IDAHO POWER®

IRP

INTEGRATED RESOURCE PLAN

2025

APPENDIX C: Technical Report

June 2025

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INTRODUCTION

Appendix C–Technical Appendix contains supporting data and explanatory materials used to develop Idaho Power's *2025 Integrated Resource Plan* (IRP).

The main document, the 2025 IRP Report, contains a full narrative of Idaho Power's resource planning process. Additional information regarding the 2025 IRP sales and load forecast is contained in *Appendix A–Sales and Load Forecast* and details on Idaho Power's demand-side management efforts are explained in *Appendix B–Demand-Side Management 2024 Annual Report*.

For information or questions concerning the resource plan or the resource planning process, contact Idaho Power:

Jared Hansen, Resource Planning

Idaho Power
1221 West Idaho Street
Boise, Idaho 83702

208-388-2706

irp@idahopower.com

IRP ADVISORY COUNCIL

Idaho Power has involved representatives of the public in the IRP planning process since the early 1990s. This public forum is known as the IRP Advisory Council (IRPAC). The IRPAC generally meets monthly during the development of the IRP, and the meetings are open to the public. Members of the council include regulatory, political, environmental, and customer representatives, as well as representatives of other public-interest groups.

Idaho Power hosted eight IRPAC meetings for the 2025 IRP, in addition to an in-person meet and greet and an Energy Efficiency Subcommittee meeting. Idaho Power values these opportunities to convene, and the IRPAC members and the public have made significant contributions to this plan.

Involvement from the public improves the IRP, and Idaho Power is grateful to the individuals and groups that participated in the process.

Customer Representatives

Agricultural Representative	Sid Erwin
Boise State University	Brian Emtman
Idaho National Laboratory	Kurt Myers
KitzWorks, LLC	Kevin Kitz
Lactalis USA	Rick Kotze
Micron	Jim Swier/Matt Park
Obendorf Farms	Brock Obendorf
St. Luke’s Medical	Stephanie Wicks

Public-Interest Representatives

Boise State University Energy Policy Institute	Kathleen Araujo/Cassie Koerner
Blaine County	Andrew Mentzer
City of Boise	Steve Burgos/Steve Hubble/Katie O’Neil
City of Nampa	Mark Steuer
Clean Energy Opportunities for Idaho	Mike Heckler/Courtney White
Idaho Conservation League	Brad Heusinkveld/Adrian Gallo
Idaho Legislature	Rep. John Shirts
Idaho Office of Energy and Mineral Resources	Richard Stover
Idaho Water Resource Board	Brian Olmstead
National Renewable Energy Laboratory	Wesley Cole

Northwest Gas Association	Natasha Jackson/Dan Kirschner
Oil and Gas Industry Advisor	David Hawk
Oregon State University, Malheur Experiment Station Professor Emeritus	Clint Shock
Renewable Northwest	Katie Chamberlain/Kyle Unruh
Sierra Club	Lisa Young
Sun Valley Institute for Resilience	Herbert Romero

Regulatory Commission Representatives

Idaho Public Utilities Commission	Mike Louis/Matt Suess
Public Utility Commission of Oregon	Kim Herb/Benedikt Springer

IRPAC Meeting Schedule and Agenda

Meeting Dates		Agenda Items
2024	Tuesday, August 20	Introductory Comments Idaho Power Team Introductions Advisory Council Introductions
2024	Thursday, August 29	Energy Efficiency Subcommittee Meeting
2024	Thursday, September 12	2023 IRP Review 2025 IRP Overview Future Supply Side Resources Outlook Aurora Modeling Overview
2024	Thursday, October 10	EPA Emissions Rule and Carbon Price Forecast Modeling Scenarios CSPP Forecast
2024	Thursday, November 14	Natural Gas Price Forecasts Energy and Demand Forecast Energy Efficiency (EE) and Demand Response (DR) Modeling Recommendation
2024	Thursday, December 12	Bridger Conversion Modeling Reliability and Capacity Assessment Scenarios and Sensitivities Follow-Up Idaho Power's Hydroelectric System
2025	Thursday, January 9	Energy and Demand Forecast Update Resource Procurement and RFP Updates Stochastic Analysis
2025	Thursday, March 13	Transmission Update Energy and Demand Forecast Update 2025 IRP Analysis Update
2025	Thursday, April 17	Preliminary Modeling Results Portfolio Reliability Analysis

Meeting Dates		Agenda Items
2025	Thursday, May 8	Qualitative Risk Assessment Stochastic Risk Analysis Draft Preferred Portfolio Scenarios and Sensitivities 2026-2030 IRP Action Plan

SALES AND LOAD FORECAST DATA

Compound Annual Forecast Growth Rates

	2026-2031	2026-2036	2026-2045
Sales[1]			
Residential Sales	0.5%	0.8%	0.6%
Commercial Sales	1.7%	1.5%	1.3%
Irrigation Sales	0.8%	0.6%	0.6%
Industrial Sales	0.7%	0.7%	0.7%
Additional Firm Sales	31.1%	15.3%	7.8%
System Sales	7.3%	4.2%	2.4%
Total Sales	7.3%	4.2%	2.4%
Average Loads			
Residential Load	0.5%	0.8%	0.6%
Commercial Load	1.7%	1.5%	1.3%
Irrigation Load	0.8%	0.6%	0.6%
Industrial Load	0.7%	0.7%	0.7%
Additional Firm Sales	31.1%	15.2%	7.8%
System Load Losses	3.5%	2.1%	1.4%
System Load	7.0%	4.0%	2.3%
Total Load	7.0%	4.0%	2.3%
Peaks			
System Peak	4.7%	2.8%	1.8%
Total Peak	4.7%	2.8%	1.8%
Winter Peak	5.5%	2.9%	1.6%
Summer Peak	4.7%	2.8%	1.8%
Customers			
Residential Customers	1.7%	1.6%	1.3%
Commercial Customers	1.5%	1.5%	1.4%
Irrigation Customers	1.1%	1.1%	1.0%
Industrial Customers	0.6%	0.6%	0.5%

[1] Beginning in 2025, the 5-year growth rate is 8.3%, and the 20-year growth-rate is 2.7%.

Expected-Case Load Forecast

2026 Monthly Summary[1]	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	871	832	668	576	535	592	796	710	539	567	736	900
Commercial	517	515	467	438	451	486	556	547	488	474	493	519
Irrigation	4	4	10	124	321	542	665	528	317	65	7	5
Industrial	272	277	273	264	267	277	280	285	283	282	281	276
Additional Firm	189	194	214	212	215	232	263	281	289	308	332	358
Loss	158	156	141	140	152	177	207	191	158	141	152	166
System Load	**2,012**	**1,977**	**1,772**	**1,752**	**1,942**	**2,306**	**2,767**	**2,542**	**2,073**	**1,837**	**2,002**	**2,224**
Light Load	1,880	1,849	1,655	1,611	1,777	2,072	2,494	2,254	1,885	1,677	1,870	2,072
Heavy Load	2,116	2,072	1,869	1,856	2,083	2,477	2,982	2,770	2,224	1,952	2,112	2,343
Total Load	**2,012**	**1,977**	**1,772**	**1,752**	**1,942**	**2,306**	**2,767**	**2,542**	**2,073**	**1,837**	**2,002**	**2,224**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	2,540	2,425	2,224	2,013	2,606	3,933	3,934	3,538	3,181	2,216	2,472	2,584
Total Peak Load	**2,540**	**2,425**	**2,224**	**2,013**	**2,606**	**3,933**	**3,934**	**3,538**	**3,181**	**2,216**	**2,472**	**2,584**

