional kWh	<u>409,121,417</u>			<u>0.107014</u>	<u>43,781,719</u>
23	Subtotal - Non-Summer Energy	<u>3,648,185,618</u>			\$ 0.096502	\$ 352,057,188
24	Subtotal - Total Energy	5,404,135,997				\$ 544,288,858
25	Transfer Adjustment Revenue			\$ 64,401,980		
26	Total Adjusted Base Revenue			\$ 563,995,419		\$ 632,967,045

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**Residential Service On-Site Generation  
Schedule 6**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	159,453	\$ 5.00	\$ 797,263	\$ 15.00	\$ 2,391,789
2	Minimum Charge	1,482	2.00	2,964	3.00	4,446
3	Summer Energy (Jun-Aug)					
4	First 800 kWh	18,235,390	\$ 0.086518	\$ 1,577,690		
5	801-2,000 kWh	7,041,132	0.104033	732,510		
6	All Additional kWh	<u>2,840,881</u>	<u>0.123585</u>	<u>351,090</u>		
7	Subtotal - Summer Energy	28,117,404	\$ 0.094649	\$ 2,661,290		
8	Non-Summer Energy (Sep-May)					
9	First 800 kWh	54,533,261	\$ 0.080390	\$ 4,383,929		
10	801-2,000 kWh	24,135,393	0.088627	2,139,047		
11	All Additional kWh	<u>16,126,439</u>	<u>0.098154</u>	<u>1,582,874</u>		
12	Subtotal - Non-Summer Energy	<u>94,795,092</u>	\$ 0.085509	<u>\$ 8,105,851</u>		
13	Subtotal - Total Energy	122,912,496		\$ 10,767,141		
14	Summer Energy (Jun-Sep)					
15	First 800 kWh	25,836,936			\$ 0.102985	\$ 2,660,817
16	801-2,000 kWh	7,940,411			0.117937	936,468
17	All Additional kWh	<u>2,032,980</u>			<u>0.139291</u>	<u>283,176</u>
18	Subtotal - Summer Energy	35,810,327			\$ 0.108362	\$ 3,880,461
19	Non-Summer Energy (Oct-May)					
20	First 800 kWh	51,716,052			\$ 0.093050	\$ 4,812,179
21	801-2,000 kWh	21,825,301			0.100034	2,183,272
22	All Additional kWh	<u>13,560,815</u>			<u>0.107014</u>	<u>1,451,197</u>
23	Subtotal - Non-Summer Energy	<u>87,102,169</u>			\$ 0.096974	\$ 8,446,648
24	Subtotal - Total Energy	122,912,496				\$ 12,327,109
25	Transfer Adjustment Revenue			\$ 1,465,405		
26	Total Adjusted Base Revenue			\$ 13,032,773		\$ 14,723,344

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Master-Metered Mobile Home Park Residential Service  
Schedule 3

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	225	\$ 5.00	\$ 1,124	\$ 15.00	\$ 3,372
2	Energy Charge	4,476,086	\$ 0.087075	389,755	\$ 0.110625	495,167
3	Transfer Adjustment Revenue			53,271		
4	Total Adjusted Base Revenue			\$ 444,150		\$ 498,539

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**Residential Service - Time-of-Use  
Schedule 5**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	11,836	\$ 5.00	\$ 59,179	\$ 15.00	\$ 177,536
2	Minimum Charge	29	2.00	58	3.00	87
3	Summer Energy (Jun-Aug)					
4	On-Peak	1,317,837	\$ 0.128910	\$ 169,882		
5	Off-Peak	2,932,059	0.073899	216,676		
6	Subtotal - Summer Energy	4,249,896	\$ 0.090957	\$ 386,559		
7	Non-Summer Energy (Sep-May)					
8	On-Peak	5,206,937	\$ 0.095159	\$ 495,487		
9	Off-Peak	7,490,517	0.073899	553,542		
10	Subtotal - Non-Summer Energy	12,697,455	\$ 0.082617	\$ 1,049,029		
11	Subtotal - Total Energy	16,947,350		\$ 1,435,587		
12	Summer Energy (Jun-Sep)					
13	On-Peak	999,802			\$ 0.279642	\$ 279,587
14	Off-Peak	4,410,435			0.069911	308,338
15	Subtotal - Summer Energy	5,410,238			\$ 0.108669	\$ 587,925
16	Non-Summer Energy (Oct-May)					
17	On-Peak	2,279,827			\$ 0.134745	\$ 307,195
18	Off-Peak	9,257,286			0.089830	831,582
19	Subtotal - Non-Summer Energy	11,537,113			\$ 0.098706	\$ 1,138,777
20	Subtotal - Total Energy	16,947,350				\$ 1,726,702
21	Transfer Adjustment Revenue			\$ 201,741		
22	Total Adjusted Base Revenue			\$ 1,696,564		\$ 1,904,324

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**Small General Service On-Site Generation**  
**Schedule 8**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	1,050	\$ 5.00	\$ 5,250	\$ 20.00	\$ 21,000
2	Minimum Charge	6	2.00	12	3.00	18
3	Summer Energy (Jun-Aug)					
4	0 - 300 kWh	26,347	\$ 0.098633	\$ 2,599		
5	All Additional kWh	<u>56,107</u>	<u>0.117472</u>	<u>6,591</u>		
6	Subtotal - Summer Energy	82,454	\$ 0.111452	\$ 9,190		
7	Non-Summer Energy (Sep-May)					
8	0 - 300 kWh	117,296	\$ 0.098633	\$ 11,569		
9	All Additional kWh	<u>170,958</u>	<u>0.103486</u>	<u>17,692</u>		
10	Subtotal - Non-Summer Energy	<u>288,254</u>	\$ 0.101511	\$ 29,261		
11	Subtotal - Total Energy	370,708		\$ 38,451		
12	Summer Energy (Jun-Sep)					
13	0 - 300 kWh	41,132			\$ 0.089863	\$ 3,696
14	All Additional kWh	<u>68,948</u>			<u>0.102694</u>	<u>7,081</u>
15	Subtotal - Summer Energy	110,080			\$ 0.097900	\$ 10,777
16	Non-Summer Energy (Oct-May)					
17	0 - 300 kWh	105,075			\$ 0.089863	\$ 9,442
18	All Additional kWh	<u>155,553</u>			<u>0.089887</u>	<u>13,982</u>
19	Subtotal - Non-Summer Energy	<u>260,628</u>			\$ 0.089877	\$ 23,425
20	Subtotal - Total Energy	370,708				\$ 34,201
21	Transfer Adjustment Revenue			\$ 4,447		
22	Total Adjusted Base Revenue			\$ 48,160		\$ 55,219

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**Idaho Power Company**  
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**Large General Service**  
**Schedule 9 Primary Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	3,362	\$ 285.00	\$ 958,142	\$ 335.00	\$ 1,126,237
2	Minimum Charge	-	10.00	-	50.00	-
3	<u>Basic Charge</u>					
4	Total Basic Charge	1,935,320	\$ 1.30	\$ 2,515,916	\$ 1.70	\$ 3,290,044
5	<u>Demand Charge (Current Seasons)</u>					
6	Summer (Jun-Aug)	421,737	\$ 5.16	\$ 2,176,164		
7	Non-Summer (Sep-May)	1,129,739	4.52	5,106,419		
8	Total Demand	1,551,476		\$ 7,282,583		
9	On-Peak Summer Demand (Jun-Aug)	394,562	\$ 0.97	\$ 382,725		
10	<u>Demand Charge (Proposed Seasons)</u>					
11	Summer (Jun-Sep)	562,598			\$ 7.76	\$ 4,365,759
12	Non-Summer (Oct-May)	988,878			7.36	7,278,143
13	Total Demand	1,551,476				\$ 11,643,901
14	On-Peak Summer Demand (Jun-Sep)	525,669			\$ 1.46	\$ 767,477
15	<u>Summer Energy (Jun-Aug)</u>					
16	On-Peak	45,450,558	\$ 0.049454	\$ 2,247,712		
17	Mid-Peak	70,944,613	0.045633	3,237,416		
18	Off-Peak	46,864,805	0.043133	2,021,420		
19	Subtotal - Summer Energy	163,259,977	\$ 0.045979	\$ 7,506,547		
20	<u>Non-Summer Energy (Sep-May)</u>					
21	Mid-Peak	266,940,199	\$ 0.040920	\$ 10,923,193		
22	Off-Peak	167,941,864	0.039546	6,641,429		
23	Subtotal - Non-Summer Energy	434,882,062	\$ 0.040389	\$ 17,564,622		
24	Subtotal - Total Energy	598,142,039		\$ 25,071,169		
25	<u>Summer Energy (Jun-Sep)</u>					
26	On-Peak	29,601,623			\$ 0.050220	\$ 1,486,593
27	Mid-Peak	41,637,317			0.050220	2,091,026
28	Off-Peak	143,727,301			0.044949	6,460,398
29	Subtotal - Summer Energy	214,966,240			\$ 0.046696	\$ 10,038,018
30	<u>Non-Summer Energy (Oct-May)</u>					
31	On-Peak	85,400,026			\$ 0.045603	\$ 3,894,497
32	Mid-Peak	87,831,834			0.043328	3,805,578
33	Off-Peak	209,943,940			0.041504	8,713,513
34	Subtotal - Non-Summer Energy	383,175,799			\$ 0.042836	\$ 16,413,588
35	Subtotal - Total Energy	598,142,039				\$ 26,451,606
36	Transfer Adjustment Revenue			\$ 7,068,745		
37	Total Adjusted Base Revenue			\$ 43,279,279		\$ 43,279,265

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**Large General Service**  
**Schedule 9 Transmission Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	48	\$ 285.00	\$ 13,680	\$ 335.00	\$ 16,080
2	Minimum Charge	-	10.00	-	50.00	-
3	<u>Basic Charge</u>					
4	Total Basic Charge	17,008	\$ 0.69	\$ 11,736	\$ 1.02	\$ 17,348
5	<u>Demand Charge (Current Seasons)</u>					
6	Summer (Jun-Aug)	3,210	\$ 4.84	\$ 15,537		
7	Non-Summer (Sep-May)	10,676	4.36	46,546		
8	Total Demand	13,886		\$ 62,083		
9	On-Peak Summer Demand (Jun-Aug)	2,749	\$ 0.97	\$ 2,667		
10	<u>Demand Charge (Proposed Seasons)</u>					
11	Summer (Jun-Sep)	4,400			\$ 6.84	\$ 30,093
12	Non-Summer (Oct-May)	9,486			5.99	56,823
13	Total Demand	13,886				\$ 86,916
14	On-Peak Summer Demand (Jun-Sep)	3,767			\$ 1.46	\$ 5,500
15	<u>Summer Energy (Jun-Aug)</u>					
16	On-Peak	193,515	\$ 0.048664	\$ 9,417		
17	Mid-Peak	350,627	0.045000	15,778		
18	Off-Peak	236,395	0.042585	10,067		
19	Subtotal - Summer Energy	780,537	\$ 0.045177	\$ 35,262		
20	<u>Non-Summer Energy (Sep-May)</u>					
21	Mid-Peak	1,661,772	\$ 0.040408	\$ 67,149		
22	Off-Peak	1,114,834	0.039155	43,651		
23	Subtotal - Non-Summer Energy	2,776,606	\$ 0.039905	\$ 110,800		
24	Subtotal - Total Energy	3,557,143		\$ 146,063		
25	<u>Summer Energy (Jun-Sep)</u>					
26	On-Peak	110,660			\$ 0.049429	\$ 5,470
27	Mid-Peak	169,020			0.049429	8,354
28	Off-Peak	760,683			0.044097	33,544
29	Subtotal - Summer Energy	1,040,363			\$ 0.045530	\$ 47,368
30	<u>Non-Summer Energy (Oct-May)</u>					
31	On-Peak	542,469			\$ 0.044570	\$ 24,178
32	Mid-Peak	572,351			0.042293	24,206
33	Off-Peak	1,401,959			0.040467	56,733
34	Subtotal - Non-Summer Energy	2,516,780			\$ 0.041767	\$ 105,117
35	Subtotal - Total Energy	3,557,143				\$ 152,486
36	Transfer Adjustment Revenue			\$ 42,103		
37	Total Adjusted Base Revenue			\$ 278,331		\$ 278,330

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**Large Power Service**  
**Schedule 19 Secondary Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	12	\$ 39.00	\$ 468	\$ 90.00	\$ 1,080
2	Minimum Charge	-	5.00	-	5.00	-
3	<u>Basic Charge</u>					
4	Total Basic Charge	14,167	\$ 0.93	\$ 13,176	\$ 1.98	\$ 28,051
5	<u>Demand Charge (Current Seasons)</u>					
6	Summer (Jun-Aug)	3,233	\$ 5.99	\$ 19,365		
7	Non-Summer (Sep-May)	10,109	4.30	43,467		
8	Total Demand	13,342		\$ 62,832		
9	On-Peak Summer Demand (Jun-Aug)	2,591	\$ 1.03	\$ 2,669		
10	<u>Demand Charge (Proposed Seasons)</u>					
11	Summer (Jun-Sep)	4,291			\$ 10.32	\$ 44,279
12	Non-Summer (Oct-May)	9,051			8.31	75,213
13	Total Demand	13,342				\$ 119,492
14	On-Peak Summer Demand (Jun-Sep)	3,439			\$ 1.78	\$ 6,121
15	<u>Summer Energy (Jun-Aug)</u>					
16	On-Peak	423,806	\$ 0.064456	\$ 27,317		
17	Mid-Peak	563,279	0.051034	28,746		
18	Off-Peak	664,973	0.045292	30,118		
19	Subtotal - Summer Energy	1,652,057	\$ 0.052166	\$ 86,181		
20	<u>Non-Summer Energy (Sep-May)</u>					
21	Mid-Peak	2,894,106	\$ 0.047466	\$ 137,372		
22	Off-Peak	1,988,464	0.042171	83,856		
23	Subtotal - Non-Summer Energy	4,882,571	\$ 0.045310	\$ 221,227		
24	Subtotal - Total Energy	6,534,628		\$ 307,408		
25	<u>Summer Energy (Jun-Sep)</u>					
26	On-Peak	324,610			\$ 0.058686	\$ 19,050
27	Mid-Peak	418,903			0.058686	24,584
28	Off-Peak	1,459,219			0.053432	77,969
29	Subtotal - Summer Energy	2,202,732			\$ 0.055205	\$ 121,603
30	<u>Non-Summer Energy (Oct-May)</u>					
31	On-Peak	937,724			\$ 0.053148	\$ 49,838
32	Mid-Peak	965,486			0.050867	49,111
33	Off-Peak	2,428,686			0.049038	119,098
34	Subtotal - Non-Summer Energy	4,331,896			\$ 0.050335	\$ 218,047
35	Subtotal - Total Energy	6,534,628				\$ 339,650
36	Transfer Adjustment Revenue			\$ 77,197		
37	Total Adjusted Base Revenue			\$ 463,750		\$ 494,394

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**Large Power Service**  
**Schedule 19 Primary Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	1,356	\$ 299.00	\$ 405,444	\$ 430.00	\$ 583,080
2	Minimum Charge	-	10.00	-	50.00	-
3	<u>Basic Charge</u>					
4	Total Basic Charge	5,241,211	\$ 1.28	\$ 6,708,750	\$ 2.18	\$ 11,425,840
5	<u>Demand Charge (Current Seasons)</u>					
6	Summer (Jun-Aug)	1,200,164	\$ 6.12	\$ 7,345,004		
7	Non-Summer (Sep-May)	3,433,952	4.54	15,590,143		
8	Total Demand	4,634,116		\$ 22,935,147		
9	On-Peak Summer Demand (Jun-Aug)	1,153,172	\$ 0.97	\$ 1,118,577		
10	<u>Demand Charge (Proposed Seasons)</u>					
11	Summer (Jun-Sep)	1,600,720			\$ 9.87	\$ 15,799,106
12	Non-Summer (Oct-May)	3,033,396			8.49	25,753,534
13	Total Demand	4,634,116				\$ 41,552,640
14	On-Peak Summer Demand (Jun-Sep)	1,537,925			\$ 1.57	\$ 2,414,542
15	<u>Summer Energy (Jun-Aug)</u>					
16	On-Peak	155,742,275	\$ 0.053049	\$ 8,261,972		
17	Mid-Peak	258,777,524	0.042185	10,916,530		
18	Off-Peak	192,288,068	0.037639	7,237,531		
19	Subtotal - Summer Energy	606,807,867	\$ 0.043533	\$ 26,416,032		
20	<u>Non-Summer Energy (Sep-May)</u>					
21	Mid-Peak	1,014,622,007	\$ 0.039765	\$ 40,346,444		
22	Off-Peak	725,865,453	0.035550	25,804,517		
23	Subtotal - Non-Summer Energy	1,740,487,460	\$ 0.038007	\$ 66,150,961		
24	Subtotal - Total Energy	2,347,295,327		\$ 92,566,993		
25	<u>Summer Energy (Jun-Sep)</u>					
26	On-Peak	115,731,721			\$ 0.051210	\$ 5,926,621
27	Mid-Peak	149,838,340			0.051210	7,673,221
28	Off-Peak	535,937,021			0.045951	24,626,842
29	Subtotal - Summer Energy	801,507,082			\$ 0.047694	\$ 38,226,685
30	<u>Non-Summer Energy (Oct-May)</u>					
31	On-Peak	334,235,604			\$ 0.046309	\$ 15,478,117
32	Mid-Peak	337,433,892			0.044028	14,856,539
33	Off-Peak	874,118,749			0.042198	36,886,063
34	Subtotal - Non-Summer Energy	1,545,788,245			\$ 0.043486	\$ 67,220,719
35	Subtotal - Total Energy	2,347,295,327				\$ 105,447,404
36	Transfer Adjustment Revenue			\$ 27,682,780		
37	Total Adjusted Base Revenue			\$ 151,417,691		\$ 161,423,506

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**Large Power Service**  
**Schedule 19 Transmission Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	24	\$ 299.00	\$ 7,176	\$ 430.00	\$ 10,320
2	Minimum Charge	-	10.00	-	50.00	-
3	<u>Basic Charge</u>					
4	Total Basic Charge	60,014	\$ 0.71	\$ 42,610	\$ 1.83	\$ 109,825
5	<u>Demand Charge (Current Seasons)</u>					
6	Summer (Jun-Aug)	15,188	\$ 5.93	\$ 90,063		
7	Non-Summer (Sep-May)	43,455	4.41	191,638		
8	Total Demand	58,643		\$ 281,700		
9	On-Peak Summer Demand (Jun-Aug)	14,437	\$ 0.97	\$ 14,004		
10	<u>Demand Charge (Proposed Seasons)</u>					
11	Summer (Jun-Sep)	20,063			\$ 10.02	\$ 201,034
12	Non-Summer (Oct-May)	38,580			8.62	332,556
13	Total Demand	58,643				\$ 533,590
14	On-Peak Summer Demand (Jun-Sep)	19,071			\$ 1.57	\$ 29,941
15	<u>Summer Energy (Jun-Aug)</u>					
16	On-Peak	2,000,915	\$ 0.052447	\$ 104,942		
17	Mid-Peak	3,704,369	0.041889	155,172		
18	Off-Peak	2,838,258	0.037394	106,134		
19	Subtotal - Summer Energy	8,543,543	\$ 0.042868	\$ 366,248		
20	<u>Non-Summer Energy (Sep-May)</u>					
21	Mid-Peak	13,775,429	\$ 0.039577	\$ 545,190		
22	Off-Peak	10,546,708	0.035383	373,174		
23	Subtotal - Non-Summer Energy	24,322,137	\$ 0.037758	\$ 918,364		
24	Subtotal - Total Energy	32,865,680		\$ 1,284,612		
25	<u>Summer Energy (Jun-Sep)</u>					
26	On-Peak	1,516,856			\$ 0.051063	\$ 77,455
27	Mid-Peak	1,908,973			0.051063	97,478
28	Off-Peak	7,883,515			0.045777	360,884
29	Subtotal - Summer Energy	11,309,344			\$ 0.047378	\$ 535,817
30	<u>Non-Summer Energy (Oct-May)</u>					
31	On-Peak	4,606,525			\$ 0.046042	\$ 212,094
32	Mid-Peak	4,608,196			0.043759	201,650
33	Off-Peak	12,341,615			0.041928	517,459
34	Subtotal - Non-Summer Energy	21,556,336			\$ 0.043199	\$ 931,203
35	Subtotal - Total Energy	32,865,680				\$ 1,467,020
36	Transfer Adjustment Revenue			\$ 387,282		
37	Total Adjusted Base Revenue			\$ 2,017,384		\$ 2,150,696

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END ▪

**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**ANDERSON, DI  
TESTIMONY**

**EXHIBIT NO. 54**

**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison - First Year Change**  
**IPC-E-23-11**  
**Schedule 1 - Residential Service**

kWh	Monthly Billing					Change				Weighted	
	Test Year		Year 1			\$		%		Average Change <sup>1</sup>	
	Summer	Non-Summer	Summer	Non-Summer		Summer	Non-Summer	Summer	Non-Summer	\$	%
150	\$ 19.77	\$ 18.85	\$ 30.45	\$ 28.96	\$	10.68	\$ 10.11	54.0%	53.7%	\$ 10.38	54.4%
250	\$ 29.61	\$ 28.08	\$ 40.75	\$ 38.26	\$	11.14	\$ 10.19	37.6%	36.3%	\$ 10.63	37.4%
350	\$ 39.45	\$ 37.31	\$ 51.04	\$ 47.57	\$	11.59	\$ 10.26	29.4%	27.5%	\$ 10.88	28.8%
450	\$ 49.30	\$ 46.54	\$ 61.34	\$ 56.87	\$	12.05	\$ 10.33	24.4%	22.2%	\$ 11.14	23.6%
550	\$ 59.14	\$ 55.77	\$ 71.64	\$ 66.18	\$	12.50	\$ 10.41	21.1%	18.7%	\$ 11.39	20.1%
650	\$ 68.98	\$ 65.00	\$ 81.94	\$ 75.48	\$	12.96	\$ 10.48	18.8%	16.1%	\$ 11.64	17.6%
750	\$ 78.83	\$ 74.23	\$ 92.24	\$ 84.79	\$	13.41	\$ 10.56	17.0%	14.2%	\$ 11.89	15.8%
850	\$ 89.55	\$ 83.87	\$ 103.28	\$ 94.44	\$	13.74	\$ 10.57	15.3%	12.6%	\$ 12.10	14.2%
950	\$ 101.14	\$ 93.93	\$ 115.08	\$ 104.45	\$	13.94	\$ 10.52	13.8%	11.2%	\$ 12.26	12.8%
1,000	\$ 106.94	\$ 98.95	\$ 120.98	\$ 109.45	\$	14.04	\$ 10.49	13.1%	10.6%	\$ 12.34	12.2%
1,200	\$ 130.13	\$ 119.06	\$ 144.56	\$ 129.45	\$	14.43	\$ 10.39	11.1%	8.7%	\$ 12.66	10.4%
1,400	\$ 153.32	\$ 139.17	\$ 168.15	\$ 149.46	\$	14.83	\$ 10.29	9.7%	7.4%	\$ 12.98	9.1%
1,600	\$ 176.51	\$ 159.28	\$ 191.74	\$ 169.47	\$	15.23	\$ 10.19	8.6%	6.4%	\$ 13.30	8.1%
1,800	\$ 199.70	\$ 179.39	\$ 215.33	\$ 189.47	\$	15.63	\$ 10.08	7.8%	5.6%	\$ 13.62	7.4%
2,000	\$ 222.89	\$ 199.50	\$ 238.91	\$ 209.48	\$	16.02	\$ 9.98	7.2%	5.0%	\$ 13.94	6.8%
2,500	\$ 290.64	\$ 254.53	\$ 308.56	\$ 262.99	\$	17.92	\$ 8.45	6.2%	3.3%	\$ 14.62	5.5%
3,000	\$ 358.39	\$ 309.57	\$ 378.20	\$ 316.49	\$	19.81	\$ 6.92	5.5%	2.2%	\$ 15.29	4.8%
5,000	\$ 629.40	\$ 529.71	\$ 656.79	\$ 530.52	\$	27.39	\$ 0.81	4.4%	0.2%	\$ 17.98	3.2%

<sup>1</sup> Includes change to four-month summer season.