2027 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	881	838	671	574	532	586	790	708	533	557	724	897
Commercial	526	524	475	446	459	494	566	556	496	482	501	527
Irrigation	4	4	10	124	322	544	667	530	318	65	7	5
Industrial	272	277	272	263	267	277	280	285	282	282	281	277
Additional Firm	392	417	426	437	449	481	498	518	528	545	576	591
Loss	166	164	149	148	161	185	215	199	166	149	160	174
System Load	**2,242**	**2,224**	**2,004**	**1,992**	**2,189**	**2,568**	**3,016**	**2,797**	**2,324**	**2,079**	**2,249**	**2,470**
Light Load	2,095	2,080	1,871	1,831	2,004	2,308	2,719	2,479	2,113	1,898	2,101	2,302
Heavy Load	2,368	2,332	2,104	2,109	2,349	2,758	3,250	3,047	2,493	2,222	2,362	2,602
Total Load	**2,242**	**2,224**	**2,004**	**1,992**	**2,189**	**2,568**	**3,016**	**2,797**	**2,324**	**2,079**	**2,249**	**2,470**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	2,760	2,664	2,449	2,240	2,843	4,219	4,220	3,841	3,477	2,514	2,748	2,863
Total Peak Load	**2,760**	**2,664**	**2,449**	**2,240**	**2,843**	**4,219**	**4,220**	**3,841**	**3,477**	**2,514**	**2,748**	**2,863**

1.The sales and load forecast reflects the impact of existing EE programs on average load and peak demand. The new EE programs, proposed as part of the 2023 IRP. The peak load forecast does not include the impact of existing or new DR programs.

2028 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	890	816	673	576	535	591	797	714	538	560	728	902
Commercial	547	519	482	452	465	502	574	565	504	489	509	536
Irrigation	4	4	10	125	326	551	676	537	322	66	8	5
Industrial	282	267	273	264	268	277	280	286	283	282	282	280
Additional Firm	611	621	624	623	622	645	658	686	677	692	715	742
Loss	176	169	156	155	168	192	222	206	173	155	165	181
System Load	**2,511**	**2,395**	**2,218**	**2,195**	**2,384**	**2,758**	**3,208**	**2,994**	**2,496**	**2,244**	**2,406**	**2,645**
Light Load	2,346	2,240	2,071	2,018	2,182	2,479	2,892	2,654	2,269	2,048	2,248	2,465
Heavy Load	2,653	2,510	2,329	2,337	2,542	2,962	3,480	3,240	2,678	2,398	2,527	2,800
Total Load	**2,511**	**2,395**	**2,218**	**2,195**	**2,384**	**2,758**	**3,208**	**2,994**	**2,496**	**2,244**	**2,406**	**2,645**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,057	2,873	2,698	2,471	3,073	4,457	4,458	4,082	3,700	2,716	2,940	3,054
Total Peak Load	**3,057**	**2,873**	**2,698**	**2,471**	**3,073**	**4,457**	**4,458**	**4,082**	**3,700**	**2,716**	**2,940**	**3,054**

2029 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	888	846	677	580	540	597	805	722	543	565	734	908
Commercial	545	542	491	461	474	511	585	576	513	498	518	546
Irrigation	4	4	10	126	328	554	680	541	324	66	8	5
Industrial	276	280	276	267	271	280	284	289	286	286	285	284
Additional Firm	765	781	781	778	772	801	819	827	817	810	825	833
Loss	181	179	163	161	174	199	230	213	179	160	170	185
System Load	**2,659**	**2,632**	**2,399**	**2,374**	**2,559**	**2,942**	**3,403**	**3,168**	**2,664**	**2,385**	**2,540**	**2,761**
Light Load	2,484	2,462	2,240	2,182	2,343	2,644	3,068	2,808	2,422	2,177	2,373	2,573
Heavy Load	2,796	2,760	2,518	2,527	2,730	3,160	3,691	3,428	2,875	2,536	2,668	2,923
Total Load	**2,659**	**2,632**	**2,399**	**2,374**	**2,559**	**2,942**	**3,403**	**3,168**	**2,664**	**2,385**	**2,540**	**2,761**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,213	3,124	2,897	2,653	3,245	4,657	4,658	4,261	3,874	2,853	3,073	3,179
Total Peak Load	**3,213**	**3,124**	**2,897**	**2,653**	**3,245**	**4,657**	**4,658**	**4,261**	**3,874**	**2,853**	**3,073**	**3,179**

2030 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	894	852	682	585	545	602	813	729	548	569	738	912
Commercial	554	551	500	469	483	520	596	586	522	507	528	555
Irrigation	4	4	11	127	331	560	687	547	328	67	8	5
Industrial	280	284	280	271	275	284	288	293	290	290	289	286
Additional Firm	838	846	841	834	825	854	890	907	902	902	924	932
Loss	185	182	166	164	177	203	234	218	183	164	175	189
System Load	**2,755**	**2,720**	**2,479**	**2,449**	**2,635**	**3,024**	**3,508**	**3,279**	**2,774**	**2,499**	**2,661**	**2,879**
Light Load	2,574	2,544	2,315	2,251	2,413	2,717	3,162	2,906	2,522	2,281	2,486	2,683
Heavy Load	2,897	2,852	2,614	2,594	2,811	3,269	3,780	3,548	2,994	2,656	2,795	3,047
Total Load	**2,755**	**2,720**	**2,479**	**2,449**	**2,635**	**3,024**	**3,508**	**3,279**	**2,774**	**2,499**	**2,661**	**2,879**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,324	3,208	2,971	2,716	3,311	4,771	4,772	4,380	4,002	2,965	3,192	3,306
Total Peak Load	**3,324**	**3,208**	**2,971**	**2,716**	**3,311**	**4,771**	**4,772**	**4,380**	**4,002**	**2,965**	**3,192**	**3,306**

2031 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	898	856	686	588	549	608	821	736	553	573	742	918
Commercial	562	559	507	476	490	528	604	594	530	514	535	561
Irrigation	4	4	11	128	333	564	693	551	330	68	8	5
Industrial	282	286	282	273	276	286	290	295	292	292	291	287
Additional Firm	958	977	970	970	968	1,007	1,017	1,030	1,021	1,010	1,029	1,025
Loss	190	187	171	169	183	208	240	223	188	168	179	193
System Load	**2,894**	**2,871**	**2,626**	**2,604**	**2,799**	**3,202**	**3,664**	**3,429**	**2,914**	**2,625**	**2,785**	**2,990**
Light Load	2,704	2,685	2,452	2,393	2,563	2,878	3,303	3,040	2,649	2,396	2,601	2,786
Heavy Load	3,032	3,010	2,769	2,757	2,970	3,462	3,925	3,737	3,108	2,791	2,924	3,137
Total Load	**2,894**	**2,871**	**2,626**	**2,604**	**2,799**	**3,202**	**3,664**	**3,429**	**2,914**	**2,625**	**2,785**	**2,990**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,465	3,355	3,123	2,868	3,476	4,948	4,949	4,546	4,159	3,096	3,314	3,427
Total Peak Load	**3,465**	**3,355**	**3,123**	**2,868**	**3,476**	**4,948**	**4,949**	**4,546**	**4,159**	**3,096**	**3,314**	**3,427**

2032 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	913	837	691	593	555	614	830	744	559	578	748	926
Commercial	582	552	512	481	495	533	611	601	535	519	541	569
Irrigation	4	4	11	128	335	567	696	554	332	68	8	5
Industrial	293	277	283	273	277	287	291	296	293	293	292	289
Additional Firm	1,059	1,073	1,062	1,053	1,040	1,072	1,070	1,077	1,059	1,044	1,063	1,046
Loss	196	188	174	172	186	212	243	226	190	170	181	195
System Load	**3,046**	**2,931**	**2,733**	**2,701**	**2,887**	**3,286**	**3,740**	**3,498**	**2,968**	**2,672**	**2,831**	**3,029**
Light Load	2,846	2,741	2,552	2,482	2,643	2,953	3,372	3,101	2,698	2,439	2,645	2,823
Heavy Load	3,190	3,085	2,869	2,860	3,080	3,529	4,006	3,811	3,165	2,856	2,961	3,178
Total Load	**3,046**	**2,931**	**2,733**	**2,701**	**2,887**	**3,286**	**3,740**	**3,498**	**2,968**	**2,672**	**2,831**	**3,029**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,615	3,425	3,232	2,962	3,563	5,042	5,043	4,631	4,228	3,147	3,362	3,469
Total Peak Load	**3,615**	**3,425**	**3,232**	**2,962**	**3,563**	**5,042**	**5,043**	**4,631**	**4,228**	**3,147**	**3,362**	**3,469**

2033 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	912	870	697	599	562	623	843	756	567	585	755	935
Commercial	577	574	520	488	503	542	620	610	544	528	549	577
Irrigation	4	4	11	129	336	569	699	556	333	68	8	5
Industrial	285	289	285	276	279	289	293	299	295	295	294	291
Additional Firm	1,070	1,087	1,065	1,053	1,042	1,073	1,071	1,076	1,060	1,046	1,063	1,046
Loss	195	193	175	174	187	213	245	227	192	172	182	196
System Load	**3,044**	**3,017**	**2,753**	**2,718**	**2,909**	**3,309**	**3,770**	**3,524**	**2,991**	**2,693**	**2,852**	**3,050**
Light Load	2,844	2,822	2,571	2,498	2,663	2,974	3,398	3,124	2,719	2,458	2,665	2,842
Heavy Load	3,202	3,163	2,891	2,878	3,103	3,554	4,062	3,814	3,190	2,878	2,983	3,200
Total Load	**3,044**	**3,017**	**2,753**	**2,718**	**2,909**	**3,309**	**3,770**	**3,524**	**2,991**	**2,693**	**2,852**	**3,050**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,616	3,494	3,249	2,971	3,578	5,081	5,082	4,667	4,267	3,166	3,380	3,486
Total Peak Load	**3,616**	**3,494**	**3,249**	**2,971**	**3,578**	**5,081**	**5,082**	**4,667**	**4,267**	**3,166**	**3,380**	**3,486**

2034 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	921	879	705	607	570	633	857	769	576	592	763	943
Commercial	586	582	528	495	510	549	629	619	551	535	557	585
Irrigation	4	4	11	129	336	570	701	558	334	68	8	5
Industrial	287	291	287	278	281	292	295	301	298	297	296	294
Additional Firm	1,072	1,091	1,067	1,057	1,045	1,075	1,071	1,079	1,063	1,048	1,065	1,049
Loss	197	194	177	175	188	215	247	229	193	173	183	198
System Load	**3,067**	**3,042**	**2,774**	**2,740**	**2,930**	**3,334**	**3,799**	**3,554**	**3,015**	**2,713**	**2,873**	**3,073**
Light Load	2,866	2,845	2,591	2,519	2,683	2,997	3,425	3,150	2,741	2,477	2,684	2,864
Heavy Load	3,226	3,189	2,913	2,917	3,109	3,581	4,094	3,845	3,215	2,900	3,004	3,238
Total Load	**3,067**	**3,042**	**2,774**	**2,740**	**2,930**	**3,334**	**3,799**	**3,554**	**3,015**	**2,713**	**2,873**	**3,073**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,637	3,516	3,269	2,984	3,594	5,120	5,121	4,707	4,307	3,186	3,398	3,507
Total Peak Load	**3,637**	**3,516**	**3,269**	**2,984**	**3,594**	**5,120**	**5,121**	**4,707**	**4,307**	**3,186**	**3,398**	**3,507**

2035 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	930	888	713	614	578	643	870	781	584	599	770	951
Commercial	594	590	535	502	517	557	637	627	559	542	565	592
Irrigation	4	4	11	129	338	573	705	561	336	69	8	5
Industrial	290	294	290	280	284	294	298	304	300	300	299	295
Additional Firm	1,073	1,090	1,069	1,057	1,045	1,073	1,072	1,080	1,063	1,047	1,065	1,049
Loss	198	195	178	176	190	216	249	231	194	174	184	199
System Load	**3,089**	**3,062**	**2,795**	**2,759**	**2,951**	**3,357**	**3,831**	**3,583**	**3,037**	**2,731**	**2,891**	**3,091**
Light Load	2,886	2,864	2,610	2,536	2,701	3,017	3,453	3,176	2,761	2,493	2,701	2,881
Heavy Load	3,235	3,211	2,935	2,937	3,131	3,605	4,128	3,877	3,258	2,903	3,024	3,257
Total Load	**3,089**	**3,062**	**2,795**	**2,759**	**2,951**	**3,357**	**3,831**	**3,583**	**3,037**	**2,731**	**2,891**	**3,091**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,656	3,533	3,287	2,992	3,608	5,161	5,162	4,746	4,346	3,203	3,414	3,523
Total Peak Load	**3,656**	**3,533**	**3,287**	**2,992**	**3,608**	**5,161**	**5,162**	**4,746**	**4,346**	**3,203**	**3,414**	**3,523**

2036 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	947	870	720	622	586	654	885	794	593	607	778	960
Commercial	613	581	539	506	521	562	643	633	564	547	570	599
Irrigation	4	4	11	130	339	576	709	564	338	69	8	5
Industrial	301	285	291	281	285	295	299	305	301	301	300	297
Additional Firm	1,073	1,075	1,069	1,057	1,044	1,074	1,073	1,080	1,062	1,047	1,066	1,049
Loss	201	193	179	177	191	218	251	233	196	175	185	200
System Load	**3,139**	**3,008**	**2,809**	**2,773**	**2,966**	**3,378**	**3,859**	**3,608**	**3,054**	**2,746**	**2,907**	**3,111**
Light Load	2,933	2,813	2,623	2,549	2,715	3,036	3,479	3,198	2,777	2,506	2,716	2,900
Heavy Load	3,288	3,152	2,962	2,937	3,147	3,652	4,133	3,931	3,257	2,919	3,053	3,264
Total Load	**3,139**	**3,008**	**2,809**	**2,773**	**2,966**	**3,378**	**3,859**	**3,608**	**3,054**	**2,746**	**2,907**	**3,111**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,699	3,499	3,299	2,999	3,619	5,200	5,201	4,781	4,376	3,216	3,428	3,540
Total Peak Load	**3,699**	**3,499**	**3,299**	**2,999**	**3,619**	**5,200**	**5,201**	**4,781**	**4,376**	**3,216**	**3,428**	**3,540**