**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison - Final Year of Transition vs Year 1**  
**IPC-E-23-11**  
**Schedule 1 - Residential Service**

kWh	Monthly Billing					Change				Weighted	
	Year 1		Year 3			\$		%		Average Change	
	Summer	Non-Summer	Summer	Non-Summer		Summer	Non-Summer	Summer	Non-Summer	\$	%
150	\$ 30.45	\$ 28.96	\$ 48.11	\$ 46.20	\$	17.66	\$ 17.24	58.0%	59.5%	\$ 17.38	59.0%
250	\$ 40.75	\$ 38.26	\$ 56.84	\$ 53.67	\$	16.10	\$ 15.40	39.5%	40.3%	\$ 15.64	40.0%
350	\$ 51.04	\$ 47.57	\$ 65.58	\$ 61.13	\$	14.54	\$ 13.57	28.5%	28.5%	\$ 13.89	28.5%
450	\$ 61.34	\$ 56.87	\$ 74.32	\$ 68.60	\$	12.98	\$ 11.73	21.2%	20.6%	\$ 12.14	20.8%
550	\$ 71.64	\$ 66.18	\$ 83.06	\$ 76.07	\$	11.42	\$ 9.89	15.9%	14.9%	\$ 10.40	15.3%
650	\$ 81.94	\$ 75.48	\$ 91.80	\$ 83.53	\$	9.86	\$ 8.05	12.0%	10.7%	\$ 8.65	11.1%
750	\$ 92.24	\$ 84.79	\$ 100.53	\$ 91.00	\$	8.30	\$ 6.21	9.0%	7.3%	\$ 6.91	7.9%
850	\$ 103.28	\$ 94.44	\$ 109.27	\$ 98.47	\$	5.99	\$ 4.03	5.8%	4.3%	\$ 4.68	4.8%
950	\$ 115.08	\$ 104.45	\$ 118.01	\$ 105.94	\$	2.93	\$ 1.49	2.5%	1.4%	\$ 1.97	1.8%
1,000	\$ 120.98	\$ 109.45	\$ 122.38	\$ 109.67	\$	1.40	\$ 0.22	1.2%	0.2%	\$ 0.62	0.5%
1,200	\$ 144.56	\$ 129.45	\$ 139.85	\$ 124.60	\$	(4.71)	\$ (4.85)	(3.3%)	(3.7%)	\$ (4.80)	(3.6%)
1,400	\$ 168.15	\$ 149.46	\$ 157.33	\$ 139.54	\$	(10.82)	\$ (9.92)	(6.4%)	(6.6%)	\$ (10.22)	(6.6%)
1,600	\$ 191.74	\$ 169.47	\$ 174.81	\$ 154.47	\$	(16.93)	\$ (15.00)	(8.8%)	(8.8%)	\$ (15.64)	(8.8%)
1,800	\$ 215.33	\$ 189.47	\$ 192.28	\$ 169.40	\$	(23.04)	\$ (20.07)	(10.7%)	(10.6%)	\$ (21.06)	(10.6%)
2,000	\$ 238.91	\$ 209.48	\$ 209.76	\$ 184.34	\$	(29.15)	\$ (25.14)	(12.2%)	(12.0%)	\$ (26.48)	(12.1%)
2,500	\$ 308.56	\$ 262.99	\$ 253.45	\$ 221.67	\$	(55.11)	\$ (41.32)	(17.9%)	(15.7%)	\$ (45.91)	(16.5%)
3,000	\$ 378.20	\$ 316.49	\$ 297.14	\$ 259.01	\$	(81.07)	\$ (57.49)	(21.4%)	(18.2%)	\$ (65.35)	(19.4%)
5,000	\$ 656.79	\$ 530.52	\$ 471.90	\$ 408.35	\$	(184.89)	\$ (122.18)	(28.2%)	(23.0%)	\$ (143.08)	(25.0%)

**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison - First Year Change**  
**IPC-E-23-11**  
**Schedule 5 - Optional Time-of-Day Plan**

kWh	Monthly Billing <sup>1</sup>					Change				Weighted	
	Test Year		Year 1			\$		%		Average Change <sup>2</sup>	
	Summer	Non-Summer	Summer	Non-Summer		Summer	Non-Summer	Summer	Non-Summer	\$	%
150	\$ 20.43	\$ 19.18	\$ 31.30	\$ 29.81	\$	10.87	\$ 10.63	53.2%	55.4%	\$ 10.81	55.5%
250	\$ 30.72	\$ 28.63	\$ 42.17	\$ 39.68	\$	11.45	\$ 11.05	37.3%	38.6%	\$ 11.36	39.0%
350	\$ 41.00	\$ 38.08	\$ 53.03	\$ 49.55	\$	12.03	\$ 11.46	29.3%	30.1%	\$ 11.90	30.7%
450	\$ 51.29	\$ 47.53	\$ 63.90	\$ 59.42	\$	12.61	\$ 11.88	24.6%	25.0%	\$ 12.44	25.7%
550	\$ 61.57	\$ 56.99	\$ 74.77	\$ 69.29	\$	13.19	\$ 12.30	21.4%	21.6%	\$ 12.98	22.3%
650	\$ 71.86	\$ 66.44	\$ 85.63	\$ 79.16	\$	13.78	\$ 12.72	19.2%	19.1%	\$ 13.52	19.9%
750	\$ 82.15	\$ 75.89	\$ 96.50	\$ 89.03	\$	14.36	\$ 13.14	17.5%	17.3%	\$ 14.07	18.2%
850	\$ 92.43	\$ 85.34	\$ 107.37	\$ 98.90	\$	14.94	\$ 13.56	16.2%	15.9%	\$ 14.61	16.8%
950	\$ 102.72	\$ 94.80	\$ 118.24	\$ 108.77	\$	15.52	\$ 13.98	15.1%	14.7%	\$ 15.15	15.7%
1,000	\$ 107.86	\$ 99.52	\$ 123.67	\$ 113.71	\$	15.81	\$ 14.18	14.7%	14.3%	\$ 15.42	15.2%
1,200	\$ 128.43	\$ 118.43	\$ 145.40	\$ 133.45	\$	16.97	\$ 15.02	13.2%	12.7%	\$ 16.50	13.6%
1,400	\$ 149.01	\$ 137.33	\$ 167.14	\$ 153.19	\$	18.13	\$ 15.86	12.2%	11.5%	\$ 17.59	12.5%
1,600	\$ 169.58	\$ 156.23	\$ 188.87	\$ 172.93	\$	19.29	\$ 16.69	11.4%	10.7%	\$ 18.67	11.7%
1,800	\$ 190.15	\$ 175.14	\$ 210.60	\$ 192.67	\$	20.45	\$ 17.53	10.8%	10.0%	\$ 19.76	11.0%
2,000	\$ 210.72	\$ 194.04	\$ 232.34	\$ 212.41	\$	21.62	\$ 18.37	10.3%	9.5%	\$ 20.84	10.5%
2,500	\$ 262.15	\$ 241.30	\$ 286.67	\$ 261.76	\$	24.52	\$ 20.46	9.4%	8.5%	\$ 23.55	9.6%
3,000	\$ 313.58	\$ 288.56	\$ 341.01	\$ 311.12	\$	27.42	\$ 22.55	8.7%	7.8%	\$ 26.26	8.9%
5,000	\$ 519.31	\$ 477.61	\$ 558.34	\$ 508.53	\$	39.04	\$ 30.92	7.5%	6.5%	\$ 37.10	7.6%

<sup>1</sup> Bills are calculated on class average on-peak to off-peak ratio by season. Does not account for behavioral response to new price signal.

<sup>2</sup> Includes change to four-month summer season.



**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison - Final Year of Transition vs Year 1**  
**IPC-E-23-11**  
**Schedule 5 - Optional Time-of-Day Plan**

kWh	Monthly Billing <sup>1</sup>					Change				Weighted	
	Year 1		Year 3			\$		%		Average Change	
	Summer	Non-Summer	Summer	Non-Summer		Summer	Non-Summer	Summer	Non-Summer	\$	%
150	\$ 51.13	\$ 28.64	\$ 66.18	\$ 51.29	\$	15.05	\$ 22.65	29.4%	79.1%	\$ 20.11	55.7%
250	\$ 75.22	\$ 37.74	\$ 86.97	\$ 62.15	\$	11.74	\$ 24.41	15.6%	64.7%	\$ 20.19	40.2%
350	\$ 99.31	\$ 46.84	\$ 107.75	\$ 73.01	\$	8.44	\$ 26.18	8.5%	55.9%	\$ 20.27	31.5%
450	\$ 123.40	\$ 55.93	\$ 128.54	\$ 83.88	\$	5.14	\$ 27.95	4.2%	50.0%	\$ 20.34	25.9%
550	\$ 147.49	\$ 65.03	\$ 149.32	\$ 94.74	\$	1.84	\$ 29.71	1.2%	45.7%	\$ 20.42	22.1%
650	\$ 171.57	\$ 74.12	\$ 170.11	\$ 105.60	\$	(1.46)	\$ 31.48	(0.9%)	42.5%	\$ 20.50	19.2%
750	\$ 195.66	\$ 83.22	\$ 190.90	\$ 116.46	\$	(4.77)	\$ 33.24	(2.4%)	39.9%	\$ 20.57	17.0%
850	\$ 219.75	\$ 92.31	\$ 211.68	\$ 127.32	\$	(8.07)	\$ 35.01	(3.7%)	37.9%	\$ 20.65	15.3%
950	\$ 243.84	\$ 101.41	\$ 232.47	\$ 138.18	\$	(11.37)	\$ 36.77	(4.7%)	36.3%	\$ 20.73	13.9%
1,000	\$ 255.88	\$ 105.96	\$ 242.86	\$ 143.61	\$	(13.02)	\$ 37.66	(5.1%)	35.5%	\$ 20.76	13.3%
1,200	\$ 304.06	\$ 124.15	\$ 284.43	\$ 165.34	\$	(19.63)	\$ 41.19	(6.5%)	33.2%	\$ 20.92	11.4%
1,400	\$ 352.24	\$ 142.34	\$ 326.01	\$ 187.06	\$	(26.23)	\$ 44.72	(7.4%)	31.4%	\$ 21.07	9.9%
1,600	\$ 400.41	\$ 160.53	\$ 367.58	\$ 208.78	\$	(32.83)	\$ 48.25	(8.2%)	30.1%	\$ 21.22	8.8%
1,800	\$ 448.59	\$ 178.72	\$ 409.15	\$ 230.51	\$	(39.44)	\$ 51.78	(8.8%)	29.0%	\$ 21.37	8.0%
2,000	\$ 496.77	\$ 196.92	\$ 450.72	\$ 252.23	\$	(46.04)	\$ 55.31	(9.3%)	28.1%	\$ 21.53	7.3%
2,500	\$ 617.21	\$ 242.39	\$ 554.66	\$ 306.54	\$	(62.55)	\$ 64.14	(10.1%)	26.5%	\$ 21.91	6.0%
3,000	\$ 737.65	\$ 287.87	\$ 658.59	\$ 360.84	\$	(79.07)	\$ 72.97	(10.7%)	25.3%	\$ 22.29	5.1%
5,000	\$ 1,219.42	\$ 469.79	\$ 1,074.31	\$ 578.07	\$	(145.11)	\$ 108.28	(11.9%)	23.0%	\$ 23.82	3.3%

<sup>1</sup> Bills are calculated on class average on-peak to off-peak ratio by season. Does not account for behavioral response to new price signal.

**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison**  
**IPC-E-23-11**  
**Schedule 9 - Large General Service - Primary**

Load Size	Load		Monthly Billing <sup>1</sup>				Change				Weighted	
			Current		Proposed		\$		%		Average Change <sup>2</sup>	
			Summer	Non-Summer	Summer	Non-Summer	Summer	Non-Summer	Summer	Non-Summer	\$	%
250	40%	73,000	\$ 6,426.46	\$ 5,631.53	\$ 6,555.42	\$ 5,832.15	\$ 128.96	\$ 200.62	2.0%	3.6%	\$ 242.98	4.2%
	50%	92,000	\$ 7,524.60	\$ 6,623.47	\$ 7,442.64	\$ 6,646.03	(81.96)	22.56	(1.1%)	0.3%	62.81	0.9%
	60%	110,000	\$ 8,564.94	\$ 7,563.20	\$ 8,283.16	\$ 7,417.07	(281.78)	(146.13)	(3.3%)	(1.9%)	(107.87)	(1.4%)
	70%	128,000	\$ 9,605.29	\$ 8,502.93	\$ 9,123.69	\$ 8,188.11	(481.60)	(314.82)	(5.0%)	(3.7%)	(278.55)	(3.2%)
	80%	146,000	\$ 10,645.63	\$ 9,442.66	\$ 9,964.21	\$ 8,959.15	(681.42)	(483.51)	(6.4%)	(5.1%)	(449.23)	(4.6%)
350	40%	102,000	\$ 8,871.48	\$ 7,759.71	\$ 9,034.25	\$ 8,022.44	\$ 162.77	\$ 262.74	1.8%	3.4%	\$ 322.06	4.0%
	50%	128,000	\$ 10,374.20	\$ 9,117.09	\$ 10,248.34	\$ 9,136.17	(125.86)	19.08	(1.2%)	0.2%	75.52	0.8%
	60%	154,000	\$ 11,876.92	\$ 10,474.48	\$ 11,462.43	\$ 10,249.90	(414.49)	(224.58)	(3.5%)	(2.1%)	(171.02)	(1.6%)
	70%	179,000	\$ 13,321.85	\$ 11,779.66	\$ 12,629.83	\$ 11,320.79	(692.02)	(458.87)	(5.2%)	(3.9%)	(408.07)	(3.4%)
	80%	205,000	\$ 14,824.57	\$ 13,137.05	\$ 13,843.92	\$ 12,434.52	(980.65)	(702.53)	(6.6%)	(5.3%)	(654.61)	(4.8%)
450	40%	132,000	\$ 11,374.30	\$ 9,940.09	\$ 11,559.77	\$ 10,255.57	\$ 185.47	\$ 315.49	1.6%	3.2%	\$ 391.67	3.8%
	50%	165,000	\$ 13,281.60	\$ 11,662.93	\$ 13,100.74	\$ 11,669.15	(180.87)	6.22	(1.4%)	0.1%	78.75	0.7%
	60%	198,000	\$ 15,188.90	\$ 13,385.76	\$ 14,641.70	\$ 13,082.73	(547.20)	(303.04)	(3.6%)	(2.3%)	(234.16)	(1.7%)
	70%	231,000	\$ 17,096.20	\$ 15,108.60	\$ 16,182.66	\$ 14,496.30	(913.54)	(612.30)	(5.3%)	(4.1%)	(547.08)	(3.5%)
	80%	264,000	\$ 19,003.50	\$ 16,831.44	\$ 17,723.62	\$ 15,909.88	(1,279.88)	(921.56)	(6.7%)	(5.5%)	(860.00)	(4.9%)
550	40%	161,000	\$ 13,819.33	\$ 12,068.26	\$ 14,038.60	\$ 12,445.87	\$ 219.28	\$ 377.61	1.6%	3.1%	\$ 470.75	3.8%
	50%	201,000	\$ 16,131.20	\$ 14,156.55	\$ 15,906.43	\$ 14,159.29	(224.77)	2.74	(1.4%)	0.0%	91.46	0.6%
	60%	242,000	\$ 18,500.88	\$ 16,297.04	\$ 17,820.96	\$ 15,915.55	(679.91)	(381.49)	(3.7%)	(2.3%)	(297.31)	(1.8%)
	70%	282,000	\$ 20,812.75	\$ 18,385.33	\$ 19,688.79	\$ 17,628.98	(1,123.96)	(756.35)	(5.4%)	(4.1%)	(676.60)	(3.6%)
	80%	322,000	\$ 23,124.63	\$ 20,473.62	\$ 21,556.63	\$ 19,342.41	(1,568.01)	(1,131.22)	(6.8%)	(5.5%)	(1,055.90)	(5.0%)
650	40%	190,000	\$ 16,264.35	\$ 14,196.43	\$ 16,517.43	\$ 14,636.16	\$ 253.08	\$ 439.73	1.6%	3.1%	\$ 549.84	3.7%
	50%	238,000	\$ 19,038.60	\$ 16,702.38	\$ 18,758.83	\$ 16,692.27	(279.77)	(10.11)	(1.5%)	(0.1%)	94.69	0.5%
	60%	285,000	\$ 21,755.06	\$ 19,156.12	\$ 20,953.53	\$ 18,705.55	(801.53)	(450.57)	(3.7%)	(2.4%)	(350.98)	(1.8%)
	70%	333,000	\$ 24,529.31	\$ 21,662.06	\$ 23,194.93	\$ 20,761.66	(1,334.38)	(900.41)	(5.4%)	(4.2%)	(806.13)	(3.6%)
	80%	381,000	\$ 27,303.56	\$ 24,168.01	\$ 25,436.33	\$ 22,817.77	(1,867.24)	(1,350.24)	(6.8%)	(5.6%)	(1,261.28)	(5.1%)
750	40%	220,000	\$ 18,767.17	\$ 16,376.81	\$ 19,042.96	\$ 16,869.29	\$ 275.79	\$ 492.48	1.5%	3.0%	\$ 619.44	3.6%
	50%	275,000	\$ 21,946.00	\$ 19,248.21	\$ 21,611.23	\$ 19,225.25	(334.78)	(22.96)	(1.5%)	(0.1%)	97.92	0.5%
	60%	329,000	\$ 25,067.04	\$ 22,067.40	\$ 24,132.80	\$ 21,538.37	(934.24)	(529.02)	(3.7%)	(2.4%)	(414.13)	(1.8%)
	70%	384,000	\$ 28,245.87	\$ 24,938.80	\$ 26,701.07	\$ 23,894.34	(1,544.80)	(1,044.46)	(5.5%)	(4.2%)	(935.65)	(3.6%)
	80%	439,000	\$ 31,424.70	\$ 27,810.19	\$ 29,269.33	\$ 26,250.30	(2,155.36)	(1,559.90)	(6.9%)	(5.6%)	(1,457.18)	(5.1%)

<sup>1</sup> Bills are based on class average energy consumption by time period and season.

<sup>2</sup> Includes change to four-month summer season.

**Idaho Power Company**  
**State of Idaho**  
**Monthly Adjusted Base Revenue Comparison**  
**IPC-E-23-11**  
**Schedule 19 - Large Power Service - Primary**

Load Size	Load		Monthly Billing <sup>1</sup>				Change				Annual	
			Current		Proposed		\$		%		Average Change <sup>2</sup>	
			Summer	Non-Summer	Summer	Non-Summer	Summer	Non-Summer	Summer	Non-Summer	\$	%
1,000	40%	295,000	\$ 25,119.95	\$ 20,977.87	\$ 28,343.70	\$ 24,214.07	\$ 3,223.75	\$ 3,236.20	12.8%	15.4%	\$ 3,577.22	16.3%
	50%	365,000	\$ 28,992.79	\$ 24,463.92	\$ 31,682.25	\$ 27,258.12	2,689.46	2,794.20	9.3%	11.4%	3,136.69	12.3%
	60%	440,000	\$ 33,142.26	\$ 28,198.96	\$ 35,259.26	\$ 30,519.59	2,117.00	2,320.63	6.4%	8.2%	2,664.70	9.1%
	70%	510,000	\$ 37,015.10	\$ 31,685.01	\$ 38,597.81	\$ 33,563.64	1,582.71	1,878.63	4.3%	5.9%	2,224.17	6.7%
	80%	585,000	\$ 41,164.57	\$ 35,420.05	\$ 42,174.82	\$ 36,825.12	1,010.25	1,405.07	2.5%	4.0%	1,752.17	4.8%
2,500	40%	730,000	\$ 61,936.44	\$ 51,622.67	\$ 69,856.56	\$ 59,564.03	\$ 7,920.12	\$ 7,941.36	12.8%	15.4%	\$ 8,793.76	16.2%
	50%	915,000	\$ 72,171.79	\$ 60,835.79	\$ 78,679.86	\$ 67,609.01	6,508.07	6,773.22	9.0%	11.1%	7,629.50	12.0%
	60%	1,100,000	\$ 82,407.15	\$ 70,048.91	\$ 87,503.16	\$ 75,653.99	5,096.01	5,605.08	6.2%	8.0%	6,465.24	8.8%
	70%	1,280,000	\$ 92,365.88	\$ 79,013.02	\$ 96,087.99	\$ 83,481.53	3,722.11	4,468.51	4.0%	5.7%	5,332.45	6.5%
	80%	1,465,000	\$ 102,601.24	\$ 88,226.13	\$ 104,911.29	\$ 91,526.51	2,310.05	3,300.38	2.3%	3.7%	4,168.19	4.5%
3,500	40%	1,025,000	\$ 86,757.39	\$ 72,301.55	\$ 97,770.26	\$ 83,348.10	\$ 11,012.87	\$ 11,046.55	12.7%	15.3%	\$ 12,239.98	16.1%
	50%	1,280,000	\$ 100,865.59	\$ 85,000.71	\$ 109,932.11	\$ 94,437.13	9,066.52	9,436.42	9.0%	11.1%	10,635.19	12.0%
	60%	1,535,000	\$ 114,973.78	\$ 97,699.86	\$ 122,093.95	\$ 105,526.15	7,120.17	7,826.28	6.2%	8.0%	9,030.41	8.9%
	70%	1,795,000	\$ 129,358.61	\$ 110,648.03	\$ 134,494.27	\$ 116,832.61	5,135.66	6,184.58	4.0%	5.6%	7,394.15	6.4%
	80%	2,050,000	\$ 143,466.80	\$ 123,347.19	\$ 146,656.11	\$ 127,921.63	3,189.31	4,574.44	2.2%	3.7%	5,789.37	4.5%
5,000	40%	1,465,000	\$ 123,850.50	\$ 103,195.35	\$ 139,521.59	\$ 118,915.49	\$ 15,671.08	\$ 15,720.14	12.7%	15.2%	\$ 17,425.05	16.1%
	50%	1,830,000	\$ 144,044.59	\$ 121,372.58	\$ 156,929.72	\$ 134,788.02	12,885.13	13,415.44	8.9%	11.1%	15,128.00	11.9%
	60%	2,195,000	\$ 164,238.67	\$ 139,549.81	\$ 174,337.85	\$ 150,660.54	10,099.18	11,110.73	6.1%	8.0%	12,830.95	8.8%
	70%	2,560,000	\$ 184,432.76	\$ 157,727.04	\$ 191,745.98	\$ 166,533.07	7,313.22	8,806.03	4.0%	5.6%	10,533.90	6.4%
	80%	2,930,000	\$ 204,903.47	\$ 176,153.27	\$ 209,392.58	\$ 182,623.02	4,489.11	6,469.75	2.2%	3.7%	8,205.39	4.5%
7,000	40%	2,050,000	\$ 173,215.78	\$ 144,304.09	\$ 195,110.53	\$ 166,266.20	\$ 21,894.75	\$ 21,962.11	12.6%	15.2%	\$ 24,348.96	16.1%
	50%	2,560,000	\$ 201,432.17	\$ 169,702.41	\$ 219,434.22	\$ 188,444.25	18,002.05	18,741.84	8.9%	11.0%	21,139.39	11.9%
	60%	3,075,000	\$ 229,925.19	\$ 195,349.73	\$ 243,996.38	\$ 210,839.73	14,071.18	15,490.00	6.1%	7.9%	17,898.35	8.8%
	70%	3,585,000	\$ 258,141.59	\$ 220,748.05	\$ 268,320.06	\$ 233,017.78	10,178.48	12,269.73	3.9%	5.6%	14,688.77	6.4%
	80%	4,100,000	\$ 286,634.61	\$ 246,395.37	\$ 292,882.22	\$ 255,413.26	6,247.61	9,017.89	2.2%	3.7%	11,447.73	4.5%
8,500	40%	2,490,000	\$ 210,308.89	\$ 175,197.90	\$ 236,861.85	\$ 201,833.59	\$ 26,552.96	\$ 26,635.69	12.6%	15.2%	\$ 29,534.03	16.1%
	50%	3,110,000	\$ 244,611.17	\$ 206,074.29	\$ 266,431.83	\$ 228,795.14	21,820.65	22,720.86	8.9%	11.0%	25,632.20	11.9%
	60%	3,735,000	\$ 279,190.09	\$ 237,199.68	\$ 296,240.27	\$ 255,974.12	17,050.19	18,774.45	6.1%	7.9%	21,698.89	8.8%
	70%	4,355,000	\$ 313,492.37	\$ 268,076.06	\$ 325,810.25	\$ 282,935.67	12,317.88	14,859.61	3.9%	5.5%	17,797.06	6.4%
	80%	4,980,000	\$ 348,071.28	\$ 299,201.46	\$ 355,618.69	\$ 310,114.65	7,547.41	10,913.20	2.2%	3.6%	13,863.75	4.5%

<sup>1</sup> Bills are based on class average energy consumption by time period and season.

<sup>2</sup> Includes change to four-month summer season.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**ANDERSON, DI**  
**TESTIMONY**

**EXHIBIT NO. 55**

**Idaho Power Company  
State of Idaho  
Residential Price Modernization Plan  
Filed June 1, 2023  
IPC-E-23-11**

**Residential Service  
Schedule 1 and Schedule 6**

Line No.	Description	Adjusted 2023 Units	Test Year		Year 1		Year 2		Year 3	
			Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars
1	Service Charge	6,057,159	\$ 5.00	\$ 30,285,794	\$ 15.00	\$ 90,857,381	\$ 25.00	\$ 151,428,968	\$ 35.00	\$ 212,000,555
2	Minimum Charge	72,347	3.00	217,041	3.00	217,041	3.00	217,041	3.00	217,041
3	Summer Energy (Jun-Sep)									
4	First 800 kWh	1,158,501,794	\$ 0.110788	\$ 128,347,806	\$ 0.102985	\$ 119,308,307	\$ 0.095182	\$ 110,268,518	\$ 0.087379	\$ 101,228,728
5	801-2,000 kWh	534,019,069	0.133216	71,139,884	0.117937	62,980,607	0.102658	54,821,330	0.087379	46,662,052
6	All Additional kWh	99,239,843	0.158253	15,704,970	0.139291	13,823,217	0.115634	11,475,500	0.087379	8,671,478
7	Subtotal - Summer Energy	1,791,760,706	\$ 0.120101	\$ 215,192,661	\$ 0.109451	\$ 196,112,131	\$ 0.098543	\$ 176,565,347	\$ 0.087379	\$ 156,562,259
8	Non-Summer Energy (Oct-May)									
9	First 800 kWh	2,305,593,411	\$ 0.102240	\$ 235,724,142	\$ 0.093050	\$ 214,535,467	\$ 0.083859	\$ 193,344,758	\$ 0.074669	\$ 172,156,354
10	801-2,000 kWh	1,007,012,144	0.112716	113,506,327	0.100034	100,735,453	0.087351	87,963,518	0.074669	75,192,590
11	All Additional kWh	422,682,232	0.124832	52,764,437	0.107014	45,232,916	0.090306	38,170,742	0.074669	31,561,260
12	Subtotal - Non-Summer Energy	3,735,287,787	\$ 0.107621	\$ 401,994,906	\$ 0.096513	\$ 360,503,836	\$ 0.085530	\$ 319,479,017	\$ 0.074669	\$ 278,910,204
13	Subtotal - Total Energy	5,527,048,493		\$ 617,187,567		\$ 556,615,967		\$ 496,044,365		\$ 435,472,463
14	Total Adjusted Base Revenue			\$ 647,690,401		\$ 647,690,389		\$ 647,690,373		\$ 647,690,058

■ END

END ■

Idaho Power Company  
State of Idaho  
Residential Price Modernization Plan  
Filed June 1, 2023  
IPC-E-23-11

Master-Metered Mobile Home Park Residential Service  
Schedule 3

Line No.	Description	Adjusted 2023 Units	Test Year		Year 1		Year 2		Year 3	
			Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars
1	Service Charge	225	\$ 5.00	\$ 1,124	\$ 15.00	\$ 3,372	\$ 25.00	\$ 5,620	\$ 35.00	\$ 7,868
2	Summer Energy (Jun-Sep)	4,476,086	\$ 0.111127	497,416	\$ 0.110625	495,167	\$ 0.110123	492,920	\$ 0.109621	490,673
3	Total Adjusted Base Revenue			\$ 498,540	\$ 0.110625	\$ 498,539		\$ 498,540		\$ 498,541

▪ END

END ▪

**Idaho Power Company**  
**State of Idaho**  
**Residential Price Modernization Plan**  
**Filed June 1, 2023**  
**IPC-E-23-11**

**Residential Service - Time-of-Use**  
**Schedule 5**

Line No.	Description	Adjusted 2023 Units	Test Year		Year 1		Year 2		Year 3	
			Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars	Price	Revenue Dollars
1	Service Charge	11,836	\$ 5.00	\$ 59,179	\$ 15.00	\$ 177,536	\$ 25.00	\$ 295,893	\$ 35.00	\$ 414,250
2	Minimum Charge	29	3.00	87	3.00	87	3.00	87	3.00	87
3	Summer Energy (Jun-Sep)									
4	On-Peak	999,802	\$ 0.298812	\$ 298,753	\$ 0.279642	\$ 279,587	\$ 0.260477	\$ 260,425	\$ 0.241307	\$ 241,259
5	Off-Peak	4,410,435	0.074703	329,473	0.069911	308,338	0.065119	287,203	0.060327	266,068
6	Subtotal - Summer Energy	5,410,238	\$ 0.116118	\$ 628,226	\$ 0.108669	\$ 587,925	\$ 0.101221	\$ 547,629	\$ 0.093772	\$ 507,328
7	Non-Summer Energy (Oct-May)									
8	On-Peak	2,279,827	\$ 0.143981	\$ 328,251	\$ 0.134745	\$ 307,195	\$ 0.125509	\$ 286,139	\$ 0.116273	\$ 265,082
9	Off-Peak	9,257,286	0.095987	888,581	0.089830	831,582	0.083672	774,576	0.077515	717,579
10	Subtotal - Non-Summer Energy	11,537,113	\$ 0.105471	\$ 1,216,832	\$ 0.098706	\$ 1,138,777	\$ 0.091939	\$ 1,060,714	\$ 0.085174	\$ 982,661
11	Subtotal - Total Energy	16,947,350		\$ 1,845,058		\$ 1,726,702		\$ 1,608,343		\$ 1,489,988
12	Total Adjusted Base Revenue			\$ 1,904,324		\$ 1,904,324		\$ 1,904,323		\$ 1,904,325

■ END

END ■

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**ANDERSON, DI**  
**TESTIMONY**

**EXHIBIT NO. 56**

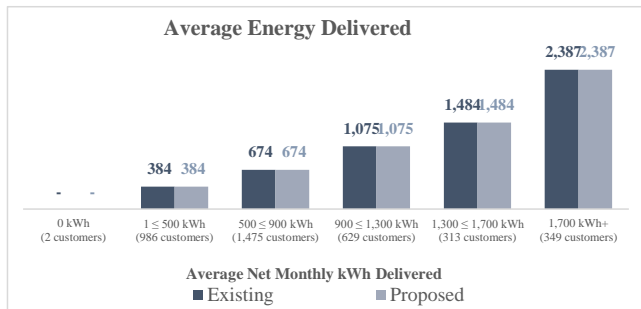
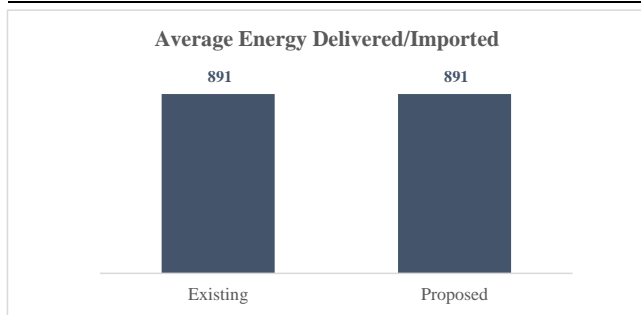


## Schedule 6 - Residential On-Site Generation

## Non-Legacy Bill Impact - 2023 GRC

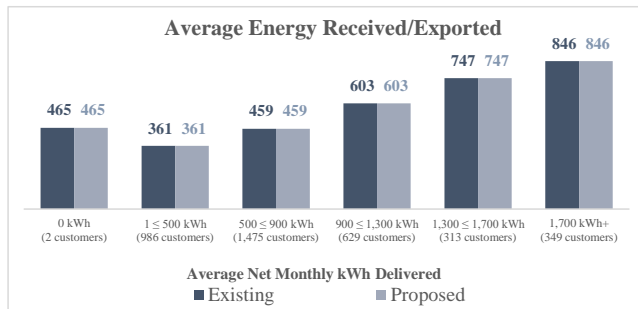
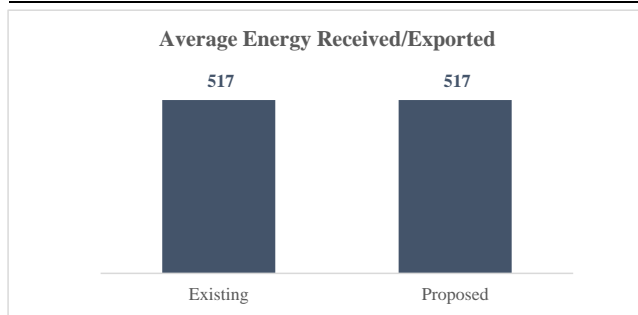
### Average Energy Delivered/Imported

Category	Count	Energy Delivered	
		Existing	Proposed
0 kWh	2	-	-
1 ≤ 500 kWh	986	384	384
500 ≤ 900 kWh	1,475	674	674
900 ≤ 1,300 kWh	629	1,075	1,075
1,300 ≤ 1,700 kWh	313	1,484	1,484
1,700 kWh+	349	2,387	2,387
<b>All Customers</b>	<b>3,754</b>	<b>891</b>	<b>891</b>



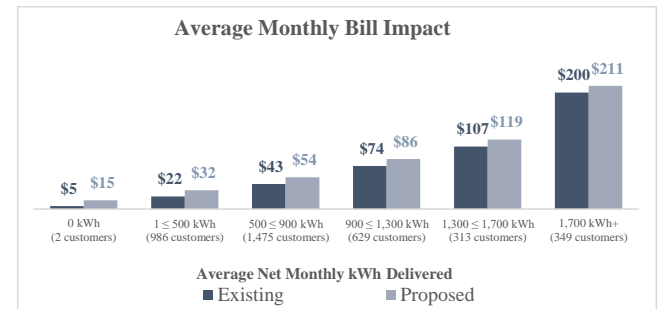
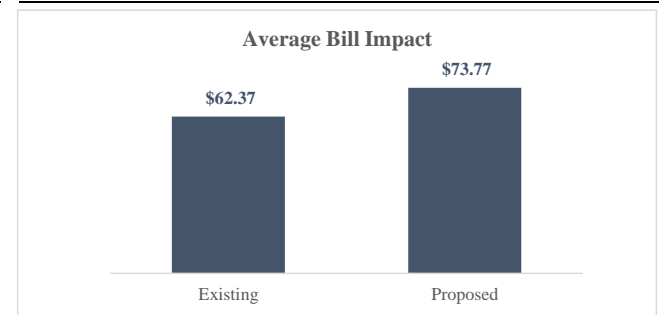
### Average Energy Received/Exported

Category	Count	Energy Exported	
		Existing	Proposed
0 kWh	2	465	465
1 ≤ 500 kWh	986	361	361
500 ≤ 900 kWh	1,475	459	459
900 ≤ 1,300 kWh	629	603	603
1,300 ≤ 1,700 kWh	313	747	747
1,700 kWh+	349	846	846
<b>All Customers</b>	<b>3,754</b>	<b>517</b>	<b>517</b>



### Average Bill Impact

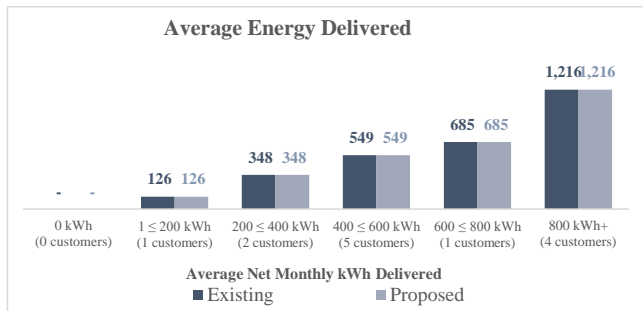
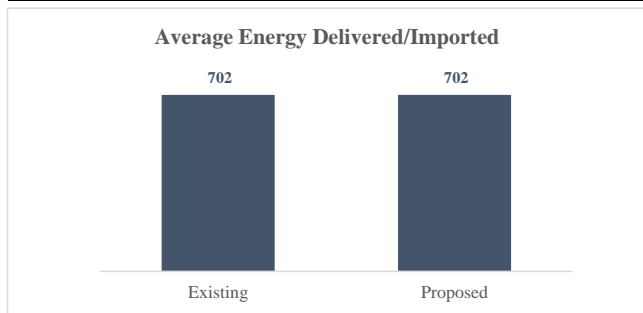
Category	Count	Avg. Monthly Bill	
		Existing	Proposed
0 kWh	2	\$ 5.00	\$ 15.00
1 ≤ 500 kWh	986	\$ 21.54	\$ 32.18
500 ≤ 900 kWh	1,475	\$ 42.91	\$ 54.48
900 ≤ 1,300 kWh	629	\$ 73.91	\$ 85.78
1,300 ≤ 1,700 kWh	313	\$ 106.96	\$ 118.87
1,700 kWh+	349	\$ 199.56	\$ 211.05
<b>All Customers</b>	<b>3,754</b>	<b>\$ 62.37</b>	<b>\$ 73.77</b>



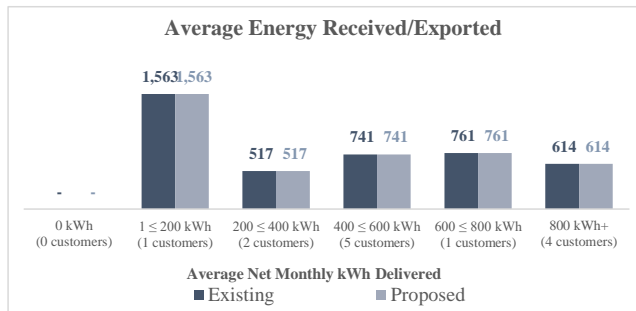
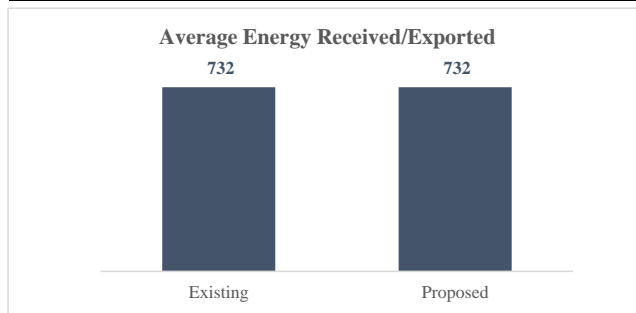
## Schedule 8 - Small General Service On-Site Generation

## Non-Legacy Bill Impact - 2023 GRC

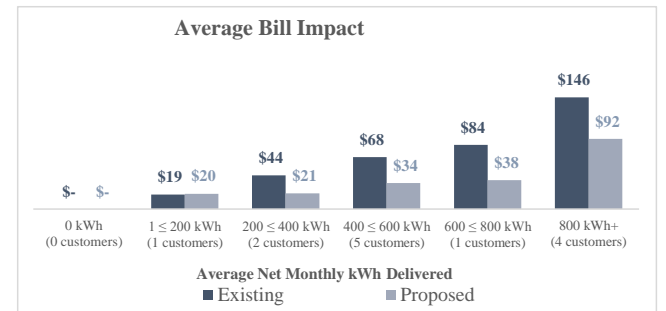
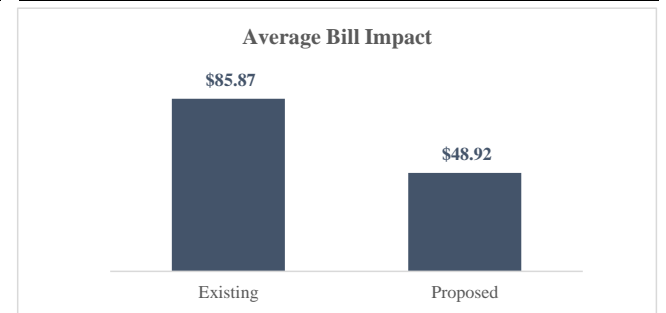
Average Energy Delivered/Imported			
Category	Count	Energy Delivered	
		Existing	Proposed
0 kWh	-	-	-
1 ≤ 200 kWh	1	126	126
200 ≤ 400 kWh	2	348	348
400 ≤ 600 kWh	5	549	549
600 ≤ 800 kWh	1	685	685
800 kWh+	4	1,216	1,216
<b>All Customers</b>	<b>13</b>	<b>702</b>	<b>702</b>



Average Energy Received/Exported			
Category	Count	Energy Exported	
		Existing	Proposed
0 kWh	-	-	-
1 ≤ 200 kWh	1	1,563	1,563
200 ≤ 400 kWh	2	517	517
400 ≤ 600 kWh	5	741	741
600 ≤ 800 kWh	1	761	761
800 kWh+	4	614	614
<b>All Customers</b>	<b>13</b>	<b>732</b>	<b>732</b>



Average Bill Impact			
Category	Count	Avg. Monthly Bill	
		Existing	Proposed
0 kWh	-	\$ -	\$ -
1 ≤ 200 kWh	1	\$ 19.05	\$ 20.00
200 ≤ 400 kWh	2	\$ 44.28	\$ 20.61
400 ≤ 600 kWh	5	\$ 67.94	\$ 33.96
600 ≤ 800 kWh	1	\$ 83.89	\$ 37.91
800 kWh+	4	\$ 146.28	\$ 91.75
<b>All Customers</b>	<b>13</b>	<b>\$ 85.87</b>	<b>\$ 48.92</b>



BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION )  
OF IDAHO POWER COMPANY FOR )  
AUTHORITY TO INCREASE ITS RATES ) CASE NO. IPC-E-23-11  
AND CHARGES FOR ELECTRIC SERVICE )  
IN THE STATE OF IDAHO AND FOR )  
ASSOCIATED REGULATORY ACCOUNTING )  
TREATMENT. )  
\_\_\_\_\_ )

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

ROBERT Z. THOMPSON

1 Q. Please state your name and business address.

2 A. My name is Robert Z. Thompson. I go by my  
3 middle name, and therefore, Zack Thompson is my preferred  
4 name. My business address is 1221 West Idaho Street, Boise,  
5 Idaho 83702.

6 Q. By whom are you employed, and in what  
7 capacity?

8 A. I am employed by Idaho Power Company ("Idaho  
9 Power" or "Company") as a Regulatory Analyst in the  
10 Regulatory Affairs Department.

11 Q. Please describe your educational background.

12 A. In May of 2008, I received a Bachelor of Arts  
13 degree in Business, Organizations, and Society with a minor  
14 in Economics from Franklin & Marshall College in Lancaster,  
15 Pennsylvania. In May of 2014, I received a Master of  
16 Business Administration degree with a specialization in  
17 Finance from Louisiana State University in Baton Rouge,  
18 Louisiana. I have also attended "The Basics: Practical  
19 Regulatory Training for the Electric Industry," an electric  
20 utility ratemaking course offered through the New Mexico  
21 State University's Center for Public Utilities, "Electric  
22 Utility Fundamentals and Insights," an electric utility  
23 course offered by Western Energy Institute, and "Electric  
24 Rates Advanced Course," an electric utility ratemaking  
25 course offered through Edison Electric Institute.

1 Q. Please describe your work experience with  
2 Idaho Power.

3 A. In 2020, I was hired as a Regulatory Analyst  
4 in the Company's Regulatory Affairs Department. My primary  
5 responsibilities include supporting activities associated  
6 with demand-side management as well as rate design for the  
7 small general service, large general secondary service,  
8 lighting, and irrigation customer classes.

9 Q. What is the purpose of your testimony?

10 A. The purpose of my testimony is to describe  
11 proposed changes and updates to Schedule 7, Small General  
12 Service ("Schedule 7"), Schedule 9, Large General Secondary  
13 Service ("Schedule 9S"), Schedule 24, Agricultural  
14 Irrigation Service ("Schedule 24"), Schedule 15, Dusk to  
15 Dawn Customer Lighting ("Schedule 15"), Schedule 41, Street  
16 Lighting Service ("Schedule 41"), Schedule 42, Traffic  
17 Control Signal Lighting Service ("Schedule 42"), and  
18 Schedule 40, Non-metered General Service ("Schedule 40").

19 Q. Are you sponsoring any exhibits?

20 A. Yes. I am sponsoring the following exhibits:

<u>Exhibit</u>	<u>Description</u>
Exhibit No. 57	Calculation of Proposed Rates
Exhibit No. 58	Typical Monthly Billing Comparison



1 is proposing to make three updates. The first update is  
2 increasing the service charge to \$20.00, or an increase of  
3 \$15.00, to move closer to the class cost of service. The  
4 second update is "flattening" the inclining energy block  
5 tiers to move closer towards flat energy rates. The third  
6 update is moving the summer seasonal rates from June 1 to  
7 August 31 to June 1 to September 30, or a three-month  
8 summer season to a four-month summer season, as explained  
9 by Company Witness Ms. Connie Aschenbrenner in her  
10 testimony.

11 Q. What did Idaho Power consider in making its  
12 \$20.00 service charge proposal for Schedule 7 customers?

13 A. Beyond moving closer to cost of service, a  
14 primary focus was placed on maintaining a smooth transition  
15 if customers move from Schedule 7 to Schedule 9S because  
16 they exceed the eligibility criteria for continued service  
17 under Schedule 7.

18 Q. Have you prepared an exhibit that illustrates  
19 the rate design proposal for revenue recovery under  
20 Schedule 7?

21 A. Yes, the rate design proposal for Schedule 7  
22 is included on page 1 of Exhibit No. 57.

23 Q. Have you prepared an exhibit that illustrates  
24 the impact of the proposed rate adjustments on Small  
25 General Service customers?

1           A.       Yes, page 1 of Exhibit No. 58 shows the  
2   billing comparison between Schedule 7 existing rates and  
3   proposed rates for typical billing levels.

4   **B.   *Schedule 9, Large General Service***

5           Q.       What is the revenue requirement to be  
6   recovered from customers taking Secondary Service under  
7   Schedule 9?

8           A.       The annual revenue requirement to be recovered  
9   from customers taking Secondary Service under Schedule 9 is  
10   \$272,747,096 as shown on page 5 of Mr. Goralski's Exhibit  
11   No. 48, which represents a 1.08 percent increase in overall  
12   collection from the class.

13   ***Standard Service Rate Design***

14          Q.       What is the current rate structure for  
15   Schedule 9S?

16          A.       The current rate structure for Schedule 9S  
17   includes a two-tier declining block Energy Charge along  
18   with a block Demand Charge and a block Basic Charge. Under  
19   this rate structure, the first block Energy Charge applies  
20   to the first 2,000 kWh of usage per month and the second  
21   block Energy Charge applies to all usage greater than 2,000  
22   kWh per month.

23               Under the Demand Charge, the first rate block  
24   applies to the first 20 kilowatts ("kW") of Billing Demand  
25   and the second block applies to all additional kW. For the



1 Basic Charge, the first rate block applies to the first 20  
2 kW of Basic Load Capacity and the second block applies to  
3 all additional kW.

4 Q. Have you prepared an exhibit that illustrates  
5 the rate design proposal for revenue recovery under  
6 Schedule 9 Secondary Service?

7 A. Yes, the rate design proposal for Schedule 9  
8 Secondary Service is included on page 3 of Exhibit No. 57.

9 Q. What changes is the Company proposing to the  
10 Schedule 9S structure?

11 A. The Company is proposing to: (1) change the 0-  
12 20 kW basic load capacity charge ("BLC") and demand charge  
13 blocks to assess a single rate for all kW, and (2) move  
14 from declining block energy rates to flat energy rates for  
15 both the summer and non-summer seasons.

16 Q. What other changes is the Company proposing  
17 for Schedule 9S?

18 A. The Company is proposing to increase the  
19 service charge to \$25.00, or an increase of \$9.00, to move  
20 closer to the class cost of service. The Company is also  
21 proposing moving the summer seasonal rates from June 1 to  
22 August 31 to June 1 to September 30, or a three-month  
23 summer season to a four-month summer season, as explained  
24 by Ms. Aschenbrenner in her testimony. Finally, for all  
25 non-service charge rate components, the Company is

1 proposing rates that represent a 30 percent incremental  
2 movement towards the costs to serve that rate component.