2037 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	947	905	728	629	594	663	898	805	601	613	783	964
Commercial	608	604	548	514	529	570	653	642	572	555	578	607
Irrigation	5	4	11	131	341	580	713	567	340	70	8	5
Industrial	293	298	294	284	288	298	302	307	304	304	303	299
Additional Firm	1,075	1,092	1,069	1,056	1,044	1,075	1,073	1,079	1,062	1,047	1,065	1,051
Loss	201	198	180	178	192	219	253	235	197	176	186	201
System Load	**3,128**	**3,102**	**2,829**	**2,791**	**2,988**	**3,405**	**3,890**	**3,636**	**3,076**	**2,765**	**2,924**	**3,127**
Light Load	2,923	2,901	2,642	2,565	2,735	3,061	3,507	3,223	2,797	2,523	2,732	2,914
Heavy Load	3,276	3,252	2,983	2,956	3,187	3,657	4,167	3,962	3,280	2,939	3,071	3,281
Total Load	**3,128**	**3,102**	**2,829**	**2,791**	**2,988**	**3,405**	**3,890**	**3,636**	**3,076**	**2,765**	**2,924**	**3,127**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,689	3,568	3,316	3,007	3,634	5,241	5,242	4,818	4,414	3,234	3,442	3,554
Total Peak Load	**3,689**	**3,568**	**3,316**	**3,007**	**3,634**	**5,241**	**5,242**	**4,818**	**4,414**	**3,234**	**3,442**	**3,554**

2038 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	950	909	731	632	598	668	905	812	605	614	784	964
Commercial	615	611	554	520	535	577	660	650	579	562	585	614
Irrigation	5	4	11	131	343	583	717	571	342	70	8	5
Industrial	295	300	295	285	289	300	303	309	306	305	305	301
Additional Firm	1,074	1,092	1,067	1,056	1,045	1,075	1,072	1,079	1,062	1,047	1,066	1,050
Loss	201	199	181	179	193	220	254	236	198	177	187	202
System Load	**3,141**	**3,115**	**2,839**	**2,803**	**3,003**	**3,423**	**3,912**	**3,656**	**3,092**	**2,775**	**2,935**	**3,136**
Light Load	2,935	2,913	2,651	2,577	2,749	3,077	3,527	3,241	2,811	2,533	2,742	2,923
Heavy Load	3,303	3,266	2,980	2,969	3,204	3,677	4,190	3,983	3,297	2,966	3,070	3,291
Total Load	**3,141**	**3,115**	**2,839**	**2,803**	**3,003**	**3,423**	**3,912**	**3,656**	**3,092**	**2,775**	**2,935**	**3,136**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,700	3,579	3,324	3,013	3,645	5,274	5,275	4,850	4,441	3,243	3,452	3,561
Total Peak Load	**3,700**	**3,579**	**3,324**	**3,013**	**3,645**	**5,274**	**5,275**	**4,850**	**4,441**	**3,243**	**3,452**	**3,561**

2039 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	950	910	732	634	602	675	915	821	611	619	789	969
Commercial	622	618	560	525	541	583	668	657	585	568	592	620
Irrigation	5	4	11	132	344	586	721	574	344	70	8	5
Industrial	297	302	297	287	291	302	305	311	308	307	307	302
Additional Firm	1,074	1,090	1,068	1,057	1,045	1,074	1,071	1,079	1,062	1,048	1,066	1,050
Loss	202	199	181	180	194	222	256	237	199	178	188	203
System Load	**3,151**	**3,124**	**2,850**	**2,816**	**3,018**	**3,441**	**3,936**	**3,679**	**3,109**	**2,791**	**2,950**	**3,150**
Light Load	2,944	2,922	2,661	2,588	2,763	3,093	3,548	3,262	2,826	2,548	2,756	2,935
Heavy Load	3,314	3,275	2,992	2,982	3,219	3,696	4,242	3,981	3,315	2,983	3,085	3,304
Total Load	**3,151**	**3,124**	**2,850**	**2,816**	**3,018**	**3,441**	**3,936**	**3,679**	**3,109**	**2,791**	**2,950**	**3,150**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,708	3,586	3,333	3,019	3,656	5,310	5,311	4,884	4,471	3,259	3,465	3,572
Total Peak Load	**3,708**	**3,586**	**3,333**	**3,019**	**3,656**	**5,310**	**5,311**	**4,884**	**4,471**	**3,259**	**3,465**	**3,572**

2040 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	963	887	735	638	606	680	923	827	614	620	789	968
Commercial	643	609	565	530	546	588	674	663	590	573	597	628
Irrigation	5	4	11	132	346	589	725	577	346	71	8	5
Industrial	309	292	298	289	293	303	307	313	309	309	308	306
Additional Firm	1,073	1,073	1,069	1,057	1,044	1,074	1,072	1,079	1,064	1,049	1,067	1,049
Loss	205	196	182	180	195	223	257	239	200	178	189	203
System Load	**3,197**	**3,062**	**2,861**	**2,826**	**3,030**	**3,457**	**3,957**	**3,697**	**3,124**	**2,800**	**2,957**	**3,159**
Light Load	2,987	2,864	2,672	2,598	2,773	3,107	3,568	3,278	2,840	2,556	2,763	2,944
Heavy Load	3,363	3,209	3,004	3,009	3,215	3,712	4,265	4,001	3,351	2,976	3,092	3,329
Total Load	**3,197**	**3,062**	**2,861**	**2,826**	**3,030**	**3,457**	**3,957**	**3,697**	**3,124**	**2,800**	**2,957**	**3,159**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,748	3,545	3,343	3,024	3,664	5,344	5,345	4,914	4,495	3,267	3,471	3,581
Total Peak Load	**3,748**	**3,545**	**3,343**	**3,024**	**3,664**	**5,344**	**5,345**	**4,914**	**4,495**	**3,267**	**3,471**	**3,581**

2041 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	954	913	735	638	608	683	927	831	616	620	788	967
Commercial	637	633	573	538	554	597	684	673	599	581	606	636
Irrigation	5	4	11	133	348	592	729	580	348	71	8	5
Industrial	302	306	302	292	296	306	310	316	313	312	312	308
Additional Firm	1,082	1,101	1,077	1,063	1,049	1,079	1,076	1,085	1,069	1,054	1,072	1,057
Loss	204	201	183	181	196	224	259	240	201	179	189	204
System Load	**3,183**	**3,159**	**2,881**	**2,844**	**3,050**	**3,481**	**3,984**	**3,725**	**3,145**	**2,819**	**2,975**	**3,178**
Light Load	2,974	2,955	2,691	2,615	2,792	3,129	3,592	3,302	2,859	2,573	2,779	2,962
Heavy Load	3,333	3,313	3,038	3,012	3,236	3,763	4,268	4,031	3,374	2,996	3,111	3,349
Total Load	**3,183**	**3,159**	**2,881**	**2,844**	**3,050**	**3,481**	**3,984**	**3,725**	**3,145**	**2,819**	**2,975**	**3,178**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,739	3,619	3,364	3,035	3,679	5,383	5,384	4,954	4,530	3,286	3,489	3,600
Total Peak Load	**3,739**	**3,619**	**3,364**	**3,035**	**3,679**	**5,383**	**5,384**	**4,954**	**4,530**	**3,286**	**3,489**	**3,600**