3 Q. Have you prepared an exhibit that shows the  
4 bill impact for the proposed Schedule 9S rate design?

5 A. Yes. Pages 2 through 4 of Exhibit No. 58 show  
6 the billing comparison between the Schedule 9S existing  
7 rates and proposed rates for typical billing levels. As  
8 can be seen from this exhibit, generally for each Demand  
9 level, the higher load factor customers will see a decrease  
10 in their overall bills as compared to low load factor  
11 customers that will see an increase. For the Demand levels  
12 below 20 kW, customers will generally see bill decreases  
13 based on the removal of the 0-20 kW BLC and Demand blocks.

14 ***Optional Time-of-Use Service Schedule***

15 Q. How did you develop the proposed optional  
16 Schedule 9S time-of-use ("TOU") service offering?

17 A. The optional Schedule 9S TOU service offering  
18 will incorporate the same structure as the proposed  
19 Schedule 9S standard service offering described above  
20 except that instead of seasonal flat energy charges there  
21 will be seasonal time-differentiated energy rates which  
22 include on-, mid-, and off-peak blocks for the summer and  
23 non-summer seasons. Ms. Aschenbrenner explains in greater  
24 detail in her testimony the rationale for offering  
25 customers the optional TOU Service under Schedule 9S.

1           Q.       What definition for on-, mid-, and off-peak  
2 does the Company propose for Schedule 9S?

3           A.       The proposed TOU periods will mirror those  
4 proposed for the other large general and large power  
5 service schedules, as described by Company Witness Mr.  
6 Grant Anderson. Accordingly, the proposed definition of the  
7 TOU periods for the summer season are:

- 8           • On-Peak: 7:00 p.m. to 11:00 p.m. Monday through  
9           Saturday, except holidays
- 10          • Mid-Peak: 3:00 p.m. to 7:00 p.m. and 11:00 p.m.  
11           to 12:00 a.m. Monday through Saturday, except  
12           holidays
- 13          • Off-Peak: 12:00 a.m. to 3:00 p.m. Monday through  
14           Saturday and all hours on Sunday and holidays

15 For the non-summer season, the Company proposes to change  
16 the definition of the TOU periods to the following:

- 17          • On-Peak: 6:00 a.m. to 9:00 a.m. and 5:00 p.m. to  
18           8:00 p.m. Monday through Saturday, except  
19           holidays
- 20          • Mid-Peak: 9:00 a.m. to 12:00 p.m., 4:00 p.m. to  
21           5:00 p.m., and 8:00 p.m. to 10:00 p.m. Monday  
22           through Saturday, except holidays
- 23          • Off-Peak: 10:00 p.m. to 6:00 a.m. and 12:00 p.m.  
24           to 4:00 p.m. Monday through Saturday and all  
25           hours on Sunday and holidays

1           Q.       Have you prepared an exhibit that illustrates  
2   the rate design proposal for the optional TOU service under  
3   Schedule 9S?

4           A.       Yes, the rate design proposal for the optional  
5   TOU service under Schedule 9S is included on page 4 of  
6   Exhibit No. 57.

7                               **II.   IRRIGATION**

8   **A.   *Schedule 24, Agricultural Irrigation Service***

9           Q.       What is the revenue requirement to be  
10   recovered from Schedule 24?

11          A.       The annual revenue to be recovered from  
12   Schedule 24 customers is \$183,423,605, as shown on page 5  
13   of Mr. Goralski's Exhibit No. 48, which represents the  
14   capped 12.91 percent increase in overall collection from  
15   the class.

16          Q.       What is the current rate structure for  
17   Schedule 24?

18          A.       Service under Schedule 24 is classified as  
19   being either "in-season" or "out-of-season." The in-season  
20   for each customer begins with the customer's meter reading  
21   for the May billing period and ends with the customer's  
22   meter reading for the September billing period. The out-  
23   of-season encompasses all other billing periods.

24               For the in-season, customers pay a higher monthly  
25   Service Charge than during the out-of-season to encourage

1 customers to continue service throughout the out-of-season  
2 period.

3 Customers pay both an Energy Charge and a Demand  
4 Charge for metered usage in-season. The Energy Charge  
5 utilizes a load-factor pricing mechanism by separating  
6 charges into two energy blocks. The first block charges  
7 irrigation customers a monthly rate per kWh for the first  
8 164 kWh per kW of demand. The second block charges  
9 customers a lower monthly energy rate per kWh for all other  
10 energy use to encourage installation of energy efficient  
11 irrigation systems with reduced demand and longer hours of  
12 operation. Customers pay an in-season Demand Charge only.  
13 During the out-of-season, customers pay a flat Energy  
14 Charge per kWh for all energy use.

15 Both Secondary Service and Transmission Service are  
16 available under Schedule 24, although no customers are  
17 currently taking Transmission Service.

18 Q. What is Idaho Power's rate design proposal for  
19 Schedule 24?

20 A. The Company is proposing one structural change  
21 to the Schedule 24 rate design along with one update. The  
22 structural change includes removing the in-season load  
23 factor energy pricing and only charging a flat rate per  
24 kWh, which is the same structure as the out-of-season  
25 energy charge. The current in-season load factor energy

1 rate structure was intended to collect demand related costs  
2 in the first block rather than increasing the demand  
3 charge. This helped the Company collect some of its fixed  
4 costs as long as customers ran their pumps for about 7 days  
5 within a month. However, from a customer understandability  
6 standpoint, it has sometimes been a source of confusion,  
7 particularly because the out-of-season rate does not have  
8 the load factor pricing structure. Therefore, the Company  
9 is proposing both the in-season and out-of-season  
10 volumetric rates have the same structure.

11 The proposed update to the Schedule 24 rate design  
12 increases both the in-season and out-of-season service  
13 charges from \$22.00 and \$3.50 to \$30.00 and \$6.00,  
14 respectively, for an increase of \$8.00 for in-season and  
15 \$2.50 for out-of-season, to move closer to the class cost  
16 of service.

17 Consistent with the overall rate design objectives,  
18 the Company is proposing to move the other non-service  
19 charge rate components closer to their cost-of-service with  
20 rates that represent a 30 percent incremental movement  
21 towards the costs to serve that rate component.

22 Q. Have you prepared an exhibit that illustrates  
23 the rate design proposal for revenue recovery under  
24 Schedule 24?

1           A.     Yes, the rate design proposal for Schedule 24  
2 is included on page 5 of Exhibit No. 57.

3           Q.     How were the rates for Transmission Service  
4 determined?

5           A.     Because no customers take Transmission Service  
6 under Schedule 24, once the percentage revenue changes for  
7 each rate component were determined for Secondary Service,  
8 the same percentage changes were applied to each component  
9 for Transmission Service to maintain the same relationship  
10 between the service levels that currently exists.

11          Q.     Have you prepared an exhibit that shows the  
12 billing impact of the rate design on Schedule 24 irrigation  
13 service customers?

14          A.     Yes, pages 5 through 7 of Exhibit No. 58 show  
15 the impact on customers' bills of the proposed rate  
16 adjustments for Schedule 24 Secondary Service. As can be  
17 seen page 7 from Exhibit No. 58, with the transition from  
18 load factor pricing to flat energy rate pricing and an  
19 increased demand charge, customers with the highest  
20 percentage increase in annual bills have the lowest average  
21 load factors. Because the rate design promotes using the  
22 system efficiently, the higher a customer's load factor,  
23 the more beneficial the rate structure tends to be.

1                                   **III.   LIGHTING & NON-METERED**

2                   Q.       How have you organized the discussion of the  
3 rate design proposals for area lighting, unmetered service,  
4 street lighting and traffic control signal lighting?

5                   A.       The discussion of rate design proposals for  
6 lighting will address Schedules 15 (Dusk to Dawn Customer  
7 Lighting), 41 (Street Lighting Service), 42 (Traffic  
8 Control Signal Lighting Service), and 40 (Non-metered  
9 General Service), respectively.

10   **A.   *Schedule 15, Dusk to Dawn Customer Lighting***

11                  Q.       What is the revenue requirement to be  
12 recovered from customers taking service under Schedule 15?

13                  A.       The annual revenue requirement to be recovered  
14 from Schedule 15 customers is \$1,327,038 as shown on page 5  
15 of Mr. Goralski's Exhibit No. 48 which represents a zero  
16 percent increase in overall collection from the class.

17                  Q.       What is the current rate structure for Dusk to  
18 Dawn Customer Lighting under Schedule 15?

19                  A.       Customers taking service under Schedule 15 are  
20 charged on a per lamp basis. Lamps currently served under  
21 Schedule 15 include 100, 200, and 400 watt high pressure  
22 sodium vapor area lighting, 40, 85, and 200 watt Light  
23 Emitting Diode ("LED") area lighting; 200 and 400 watt high  
24 pressure sodium vapor flood lighting, 85, 150, and 300 watt



1 LED flood lighting, and 400 and 1,000 watt metal halide  
2 flood lighting.

3 Q. What is the status of the Company's LED  
4 conversion project authorized per Order No. 34452?

5 A. The Company is on schedule to complete its LED  
6 conversion project before September 30, 2023. At that time,  
7 all lighting fixtures under Schedules 15 and 41 will have  
8 been converted to LED fixtures and the Company will no  
9 longer support high pressure sodium vapor or metal halide  
10 fixtures.

11 Q. Have you prepared an exhibit that illustrates  
12 the rate design proposal for Schedule 15?

13 A. Yes. The rate design proposal for Schedule 15  
14 is included on page 7 of Exhibit No. 57 which includes base  
15 rate increases to recover the proposed revenue requirement.  
16 The Company proposes to allocate the class revenue  
17 requirement to the rate components based on a separate  
18 lighting cost-of-service study ("Lighting Study") conducted  
19 for both Schedules 15 and 41 for each fixture size offered  
20 under those schedules. The Lighting Study is contained in  
21 my workpapers.

22 Q. Is the Company proposing any other changes to  
23 Schedule 15?

24 A. As mentioned above, the Company will have  
25 completed its LED conversion project by September 30, 2023.

1 Therefore, the high pressure sodium vapor and metal halide  
2 options are being removed with only the LED area lighting  
3 and flood lighting rates remaining in the tariff.

4 **B. Schedule 41, Street Lighting Service**

5 Q. What is the revenue requirement to be  
6 recovered from customers taking service under Schedule 41?

7 A. The annual revenue requirement to be recovered  
8 from Schedule 41 is \$3,750,417 as shown on page 5 of Mr.  
9 Goralski's Exhibit No. 48, which represents a zero percent  
10 increase in overall collection from the class.

11 Q. What is the present rate structure for Street  
12 Lighting Service under Schedule 41?

13 A. The current rate structure for Schedule 41 has  
14 three service options for street lighting customers as  
15 follows:

- 16 • "A" - Idaho Power-Owned, Idaho Power-Maintained  
17 System
- 18
- 19 • "B"- Customer-Owned, Idaho Power-Maintained  
20 System
- 21
- 22 • "C" - Customer-Owned, Customer-Maintained  
23 System
- 24

25 Option "A" provides for Idaho Power-owned and Idaho  
26 Power-maintained street lighting systems. Street lighting  
27 systems under this option are not metered and customers pay  
28 monthly lamp charges based on high pressure sodium vapor  
29 lamps of 70, 100, 200, 250 or 400 watts or their LED

1 equivalents of 40, 85, 140, and 200 watts. The monthly lamp  
2 charges under Option "A" reflect the Company's cost to  
3 provide energy, install the street lighting system, and  
4 provide ongoing maintenance.

5 Option "B" provides for metered or unmetered  
6 Customer-Owned, Idaho Power-Maintained systems using 70,  
7 100, 200, 250, or 400 watt high pressure sodium vapor  
8 lamps. Option "B" is currently not open to new service and  
9 will close by September 30, 2023, per Order No. 34452.

10 Option "C" provides for customers choosing to own  
11 and install their own street lighting systems. Under this  
12 option, street lighting systems may be metered or non-  
13 metered. For metered and non-metered systems, maintenance  
14 is provided by the customer.

15 Q. Please describe the proposed updates to Option  
16 "A".

17 A. Beyond the proposed rate changes informed by  
18 the Lighting Study for Schedules 15 and 41 contained in my  
19 workpapers, the Company proposes to remove language  
20 referencing "the Accelerated Replacement of Existing  
21 Fixtures" as this charge was only related to the LED  
22 conversion project and allowed customers to convert to LED  
23 fixtures at an additional cost before the Company had them  
24 scheduled. The Company also proposes to update the Dark Sky  
25 Lighting option to remove the high-pressure sodium vapor

1 lens and replace with an LED shield with a cost of \$27.50  
2 for customers who want to alter their LED fixtures for dark  
3 sky lighting. The derivation of this value is shown in my  
4 workpapers.

5 Q. What changes are being proposed to Option "C"  
6 in Schedule 41?

7 A. Beyond the proposed rate changes informed by  
8 the Lighting Study for Schedules 15 and 41 contained in my  
9 workpapers, no other changes are being proposed for Option  
10 "C". There will continue to be metered and non-metered  
11 service for customer-owned, customer-maintained systems.

12 Q. Is the Company proposing any other changes to  
13 Schedule 41?

14 A. Yes, the Company proposes to remove all high-  
15 pressure sodium vapor language and wattages leaving the  
16 schedule to only reference LED fixtures and to remove all  
17 contents from the tariff associated with Option "B" as this  
18 option will be closed by September 30, 2023.

19 Q. Have you prepared an exhibit that illustrates  
20 the rate design proposal for Schedule 41?

21 A. Yes, the rate design proposal for Schedule 41  
22 is included on pages 8 through 11 of Exhibit No. 57.

23 **C. Schedule 42, Traffic Control Signal Lighting Service**

24 Q. What is the revenue requirement to be  
25 recovered from customers taking service under Schedule 42?

1           A.       The annual revenue requirement to be recovered  
2   from Schedule 42 customers is \$224,972 as shown on page 5  
3   of Mr. Goralski's Exhibit No. 48, which represents the  
4   capped 12.91 percent increase in overall collection from  
5   the class.

6           Q.       What is the present rate structure for Traffic  
7   Control Signal Lighting Service, Schedule 42?

8           A.       Customers taking service under Schedule 42 pay  
9   an Energy Charge for each kWh of estimated energy use for  
10   non-metered systems and for each kWh of actual usage for  
11   metered systems. For non-metered systems, usage is  
12   estimated based on the number and size of lamps burning  
13   simultaneously in each signal and the average number of  
14   hours per day the signal is operated. There is no minimum  
15   charge under Schedule 42.

16          Q.       Please describe the rate design proposal for  
17   Schedule 42.

18          A.       The rate design proposal for Schedule 42 is  
19   included on page 12 of Exhibit No. 57. The Company is  
20   proposing to increase the energy charge to target the  
21   proposed capped class revenue increase of 12.91 percent  
22   shown on page 5 of Mr. Goralski's Exhibit No. 48.

23   **D.       Schedule 40, Unmetered General Service**

24          Q.       What is the revenue requirement to be  
25   recovered from customers taking service under Schedule 40?

1           A.       The annual revenue requirement to be recovered  
2 from Schedule 40 customers is \$1,352,288 as shown on page 5  
3 of Mr. Goralski's Exhibit No. 48, which represents a 3.24  
4 percent increase in overall collection from the class.

5           Q.       What is the present rate structure for  
6 Unmetered General Service under Schedule 40?

7           A.       Customers taking service under Schedule 40 are  
8 non-metered but have energy loads and periods of operation  
9 which are fixed. Accordingly, a customer's estimated usage  
10 is charged a flat Energy Charge which recovers all costs  
11 assigned to the class. The minimum bill for service under  
12 Schedule 40 is \$1.50 per month. At the Company's  
13 discretion, an Intermittent Usage Charge, per unit, per  
14 month, may be charged to municipalities or agencies of  
15 federal, state, or county governments having the potential  
16 of intermittent variations in energy usage.

17          Q.       Please describe the rate design proposal for  
18 Schedule 40.

19          A.       The rate design proposal for Schedule 40 is  
20 included on page 13 of Exhibit No. 57. The Company is  
21 proposing to increase the Intermittent Usage Charge from  
22 \$1.00 to \$1.50, or an increase of \$0.50, as well as  
23 increase the energy charge to target the proposed class  
24 revenue increase of 3.24 percent as shown on page 5 of Mr.  
25 Goralski's Exhibit No. 48.

1           Q.     Are any other changes being proposed to  
2   Schedule 40?

3           A.     No.

4           Q.     Does this conclude your testimony?

5           A.     Yes, it does.

6           //

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**DECLARATION OF ROBERT Z. THOMPSON**

I, Robert Z. Thompson, declare under penalty of perjury under the laws of the state of Idaho:

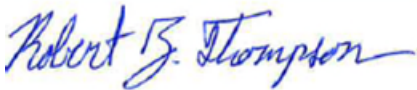
1. My name is Robert Z. Thompson. I am employed by Idaho Power Company as a Regulatory Analyst in the Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this pre-filed direct testimony and Exhibit Nos. 57 through 58 in this matter.

3. To the best of my knowledge, my pre-filed direct testimony and exhibits are true and accurate.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence before the Idaho Public Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.



Signed: \_\_\_\_\_  
ROBERT Z. THOMPSON



**BEFORE THE  
IDAHO PUBLIC UTILITIES COMMISSION  
CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**THOMPSON, DI  
TESTIMONY**

**EXHIBIT NO. 57**

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Small General Service  
Schedule 7 and Schedule 8 Combined**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	365,860	\$ 5.00	\$ 1,829,301	\$ 20.00	\$ 7,317,204
2	Minimum Charge	2,183	2.00	4,366	3.00	6,549
3	Summer Energy (Jun-Aug)					
4	0 - 300 kWh	15,552,833	\$ 0.098633	\$ 1,534,023		
5	All Additional kWh	19,695,659	0.117472	2,313,688		
6	Subtotal - Summer Energy	35,248,492	\$ 0.109160	\$ 3,847,711		
7	Non-Summer Energy (Sep-May)					
8	0 - 300 kWh	48,683,072	\$ 0.098633	\$ 4,801,757		
9	All Additional kWh	54,724,304	0.103486	5,663,199		
10	Subtotal - Non-Summer Energy	103,407,376	\$ 0.101201	\$ 10,464,957		
11	Subtotal - Total Energy	138,655,868		\$ 14,312,668		
12	Summer Energy (Jun-Sep)					
13	0 - 300 kWh	20,489,851			\$ 0.089863	\$ 1,841,279
14	All Additional kWh	25,224,107			0.102694	2,590,364
15	Subtotal - Summer Energy	45,713,958			\$ 0.096943	\$ 4,431,644
16	Non-Summer Energy (Oct-May)					
17	0 - 300 kWh	43,567,779			\$ 0.089863	\$ 3,915,131
18	All Additional kWh	49,374,131			0.089887	4,438,093
19	Subtotal - Non-Summer Energy	92,941,910			\$ 0.089876	\$ 8,353,224
20	Subtotal - Total Energy	138,655,868				\$ 12,784,868
21	Transfer Adjustment Revenue			\$ 1,662,745		
22	Total Adjusted Base Revenue			\$ 17,809,080		\$ 20,108,621

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Small General Service  
Schedule 7**

<b>Line No.</b>	<b>Description</b>	<b>Test Year Billing Units</b>	<b>Current Base Rate</b>	<b>Test Year Base Revenue</b>	<b>Proposed Effective Rate</b>	<b>Proposed Effective Revenue</b>
1	Service Charge	364,810	\$ 5.00	\$ 1,824,051	\$ 20.00	\$ 7,296,204
2	Minimum Charge	2,177	2.00	4,354	3.00	6,531
3	Summer Energy (Jun-Aug)					
4	0 - 300 kWh	15,526,486	\$ 0.098633	\$ 1,531,424		
5	All Additional kWh	<u>19,639,552</u>	<u>0.117472</u>	<u>2,307,097</u>		
6	Subtotal - Summer Energy	35,166,038	\$ 0.109154	\$ 3,838,521		
7	Non-Summer Energy (Sep-May)					
8	0 - 300 kWh	48,565,776	\$ 0.098633	\$ 4,790,188		
9	All Additional kWh	<u>54,553,347</u>	<u>0.103486</u>	<u>5,645,508</u>		
10	Subtotal - Non-Summer Energy	<u>103,119,122</u>	\$ 0.101200	<u>\$ 10,435,696</u>		
11	Subtotal - Total Energy	138,285,160		\$ 14,274,217		
12	Summer Energy (Jun-Sep)					
13	0 - 300 kWh	20,448,718			\$ 0.089863	\$ 1,837,583
14	All Additional kWh	<u>25,155,159</u>			<u>0.102694</u>	<u>2,583,284</u>
15	Subtotal - Summer Energy	45,603,878			\$ 0.096941	\$ 4,420,867
16	Non-Summer Energy (Oct-May)					
17	0 - 300 kWh	43,462,704			\$ 0.089863	\$ 3,905,689
18	All Additional kWh	<u>49,218,578</u>			<u>0.089887</u>	<u>4,424,110</u>
19	Subtotal - Non-Summer Energy	<u>92,681,282</u>			\$ 0.089876	\$ 8,329,799
20	Subtotal - Total Energy	138,285,160				\$ 12,750,666
21	Transfer Adjustment Revenue			<u>\$ 1,658,298</u>		
22	Total Adjusted Base Revenue			\$ 17,760,920		\$ 20,053,401

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Large General Service  
Schedule 9 Secondary Standard Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	453,162	\$ 16.00	\$ 7,250,592	\$ 25.00	\$ 11,329,050
2	Minimum Charge	1,784	5.00	8,920	3.00	5,352
3	<u>Basic Charge</u>					
4	Total Basic Charge (Current)	8,516,555	\$ 1.03	\$ 8,772,052		
5	Total Basic Charge (Proposed)	15,010,667			\$ 1.47	\$ 22,065,681
6	<u>Demand Charge (Current)</u>					
7	0-20 kW	5,349,195	\$ -	\$ -		
8	Over 20 kW - Summer	1,562,250	6.06	9,467,238		
9	Over 20 kW - Non-Summer	4,230,876	4.45	18,827,398		
10	Total Demand	11,142,321		\$ 28,294,636		
11	<u>Demand Charge (Proposed)</u>					
12	Summer kW	3,897,816			\$ 7.60	\$ 29,623,401
13	Non-Summer kW	7,244,505			5.99	43,394,587
14	Total Demand	11,142,321				\$ 73,017,988
15	<u>Summer Energy (Current)</u>					
16	0-2,000 kWh	166,185,698	\$ 0.105250	\$ 17,491,045		
17	Over 2,000 kWh	705,756,622	0.048716	34,381,640		
18	Subtotal - Summer Energy	871,942,320	\$ 0.059491	\$ 51,872,684		
19	<u>Non-Summer Energy (Current)</u>					
20	0-2,000 kWh	514,806,364	\$ 0.094742	\$ 48,773,785		
21	Over 2,000 kWh	1,934,795,934	0.044196	85,510,241		
22	Subtotal - Non-Summer Energy	2,449,602,298	\$ 0.054819	\$ 134,284,026		
23	Subtotal - Total Energy	3,321,544,618		\$ 186,156,710		
24	<u>Summer Energy (Jun-Sep)</u>					
25	All kWh	1,143,297,617			\$ 0.051289	\$ 58,638,591
26	<u>Non-Summer Energy (Oct-May)</u>					
27	All kWh	2,178,247,001			\$ 0.049439	\$ 107,690,353
28	Subtotal - Total Energy	3,321,544,618				\$ 166,328,945
29	Transfer Adjustment Revenue			\$ 39,344,999		
30	Total Adjusted Base Revenue			\$ 269,827,909		\$ 272,747,016