2042 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	953	913	735	638	609	685	931	835	618	621	788	969
Commercial	644	640	579	544	560	603	691	680	605	588	612	643
Irrigation	5	4	11	133	349	595	733	584	350	72	8	5
Industrial	304	309	304	294	298	309	313	319	316	315	314	311
Additional Firm	1,083	1,101	1,075	1,062	1,050	1,079	1,078	1,085	1,069	1,053	1,073	1,059
Loss	204	202	184	182	197	225	260	241	202	180	190	205
System Load	**3,194**	**3,169**	**2,889**	**2,853**	**3,063**	**3,496**	**4,005**	**3,743**	**3,159**	**2,827**	**2,985**	**3,192**
Light Load	2,984	2,964	2,698	2,623	2,804	3,142	3,611	3,318	2,872	2,581	2,789	2,974
Heavy Load	3,345	3,323	3,046	3,022	3,250	3,779	4,290	4,079	3,369	3,006	3,135	3,349
Total Load	**3,194**	**3,169**	**2,889**	**2,853**	**3,063**	**3,496**	**4,005**	**3,743**	**3,159**	**2,827**	**2,985**	**3,192**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,748	3,628	3,370	3,039	3,688	5,417	5,418	4,984	4,554	3,294	3,498	3,611
Total Peak Load	**3,748**	**3,628**	**3,370**	**3,039**	**3,688**	**5,417**	**5,418**	**4,984**	**4,554**	**3,294**	**3,498**	**3,611**

2043 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	956	916	738	641	613	690	937	841	622	624	791	972
Commercial	652	647	586	549	566	610	699	688	612	594	619	649
Irrigation	5	4	11	134	351	598	737	587	352	72	8	5
Industrial	307	312	307	297	301	312	315	322	318	318	317	313
Additional Firm	1,083	1,100	1,075	1,063	1,049	1,080	1,078	1,085	1,067	1,053	1,074	1,059
Loss	205	203	184	183	198	226	261	243	203	181	191	206
System Load	**3,208**	**3,182**	**2,901**	**2,867**	**3,077**	**3,516**	**4,028**	**3,764**	**3,174**	**2,842**	**3,000**	**3,203**
Light Load	2,997	2,976	2,709	2,635	2,817	3,160	3,631	3,337	2,885	2,594	2,803	2,985
Heavy Load	3,360	3,336	3,059	3,036	3,282	3,776	4,314	4,101	3,385	3,021	3,151	3,361
Total Load	**3,208**	**3,182**	**2,901**	**2,867**	**3,077**	**3,516**	**4,028**	**3,764**	**3,174**	**2,842**	**3,000**	**3,203**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,760	3,638	3,380	3,046	3,698	5,451	5,452	5,016	4,581	3,308	3,510	3,621
Total Peak Load	**3,760**	**3,638**	**3,380**	**3,046**	**3,698**	**5,451**	**5,452**	**5,016**	**4,581**	**3,308**	**3,510**	**3,621**

2044 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	968	892	739	642	615	693	943	846	625	626	793	975
Commercial	672	636	590	553	570	615	704	693	617	598	624	656
Irrigation	5	4	11	134	352	601	740	590	353	72	8	5
Industrial	320	303	309	299	303	314	317	324	320	319	319	318
Additional Firm	1,082	1,081	1,075	1,062	1,050	1,080	1,078	1,084	1,067	1,054	1,074	1,057
Loss	208	199	185	183	198	227	263	244	204	181	192	207
System Load	**3,254**	**3,116**	**2,910**	**2,874**	**3,089**	**3,529**	**4,045**	**3,779**	**3,187**	**2,852**	**3,009**	**3,218**
Light Load	3,041	2,914	2,717	2,642	2,828	3,172	3,647	3,350	2,897	2,603	2,811	2,999
Heavy Load	3,423	3,265	3,055	3,060	3,278	3,790	4,359	4,089	3,418	3,032	3,147	3,390
Total Load	**3,254**	**3,116**	**2,910**	**2,874**	**3,089**	**3,529**	**4,045**	**3,779**	**3,187**	**2,852**	**3,009**	**3,218**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,800	3,593	3,388	3,049	3,707	5,483	5,484	5,044	4,602	3,317	3,518	3,633
Total Peak Load	**3,800**	**3,593**	**3,388**	**3,049**	**3,707**	**5,483**	**5,484**	**5,044**	**4,602**	**3,317**	**3,518**	**3,633**

2045 Monthly Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Load (aMW) 50th Percentile												
Residential	962	921	741	644	617	696	947	850	627	627	793	976
Commercial	666	661	598	561	578	623	714	702	625	606	632	659
Irrigation	5	4	11	135	354	603	744	593	355	73	8	5
Industrial	313	318	313	303	307	318	322	328	325	324	324	318
Additional Firm	1,081	1,100	1,075	1,064	1,050	1,080	1,076	1,084	1,069	1,054	1,073	1,057
Loss	207	205	186	184	199	228	264	245	205	182	192	207
System Load	**3,233**	**3,209**	**2,924**	**2,891**	**3,106**	**3,549**	**4,067**	**3,802**	**3,206**	**2,867**	**3,022**	**3,222**
Light Load	3,021	3,001	2,731	2,657	2,843	3,190	3,666	3,370	2,915	2,617	2,824	3,002
Heavy Load	3,387	3,364	3,084	3,062	3,313	3,812	4,356	4,143	3,419	3,048	3,174	3,380
Total Load	**3,233**	**3,209**	**2,924**	**2,891**	**3,106**	**3,549**	**4,067**	**3,802**	**3,206**	**2,867**	**3,022**	**3,222**
Peak Load (MW) 50th Percentile												
System Peak Load (1 hour)	3,782	3,661	3,401	3,058	3,719	5,516	5,517	5,078	4,636	3,331	3,529	3,637
Total Peak Load	**3,782**	**3,661**	**3,401**	**3,058**	**3,719**	**5,516**	**5,517**	**5,078**	**4,636**	**3,331**	**3,529**	**3,637**

Annual Summary

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Billed Sales (MWh) 50th Percentile										
Residential	6,069,203	6,050,768	6,090,598	6,131,493	6,176,568	6,221,875	6,283,820	6,348,809	6,428,794	6,507,296
Commercial	4,338,125	4,414,914	4,493,856	4,566,379	4,646,799	4,714,431	4,778,420	4,838,873	4,906,171	4,972,830
Irrigation	1,904,503	1,910,206	1,935,069	1,947,666	1,967,643	1,982,712	1,992,900	1,999,074	2,005,246	2,015,096
Industrial	2,421,040	2,419,981	2,431,337	2,452,398	2,488,529	2,504,665	2,519,620	2,531,927	2,550,230	2,574,577
Additional Firm	2,257,365	4,278,945	5,794,824	7,015,723	7,662,643	8,747,960	9,309,062	9,306,730	9,329,289	9,331,655
System Load	**16,990,236**	**19,074,814**	**20,745,685**	**22,113,658**	**22,942,183**	**24,171,643**	**24,883,823**	**25,025,412**	**25,219,729**	**25,401,455**
Total Load	**16,990,236**	**19,074,814**	**20,745,685**	**22,113,658**	**22,942,183**	**24,171,643**	**24,883,823**	**25,025,412**	**25,219,729**	**25,401,455**
Generation Month Sales (MWh) 50th Percentile										
Residential	6,073,975	6,051,565	6,092,931	6,134,468	6,178,825	6,224,917	6,287,579	6,353,090	6,432,850	6,511,387
Commercial	4,342,758	4,418,926	4,498,804	4,571,136	4,650,801	4,717,519	4,782,699	4,842,856	4,910,117	4,975,584
Irrigation	1,904,509	1,910,231	1,935,082	1,947,686	1,967,658	1,982,723	1,992,907	1,999,081	2,005,256	2,015,108
Industrial	2,420,950	2,420,339	2,433,730	2,455,464	2,489,899	2,505,306	2,521,292	2,533,481	2,552,296	2,575,284
Additional Firm	2,257,365	4,278,945	5,794,824	7,015,723	7,662,643	8,747,960	9,309,062	9,306,730	9,329,289	9,331,655
System Sales	**16,999,558**	**19,080,005**	**20,755,371**	**22,124,477**	**22,949,826**	**24,178,424**	**24,893,539**	**25,035,237**	**25,229,808**	**25,409,019**
Total Sales	**16,999,558**	**19,080,005**	**20,755,371**	**22,124,477**	**22,949,826**	**24,178,424**	**24,893,539**	**25,035,237**	**25,229,808**	**25,409,019**
Loss	1,416,164	1,487,026	1,551,360	1,602,507	1,636,359	1,678,898	1,707,073	1,716,245	1,729,119	1,741,547
Required Supply	**18,415,722**	**20,567,031**	**22,306,731**	**23,726,985**	**24,586,185**	**25,857,323**	**26,600,612**	**26,751,481**	**26,958,926**	**27,150,566**
Average Load (aMW) 50th Percentile										
Residential	693	691	694	700	705	711	716	725	734	743
Commercial	496	504	512	522	531	539	544	553	561	568
Irrigation	217	218	220	222	225	226	227	228	229	230
Industrial	276	276	277	280	284	286	287	289	291	294
Additional Firm	258	488	660	801	875	999	1,060	1,062	1,065	1,065
Loss	162	170	177	183	187	192	194	196	197	199
System Load	**2,102**	**2,348**	**2,539**	**2,709**	**2,807**	**2,952**	**3,028**	**3,054**	**3,078**	**3,099**
Light Load	1,925	2,150	2,326	2,481	2,571	2,704	2,775	2,798	2,820	2,840
Heavy Load	2,238	2,500	2,705	2,884	2,988	3,135	3,216	3,243	3,269	3,292
Total Load	**2,102**	**2,348**	**2,539**	**2,709**	**2,807**	**2,952**	**3,028**	**3,054**	**3,078**	**3,099**
Peak Load (MW) 50th Percentile										
System Peak (1 hour)	3,934	4,220	4,458	4,658	4,772	4,949	5,043	5,082	5,121	5,162
Total Peak Load	**3,934**	**4,220**	**4,458**	**4,658**	**4,772**	**4,949**	**5,043**	**5,082**	**5,121**	**5,162**

	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Billed Sales (MWh) 50th Percentile										
Residential	6,598,321	6,662,061	6,693,360	6,732,011	6,775,167	6,772,775	6,782,410	6,815,721	6,851,823	6,861,238
Commercial	5,031,792	5,093,034	5,153,165	5,210,038	5,272,227	5,333,088	5,391,738	5,451,630	5,507,435	5,566,768
Irrigation	2,026,499	2,038,181	2,049,415	2,060,476	2,071,375	2,082,160	2,092,884	2,103,191	2,113,309	2,123,272
Industrial	2,590,504	2,607,025	2,622,184	2,639,986	2,659,085	2,681,305	2,703,785	2,727,276	2,751,945	2,784,339
Additional Firm	9,346,192	9,332,778	9,331,518	9,331,545	9,346,375	9,389,019	9,389,536	9,389,548	9,402,621	9,388,289
System Load	**25,593,308**	**25,733,079**	**25,849,643**	**25,974,055**	**26,124,230**	**26,258,347**	**26,360,353**	**26,487,365**	**26,627,133**	**26,723,907**
Total Load	**25,593,308**	**25,733,079**	**25,849,643**	**25,974,055**	**26,124,230**	**26,258,347**	**26,360,353**	**26,487,365**	**26,627,133**	**26,723,907**
Generation Month Sales (MWh) 50th Percentile										
Residential	6,602,613	6,663,586	6,693,135	6,734,080	6,774,693	6,772,536	6,783,758	6,817,096	6,853,111	6,861,956
Commercial	5,036,157	5,096,595	5,156,536	5,212,947	5,276,606	5,336,564	5,395,287	5,454,129	5,511,761	5,566,716
Irrigation	2,026,511	2,038,193	2,049,426	2,060,487	2,071,386	2,082,171	2,092,894	2,103,201	2,113,320	2,123,278
Industrial	2,592,551	2,608,311	2,623,695	2,640,944	2,661,633	2,683,213	2,705,779	2,728,684	2,755,380	2,784,339
Additional Firm	9,346,192	9,332,778	9,331,518	9,331,545	9,346,375	9,389,019	9,389,536	9,389,548	9,402,621	9,388,289
System Sales	**25,604,024**	**25,739,463**	**25,854,309**	**25,980,002**	**26,130,694**	**26,263,503**	**26,367,254**	**26,492,658**	**26,636,193**	**26,724,578**
Total Sales	**25,604,024**	**25,739,463**	**25,854,309**	**25,980,002**	**26,130,694**	**26,263,503**	**26,367,254**	**26,492,658**	**26,636,193**	**26,724,578**
Loss	1,755,689	1,764,811	1,772,803	1,781,524	1,792,279	1,798,931	1,805,886	1,814,450	1,824,629	1,829,999
Required Supply	**27,359,714**	**27,504,274**	**27,627,113**	**27,761,527**	**27,922,972**	**28,062,434**	**28,173,140**	**28,307,107**	**28,460,822**	**28,554,577**
Average Load (aMW) 50th Percentile										
Residential	752	761	764	769	771	773	774	778	780	783
Commercial	573	582	589	595	601	609	616	623	627	635
Irrigation	231	233	234	235	236	238	239	240	241	242
Industrial	295	298	300	301	303	306	309	311	314	318
Additional Firm	1,064	1,065	1,065	1,065	1,064	1,072	1,072	1,072	1,070	1,072
Loss	200	201	202	203	204	205	206	207	208	209
System Load	**3,115**	**3,140**	**3,154**	**3,169**	**3,179**	**3,203**	**3,216**	**3,231**	**3,240**	**3,260**
Light Load	2,854	2,877	2,890	2,904	2,912	2,935	2,947	2,961	2,968	2,987
Heavy Load	3,308	3,334	3,350	3,366	3,377	3,402	3,416	3,432	3,442	3,462
Total Load	**3,115**	**3,140**	**3,154**	**3,169**	**3,179**	**3,203**	**3,216**	**3,231**	**3,240**	**3,260**
Peak Load (MW) 50th Percentile										
System Peak (1 hour)	5,201	5,242	5,275	5,311	5,345	5,384	5,418	5,452	5,484	5,517
Total Peak Load	**5,201**	**5,242**	**5,275**	**5,311**	**5,345**	**5,384**	**5,418**	**5,452**	**5,484**	**5,517**

DEMAND-SIDE RESOURCE DATA

DSM Financial Assumptions

Avoided Levelized Capacity Costs	
Simple Cycle Combustion Turbine (SCCT)	$157.58/kW-year
Financial Assumptions	
Discount rate (weighted average cost of capital)	6.62%
Financial escalation factor	2.40%
Avoided Losses	
Energy Efficiency	6.00%
DR	6.50%

Avoided Cost Averages ($/MWh)