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Large General Service  
Schedule 9 Secondary TOU Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Service Charge	453,162	\$ 16.00	\$ 7,250,592	\$ 25.00	\$ 11,329,050
2	Minimum Charge	1,784	5.00	8,920	3.00	5,352
3	<u>Basic Charge</u>					
4	Total Basic Charge (Current)	8,516,555	\$ 1.03	\$ 8,772,052		
5	Total Basic Charge (Proposed)	15,010,667			\$ 1.47	\$ 22,065,681
6	<u>Demand Charge (Current)</u>					
7	0-20 kW	5,349,195	\$ -	\$ -		
8	Over 20 kW - Summer	1,562,250	6.06	9,467,238		
9	Over 20 kW - Non-Summer	4,230,876	4.45	18,827,398		
10	Total Demand	11,142,321		\$ 28,294,636		
11	<u>Demand Charge (Proposed)</u>					
12	Summer kW	3,897,816			\$ 7.60	\$ 29,623,401
13	Non-Summer kW	7,244,505			5.99	43,394,587
14	Total Demand	11,142,321				\$ 73,017,988
15	<u>Summer Energy (Current)</u>					
16	0-2,000 kWh	166,185,698	\$ 0.105250	\$ 17,491,045		
17	Over 2,000 kWh	705,756,622	0.048716	34,381,640		
18	Subtotal - Summer Energy	871,942,320	\$ 0.059491	\$ 51,872,684		
19	<u>Non-Summer Energy (Current)</u>					
20	0-2,000 kWh	514,806,364	\$ 0.094742	\$ 48,773,785		
21	Over 2,000 kWh	1,934,795,934	0.044196	85,510,241		
22	Subtotal - Non-Summer Energy	2,449,602,298	\$ 0.054819	\$ 134,284,026		
23	Subtotal - Total Energy	3,321,544,618		\$ 186,156,710		
24	<u>Summer Energy (Jun-Sep)</u>					
25	On-Peak	158,721,787			\$ 0.054902	\$ 8,714,144
26	Mid-Peak	229,027,384			0.054902	12,574,061
27	Off-Peak	755,548,446			0.049431	37,347,515
28	Subtotal - Summer Energy	1,143,297,617			\$ 0.051286	\$ 58,635,720
29	<u>Non-Summer Energy (Oct-May)</u>					
30	On-Peak	482,938,805			\$ 0.052290	\$ 25,252,870
31	Mid-Peak	506,997,039			0.049947	25,322,981
32	Off-Peak	1,188,311,158			0.048066	57,117,364
33	Subtotal - Non-Summer Energy	2,178,247,001			\$ 0.049440	\$ 107,693,215
34	Subtotal - Total Energy	3,321,544,618				\$ 166,328,936
35	Transfer Adjustment Revenue			\$ 39,344,999		
35	Total Adjusted Base Revenue			\$ 269,827,909		\$ 272,747,007

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
Filed June 1, 2023  
IPC-E-23-11**

**Agricultural Irrigation Service  
Schedule 24 Secondary Service**

Line No.	Description	Test Year Billing Units	Current Base Rate	Test Year Base Revenue	Proposed Effective Rate	Proposed Effective Revenue
1	Bills-In Season	77,670	\$ 22.00	\$ 1,708,747	\$ 30.00	\$ 2,330,109
2	Bills-Out Season	152,477	3.50	533,668	6.00	914,859
3	Minimum Charge	379	1.50	568	3.00	1,136
4	Total Service Charge	230,525		\$ 2,242,982		\$ 3,246,104
5	<u>Demand Charge</u>					
6	Total In-Season	4,065,427	\$ 7.06	\$ 28,701,912	\$ 15.08	\$ 61,306,634
7	Total Out-Season	-	-	-	-	\$ -
8	Total Demand	4,065,427		\$ 28,701,912		\$ 61,306,634
9	<u>In-Season Energy (Current)</u>					
10	First 164 kWh per kW	610,778,359	\$ 0.058436	\$ 35,691,444		
11	All Other kWh In-Season	897,748,435	0.055483	49,809,776		
12	Subtotal - In-Season Energy	1,508,526,794	\$ 0.056679	\$ 85,501,221		
13	<u>Out-Season Energy (Current)</u>					
14	All kWh	355,995,978	\$ 0.067084	\$ 23,881,634		
15	Subtotal - Total Energy	1,864,522,772		\$ 109,382,855		
16	<u>In-Season Energy (Proposed)</u>					
17	All kWh	1,508,526,794			\$ 0.061572	\$ 92,883,012
18	<u>Out-Season Energy (Proposed)</u>					
19	All kWh	355,995,978			\$ 0.073000	\$ 25,987,706
20	Subtotal - Total Energy	1,864,522,772				\$ 118,870,718
21	Transfer Adjustment Revenue			\$ 22,120,084		
22	Total Adjusted Base Revenue			\$ 162,447,833		\$ 183,423,455

**Idaho Power Company  
State of Idaho  
Calculation of Proposed Rates  
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**Agricultural Irrigation Service  
Schedule 24 Transmission Service**

Line No	Description	(1) Use	(2) Current Rate	(3) Current Revenue	(4) Proposed Structure	(5) Proposed Use	(6) Proposed Rate	(7) Proposed Revenue				
1	Bills-In Season	0	\$	299.00	\$	-	Bills-In Season	0	\$	430.00	\$	-
2	Bills-Out Season	0	\$	3.50	\$	-	Bills-Out Season	0	\$	6.00	\$	-
3	<u>Demand Charge</u>				<u>Demand Charge</u>							
4	Total In-Season	0	\$	6.66	\$	-	Total In-Season	0	\$	14.23	\$	-
5	Total Out-Season	0	\$	-	\$	-	Total Out-Season	0	\$	-	\$	-
6	Total kW	0		\$	-		Total Demand	0		\$	-	
7	<u>Energy Charge</u>				<u>Energy Charge</u>							
8	First 164 kWh per kW	0	\$	0.055978	\$	-	In-Season Energy	0	\$	0.058972	\$	-
9	All Other kWh In-Season	0	\$	0.053233	\$	-	Out-Season Energy	0	\$	0.069670	\$	-
10					Total Energy	0		\$	-			
11	Total Out-Season	0	\$	0.064032	\$	-						
12	Total Energy	0		\$	-		Total Adjusted Base Revenue			\$	-	
13	Total Adjusted Base Revenue			\$	-							

**Idaho Power Company**  
**Calculation of Proposed Rates**  
**State of Idaho**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

**Dusk-to-Dawn Customer Lighting**  
**Schedule 15**

Line No	Description	(1) Annual Lamps	(2) kWh Use	(3) Current Base Rate	(4) Current Base Revenue	(5) Proposed Structure	(6) Annual Lamps	(7) kWh Use	(8) Proposed Base Rate	(9) Proposed Base Revenue
1	<u>Lamps</u>					<u>Area Lighting</u>				
2	100-Watt Sodium Vapor (A)	89,714	0	\$ 9.63	\$ 863,946	40 Watt Max	89,714	0	\$ 9.46	\$ 848,694
3	200-Watt Sodium Vapor (A)	9,459	0	\$ 11.50	\$ 108,777	85 Watt Max	9,459	0	\$ 11.52	\$ 108,966
4	400-Watt Sodium Vapor (A)	1,801	0	\$ 15.57	\$ 28,035	200 Watt Max	1,801	0	\$ 16.62	\$ 29,925
5	200-Watt Sodium Vapor (D)	9,599	0	\$ 13.78	\$ 132,280					
6	400-Watt Sodium Vapor (D)	5,387	0	\$ 16.24	\$ 87,493	<u>Flood Lighting</u>				
7	400-Watt Metal Halide (D)	1,164	0	\$ 14.91	\$ 17,356	85 Watt Max	9,599	0	\$ 18.81	\$ 180,565
8	1000-Watt Metal Halide(D)	956	0	\$ 23.71	\$ 22,665	150 Watt Max	6,552	0	\$ 20.70	\$ 135,618
9						300 Watt Max	956	0	\$ 24.34	\$ 23,267
10	Total	118,080	5,267,423		\$ 1,260,552	Total	118,080	5,267,423		\$ 1,327,035
11										
12	Minimum Charge	434		\$ 3.00	\$ 1,301	Minimum Charge	434		\$ -	\$ -
13										
14	Transfer Adjustment				\$ 65,185	Transfer Adjustment				\$ -
15										
16	Total Adjusted Base Revenue				\$ 1,327,038	Total Adjusted Base Revenue				\$ 1,327,035
17										



**Idaho Power Company  
Calculation of Proposed Rates  
State of Idaho  
IPC-E-23-11 General Rate Case  
Filed June 1, 2023**

**Street Lighting Service  
Schedule 41**

		<u>Summary</u>			
Line No	<u>Description</u>	(1)	(2)	(3)	(4)
		Current <u>Use</u>	Current Base <u>Revenue</u>	Proposed <u>Use</u>	Proposed Base <u>Revenue</u>
1	A - Company-Owned, Non-Metered, Maintenance	4,153,143	\$ 2,359,648	4,153,143	\$ 2,421,861
2	B - Customer-Owned, Non-Metered, Maintenance	2,214,987	\$ 149,735	0	\$ -
4	BM - Customer-Owned, Metered, Maintenance	78,103	\$ 4,750	0	\$ -
5	C - Customer-Owned, Non-Metered, No Maintenance	10,704,238	\$ 560,902	12,919,225	\$ 820,758
6	CM - Customer-Owned, Metered, No Maintenance	6,609,543	\$ 388,286	6,687,646	\$ 507,785
7	Total Bills	35,760		35,760	
8	Total kWh	23,760,014		23,760,014	
9	Transfer Adjustment		\$ 287,095		\$ -
10	Total Adjusted Base Revenue		\$ 3,750,417		\$ 3,750,405

**Idaho Power Company**  
**Calculation of Proposed Rates**  
**State of Idaho**  
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Street Lighting Service (cont'd)  
Schedule 41

Line No	Description	<b><u>A - Company-Owned, Non-Metered, Maintenance</u></b>						
		(1) Annual Lamps	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Structure	(5) Annual Lamps	(6) Proposed Base Rate	(7) Proposed Base Revenue
1	<u>Sodium Vapor / LED</u>				LED			
2	70-Watt / 40-Watt Max	431	\$ 11.55	\$ 4,978	40-Watt Max	180,477	\$ 11.50	\$ 2,075,481
3	100-Watt / 40-Watt Max	180,046	\$ 11.01	\$ 1,982,302	85-Watt Max	20,137	\$ 13.44	\$ 270,644
4	200-Watt / 85-Watt Max	20,137	\$ 14.75	\$ 297,024	140-Watt Max	2,799	\$ 15.42	\$ 43,161
5	250-Watt / 140-Watt Max	2,799	\$ 16.05	\$ 44,924	200-Watt Max	1,486	\$ 19.10	\$ 28,379
6	400-Watt / 200-Watt Max	1,486	\$ 18.30	\$ 27,190	Total LED	204,899		\$ 2,417,665
7	Total Sodium Vapor / LED	204,899		\$ 2,356,419				
8	Non-Metered - Variable Energy Use	43,270	\$ 0.07464	\$ 3,230		43,270	\$ 0.09697	\$ 4,196
9	A - Company-Owned, Non-Metered, Maintenance			\$ 2,359,648				\$ 2,421,861

**Idaho Power Company**  
**Calculation of Proposed Rates**  
**State of Idaho**  
**IPC-E-23-11 General Rate Case**  
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Street Lighting Service (cont'd)  
Schedule 41

		<b><u>B - Customer-Owned, Non-Metered, Maintenance</u></b>						
Line No	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Annual Lamps	Current Base Rate	Current Base Revenue	Proposed Structure	Annual Lamps	Proposed Base Rate	Proposed Base Revenue
1	70-Watt	0	\$ 3.11	\$ -	N/A	0	\$ -	\$ -
2	100-Watt	23,799	\$ 3.48	\$ 82,821	N/A	0	\$ -	\$ -
3	200-Watt	1,226	\$ 5.03	\$ 6,167	N/A	0	\$ -	\$ -
4	250-Watt	8,039	\$ 6.20	\$ 49,842	N/A	0	\$ -	\$ -
5	400-Watt	1,245	\$ 8.76	\$ 10,906	N/A	0	\$ -	\$ -
6	Total Sodium Vapor	34,309		\$ 149,735		0		\$ -
7	Non-Metered - Variable Energy Use	0	\$ 0.07464	\$ -	N/A	0	\$ -	\$ -
8	B - Customer-Owned, Non-Metered, Maintenance			\$ 149,735				\$ -
		<b><u>BM - Customer-Owned, Metered, Maintenance</u></b>						
Line No	Description	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Annual Lamps	Current Base Rate	Current Base Revenue	Proposed Structure	Annual Lamps	Proposed Base Rate	Proposed Base Revenue
9	<u>Sodium Vapor</u>							
10	70-Watt	0	\$ 1.37	\$ -	N/A	0	\$ -	\$ -
11	100-Watt	0	\$ 1.28	\$ -	N/A	0	\$ -	\$ -
12	200-Watt	0	\$ 1.27	\$ -	N/A	0	\$ -	\$ -
13	250-Watt	396	\$ 1.37	\$ 543	N/A	0	\$ -	\$ -
14	400-Watt	0	\$ 1.37	\$ -	N/A	0	\$ -	\$ -
15	Total Lamp Charges	396		\$ 543		0		\$ -
16	Service Charge	61	\$ 3.36	\$ 205	N/A	0	\$ -	\$ -
17	<u>Energy Charge</u>							
18	Per kWh	78,103	\$ 0.05125	\$ 4,003	N/A	0	\$ -	\$ -
19	BM - Customer-Owned, Metered, Maintenance			\$ 4,750				\$ -

**Idaho Power Company**  
**Calculation of Proposed Rates**  
**State of Idaho**  
**IPC-E-23-11 General Rate Case**  
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Street Lighting Service (cont'd)  
Schedule 41

		<u>C - Customer-Owned, Non-Metered, No Maintenance</u>													
		(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Line				Current		Current		Proposed				Proposed		Proposed	
No	Description	Use		Base		Base		Structure		Use		Base		Base	
				Rate		Revenue						Rate		Revenue	
1	<u>Energy Charge</u>							<u>Energy Charge</u>							
2	Per kWh	10,704,238	\$	0.05240	\$	560,902		Per kWh		12,919,225	\$	0.06353	\$	820,758	
3	C - Customer-Owned, Non-Metered, No Maintenance					\$	560,902							\$	820,758
		<u>CM - Customer-Owned, Metered, No Maintenance</u>													
		(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Line				Current		Current		Proposed				Proposed		Proposed	
No	Description	Use		Base		Base		Structure		Use		Base		Base	
				Rate		Revenue						Rate		Revenue	
4	Service Charge	14,746	\$	3.36	\$	49,547		Service Charge		14,807	\$	5.60	\$	82,919	
5	<u>Energy Charge</u>							<u>Energy Charge</u>							
6	Per kWh	6,609,543	\$	0.05125	\$	338,739		Per kWh		6,687,646	\$	0.06353	\$	424,866	
7	CM - Customer-Owned, Metered, No Maintenance					\$	388,286							\$	507,785

Idaho Power Company  
Calculation of Proposed Rates  
State of Idaho  
IPC-E-23-11 General Rate Case  
Filed June 1, 2023

Traffic Control Signal Lighting Service  
Schedule 42

Line No	Description	(1) <u>Use</u>	(2) Current Base <u>Rate</u>	(3) Current Base <u>Revenue</u>	(4) Proposed Base <u>Rate</u>	(5) Proposed Base <u>Revenue</u>
1	No. of Billings	9,192.0	\$ -	\$ -	\$ -	\$ -
2	Energy	2,847,961	\$ 0.05815	<u>\$ 165,609</u>	\$ 0.07899	<u>\$ 224,960</u>
3	Transfer Adjustment			\$ 33,636		\$ -
4	Total Adjusted Base Revenue			<u><u>\$ 199,244</u></u>		<u><u>\$ 224,960</u></u>

**Idaho Power Company  
Calculation of Proposed Rates  
State of Idaho  
IPC-E-23-11 General Rate Case  
Filed June 1, 2023**

**Non-metered General Service  
Schedule 40**

Line No	Description	(1) <u>Use</u>	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Base Rate	(5) Proposed Base Revenue
1	Number of Bills	19,956.0	\$ -	\$ -	\$ -	\$ -
2	Minimum Charge	846.8	\$ 1.50	\$ 1,270	\$ 2.00	\$ 1,694
3	Total Energy	13,925,301	\$ 0.08207	\$ 1,142,849	\$ 0.09697	\$ 1,350,336
4	Intermittent Usage	168	\$ 1.00	\$ 168	\$ 1.50	\$ 252
5	Transfer Adjustment			\$ 165,505		\$ -
6	Total Adjusted Base Revenue			\$ 1,309,792		\$ 1,352,282

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**  
**CASE NO. IPC-E-23-11**

**IDAHO POWER COMPANY**

**THOMPSON, DI**  
**TESTIMONY**

**EXHIBIT NO. 58**

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**  
Schedule 7, Small General Service

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Line No	Energy kWh	Summer			Non-Summer			Avg Mth Cost -12 Mths <sup>1</sup>			
		Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Difference (8) - (7)	Percent Difference
1	100	\$ 16.06	\$ 28.99	80.46%	\$ 16.06	\$ 28.99	80.46%	\$ 16.06	\$ 28.99	\$ 12.92	80.46%
2	200	\$ 27.12	\$ 37.97	39.99%	\$ 27.12	\$ 37.97	39.99%	\$ 27.12	\$ 37.97	\$ 10.85	39.99%
3	300	\$ 38.19	\$ 46.96	22.97%	\$ 38.19	\$ 46.96	22.97%	\$ 38.19	\$ 46.96	\$ 8.77	22.97%
4	400	\$ 51.13	\$ 57.23	11.92%	\$ 49.74	\$ 55.95	12.49%	\$ 50.08	\$ 56.37	\$ 6.29	12.56%
5	500	\$ 64.08	\$ 67.50	5.33%	\$ 61.28	\$ 64.94	5.96%	\$ 61.98	\$ 65.79	\$ 3.81	6.14%
6	600	\$ 77.03	\$ 77.77	0.96%	\$ 72.83	\$ 73.93	1.50%	\$ 73.88	\$ 75.21	\$ 1.33	1.79%
7	700	\$ 89.97	\$ 88.04	-2.15%	\$ 84.38	\$ 82.91	-1.74%	\$ 85.78	\$ 84.62	\$ (1.16)	-1.35%
8	800	\$ 102.92	\$ 98.31	-4.48%	\$ 95.93	\$ 91.90	-4.19%	\$ 97.67	\$ 94.04	\$ (3.64)	-3.72%
9	900	\$ 115.87	\$ 108.58	-6.29%	\$ 107.47	\$ 100.89	-6.13%	\$ 109.57	\$ 103.45	\$ (6.12)	-5.58%
10	1,000	\$ 128.81	\$ 118.84	-7.74%	\$ 119.02	\$ 109.88	-7.68%	\$ 121.47	\$ 112.87	\$ (8.60)	-7.08%
11	1,100	\$ 141.76	\$ 129.11	-8.92%	\$ 130.57	\$ 118.87	-8.96%	\$ 133.37	\$ 122.28	\$ (11.08)	-8.31%
12	1,200	\$ 154.70	\$ 139.38	-9.90%	\$ 142.12	\$ 127.86	-10.03%	\$ 145.26	\$ 131.70	\$ (13.57)	-9.34%
13	1,300	\$ 167.65	\$ 149.65	-10.74%	\$ 153.67	\$ 136.85	-10.95%	\$ 157.16	\$ 141.11	\$ (16.05)	-10.21%
14	1,400	\$ 180.60	\$ 159.92	-11.45%	\$ 165.21	\$ 145.83	-11.73%	\$ 169.06	\$ 150.53	\$ (18.53)	-10.96%
15	1,500	\$ 193.54	\$ 170.19	-12.07%	\$ 176.76	\$ 154.82	-12.41%	\$ 180.96	\$ 159.95	\$ (21.01)	-11.61%
16	1,600	\$ 206.49	\$ 180.46	-12.61%	\$ 188.31	\$ 163.81	-13.01%	\$ 192.85	\$ 169.36	\$ (23.49)	-12.18%
17	1,700	\$ 219.44	\$ 190.73	-13.08%	\$ 199.86	\$ 172.80	-13.54%	\$ 204.75	\$ 178.78	\$ (25.97)	-12.69%
18	1,800	\$ 232.38	\$ 201.00	-13.51%	\$ 211.40	\$ 181.79	-14.01%	\$ 216.65	\$ 188.19	\$ (28.46)	-13.13%
19	1,900	\$ 245.33	\$ 211.27	-13.88%	\$ 222.95	\$ 190.78	-14.43%	\$ 228.55	\$ 197.61	\$ (30.94)	-13.54%
20	2,000	\$ 258.28	\$ 221.54	-14.22%	\$ 234.50	\$ 199.77	-14.81%	\$ 240.44	\$ 207.02	\$ (33.42)	-13.90%

<sup>1</sup>Includes change to four-month summer season



**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 9, Large General Service - Secondary  
Summer

Line No	Demand kW	BLC kW	Load Factor	Energy kWh	(1) Current Rate	(2) Proposed Rate	(3) Difference (2) - (1)	(4) Percent Difference
1	10	13	20%	1,440	\$ 184.62	\$ 194.66	\$ 10.04	5.44%
2	10	13	35%	2,520	\$ 281.68	\$ 250.05	\$ (31.63)	-11.23%
3	10	13	50%	3,600	\$ 347.09	\$ 305.44	\$ (41.65)	-12.00%
4	10	13	65%	4,680	\$ 412.50	\$ 360.84	\$ (51.66)	-12.52%
5	10	13	80%	5,760	\$ 477.90	\$ 416.23	\$ (61.67)	-12.91%
6	20	27	20%	2,880	\$ 310.64	\$ 364.32	\$ 53.68	17.28%
7	20	27	35%	5,040	\$ 441.45	\$ 475.10	\$ 33.65	7.62%
8	20	27	50%	7,200	\$ 572.26	\$ 585.89	\$ 13.63	2.38%
9	20	27	65%	9,360	\$ 703.07	\$ 696.67	\$ (6.40)	-0.91%
10	20	27	80%	11,520	\$ 833.89	\$ 807.46	\$ (26.43)	-3.17%
11	50	67	20%	7,200	\$ 795.69	\$ 873.30	\$ 77.61	9.75%
12	50	67	35%	12,600	\$ 1,122.72	\$ 1,150.26	\$ 27.54	2.45%
13	50	67	50%	18,000	\$ 1,449.75	\$ 1,427.22	\$ (22.53)	-1.55%
14	50	67	65%	23,400	\$ 1,776.78	\$ 1,704.18	\$ (72.60)	-4.09%
15	50	67	80%	28,800	\$ 2,103.82	\$ 1,981.14	\$ (122.68)	-5.83%
16	100	135	20%	14,400	\$ 1,604.11	\$ 1,721.60	\$ 117.49	7.32%
17	100	135	35%	25,200	\$ 2,258.17	\$ 2,275.52	\$ 17.34	0.77%
18	100	135	50%	36,000	\$ 2,912.24	\$ 2,829.44	\$ (82.80)	-2.84%
19	100	135	65%	46,800	\$ 3,566.30	\$ 3,383.36	\$ (182.94)	-5.13%
20	100	135	80%	57,600	\$ 4,220.36	\$ 3,937.28	\$ (283.08)	-6.71%
21	300	404	20%	43,200	\$ 4,837.80	\$ 5,114.79	\$ 276.99	5.73%
22	300	404	35%	75,600	\$ 6,799.99	\$ 6,776.55	\$ (23.43)	-0.34%
23	300	404	50%	108,000	\$ 8,762.18	\$ 8,438.32	\$ (323.86)	-3.70%
24	300	404	65%	140,400	\$ 10,724.36	\$ 10,100.08	\$ (624.28)	-5.82%
25	300	404	80%	172,800	\$ 12,686.55	\$ 11,761.84	\$ (924.71)	-7.29%
26	500	674	20%	72,000	\$ 8,071.48	\$ 8,507.98	\$ 436.50	5.41%
27	500	674	35%	126,000	\$ 11,341.80	\$ 11,277.59	\$ (64.21)	-0.57%
28	500	674	50%	180,000	\$ 14,612.11	\$ 14,047.19	\$ (564.92)	-3.87%
29	500	674	65%	234,000	\$ 17,882.43	\$ 16,816.80	\$ (1,065.63)	-5.96%
30	500	674	80%	288,000	\$ 21,152.74	\$ 19,586.41	\$ (1,566.34)	-7.40%
31	750	1,010	20%	108,000	\$ 12,113.59	\$ 12,749.47	\$ 635.88	5.25%
32	750	1,010	35%	189,000	\$ 17,019.06	\$ 16,903.88	\$ (115.18)	-0.68%
33	750	1,010	50%	270,000	\$ 21,924.54	\$ 21,058.29	\$ (866.25)	-3.95%
34	750	1,010	65%	351,000	\$ 26,830.01	\$ 25,212.70	\$ (1,617.31)	-6.03%
35	750	1,010	80%	432,000	\$ 31,735.48	\$ 29,367.11	\$ (2,368.37)	-7.46%

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 9, Large General Service - Secondary  
Non-Summer

<u>Line No</u>	<u>Demand kW</u>	<u>BLC kW</u>	<u>Load Factor</u>	<u>Energy kWh</u>	(1) <u>Current Rate</u>	(2) <u>Proposed Rate</u>	(3) <u>Difference 2-1</u>	(4) <u>Percent Difference</u>
1	10	13	20%	1,440	\$ 169.49	\$ 175.90	\$ 6.41	3.78%
2	10	13	35%	2,520	\$ 258.32	\$ 229.29	\$ (29.03)	-11.24%
3	10	13	50%	3,600	\$ 318.84	\$ 282.68	\$ (36.16)	-11.34%
4	10	13	65%	4,680	\$ 379.37	\$ 336.08	\$ (43.29)	-11.41%
5	10	13	80%	5,760	\$ 439.89	\$ 389.47	\$ (50.42)	-11.46%
6	20	27	20%	2,880	\$ 285.64	\$ 326.79	\$ 41.15	14.41%
7	20	27	35%	5,040	\$ 406.69	\$ 433.58	\$ 26.89	6.61%
8	20	27	50%	7,200	\$ 527.74	\$ 540.37	\$ 12.63	2.39%
9	20	27	65%	9,360	\$ 648.79	\$ 647.16	\$ (1.64)	-0.25%
10	20	27	80%	11,520	\$ 769.84	\$ 753.94	\$ (15.90)	-2.06%
11	50	67	20%	7,200	\$ 702.87	\$ 779.48	\$ 76.61	10.90%
12	50	67	35%	12,600	\$ 1,005.49	\$ 1,046.45	\$ 40.96	4.07%
13	50	67	50%	18,000	\$ 1,308.12	\$ 1,313.42	\$ 5.30	0.41%
14	50	67	65%	23,400	\$ 1,610.74	\$ 1,580.39	\$ (30.35)	-1.88%
15	50	67	80%	28,800	\$ 1,913.36	\$ 1,847.36	\$ (66.00)	-3.45%
16	100	135	20%	14,400	\$ 1,398.25	\$ 1,533.96	\$ 135.71	9.71%
17	100	135	35%	25,200	\$ 2,003.49	\$ 2,067.90	\$ 64.40	3.21%
18	100	135	50%	36,000	\$ 2,608.74	\$ 2,601.84	\$ (6.90)	-0.26%
19	100	135	65%	46,800	\$ 3,213.99	\$ 3,135.78	\$ (78.21)	-2.43%
20	100	135	80%	57,600	\$ 3,819.24	\$ 3,669.72	\$ (149.51)	-3.91%
21	300	404	20%	43,200	\$ 4,179.76	\$ 4,551.87	\$ 372.11	8.90%
22	300	404	35%	75,600	\$ 5,995.50	\$ 6,153.69	\$ 158.19	2.64%
23	300	404	50%	108,000	\$ 7,811.24	\$ 7,755.52	\$ (55.72)	-0.71%
24	300	404	65%	140,400	\$ 9,626.98	\$ 9,357.34	\$ (269.64)	-2.80%
25	300	404	80%	172,800	\$ 11,442.72	\$ 10,959.16	\$ (483.56)	-4.23%
26	500	674	20%	72,000	\$ 6,961.27	\$ 7,569.78	\$ 608.51	8.74%
27	500	674	35%	126,000	\$ 9,987.50	\$ 10,239.49	\$ 251.99	2.52%
28	500	674	50%	180,000	\$ 13,013.74	\$ 12,909.19	\$ (104.54)	-0.80%
29	500	674	65%	234,000	\$ 16,039.97	\$ 15,578.90	\$ (461.07)	-2.87%
30	500	674	80%	288,000	\$ 19,066.21	\$ 18,248.61	\$ (817.60)	-4.29%
31	750	1,010	20%	108,000	\$ 10,438.16	\$ 11,342.17	\$ 904.02	8.66%
27	750	1,010	35%	189,000	\$ 14,977.51	\$ 15,346.73	\$ 369.22	2.47%
28	750	1,010	50%	270,000	\$ 19,516.86	\$ 19,351.29	\$ (165.57)	-0.85%
29	750	1,010	65%	351,000	\$ 24,056.21	\$ 23,355.85	\$ (700.36)	-2.91%
30	750	1,010	80%	432,000	\$ 28,595.57	\$ 27,360.41	\$ (1,235.16)	-4.32%

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 9, Large General Service - Secondary  
Weighted Monthly Average<sup>1</sup>

Line No	Demand kW	BLC kW	Load Factor	Energy kWh	(1) Current Rate	(2) Proposed Rate	(3) Difference (2) - (1)	(4) Percent Difference
1	10	13	20%	1,440	\$ 173.27	\$ 182.15	\$ 8.88	5.13%
2	10	13	35%	2,520	\$ 264.16	\$ 236.21	\$ (27.95)	-10.58%
3	10	13	50%	3,600	\$ 325.90	\$ 290.27	\$ (35.63)	-10.93%
4	10	13	65%	4,680	\$ 387.65	\$ 344.33	\$ (43.32)	-11.17%
5	10	13	80%	5,760	\$ 449.39	\$ 398.39	\$ (51.00)	-11.35%
6	20	27	20%	2,880	\$ 291.89	\$ 339.30	\$ 47.41	16.24%
7	20	27	35%	5,040	\$ 415.38	\$ 447.42	\$ 32.04	7.71%
8	20	27	50%	7,200	\$ 538.87	\$ 555.54	\$ 16.67	3.09%
9	20	27	65%	9,360	\$ 662.36	\$ 663.66	\$ 1.30	0.20%
10	20	27	80%	11,520	\$ 785.85	\$ 771.78	\$ (14.07)	-1.79%
11	50	67	20%	7,200	\$ 726.07	\$ 810.75	\$ 84.68	11.66%
12	50	67	35%	12,600	\$ 1,034.80	\$ 1,081.05	\$ 46.25	4.47%
13	50	67	50%	18,000	\$ 1,343.53	\$ 1,351.35	\$ 7.83	0.58%
14	50	67	65%	23,400	\$ 1,652.25	\$ 1,621.65	\$ (30.60)	-1.85%
15	50	67	80%	28,800	\$ 1,960.98	\$ 1,891.95	\$ (69.02)	-3.52%
16	100	135	20%	14,400	\$ 1,449.71	\$ 1,596.50	\$ 146.79	10.13%
17	100	135	35%	25,200	\$ 2,067.16	\$ 2,137.10	\$ 69.94	3.38%
18	100	135	50%	36,000	\$ 2,684.62	\$ 2,677.71	\$ (6.91)	-0.26%
19	100	135	65%	46,800	\$ 3,302.07	\$ 3,218.31	\$ (83.76)	-2.54%
20	100	135	80%	57,600	\$ 3,919.52	\$ 3,758.91	\$ (160.61)	-4.10%
21	300	404	20%	43,200	\$ 4,344.27	\$ 4,739.51	\$ 395.24	9.10%
22	300	404	35%	75,600	\$ 6,196.62	\$ 6,361.31	\$ 164.69	2.66%
23	300	404	50%	108,000	\$ 8,048.97	\$ 7,983.12	\$ (65.86)	-0.82%
24	300	404	65%	140,400	\$ 9,901.33	\$ 9,604.92	\$ (296.41)	-2.99%
25	300	404	80%	172,800	\$ 11,753.68	\$ 11,226.72	\$ (526.96)	-4.48%
26	500	674	20%	72,000	\$ 7,238.82	\$ 7,882.52	\$ 643.69	8.89%
27	500	674	35%	126,000	\$ 10,326.08	\$ 10,585.52	\$ 259.44	2.51%
28	500	674	50%	180,000	\$ 13,413.33	\$ 13,288.53	\$ (124.80)	-0.93%
29	500	674	65%	234,000	\$ 16,500.59	\$ 15,991.53	\$ (509.05)	-3.09%
30	500	674	80%	288,000	\$ 19,587.84	\$ 18,694.54	\$ (893.30)	-4.56%
31	750	1,010	20%	108,000	\$ 10,857.01	\$ 11,811.27	\$ 954.26	8.79%
27	750	1,010	35%	189,000	\$ 15,487.90	\$ 15,865.78	\$ 377.88	2.44%
28	750	1,010	50%	270,000	\$ 20,118.78	\$ 19,920.29	\$ (198.49)	-0.99%
29	750	1,010	65%	351,000	\$ 24,749.66	\$ 23,974.80	\$ (774.86)	-3.13%
30	750	1,010	80%	432,000	\$ 29,380.55	\$ 28,029.31	\$ (1,351.24)	-4.60%

<sup>1</sup> Includes change to four-month summer season

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 24, Agricultural Irrigation Service - Secondary  
In-Season

Line No	Demand kW	Load Factor	Energy kWh	(1) Current Rate	(2) Proposed Rate	(3) Difference (2) - (1)	(4) Percent Difference
1	10	20%	1,440	\$ 193.83	\$ 269.46	\$ 75.63	39.02%
2	10	35%	2,520	\$ 267.16	\$ 335.96	\$ 68.80	25.75%
3	10	50%	3,600	\$ 339.89	\$ 402.46	\$ 62.57	18.41%
4	10	65%	4,680	\$ 412.63	\$ 468.96	\$ 56.33	13.65%
5	10	80%	5,760	\$ 485.36	\$ 535.45	\$ 50.09	10.32%
6	50	20%	7,200	\$ 881.16	\$ 1,227.32	\$ 346.16	39.28%
7	50	35%	12,600	\$ 1,247.78	\$ 1,559.81	\$ 312.02	25.01%
8	50	50%	18,000	\$ 1,611.45	\$ 1,892.30	\$ 280.84	17.43%
9	50	65%	23,400	\$ 1,975.13	\$ 2,224.78	\$ 249.66	12.64%
10	50	80%	28,800	\$ 2,338.80	\$ 2,557.27	\$ 218.47	9.34%
11	100	20%	14,400	\$ 1,740.32	\$ 2,424.64	\$ 684.32	39.32%
12	100	35%	25,200	\$ 2,473.57	\$ 3,089.61	\$ 616.05	24.91%
13	100	50%	36,000	\$ 3,200.91	\$ 3,754.59	\$ 553.68	17.30%
14	100	65%	46,800	\$ 3,928.25	\$ 4,419.57	\$ 491.32	12.51%
15	100	80%	57,600	\$ 4,655.60	\$ 5,084.55	\$ 428.95	9.21%
16	300	20%	43,200	\$ 5,176.95	\$ 7,213.91	\$ 2,036.96	39.35%
17	300	35%	75,600	\$ 7,376.70	\$ 9,208.84	\$ 1,832.15	24.84%
18	300	50%	108,000	\$ 9,558.73	\$ 11,203.78	\$ 1,645.05	17.21%
19	300	65%	140,400	\$ 11,740.76	\$ 13,198.71	\$ 1,457.95	12.42%
20	300	80%	172,800	\$ 13,922.79	\$ 15,193.64	\$ 1,270.85	9.13%
21	500	20%	72,000	\$ 8,613.58	\$ 12,003.18	\$ 3,389.61	39.35%
22	500	35%	126,000	\$ 12,279.83	\$ 15,328.07	\$ 3,048.25	24.82%
23	500	50%	180,000	\$ 15,916.55	\$ 18,652.96	\$ 2,736.41	17.19%
24	500	65%	234,000	\$ 19,553.27	\$ 21,977.85	\$ 2,424.58	12.40%
25	500	80%	288,000	\$ 23,189.99	\$ 25,302.74	\$ 2,112.75	9.11%
26	750	20%	108,000	\$ 12,909.36	\$ 17,989.78	\$ 5,080.41	39.35%
27	750	35%	189,000	\$ 18,408.74	\$ 22,977.11	\$ 4,568.37	24.82%
28	750	50%	270,000	\$ 23,863.82	\$ 27,964.44	\$ 4,100.62	17.18%
29	750	65%	351,000	\$ 29,318.90	\$ 32,951.77	\$ 3,632.87	12.39%
30	750	80%	432,000	\$ 34,773.98	\$ 37,939.10	\$ 3,165.12	9.10%

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 24, Agricultural Irrigation Service - Secondary  
Out-of-Season

Line No	Demand kW	Load Factor	Energy kWh	(1) Current Rate	(2) Proposed Rate	(3) Difference 2-1	(4) Percent Difference
1	10	20%	1,440	\$ 117.18	\$ 111.12	\$ (6.06)	-5.18%
2	10	35%	2,520	\$ 202.45	\$ 189.96	\$ (12.49)	-6.17%
3	10	50%	3,600	\$ 287.71	\$ 268.80	\$ (18.91)	-6.57%
4	10	65%	4,680	\$ 372.98	\$ 347.64	\$ (25.34)	-6.79%
5	10	80%	5,760	\$ 458.24	\$ 426.48	\$ (31.76)	-6.93%
6	50	20%	7,200	\$ 571.92	\$ 531.60	\$ (40.32)	-7.05%
7	50	35%	12,600	\$ 998.24	\$ 925.80	\$ (72.44)	-7.26%
8	50	50%	18,000	\$ 1,424.56	\$ 1,320.00	\$ (104.56)	-7.34%
9	50	65%	23,400	\$ 1,850.88	\$ 1,714.20	\$ (136.68)	-7.38%
10	50	80%	28,800	\$ 2,277.19	\$ 2,108.40	\$ (168.79)	-7.41%
11	100	20%	14,400	\$ 1,140.35	\$ 1,057.20	\$ (83.15)	-7.29%
12	100	35%	25,200	\$ 1,992.98	\$ 1,845.60	\$ (147.38)	-7.40%
13	100	50%	36,000	\$ 2,845.62	\$ 2,634.00	\$ (211.62)	-7.44%
14	100	65%	46,800	\$ 3,698.25	\$ 3,422.40	\$ (275.85)	-7.46%
15	100	80%	57,600	\$ 4,550.89	\$ 4,210.80	\$ (340.09)	-7.47%
16	300	20%	43,200	\$ 3,414.04	\$ 3,159.60	\$ (254.44)	-7.45%
17	300	35%	75,600	\$ 5,971.94	\$ 5,524.80	\$ (447.14)	-7.49%
18	300	50%	108,000	\$ 8,529.85	\$ 7,890.00	\$ (639.85)	-7.50%
19	300	65%	140,400	\$ 11,087.75	\$ 10,255.20	\$ (832.55)	-7.51%
20	300	80%	172,800	\$ 13,645.66	\$ 12,620.40	\$ (1,025.26)	-7.51%
21	500	20%	72,000	\$ 5,687.73	\$ 5,262.00	\$ (425.73)	-7.49%
22	500	35%	126,000	\$ 9,950.91	\$ 9,204.00	\$ (746.91)	-7.51%
23	500	50%	180,000	\$ 14,214.08	\$ 13,146.00	\$ (1,068.08)	-7.51%
24	500	65%	234,000	\$ 18,477.25	\$ 17,088.00	\$ (1,389.25)	-7.52%
25	500	80%	288,000	\$ 22,740.43	\$ 21,030.00	\$ (1,710.43)	-7.52%
26	750	20%	108,000	\$ 8,529.85	\$ 7,890.00	\$ (639.85)	-7.50%
27	750	35%	189,000	\$ 14,924.61	\$ 13,803.00	\$ (1,121.61)	-7.52%
28	750	50%	270,000	\$ 21,319.37	\$ 19,716.00	\$ (1,603.37)	-7.52%
29	750	65%	351,000	\$ 27,714.13	\$ 25,629.00	\$ (2,085.13)	-7.52%
30	750	80%	432,000	\$ 34,108.89	\$ 31,542.00	\$ (2,566.89)	-7.53%

**Idaho Power Company**  
**State of Idaho**  
**Typical Monthly Billing Comparison**  
**IPC-E-23-11 General Rate Case**  
**Filed June 1, 2023**

Schedule 24, Agricultural Irrigation Service - Secondary  
Weighted Average Monthly<sup>1</sup>

<u>Line No</u>	<u>Demand kW</u>	<u>Load Factor</u>	<u>Energy kWh</u>	<u>(1) Current Rate</u>	<u>(2) Proposed Rate</u>	<u>(3) Difference (2) - (1)</u>	<u>(4) Percent Difference</u>
1	10	20%	1,440	\$ 104.84	\$ 128.86	\$ 24.02	22.91%
2	10	35%	2,520	\$ 157.70	\$ 177.31	\$ 19.61	12.43%
3	10	50%	3,600	\$ 210.37	\$ 225.75	\$ 15.39	7.31%
4	10	65%	4,680	\$ 263.03	\$ 274.20	\$ 11.17	4.24%
5	10	80%	5,760	\$ 315.70	\$ 322.64	\$ 6.95	2.20%
6	50	20%	7,200	\$ 485.53	\$ 588.31	\$ 102.78	21.17%
7	50	35%	12,600	\$ 749.84	\$ 830.54	\$ 80.69	10.76%
8	50	50%	18,000	\$ 1,013.17	\$ 1,072.77	\$ 59.59	5.88%
9	50	65%	23,400	\$ 1,276.50	\$ 1,314.99	\$ 38.49	3.02%
10	50	80%	28,800	\$ 1,539.83	\$ 1,557.22	\$ 17.39	1.13%
11	100	20%	14,400	\$ 961.39	\$ 1,162.61	\$ 201.23	20.93%
12	100	35%	25,200	\$ 1,490.02	\$ 1,647.07	\$ 157.06	10.54%
13	100	50%	36,000	\$ 2,016.68	\$ 2,131.53	\$ 114.86	5.70%
14	100	65%	46,800	\$ 2,543.33	\$ 2,615.99	\$ 72.66	2.86%
15	100	80%	57,600	\$ 3,069.99	\$ 3,100.45	\$ 30.45	0.99%
16	300	20%	43,200	\$ 2,864.83	\$ 3,459.84	\$ 595.01	20.77%
17	300	35%	75,600	\$ 4,450.71	\$ 4,913.21	\$ 462.50	10.39%
18	300	50%	108,000	\$ 6,030.69	\$ 6,366.59	\$ 335.90	5.57%
19	300	65%	140,400	\$ 7,610.67	\$ 7,819.97	\$ 209.30	2.75%
20	300	80%	172,800	\$ 9,190.65	\$ 9,273.35	\$ 82.70	0.90%
21	500	20%	72,000	\$ 4,768.27	\$ 5,757.06	\$ 988.79	20.74%
22	500	35%	126,000	\$ 7,411.41	\$ 8,179.36	\$ 767.95	10.36%
23	500	50%	180,000	\$ 10,044.71	\$ 10,601.65	\$ 556.94	5.54%
24	500	65%	234,000	\$ 12,678.01	\$ 13,023.95	\$ 345.94	2.73%
25	500	80%	288,000	\$ 15,311.31	\$ 15,446.25	\$ 134.94	0.88%
26	750	20%	108,000	\$ 7,147.57	\$ 8,628.59	\$ 1,481.02	20.72%
27	750	35%	189,000	\$ 11,112.28	\$ 12,262.04	\$ 1,149.75	10.35%
28	750	50%	270,000	\$ 15,062.23	\$ 15,895.48	\$ 833.25	5.53%
29	750	65%	351,000	\$ 19,012.18	\$ 19,528.92	\$ 516.75	2.72%
30	750	80%	432,000	\$ 22,962.12	\$ 23,162.37	\$ 200.24	0.87%

<sup>1</sup> Bills are based on four months of in-season, four month of out-season, and four months of zero usage.

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-23-11
AUTHORITY TO INCREASE ITS RATES	)	
AND CHARGES FOR ELECTRIC SERVICE	)	
IN THE STATE OF IDAHO AND FOR	)	
ASSOCIATED REGULATORY ACCOUNTING	)	
TREATMENT.	)	
<hr/>		)

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

RILEY MALONEY

1           Q.     Please state your name, business address, and  
2 present position with Idaho Power Company ("Idaho Power" or  
3 "Company").

4           A.     My name is Riley Maloney. My business address  
5 is 1221 West Idaho Street, Boise, Idaho 83702. I am  
6 employed by Idaho Power as a Regulatory Analyst in the  
7 Regulatory Affairs Department.

8           Q.     Please describe your educational background.

9           A.     I received a Bachelor of Arts degree in  
10 Economics from Boise State University in 2013. I have also  
11 attended "The Basics: Practical Regulatory Training for the  
12 Electric Industry," an electric utility ratemaking course  
13 offered through the New Mexico State University's Center  
14 for Public Utilities, "Electric Utility Fundamentals and  
15 Insights," an electric utility course offered by Western  
16 Energy Institute, and "Electric Rates Advanced Course," an  
17 electric utility ratemaking course offered through Edison  
18 Electric Institute.

19          Q.     Please describe your work experience with  
20 Idaho Power.

21          A.     In 2020 I was hired as a Regulatory Analyst in  
22 the Company's Regulatory Affairs Department. My primary  
23 responsibilities include supporting activities involving  
24 tariff administration and regulatory compliance filings. I  
25 provide regulatory support to the Company's operations



1 business units to ensure consistent application of the  
2 Company's rules and regulations, authorized by its  
3 Commission-approved tariff, and the Idaho Public Utilities  
4 Commission's ("Commission") Utility Customer Relations  
5 Rules. I also act as a liaison for customer service-related  
6 issues.

7 Q. What is the purpose of your testimony in this  
8 matter?

9 A. My testimony will describe the proposed  
10 updates to the Company's Schedule 31, Agreement for Supply  
11 of Standby Electric Service for the Amalgamated Sugar  
12 Company, and Schedule 45, Standby Service (collectively,  
13 "Standby Service"); Schedule 46, Alternate Distribution  
14 Service; Schedule 66, Miscellaneous Charges; Schedule 72,  
15 Generator Interconnections to PURPA Qualifying Facility  
16 Sellers; and Schedule 95, Adjustment for Municipal  
17 Franchise Fees. I will also address the changes and updates  
18 being proposed within several of the Company's service  
19 provisions in its "General Rules, Regulations and Rates."

20 **I. SCHEDULES 45 AND 31, STANDBY SERVICE**

21 Q. Please describe Schedule 45, Standby Service.

22 A. Standby Service under Schedule 45 is an  
23 optional, firm power service offering available to  
24 customers who have their own on-site source of electric  
25 generation, but request that the Company back up a portion

1 of such source of customer-owned generation in the event of  
2 an outage. Standby Service was first made available  
3 pursuant to Commission Order No. 22887, issued in Case No.  
4 IPC-E-89-04, for customers taking large power service and  
5 was subsequently updated in Case No. IPC-E-94-05 to include  
6 generation and transmission cost components. Since its  
7 inception, and because of customers' expressed interest,  
8 Standby Service has subsequently been expanded through  
9 various tariff advice filings to also be available to  
10 customers taking large general service. The Company  
11 currently has two primary service level customers taking  
12 Standby Service.

13 Q. What is the benefit of a customer taking  
14 Standby Service?

15 A. Because the Company includes the requested  
16 amount of capacity within its load forecasts, customers  
17 electing to take Standby Service are afforded reasonable  
18 assurance of continued electric service during periods of  
19 planned or unexpected outages to their on-site generating  
20 equipment.

21 Q. Are customers who are eligible required to  
22 take Standby Service?

23 A. No. However, in the event an eligible customer  
24 does not elect to take Standby Service and their on-site  
25 generation goes offline, the necessary amount of backup

1 power may not be available for taking from the Company's  
2 system as the Company will not have planned to serve the  
3 additional, temporary load within the area.

4 Q. Is the Company proposing any rate adjustments  
5 to Schedule 45, Standby Service?

6 A. Yes. Idaho Power reviewed the currently in  
7 effect methodology approved by the Commission in past  
8 general rate cases and various tariff advice filings and  
9 determined it to still be representative of the cost to  
10 provide the respective service, with exception to the  
11 derivation of standby generation and transmission cost  
12 components and excess demand charges. The proposed rate  
13 adjustments revise the charges to include the Company's  
14 Open Access Transmission Tariff ("OATT") rate components  
15 and incorporate updated unit cost information resulting  
16 from the cost-of-service studies for Schedule 19 Primary  
17 Service and Schedule 9 Primary and Secondary Services, as  
18 presented on pages 5 - 7 of Exhibit No. 43 to the Direct  
19 Testimony of Mr. Paul Goralski. The derivations of the  
20 updated charges are included in my workpapers.

21 Q. Please describe Schedule 31, Agreement for  
22 Supply of Standby Electric Service for the Amalgamated  
23 Sugar Company.

24 A. The Company has a contract with the  
25 Amalgamated Sugar Company to provide customized standby

1 service. The Company's initial contract with the  
2 Amalgamated Sugar Company to provide standby service was  
3 entered into on April 6, 1998, and approved by Commission  
4 Order No. 27708, issued in Case No. IPC-E-98-07. Currently,  
5 Amalgamated Sugar Company is provided standby service under  
6 the provisions of a revised Standby Electric Service  
7 Agreement dated December 7, 2005, which was approved by  
8 Commission Order No. 29958, issued in Case No. IPC-E-05-37.