Year		Summer High-Risk		Summer Medium-Risk	Summer Low-Risk	Winter High-Risk	Winter Medium-Risk	Winter Low-Risk	Off Season Low-Risk
2026	$58.94	$50.11	$39.24		$55.10		$52.58	$45.63	$35.51
2027	$51.24	$42.43	$35.55		$59.89		$58.00	$51.09	$37.94
2028	$49.02	$40.92	$34.37		$55.58		$53.54	$46.44	$35.35
2029	$55.26	$44.36	$38.04		$52.27		$51.15	$44.92	$32.35
2030	$50.60	$39.97	$36.44		$51.52		$50.42	$45.05	$29.99
2031	$46.33	$33.44	$29.27		$44.38		$43.38	$36.28	$22.12
2032	$43.02	$29.67	$28.49		$43.06		$41.68	$35.31	$20.45
2033	$37.62	$24.43	$25.06		$36.57		$35.13	$31.12	$17.99
2034	$36.41	$23.42	$26.42		$35.20		$33.72	$30.37	$16.70
2035	$36.02	$23.69	$24.45		$36.13		$34.68	$31.73	$16.34
2036	$34.83	$23.75	$25.20		$36.75		$35.02	$29.53	$14.44
2037	$30.90	$22.75	$22.84		$33.43		$32.03	$28.07	$13.55
2038	$29.11	$21.64	$24.49		$30.26		$28.88	$26.46	$12.74
2039	$26.30	$14.81	$18.59		$28.77		$27.91	$25.32	$9.49
2040	$22.76	$11.71	$16.16		$27.89		$26.94	$25.01	$8.38
2041	$21.65	$10.31	$16.22		$26.00		$25.11	$22.22	$7.77
2042	$21.48	$10.96	$15.45		$26.43		$25.77	$20.76	$7.82
2043	$21.42	$12.12	$16.59		$26.88		$26.21	$22.00	$8.34
2044	$16.67	$8.50	$14.53		$23.72		$23.26	$21.66	$7.47
2045	$18.39	$10.19	$15.19		$24.27		$23.75	$22.16	$9.17

The time periods used to develop the avoided cost averages shown in the table above align with Idaho Power's highest-risk hours described in the Loss of Load Expectation section.

Bundle Amounts

Incremental Achievable Potential (aMW)

Bundle	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Summer Low	25.07	23.64	22.87	22.38	21.14	18.53	16.64	14.92	13.24	11.47
Summer Medium	5.91	7.22	8.68	10.31	11.99	13.21	14.26	15.29	15.53	15.69
Summer High	19.53	20.96	21.45	25.08	27.29	27.93	28.03	27.13	25.51	23.03
Winter Low	10.03	9.64	9.65	9.67	9.10	7.95	7.18	6.48	5.85	5.34
Winter Medium	18.92	18.64	18.48	18.78	17.89	15.67	13.97	12.82	11.61	10.38
Winter High	7.93	7.49	7.31	7.30	7.08	6.51	6.11	5.82	5.54	5.26

Bundle	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Summer Low	10.16	8.74	7.68	6.82	6.28	4.85	4.73	4.53	4.50	3.61
Summer Medium	16.02	15.54	15.16	14.62	13.82	14.33	13.38	12.40	11.51	9.16
Summer High	20.59	18.17	16.34	13.25	12.21	11.20	11.13	10.35	9.57	7.81
Winter Low	4.71	4.25	3.99	3.67	3.41	2.73	3.02	2.84	2.65	2.15
Winter Medium	9.38	8.53	7.88	7.38	6.99	5.89	6.05	6.04	6.01	5.18
Winter High	4.97	4.63	4.31	4.08	3.79	3.31	3.13	3.01	2.89	1.64

Bundle Costs

Savings Weighted Levelized Cost of Energy ($/MWh) Real Dollars

Bundle	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Summer Low	$83	$86	$89	$91	$92	$93	$94	$93	$93	$94
Summer Medium	$165	$171	$177	$182	$186	$188	$191	$193	$194	$196
Summer High	$2,824	$2,231	$1,814	$1,604	$1,496	$1,385	$1,265	$1,167	$1,098	$1,058
Winter Low	$64	$64	$65	$65	$66	$66	$67	$67	$67	$67
Winter Medium	$132	$131	$132	$134	$135	$134	$134	$133	$132	$133
Winter High	$1,949	$1,585	$1,278	$1,109	$1,012	$972	$898	$822	$759	$738

Bundle	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Summer Low	$96	$97	$98	$99	$100	$101	$101	$101	$101	$100
Summer Medium	$199	$200	$202	$205	$208	$210	$212	$213	$216	$219
Summer High	$1,035	$997	$979	$966	$957	$938	$864	$860	$854	$848
Winter Low	$67	$67	$67	$65	$65	$64	$62	$61	$61	$60
Winter Medium	$135	$136	$137	$139	$140	$141	$139	$139	$140	$143
Winter High	$699	$630	$615	$607	$605	$610	$620	$627	$632	$637

SUPPLY-SIDE RESOURCE DATA

Key Financial and Forecast Assumptions

Financing Cap Structure and Cost	
Composition	
Debt	50.00%
Preferred	0.00%
Common	50.00%
Total	**100.00%**
Cost	
Debt	4.895%
Preferred	0.00%
Common	9.600%
Average Weighted Cost	**7.248%**

Financial Assumptions and Factors	
Plant operating (book) life	**Expected Life of the Asset**
Discount rate (weighted average cost of capital[1])	6.62%
Composite tax rate	25.74%
Deferred rate	21.30%
General O&M escalation rate	2.40%
Annual property tax rate (% of investment)	0.38%
B2H annual property tax rate (% of investment)	0.66%
Property tax escalation rate	3.00%
B2H property tax escalation rate	3.90%
Annual insurance premiums (% of investment)	0.052%
B2H annual insurance premiums (% of investment)	0.003%
Insurance escalation rate	1.00%
B2H insurance escalation rate	1.00%
AFUDC rate (annual)	7.40%

[1] Incorporates tax effects.

Cost Inputs and Operating Assumptions (Costs in 2026$)

Supply-Side Resources	Nameplate (Plant Capacity) (MW)	Overnight Plant Capital ($/kW)	Transmission/ Interconnection Capital ($/kW)	Total Capital ($/kW)	Fixed O&M ($/kW-month)	Non-Fuel Variable O&M ($/MWh)	Heat Rate (Btu/kWh)	Economic Life (years)
Combined Cycle Combustion Turbine (CCCT)	300	$1,650	$191	$1,841	$1.60	$3.40	6,431	30
Simple Cycle Combustion Turbine (SCCT)	150	$1,200	$191	$1,391	$0.80	$6.00	9,905	30
Reciprocating Gas Engine (Recip)	50	$2,460	$127	$2,587	$1.20	$5.50	7,600	40
Hydrogen Combustion Turbine	150	$1,470	$191	$1,661	$0.80	$6.00	9,905	30
Small Modular Reactor	100	$10,310	$191	$10,501	$14.60	$3.40	9,180	60
Geothermal	30	$9,450	$127	$9,577	$18.50	—	—	30
Solar PV	100	$1,490	$191	$1,681	$2.00	—	—	30
Wind	100	$2,690	$191	$2,881	$2.90	—	—	30
Battery (4 hour)	50	$1,400	$127	$1,527	$3.70	—	—	20
Battery (4 hour)—Distribution Connected	5	$1,400	$127	$1,527	$3.70	—	—	20
Battery (8 hour)	50	$2,530	$127	$2,657	$6.60	—	—	20
Pumped Hydro (12 hour)	250	$4,190	$187	$4,377	$2.00	$0.70	—	100
Iron Oxide Battery (100 hour)	50	$3,000	$127	$3,127	$1.70	—	—	15