9 Q. Is the Company proposing any rate adjustments  
10 to the standby charges for Amalgamated Sugar Company under  
11 Schedule 31?

12 A. Yes. Idaho Power reviewed the currently in  
13 effect methodology approved by the Commission in past  
14 general rate cases and found it to still be representative  
15 of the cost to provide the respective service, with  
16 exception to the derivation of standby generation and  
17 transmission cost components and excess demand charges.  
18 The proposed rate adjustments revise the charges to include  
19 the Company's OATT rate components and incorporate updated  
20 unit cost information resulting from the aforementioned  
21 cost-of-service study for Schedule 19 Primary Service. The  
22 derivations of the updated charges are included in my  
23 workpapers.

1           Q.       Why is the Company proposing to change how the  
2   standby generation and transmission cost component for  
3   Schedule 31 and Schedule 45 is derived?

4           A.       The Company is proposing to use its OATT rate  
5   components within the derivation of Schedule 31 and  
6   Schedule 45's standby reservation charges to remain  
7   consistent with the methodology most recently relied upon  
8   when determining its special contracts' rates, as addressed  
9   by Company Witness Mr. Paul Goralski.

10          Q.       Please describe the excess demand charge and  
11   the changes to the charge's derivation being proposed  
12   within Schedules 31 and 45.

13          A.       Excess demand charges are incurred when a  
14   customer taking Standby Service exceeds their total amount  
15   of contract demand during a billing period. The proposed  
16   excess demand charge is derived from the Company's OATT  
17   rate components and represents the annual cost for an  
18   incremental megawatt accessed at those OATT rate  
19   components, collected each day over one month. Any excess  
20   demand charges assessed to a customer will continue to be  
21   in addition to all standby demand charges and energy  
22   charges incurred for the additional amount of load  
23   consumed.

24   //

1           **II.    SCHEDULE 46, ALTERNATE DISTRIBUTION SERVICE**

2           Q.       What is Alternate Distribution Service?

3           A.       Alternate Distribution Service is an optional  
4 service offering for commercial and industrial customers  
5 desiring redundancy and, in the event of a distribution-  
6 related outage, automatic switching of electric service to  
7 an alternate distribution circuit serving their premises.

8 This service was first made available pursuant to  
9 Commission Order No. 22887, issued in Case No. IPC-E-89-04,  
10 for customers taking large power service or large general  
11 service. The Company currently has six customers taking  
12 Alternate Distribution Service.

13          Q.       What is the benefit of a customer taking  
14 Alternate Distribution Service?

15          A.       Alternate Distribution Service provides  
16 customers an extra measure of reliability that does not  
17 exist with only one source of distribution service. Absent  
18 on-site backup generation, a customer's operations may  
19 cease in the event of a distribution-related outage  
20 affecting the distribution circuit serving their premises.  
21 Though not guaranteed, Alternate Distribution Service may  
22 minimize the chance of a customer's operations from being  
23 disrupted in such a scenario.

24          Q.       Is the Company proposing any rate adjustments  
25 to Schedule 46, Alternate Distribution Service?

1           A.       Yes. After reviewing the currently in effect  
2 methodology approved by the Commission in past general rate  
3 cases, the Company found the method to continue to be  
4 reasonable, with one exception. When reviewing the  
5 methodology used to derive the Capacity Charge, the Company  
6 identified that generation and transmission-related  
7 capacity cost components had previously been inadvertently  
8 included. As such, the Capacity Charge being proposed as  
9 part of this case corrects for this and does not include  
10 any generation or transmission-related capacity cost  
11 components.

12           The proposed Capacity Charge rate includes updated  
13 unit cost information resulting from the cost-of-service  
14 study for Schedule 19 Primary Service. Additionally, the  
15 Company proposes to update the mileage charge and average  
16 distribution line length covered by Schedule 19 customers'  
17 rates utilizing the same methodology previously relied  
18 upon.

19           The updated Capacity Charge is derived by summing  
20 the Distribution demand revenue requirement for  
21 Substations, Primary Lines, and Primary Transformers for  
22 Schedule 19 Primary Service (\$7,435,654; \$11,058,271; and  
23 \$1,575,448, respectively), and dividing this sum by the  
24 total billed kilowatt ("kW") of 5,315,392. The respective  
25 revenue requirement for each of these facilities and total

1 billed kW can be found on page 7 of Exhibit No. 43 to the  
2 Direct Testimony of Mr. Goralski, and the derivation of the  
3 updated Capacity Charge using these amounts is included in  
4 my workpapers.

5 Q. Please describe Schedule 46's mileage charge  
6 and the methodology used to derive it.

7 A. Schedule 46's mileage charge is intended to  
8 recover the distribution facilities' ongoing operating and  
9 maintenance expenses based upon the proportion of capacity  
10 committed and length of line constructed to provide  
11 alternate distribution service to an individual customer.  
12 To derive this charge, the Company determined the per-mile  
13 cost to build a three-phase overhead distribution circuit,  
14 applied the facilities charge rate for facilities installed  
15 more than 31 years, as proposed below, and then divided by  
16 the three-phase overhead distribution circuit's total  
17 capacity.

18 **III. SCHEDULE 66, MISCELLANEOUS CHARGES**

19 Q. How did you approach updating the Company's  
20 Schedule 66's charges?

21 A. I started by reviewing the methodology that  
22 was relied upon for each charge's most recent update to  
23 determine whether that methodology continued to reasonably  
24 reflect the requirements to provide the respective type of



1 service. To the extent circumstances have changed since the  
2 charge was last updated, I developed a new recommendation.

3 Q. How do you propose to update the Current  
4 Transformer Charges within Schedule 66?

5 A. The proposed Current Transformer Charges  
6 simply update the cost of materials to better reflect and  
7 recover the Company's current costs of supplying the  
8 respective services. The methodology used to derive the  
9 proposed Current Transformer Charges was most recently  
10 reviewed by the Commission in 2010 as part of Tariff Advice  
11 No. 10-01.

12 Q. Why is the Company proposing to remove the  
13 option for customers to request the installation of non-  
14 Advanced Metering Infrastructure current transformer  
15 metering?

16 A. The Company predominately installs Advanced  
17 Metering Infrastructure ("AMI") meters within its service  
18 area and has generally stopped procuring non-AMI capable  
19 meters. Because of this, the Company is proposing to strike  
20 the option to install non-AMI current transformer metering  
21 to avoid customer confusion. In areas where a customer-  
22 requested current transformer is installed but AMI  
23 functionality is not available, an AMI capable meter would  
24 still be installed but the AMI-specific functionality would  
25 not be utilized until possible.

1           Q.       Why is the Company proposing to increase its  
2 customer-requested Special Meter Test charge?

3           A.       This charge was last updated during Case No.  
4 IPC-E-94-05 and was based on the then-applicable hourly  
5 labor rate for the Company's meter technicians. As such,  
6 the Company is proposing to update the charge from \$30 to  
7 \$85 to be more representative of the Company's current  
8 labor cost for providing the service. However, pursuant to  
9 Section 4, Meter Tests, of Rule D of the Company's tariff,  
10 Customers will continue to be provided one Special Meter  
11 Test free of charge every twelve months, and a Special  
12 Meter Test charge will be refunded in instances where the  
13 average registration error of the tested meter exceeds plus  
14 or minus two percent.

15          Q.       Please describe the Service Establishment  
16 Charge within Schedule 66.

17          A.       The Service Establishment Charge is assessed  
18 when a customer desires to initiate a new service contract  
19 with the Company at a location where the Point of Delivery  
20 is already energized. This charge is intended to recover  
21 the costs associated with recording or updating the  
22 customer's pertinent information into the Company's  
23 customer information system and initiating service.  
24 Compared to the existing Service Establishment Charge  
25 amount of \$20, the proposed Service Establishment Charge

1 amount of \$30 is more reflective of the Company's current  
2 costs for performing the necessary work.

3 Q. Has the methodology used to derive the  
4 proposed Service Establishment Charge been modified?

5 A. No. The methodology used to derive the Service  
6 Establishment Charge remains largely the same as of that  
7 approved in Case No. IPC-E-03-13, which is the last time  
8 this charge was updated. The only adjustment made in  
9 deriving the proposed Service Establishment Charge is  
10 updating the type of employees that perform the respective  
11 work and weighting their differing hourly costs  
12 accordingly.

13 Q. Please describe the Continuous Service Charge  
14 within Schedule 66.

15 A. The Continuous Service Charge provides  
16 property managers a cost-effective option to have electric  
17 service at their properties automatically transfer into  
18 their names when tenants request their service be  
19 discontinued. By requesting to implement a continuous  
20 service arrangement, property managers can automatically  
21 retain electric service between tenants to prevent damage  
22 from occurring and to have electricity available for  
23 maintenance and/or marketing of their property.  
24 Additionally, property managers electing to receive this  
25 service are also provided notice from Idaho Power each time

1 service is transferred into their name, electric service at  
2 the property is subject to termination, or a tenant's  
3 application for electric service is denied. Idaho Power  
4 also provides enrolled property managers with an annual  
5 inventory of all their properties where an active  
6 continuous service arrangement exists.

7 Q. Is there benefit to the Company in offering  
8 property managers a continuous service arrangement?

9 A. Yes. When property managers request a  
10 continuous service arrangement, there is less of a need for  
11 them to contact the Company each time a tenant requests to  
12 discontinue service. As a result, Company resources are  
13 optimized as those representatives can handle other  
14 customer needs.

15 Q. How was the proposed Continuous Service Charge  
16 amount determined?

17 A. Using the methodology approved in Case No.  
18 IPC-E-05-28, the Company proposes to continue pricing the  
19 Continuous Service Charge at 50 percent of the proposed  
20 Service Establishment Charge amount, or \$15, to balance the  
21 costs of operating the offering while still maintaining an  
22 incentive to encourage participation amongst property  
23 managers.

24 Q. Please describe the Field Visit Charge within  
25 Schedule 66.

1           A.       The Field Visit Charge is designed to recover  
2 costs incurred by the Company when a Company representative  
3 is dispatched to connect or disconnect service, but due to  
4 customer action, the Company representative is unable to  
5 complete such action at the time of visit. This charge is  
6 applicable to non-collection as well as collection-related  
7 visits to customers' premises.

8           Q.       Has the methodology used to derive the  
9 proposed Field Visit Charge been modified?

10          A.       No. The methodology used to derive the Field  
11 Visit Charge is nearly the same as that approved in Case  
12 No. IPC-E-03-13, which is the last time this charge was  
13 updated. The only adjustment made in deriving the proposed  
14 Field Visit Charge amounts is removing administrative  
15 support costs because no administrative support work is  
16 currently required within a Field Visit's scope of work.  
17 The proposed \$25 and \$45 Field Visit Charge amounts are  
18 more reflective of the Company's current costs incurred in  
19 respect to visiting a customer's premises with the  
20 intention of connecting or disconnecting service but being  
21 unable to do so because of customer action.

22          Q.       Please describe the Service Connection Charges  
23 within Schedule 66.

24          A.       A Service Connection Charge is assessed  
25 anytime a customer desires to initiate a new service

1 contract with the Company at a location where the Point of  
2 Delivery is currently disconnected from the Company's  
3 system and remote connection is not available. Like the  
4 Service Establishment Charge, the Service Connection Charge  
5 also seeks to recover the costs associated with recording  
6 or updating the customer's pertinent information into the  
7 Company's customer information system, as well as having to  
8 dispatch Company personnel to physically connect and  
9 initiate service. Compared to the existing Service  
10 Connection Charge amounts of \$20 and \$40, the proposed  
11 Service Connection Charge amounts of \$30 and \$50,  
12 respectively, are more reflective of the Company's current  
13 cost for performing the necessary work.

14 Q. Will a customer be charged both the Service  
15 Establishment Charge and a Service Connection Charge?

16 A. No. Because the Service Connection Charge  
17 includes the costs associated with the tasks of service  
18 establishment plus the cost to physically connect service,  
19 only the Service Connection Charge is assessed.

20 Q. Why are there differing Field Visit and  
21 Service Connection Charges based on customer class?

22 A. The Field Visit and Service Connection Charges  
23 remain bifurcated to continue reflecting the difference in  
24 skill level required of the employee(s) dispatched to  
25 perform the requested type of work, which is generally

1 dependent on the voltage at which each customer class  
2 typically takes service.

3 Q. Can customers request connection of service  
4 outside of the Company's normal business hours?

5 A. Yes. The charges by rate schedule outlined  
6 within Attachment 1 to the Company's application include  
7 two after-hours blocks and their associated charges. The  
8 block-hour structure remains the same as that currently in  
9 place; however, the charges have been updated to be more  
10 reflective of the Company's current costs for performing  
11 the work during the respective hours.

12 Q. Why does the Company continue to propose  
13 block-hour Service Connection Charges?

14 A. As first approved in Case No. IPC-E-03-13, the  
15 block-hour methodology recognizes the higher cost of  
16 serving customer requests for connection after normal  
17 working hours due to the overtime rate paid to employees  
18 during these hours. Additionally, during the third block-  
19 hours of 9:01 p.m. to 7:29 a.m., two employees may be  
20 dispatched for safety reasons. The proposed block-hour  
21 Service Connection Charges continue to reflect the  
22 Company's costs to serve customers based on the time of day  
23 that a customer requests the Company provide connection of  
24 service.

1           Q.       Why are the proposed Service Connection  
2 charges priced at a slight premium for the second and third  
3 block-hours?

4           A.       Some of the Company's currently approved  
5 second and third block-hour Service Connection Charges,  
6 last updated in Case No. IPC-E-03-13, include a slight  
7 premium, which is intended to encourage customers to  
8 request the service be performed within normal working  
9 hours at the lower price. The Company has found after-hour  
10 time frames can pose safety concerns for the Company's  
11 employees.

12          Q.       Please describe the Remote Service Connection  
13 Charge within Schedule 66.

14          A.       The Remote Service Connection charge is  
15 assessed anytime a customer requests connection of service  
16 at a location where the Point of Delivery is currently  
17 disconnected from the Company's system, but a meter with  
18 remote connect capability has been installed. Unlike the  
19 Service Establishment or Service Connection Charges, the  
20 Remote Service Connection Charge only includes the cost of  
21 back-office operations necessary to remotely connect and  
22 re-establish service; no field-related costs are incurred  
23 and therefore are not included within the derivation of the  
24 proposed Remote Service Connection Charge.



1           Q.     How many locations within the Company's  
2 service area can be remotely connected?

3           A.     As of the end of 2022, the Company has  
4 installed approximately 41,500 meters equipped with remote  
5 connect/disconnect functionality within its Idaho service  
6 area. Additionally, the Company continues to objectively  
7 identify locations where deployment of remote  
8 connect/disconnect capable meters can reduce costs paid by  
9 all customers, via the Company incurring lower annual  
10 operating expenses, as well as increase the satisfaction of  
11 customers residing at these locations through the provision  
12 of faster, more predictable, and cheaper connection of  
13 service.

14          Q.     Why has the Remote Service Connection Charge  
15 decreased compared to the currently approved charge?

16          A.     Likely as a result of technological  
17 advancements and process improvements, the cost of  
18 performing remote service connections has decreased on a  
19 per transaction basis compared to that of the current  
20 charge, which was implemented and approved as part of Case  
21 No. GNR-U-14-01.

22          Q.     In his testimony on page 13, Company Witness  
23 Mr. Matthew Larkin refers to a forecast to Account 451's  
24 Miscellaneous Service Revenues based on the proposed

1 changes to Schedule 66. Can you please explain the basis  
2 for this forecasted amount?

3 A. Yes. The workpapers accompanying my testimony  
4 detail the difference in revenues from Schedule 66's  
5 current charge amounts to the proposed charge amounts for  
6 these services.

7 Q. Please describe Schedule 66's proposed  
8 Fractional Period Minimum Billing amounts.

9 A. "Fractional Period Minimum Billings" specifies  
10 the minimum bill requirements for each service schedule  
11 when service is taken for a partial billing period. The  
12 minimum bill amounts have been updated to be more  
13 reflective of each customer class's allocated costs  
14 associated with bill preparation and meter reading.

15 The proposed Fractional Period Minimum Billing  
16 amounts are informed based on each customer class's  
17 respective cost-of-service unit cost for meter reading and  
18 customer accounting expenses multiplied by the proportion  
19 of functionalized customer accounting expenses for  
20 providing customer records to the total functionalized  
21 customer records expense. Mr. Goralski's Exhibit Nos. 37  
22 and 43 contain the information to derive the functionalized  
23 customer account expense proportion, and each customer  
24 class's meter reading and customer account expense unit  
25 costs, respectively.

1           Q.       What monthly rates is the Company proposing  
2   for facilities charges?

3           A.       The Company is proposing to update the monthly  
4   facilities charge rates to the following:

<b>Table 1 Proposed Facilities Charge Rates</b>		
<b>Rate Schedule</b>	<b>Facilities</b>	<b>Facilities</b>
	<b>Installed 31 Years</b>	<b>Installed More</b>
	<b>or Less</b>	<b>Than 31 Years</b>
Schedule 9	<b>1.38%</b>	<b>0.61%</b>
Schedule 15	<b>1.66%</b>	<b>1.66%</b>
Schedule 19	<b>1.38%</b>	<b>0.61%</b>
Schedule 24	<b>1.38%</b>	<b>0.61%</b>
Schedule 29	<b>1.38%</b>	<b>0.61%</b>
Schedule 32	<b>1.38%</b>	<b>0.61%</b>
Schedule 41	<b>1.17%</b>	<b>1.17%</b>
Schedule 45	<b>1.38%</b>	<b>0.61%</b>
Schedule 46	<b>1.38%</b>	<b>0.61%</b>

5  
6           Q.       Please describe the individual cost components  
7   that are used to derive the Company's facilities charges.

8           A.       The cost components used to derive the  
9   Company's facilities charges are the same components  
10   included in the Company's revenue requirement for like  
11   facilities. Descriptions of each cost component are as  
12   follows:

1           Rate of Return - Idaho Power's cost of financing its  
2 original investment in facilities. This uses a weighted  
3 average of the Company's cost of debt and cost of equity.  
4 The facilities charge methodology uses a level payment  
5 stream to simplify the rate calculation and the  
6 administration of the facilities charge. The Rate of  
7 Return used to determine the facilities charge will be the  
8 Rate of Return ordered by the Commission in this case.

9           Booked Depreciation - The straight-line annual  
10 depreciation of assets based on a levelized 31-year basis.

11           Income Taxes - The tax that Idaho Power pays on the  
12 amount of revenue received from the equity portion of the  
13 Rate of Return.

14           Property Taxes - The tax that Idaho Power pays for  
15 its distribution facilities. Each dollar the Company  
16 invests beyond the Point of Delivery is assessed property  
17 taxes.

18           Other Taxes (Regulatory Fees) - The taxes and fees  
19 that Idaho Power pays to the Idaho Public Utilities  
20 Commission and Oregon Public Utility Commission. A portion  
21 of these fees are tied to the Company's distribution  
22 investment which includes facilities installed beyond the  
23 Company's Point of Delivery.

24           Operation and Maintenance Expenses - Includes all of  
25 Idaho Power's costs to operate and maintain its

1 distribution facilities. This cost component represents an  
2 average maintenance rate for all distribution equipment.

3 Administration and General Expenses - Represents an  
4 expense based on total Administration and General expense  
5 as a percentage of total plant investment.

6 Working Capital - Working Capital is the carrying  
7 cost of inventory. Working Capital is based on the cost of  
8 capital to finance the distribution facilities inventory  
9 and the property taxes that the Company pays on its  
10 inventory.

11 Insurance - The insurance rate reflects the  
12 additional cost Idaho Power incurs for insurance premiums  
13 resulting from facilities installed beyond the Company's  
14 Point of Delivery. This insurance rate covers property,  
15 casualty, and worker's compensation. It does not cover  
16 facility replacement costs for failed facilities.

17 Q. Is the Company proposing changes to the  
18 methodology used to derive facilities charges?

19 A. No. The Company proposes to rely on the same  
20 methodology and cost components that the Commission  
21 approved in Case No. IPC-E-11-08.

22 Q. What are the proposed percentage amounts for  
23 each cost component by rate class?

24 A. The proposed percentage amounts used to derive  
25 the proposed facilities charge rates are as follows:

<b>Table 2 Facilities Charge Cost Components</b>				
		<b>Rates</b>		
		<b>9/19/24/29/</b>		
	<b>Cost Components</b>	<b>Rate 15</b>	<b>32/45/46</b>	<b>Rate 41</b>
1	Rate of Return	4.85%	4.85%	4.85%
2	Book Depreciation	3.23%	3.23%	3.23%
3	Income Taxes	1.16%	1.16%	1.16%
4	Property Taxes	0.36%	0.36%	0.36%
5	Other Taxes	0.04%	0.04%	0.04%
	(Regulatory Fees)			
6	Operation &	7.37%	3.95%	1.46%
	Maintenance			
7	Administration &	2.32%	2.32%	2.32%
	General			
8	Working Capital	0.34%	0.34%	0.34%
9	Insurance	0.30%	0.30%	0.30%
10	Annual Total	20.0%	16.5%	14.0%
	<b>(ΣLines 1-9)</b>			
11	<b>Monthly Rate</b>	<b>1.66%</b>	<b>1.38%</b>	<b>1.17%</b>
	<b>(Line 10/12)</b>			

1  
2 Q. What cost components have contributed to the  
3 proposed reduction in the facilities charge rate for  
4 facilities installed 31 years or less?

1           A.       Decreases in the Company's requested overall  
2 rate-of-return and income and property tax rates are the  
3 primary drivers for the reduction in the proposed  
4 facilities charge rate for facilities installed 31 years or  
5 less.

6           Q.       What cost components have driven the proposed  
7 increase in the facilities charge rate for facilities  
8 installed more than 31 years?

9           A.       Increased working capital costs; and slightly  
10 elevated administrative and general expenses, and  
11 distribution-related operations and maintenance costs; have  
12 driven the proposed increase in the facilities charge rate  
13 for facilities installed more than 31 years.

14          Q.       What is the estimated change in the Company's  
15 revenue from the proposed facilities charge rates?

16          A.       Overall, the Company estimates that its  
17 proposed facilities charge rates will result in a reduction  
18 in revenue received through facilities charges of  
19 approximately \$184,400 per year.

20       **IV.    SCHEDULE 72, GENERATOR INTERCONNECTIONS TO PURPA**

21                       **QUALIFYING FACILITY SELLERS**

22          Q.       What is the purpose of Schedule 72, Generator  
23 Interconnections to Public Utility Regulatory Policies Act  
24 of 1978 ("PURPA") Qualifying Facility Sellers?

1           A.       Similar to how Rule H of the Company's tariff  
2 outlines the requirements for customers seeking to  
3 interconnect to the Company's distribution system, Schedule  
4 72 details the Idaho Commission's process and requirements  
5 for non-utility generators contracting, or seeking to  
6 contract, with the Company to interconnect a PURPA-  
7 qualifying generation facility in order to sell electric  
8 energy to the Company.

9           Q.       What updates does the Company propose within  
10 Schedule 72?

11          A.       Outside of the various edits intended to  
12 better clarify Schedule 72's existing provisions, the  
13 Company is proposing to modify Schedule 72's vested  
14 interest provisions so that they are consistent with  
15 provisions currently existing for the same within Rule H of  
16 the Company's tariff.

17          Q.       Why do the vested interest provisions in  
18 Schedule 72 and Rule H currently differ?

19          A.       Prior to Case No. IPC-E-94-05, the bulk of the  
20 Company's existing Rule H practices were included within  
21 its tariff under Schedule 71 which, in many respects, was  
22 very similar to Schedule 72 as it currently exists.  
23 However, as part of Case No. IPC-E-95-18, the Commission  
24 approved modifications to Rule H's vested interest  
25 provisions to achieve greater simplicity of administration.



1 Similar vested interest modifications were, however, not  
2 simultaneously incorporated into Schedule 72.

3 Q. What challenges do the existing Schedule 72  
4 vested interest provisions present?

5 A. The existing vested interest provisions under  
6 Schedule 72 require the Company to collect a vested  
7 interest charge not only for the entity that originally  
8 funded the interconnection facilities' construction cost,  
9 but also for all "Additional Applicants" that have  
10 subsequently connected and who also hold a vested interest.  
11 This practice is not only complex to administer, but it  
12 often results in numerous and minimal vested interest  
13 refund checks being sent to "Additional Applicants."

14 Q. What vested interest provisions does Idaho  
15 Power now seek to add to or update within Schedule 72?

16 A. Idaho Power proposes to update Schedule 72's  
17 vested interest provisions to allow for only one seller,  
18 person or entity to hold a vested interest at a time in a  
19 section of interconnection facilities. Additionally, the  
20 Company proposes to add an option for an "Additional  
21 Applicant" to pay the current vested interest so that they  
22 may in-turn hold a vested interest in the interconnection  
23 facilities and therefore be eligible to receive refunds.  
24 Finally, the Company proposes to limit the total amount and  
25 number of refunds that a Schedule 72 vested interest holder

1 is eligible to receive to be no more than 80 percent of  
2 their original interconnection cost, until receipt of four  
3 vested interest refunds has occurred, or until eligibility  
4 to receive vested interest refunds has expired, which is 5  
5 years after the date the Company completes construction of  
6 its portion of the interconnection facilities. These  
7 proposed updates will allow for Schedule 72 and Rule H's  
8 vested interest provisions to be applied and administered  
9 in a consistent manner.

10 **V. SCHEDULE 95, ADJUSTMENT FOR MUNICIPAL FRANCHISE FEES**

11 Q. Please explain the updates being proposed  
12 within Schedule 95.

13 A. Schedule 95 lists all franchise fees that  
14 Idaho Power currently pays to Idaho municipalities, which  
15 range from 1 percent to 3 percent of amounts billed for  
16 electric service to customers residing within the corporate  
17 limits of each listed municipality. When there is a change  
18 to a municipality's franchise fee amount, the Company files  
19 a tariff advice with the Commission to update the franchise  
20 fee rate listed in Schedule 95.

21 Schedule 95 also lists the municipal ordinance  
22 number for the municipality's franchise agreement with  
23 Idaho Power. When an existing franchise agreement expires  
24 and the Company enters into a new franchise agreement with  
25 the municipality, the new franchise agreement will contain

1 a new number for the municipal ordinance that approved the  
2 new franchise agreement. In these cases, if the franchise  
3 fee rate under the new franchise agreement did not change,  
4 the Company has not historically filed a tariff advice with  
5 the Commission merely to update the ordinance number.  
6 Instead, the Company has typically only filed a tariff  
7 advice if a municipality's franchise fee rate changes as  
8 part of a new franchise agreement.

9 Idaho Power is proposing to update all ordinance  
10 numbers listed in Schedule 95 where the currently listed  
11 ordinance number has been replaced by a new franchise  
12 agreement with a new ordinance number, but the new  
13 ordinance number was not previously updated in Schedule 95  
14 because the new franchise agreement did not include a  
15 change in the franchise fee rate.

16 Going forward, the Company intends to include updated  
17 municipal ordinance numbers as part of any tariff advice  
18 where it provides new or updated franchise fee rates.

19 **VI. IDAHO POWER'S GENERAL RULES AND REGULATIONS**

20 Q. How did you arrive at the proposed changes to  
21 the Company's General Rules and Regulations?

22 A. The changes I propose to the Company's General  
23 Rules and Regulations are the result of collaborative  
24 efforts between representatives from various business units

1 within the Company, as well as from guidance by Company  
2 Witness Ms. Connie Aschenbrenner.

3 Q. Do you intend to discuss each of the proposed  
4 changes to the tariff?

5 A. No. While a number of the changes I discuss  
6 are substantive in nature, a significant number of other  
7 changes are "form" or "housekeeping" in nature only and do  
8 not materially change the scope, effect, or application of  
9 the respective rules and regulations. The specific changes  
10 to the service provisions I address are detailed within  
11 Attachment 2 to the Company's application. These revisions  
12 are shown in legislative format within Attachment 2 so that  
13 parties reviewing them will be able to readily identify the  
14 proposed changes.

15 **Rule B**

16 Q. What changes is the Company proposing be made  
17 to Rule B (Definitions) of its tariff?

18 A. Rule B of the Company's tariff has been  
19 modified to better clarify the Company's definition of a  
20 "Premises."

21 Q. Why does the Company believe modification to  
22 its definition of "Premises" is required?

23 A. With the recent increase in the number of  
24 prospective developments constructed in the Company's  
25 service area, some developers have expressed confusion

1 regarding the Company's service requirements - specifically  
2 regarding what constitutes a "Premises" and whether such  
3 Premises can be served at more than one Point of Delivery.  
4 By more thoroughly detailing the criteria that the Company  
5 uses to define a Premises, developers are provided a  
6 clearer understanding of the Company's existing service  
7 requirements, which are in place to serve customers most  
8 cost-effectively. This modification will further enable  
9 developers to initially design and construct their  
10 buildings in conformance with the Company's service  
11 requirements, thereby reducing possible post-construction  
12 confusion and retrofits.

13 **Rule C**

14 Q. What change is the Company proposing to Rule C  
15 (Service and Limitations) of its tariff?

16 A. The Company proposes that Section 2 of Rule C,  
17 Supplying of Service, be clarified to highlight that the  
18 construction of any necessary line extensions or the  
19 installation of service facilities will only be performed  
20 in conformance with the Company's construction standards.  
21 While not a change in existing practice and already implied  
22 given the Company's ownership and ongoing responsibility  
23 for the operation and maintenance of all such facilities,  
24 the proposed language simply makes the requirement

1 explicitly clear in instances where a customer may desire  
2 use of an alternative construction standard.

3 **Rule D**

4 Q. What changes is the Company proposing be made  
5 to Rule D (Metering) of its tariff?

6 A. Aside from relocating reference to certain  
7 services' funding mechanism from Schedule 66 to within Rule  
8 D itself, the Company is proposing to eliminate its  
9 optional, Off-site Meter Reading Service offering. Second,  
10 the Company proposes to update how costs are recovered for  
11 certain customers requesting receipt of optional, Load  
12 Profile Metering services, as well as including a general  
13 waiver and release of liability for such services. Finally,  
14 the Company seeks to remove offering its optional, Surge  
15 Protection Device Service and update certain meter reading-  
16 related verbiage to reflect technological advancements.

17 Q. Why is the Company proposing to require work  
18 order costs within Rule D for the installation of Secondary  
19 Service voltage transformers?

20 A. Secondary Service voltage transformers are  
21 infrequently installed and are typically only requested  
22 when a customer prefers to be served at a non-standard  
23 voltage. Because the cost and type of voltage transformer  
24 installed for each request may differ, the Company believes  
25 it reasonable to require work order costs for these

1 installations to better recover the cost of installation  
2 from the customer requesting the service be provided.

3 Q. Why is the Company proposing to eliminate its  
4 optional, Off-site Meter Reading Service?

5 A. Following the Company's installation of AMI  
6 meters throughout its service area, as approved by the  
7 Commission in IPC-E-08-16, nearly all customers' meters  
8 innately contain the capability to be remotely read.  
9 Because of the Company's standardization of installing AMI  
10 meters, the need for a subscription-based offsite meter  
11 reading offering has become obsolete.

12 Q. How does the Company currently recover costs  
13 when customers request to receive Load Profile Metering  
14 services?

15 A. Under the current monthly subscription-based  
16 model, customers requesting to receive Load Profile  
17 Metering services pay a fixed upfront charge for the  
18 installation of the new metering equipment and an ongoing  
19 monthly charge thereafter. The ongoing monthly charge  
20 intends to recoup the installed facilities' incremental  
21 costs over a levelized three-year period. In the event a  
22 customer receiving Load Profile Metering service cancels  
23 such service within the first three years, the customer is  
24 required to pay a fixed removal fee.

1           Q.     How does the Company propose it recover costs  
2 going forward when requested to provide Load Profile  
3 Metering services?

4           A.     The Company proposes that work order cost be  
5 assessed for the installation and removal, if requested, of  
6 Load Profile Metering services. Using a work order cost  
7 approach is more consistent with the Company's tariff for  
8 other installations that customers may request, such as  
9 those provided for under Rule H, and is better aligned with  
10 cost causation principles by removing the Company's current  
11 risk of not recovering the cost of its investment should a  
12 customer cancel receipt of Load Profile Metering services  
13 within the first 3 years after installation.

14          Q.     Why is the Company seeking to add a general  
15 waiver and release of liability for Load Profile Metering  
16 services?

17          A.     Though the Company does not promote the  
18 utilization of Load Profile Metering data for customers to  
19 automate their operations, the Company has become aware of  
20 some customers desiring to use the service for that  
21 purpose. As a result of technological advancements allowing  
22 for such automation options, and the numerous factors that  
23 may impede the Company's ability to provide Load Profile  
24 Metering data reliably or on a prescribed cadence, such as  
25 an outage or routine maintenance, the Company believes it



1 prudent to include a general waiver and release of  
2 liability as part of customers' receipt of Load Profile  
3 Metering services to minimize the risk of damages being  
4 sought by customers using the services in an unadvised  
5 manner.

6 Q. Why is the Company proposing to remove the  
7 option for customers to request Surge Protection Device  
8 Services?

9 A. This is no longer a service the Company is  
10 positioned to offer. While the provision has been included  
11 in the Company's tariff since 1999, the Company has not had  
12 recent success in receiving an acceptable indemnification  
13 agreement from surge protection device vendors, as required  
14 under the offering's current provisions. Because third-  
15 party providers exist that can install whole-house surge  
16 protection in a more time-efficient manner, the Company  
17 believes it reasonable to remove this optional service  
18 offering from its tariff in order to prevent customer  
19 confusion and frustration that may occur as a result of  
20 customers requesting a service that the Company is not  
21 currently positioned to deliver.

22 Q. Please describe the changes proposed under  
23 Rule D's Section 2, Measurement of Energy, and Section 6,  
24 Meter Reading.

1           A.       The verbiage being proposed to these sections  
2 incorporates changes to the Company's meter reading  
3 practices made possible through technological advancements.  
4 Specifically, the existing verbiage contemplates the  
5 Company manually reading meters, typically on an interval  
6 of once per billing period. However, because technological  
7 advancements in metering equipment have allowed for  
8 customers' meters to be remotely read and at greater  
9 interval frequency, the Company has updated the sections'  
10 verbiage to also indicate that multiple meter readings can  
11 occur during a customer's billing period, as well as  
12 clarifying the threshold amount of unscaled hourly meter  
13 reads required during a customer's billing period before  
14 their bill will be designated as an estimate.

15           Q.       Under what circumstances is the Company unable  
16 to obtain remote meter readings?

17           A.       While infrequent, the Company may not be able  
18 to remotely obtain customers' meter readings due to  
19 situations resulting from, but not limited to, a  
20 communication outage at the substation, line interference,  
21 or maintenance work.

22           Q.       Please explain what you mean by "unscaled  
23 hourly meter reads."

24           A.       An unscaled hourly meter read is an estimate  
25 of a customer's usage during the respective hour and occurs

1 when the Company is unable to infer a customer's missing  
2 hourly usage data based on other known meter readings and  
3 usage patterns for such customer at the same premises.  
4 Conversely, a scaled hourly read occurs when an hourly  
5 meter read is unable to be obtained but, because the delta  
6 of unrecorded energy is known, the Company can proportion  
7 the total unrecorded amount of consumed energy over any  
8 missing intervals based on customers' historical usage  
9 patterns at the premises.

10 **Rule E**

11 Q. What changes is the Company proposing be made  
12 to Rule E (Master Metering Standards) of its tariff?

13 A. Rule E of the Company's tariff has  
14 historically adopted most of the language found in IDAPA  
15 31.26.01, which contains the Commission's Master-Metering  
16 Rules for Electric Utilities ("Commission's Master Metering  
17 Rules"). As such, most of the proposed updates to Rule E  
18 are to simply align the Company's master-metering rules to  
19 the Commission's Master Metering Rules. Should any of the  
20 Commission's Master Metering Rules be revised as part of  
21 the efforts currently taking place within Case No. RUL-U-  
22 23-03, the Company will modify the proposed language within  
23 Rule E accordingly.

1           Q.     Are there any notable differences in the  
2 Company's Rule E compared to the Commission's Master-  
3 Metering Rules?

4           A.     No. However, under Section 2(b) of the  
5 Company's Rule E, there is reference to Schedule 3 -  
6 Master-Metered Mobile Home Park - Residential Service. This  
7 reference is in conformance with Commission Order No. 30754  
8 which approved such rate schedule to be used in instances  
9 where eligible park operators bill master-metered tenants  
10 for electric service.

11   **Rule H**

12           Q.     What changes is the Company proposing be made  
13 to Rule H (New Service Attachments and Distribution Line  
14 Installations or Alterations) of its tariff?

15           A.     First, the Company is proposing to update  
16 Section 7 of Rule H's verbiage regarding the provision of  
17 Company-funded allowances. This section has been updated to  
18 better clarify that Rule H's allowances only offset the  
19 cost of installed terminal facilities, which is comprised  
20 of a transformer and service attachment.

21                 Second, the Company is proposing that existing  
22 customers be eligible to receive a Company-funded allowance  
23 when such customers increase their load and are responsible  
24 for upgrading terminal facilities that currently serve two

1 or more customers taking residential, general service or  
2 irrigation service.

3 Finally, the Company is proposing a handful of edits  
4 within Rule H for streamlining and clarity purposes, as  
5 well as updating the provisions governing unusual  
6 conditions and irrevocable letters of credit to better  
7 align with current construction and work order  
8 reconciliation timelines.

9 Q. Please describe the Company's current practice  
10 for providing allowances pursuant to Rule H.

11 A. Currently, if installation of a new service  
12 conductor is required to serve a new request for service, a  
13 Company-funded allowance or salvage credit, whichever is  
14 greater, is provided to offset a portion of the new or  
15 upgraded terminal facilities' cost of installation. The  
16 amount of the Company-funded allowance provided in these  
17 instances is dependent upon the then effective cost of  
18 "Standard Terminal Facilities," whether the request is for  
19 single phase or three phase service, and the extent of  
20 terminal facilities required to be installed.

21 For example, if a new customer's service request  
22 only requires the installation of a new overhead service  
23 conductor, such service conductor's installation cost will  
24 be offset by up to the then effective and applicable  
25 allowance amount. Similarly, if a new customer's service

1 request requires the installation of transformation and  
2 overhead service conductor, these facilities' installation  
3 cost will be offset by up to the then effective and  
4 applicable allowance amount.

5 Any installation costs in excess of a customer's  
6 eligible allowance or salvage credit remains the requesting  
7 customer's responsibility to fund.

8 Q. Are existing customers currently eligible to  
9 receive an allowance if their load request requires  
10 terminal facilities to be upgraded?

11 A. No. Existing customers increasing their load  
12 and necessitating upgraded terminal facilities are  
13 currently financially responsible for funding the entire  
14 cost, less any applicable salvage credit, of the required  
15 upgraded terminal facilities.

16 Q. Why is the Company proposing that existing  
17 customers also be eligible to receive a Company-funded  
18 allowance under certain circumstances?

19 A. As the Commission noted within Order No.  
20 30955, "[d]epending on the geographic configuration of  
21 customer locations, transformers can serve multiple  
22 customers." While it is certainly most economical to serve,  
23 when possible, multiple customers taking Secondary Service  
24 from a single transformer, each customer connected to such  
25 "shared" transformer may have otherwise been afforded the

1 entirety of an allowance if not but for the geographic  
2 configuration that allowed for such sharing of  
3 transformation to occur. Further, if each of these  
4 customers were served from individual terminal facilities,  
5 the need to upgrade said terminal facilities as a result of  
6 adding load may have been avoided.

7           Recognizing these factors, the Company believes it  
8 reasonable to begin contributing, in qualifying  
9 circumstances, towards a portion of the upgraded terminal  
10 facilities' costs, up to the financially responsible  
11 customer's effective allowance amount, given the upgraded  
12 terminal facilities will continue serving multiple  
13 customers.

14           Q.       Why is the Company removing the definition of  
15 Point of Delivery within Rule H?

16           A.       Defining "Point of Delivery" within Rule H is  
17 duplicative of the same definition also existing within  
18 Rule B of the Company's tariff. Because Point of Delivery  
19 is frequently used throughout the Company's tariff, its  
20 broad definition is most appropriately included within Rule  
21 B to limit potential confusion.

22           Q.       Why is the Company proposing to remove  
23 reference to a 200-amperage meter base within Rule H's  
24 definition of Standard Terminal Facilities?

1           A.       Customers are responsible for providing an  
2 acceptable meter base to accommodate their requested level  
3 of service. Removal of the existing "to serve a 200-  
4 amperage meter base" verbiage within the definition of  
5 "Standard Terminal Facilities" helps eliminate any  
6 ambiguity of this requirement and better specifies the  
7 facilities installed by the Company and used in determining  
8 allowance amounts.

9           Q.       Why is the Company proposing to remove "meter"  
10 from the definition of Terminal Facilities?

11          A.       In accordance with Rule D of the Company's  
12 tariff, meters are typically provided at no cost to  
13 customers, unless a customer requests a meter type not  
14 required by the Company or necessitates more than one  
15 primary voltage meter. As a result, the Company recommends  
16 removing reference of a meter within the definition of  
17 Terminal Facilities in order to eliminate potential  
18 confusion as to which facilities' costs are offset via a  
19 Company-funded allowance.

20          Q.       Please explain the Company's proposed revision  
21 regarding Rule H's Unusual Conditions.

22          A.       Because the Company's reconciliation of a  
23 project's work order can be dependent on external parties'  
24 timely submission of information, a 90-day timeframe to  
25 return unencountered unusual conditions amounts can often



1 be difficult to achieve. As such, the Company is proposing  
2 to adjust the reconciliation timing language to provide  
3 flexibility for various types of scenarios while  
4 simultaneously also ensuring that once such reconciliation  
5 of work order costs has been completed, customers are  
6 refunded any eligible amounts within 30 days.

7 Q. Are there any other notable modifications  
8 being proposed to Rule H?

9 A. Though infrequently used by customers, the  
10 Company is proposing the Commission give Idaho Power  
11 latitude to determine, on a case-by-case basis, when the  
12 Company will accept an irrevocable letter of credit for the  
13 estimated cost of unusual conditions. Because of the length  
14 of time that it may take to complete the construction and  
15 reconciliation of actual costs for certain projects, a  
16 customer-provided irrevocable letter of credit could  
17 expire, thereby putting the Company at risk of not being  
18 able to collect the cost of unusual conditions associated  
19 with customer-requested construction work. By having the  
20 flexibility of being able to determine when to accept an  
21 irrevocable letter of credit, the Company may be able to  
22 limit risk of not being able to collect the cost of unusual  
23 conditions seemingly "guaranteed" by an irrevocable letter  
24 of credit.

1           Q.     Is the Company proposing to change Rule H's  
2     fixed charges, credits or overhead rate as part of its  
3     Application?

4           A.     In keeping with Commission Order Nos. 30853,  
5     30955 and 32472, the Company submits for the Commission's  
6     review updated Rule H charges, credits and the general  
7     overhead rate prior to January 1<sup>st</sup> of each year. To avoid  
8     duplicative efforts and potential customer confusion, and  
9     in recognition that the existing charges, credits and  
10    general overhead rate were just updated on March 15, 2023,  
11    the Company believes it reasonable at this time to defer  
12    updating these Rule H charges and credits until its routine  
13    annual compliance filing.

14    **Rule J**

15           Q.     What changes is the Company proposing be made  
16    to Rule J (Continuity, Curtailment and Interruption of  
17    Electric Service) of its tariff?

18           A.     Rule J should be updated to include reference  
19    to the service voltage ranges described in the current  
20    edition of standard C84.1 of the American National  
21    Standards Institute - *American National Standard for*  
22    *Electric Power Systems and Equipment - Voltage Ratings*  
23    *(60Hz)*. Because the Company currently adheres to the  
24    referenced service voltage standard, inclusion of the  
25    reference will not result in a change to how the Company

1 operates or designs its system; however, it will provide  
2 greater clarity and transparency to customers.

3 **Rule L**

4 Q. What changes are you proposing be made to Rule  
5 L (Deposits) of Idaho Power's tariff?

6 A. Rule L has been updated to provide the Company  
7 flexibility to return a large commercial or special  
8 contract customer's collected deposit, and any accrued  
9 interest, early if such customer establishes good credit  
10 prior to the deposit being held for 12 months. This change  
11 better aligns Rule L's deposit retention requirements with  
12 IDAPA 31.21.01.107.04, which allows for the early return of  
13 deposits and accrued interest to residential and small  
14 commercial customers.

15 **Rule M**

16 Q. What changes is the Company proposing be made  
17 to Rule M (Facilities Charge Service) of its tariff?

18 A. Section 4 of Rule M has been updated to  
19 plainly state that the monthly facilities charge amount  
20 assessed for Company-owned facilities installed at the  
21 customer's request on the customer's side of the Point of  
22 Delivery is independent of a customer's monthly energy  
23 usage. The Company also seeks to clarify that a facilities  
24 charge customer remains financially responsible for their  
25 monthly facilities charge bill until either another

1 customer requests to assume responsibility for such  
2 facilities charge arrangement, and the Company is agreeable  
3 to providing Rule M services to such requesting customer,  
4 or the facilities charge customer pays the non-salvable  
5 cost associated with the removal of all Company-owned  
6 facilities beyond the Point of Delivery.

7 Q. Does the proposed verbiage update to Section 4  
8 of Rule M change how the Company assesses facilities  
9 charges to customers?

10 A. No. The Company currently bills facilities  
11 charges in the manner described within the proposed  
12 verbiage within Section 4 of Rule M. This proposed update  
13 simply provides customers with greater transparency of the  
14 Company's practices associated with this optional service.

15 **VII. MISCELLANEOUS SCHEDULE UPDATES**

16 Q. What other schedules is the Company proposing  
17 to update as part of its application?

18 A. The Company is proposing to remove schedules  
19 that are no longer active, eliminate water and space  
20 heating provisions within its residential service  
21 schedules, update the past due threshold amount  
22 necessitating a Tier 2 deposit under Schedule 24,  
23 Agricultural Irrigation Service, and update the Company-  
24 provided payment amount under Schedule 61, Payment for Home  
25 Wiring Audit.

1           Q.     What schedules is the Company proposing to  
2 remove from its tariff?

3           A.     The Company is proposing to remove the below  
4 listed schedules from its tariff since the schedules are  
5 either suspended or unused by customers.

6                 • Schedule 4, Residential Service Energy Watch  
7 Pilot Plan

8                 • Schedule 60, Solar Photovoltaic Service Pilot  
9 Program

10                • Schedule 63, Community Solar Pilot Program

11           Q.     Why is the Company proposing to remove the  
12 space and water heater provisions from its residential  
13 service schedules?

14           Q.     The Company's proposal is intended to  
15 streamline and simplify its residential service schedules  
16 and their respective interconnection requirements. These  
17 provisions are also already generally covered within Rule  
18 K, Customer's Load and Operations, of the Company's tariff.  
19 Additionally, the Company's Customer Requirements for  
20 Electric Service document remains updated with relevant  
21 provisions, industry standards, and/or best practices.

22           Q.     Please explain the update being proposed to  
23 Schedule 24's past due threshold amount necessitating a  
24 Tier 2 deposit.

1           A.       The Company is proposing to increase Schedule  
2 24's past due threshold amount necessitating a Tier 2  
3 deposit from \$1,000 to \$1,500 to better align with the  
4 amount of inflation that has materialized since Schedule  
5 24's Tier 2 deposit requirements were first authorized by  
6 Commission Order No. 29639, issued in Case No. IPC-E-04-20.

7           Q.       Please explain the updated Company-provided  
8 payment amount being proposed within Schedule 61.

9           A.       The Company proposes to raise the payment for  
10 customers who undergo a home wiring audit from \$40 to \$60.  
11 The proposed Company-provided payment amount of \$60 is  
12 based on escalating the existing payment amount by the  
13 amount of inflation that has materialized since the  
14 existing payment amount was established as part of Case No.  
15 IPC-E-07-08.

16          Q.       Does this conclude your direct testimony in  
17 this case?

18          A.       Yes, it does.

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**DECLARATION OF RILEY MALONEY**

I, Riley Maloney, declare under penalty of perjury  
under the laws of the state of Idaho:

1. My name is Riley Maloney. I am employed by  
Idaho Power Company as a Regulatory Analyst in the  
Regulatory Affairs Department.

2. On behalf of Idaho Power, I present this  
pre-filed direct testimony in this matter.

3. To the best of my knowledge, my pre-filed  
direct testimony is true and accurate.

I hereby declare that the above statement is true to  
the best of my knowledge and belief, and that I understand  
it is made for use as evidence before the Idaho Public  
Utilities Commission and is subject to penalty for perjury.

SIGNED this 1st day of June 2023, at Boise, Idaho.

Signed:   
RILEY MALONEY