Supply-Side Resource Escalation Factors[1] (2026–2035)

Supply-Side Resources	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Combined Cycle Combustion Turbine (CCCT)	2.40%	2.40%	2.40%	2.40%	2.40%	1.61%	1.68%	1.60%	1.59%	1.66%
Simple Cycle Combustion Turbine (SCCT)	2.40%	2.40%	2.40%	2.40%	2.40%	1.55%	1.55%	1.54%	1.53%	1.52%
Reciprocating Gas Engine (Recip)	2.40%	2.40%	2.40%	2.40%	2.40%	1.55%	1.55%	1.54%	1.53%	1.52%
Hydrogen Combustion Turbine	2.40%	2.40%	2.40%	2.40%	2.40%	1.55%	1.55%	1.54%	1.53%	1.52%
Small Modular Reactor	2.40%	2.40%	2.40%	2.40%	2.40%	-1.35%	-1.50%	-1.65%	-1.83%	-2.01%
Geothermal	-0.28%	-0.05%	0.14%	0.31%	0.45%	0.57%	0.68%	0.78%	0.87%	0.94%
Solar PV	2.40%	2.40%	2.40%	2.40%	2.40%	-0.68%	-0.78%	-0.89%	-1.00%	-1.12%
Wind	2.40%	2.40%	2.40%	2.40%	2.40%	1.30%	1.28%	1.27%	1.26%	1.24%
Battery (4 hour)	3.40%	3.40%	2.40%	2.40%	2.40%	0.86%	0.83%	0.81%	0.78%	0.76%
Battery (4 hour)—Distribution Connected	3.40%	3.40%	2.40%	2.40%	2.40%	0.86%	0.83%	0.81%	0.78%	0.76%
Battery (8 hour)	3.40%	3.40%	2.40%	2.40%	2.40%	0.74%	0.71%	0.68%	0.65%	0.62%
Pumped Hydro (12 hour)	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
Iron Oxide Battery (100 hour)	3.40%	3.40%	2.40%	2.40%	2.40%	0.74%	0.71%	0.68%	0.65%	0.62%

[1] Factors include the 2025 IRP general O&M escalation rate assumption of 2.4%.

Supply-Side Resource Escalation Factors[1] (2036–2045)

Supply-Side Resources	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Combined Cycle Combustion Turbine (CCCT)	1.58%	1.58%	1.49%	1.56%	1.55%	1.55%	1.54%	1.53%	1.52%	1.52%
Simple Cycle Combustion Turbine (SCCT)	1.52%	1.52%	1.50%	1.49%	1.48%	1.48%	1.47%	1.46%	1.45%	1.45%
Reciprocating Gas Engine (Recip)	1.52%	1.52%	1.50%	1.49%	1.48%	1.48%	1.47%	1.46%	1.45%	1.45%
Hydrogen Combustion Turbine	1.52%	1.52%	1.50%	1.49%	1.48%	1.48%	1.47%	1.46%	1.45%	1.45%
Small Modular Reactor	-1.45%	-1.60%	-1.77%	-1.95%	-2.15%	-0.46%	-0.54%	-0.63%	-0.73%	-0.83%
Geothermal	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%	1.90%
Solar PV	0.50%	0.47%	0.43%	0.39%	0.35%	0.31%	0.26%	0.21%	0.17%	0.11%
Wind	1.23%	1.22%	1.20%	1.19%	1.17%	1.16%	1.14%	1.13%	1.11%	1.09%
Battery (4 hour)	0.73%	0.70%	0.67%	0.64%	0.61%	0.58%	0.54%	0.51%	0.47%	0.43%
Battery (4 hour)—Distribution Connected	0.73%	0.70%	0.67%	0.64%	0.61%	0.58%	0.54%	0.51%	0.47%	0.43%
Battery (8 hour)	0.59%	0.56%	0.53%	0.49%	0.46%	0.42%	0.38%	0.34%	0.30%	0.25%
Pumped Hydro (12 hour)	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
Iron Oxide Battery (100 hour)	0.59%	0.56%	0.53%	0.49%	0.46%	0.42%	0.38%	0.34%	0.30%	0.25%

[1] Factors include the 2025 IRP general O&M escalation rate assumption of 2.4%.

Levelized Capacity (Fixed) Cost per kW/Month (Costs in 2026$)

Supply-Side Resources	Cost of Capital[1]	Non-Fuel O&M[2]	Total Cost per kW[3]
Combined Cycle Combustion Turbine (CCCT)	$16	$3	$19
Simple Cycle Combustion Turbine (SCCT)	$11	$2	$13
Reciprocating Gas Engine (Recip)	$20	$3	$23
Hydrogen Combustion Turbine	$12	$2	$14
Small Modular Reactor	$68	$29	$97
Geothermal	$67	$31	$98
Solar PV	$7	$4	$11
Wind	$17	$5	$22
Battery (4 hour)	$11	$5	$16
Battery (4 hour)—Distribution Connected	$11	$5	$16
Battery (8 hour)	$19	$9	$28
Pumped Hydro (12 hour)	$31	$6	$37
Iron Oxide Battery (100 hour)	$25	$3	$28

[1] Cost of Capital includes tax credit benefits (ITC/PTC).

[2] Non-Fuel O&M includes fixed and property taxes.

[3] Rounding may make sum of Cost of Capital and Non-Fuel O&M costs not match Total Cost per kW.

Renewable Energy Certificate Forecast

Year	Nominal ($/MWh)
2026	$9.51
2027	$10.33
2028	$10.93
2029	$11.53
2030	$12.00
2031	$12.47
2032	$12.94
2033	$13.41
2034	$13.88
2035	$14.35
2036	$14.83
2037	$15.31
2038	$15.78
2039	$16.26
2040	$16.73
2041	$17.41
2042	$18.08
2043	$18.76
2044	$19.43
2045	$20.11

EXISTING RESOURCE DATA

Qualifying Facility Data (PURPA)

Cogeneration & Small Power Production Projects
Status as of April 1, 2025

Hydro Projects

Project	MW	Contract On-line Date	Contract End Date	Project	MW	Contract On-line Date	Contract End Date
Arena Drop	0.45	Sep-2010	Sep-2030	Little Wood River Ranch 1	1.01	Aug-2021	Aug-2041
Baker City Hydro	0.24	Sep-2015	Sep-2030	Little Wood River Ranch II	1.25	Oct-2015	Oct-2035
Barber Dam Hydro	3.70	Apr-2024	Apr-2044	Little Wood River Reservoir	2.85	Mar-2020	Mar-2040
Birch Creek Hydro Project	0.07	Nov-2019	Nov-2039	Low Line Canal Hydro Project	8.20	May-2020	May-2040
Black Canyon #3	0.13	Apr-2019	Apr-2039	Low Line Midway Hydro	2.50	Aug-2007	Aug-2027
Black Canyon Bliss Hydro	0.03	Oct-2015	Oct-2035	Lowline #2	2.79	May-2023	May-2043
Blind Canyon	1.63	Dec-2014	Dec-2034	Magic Reservoir Hydro	9.00	Jun-2024	Jun-2044
Box Canyon	0.30	Feb-2019	Feb-2039	Malad River	1.17	May-2019	May-2039
Briggs Creek	0.60	Oct-2020	Oct-2040	Marco Ranches	1.20	Aug-2020	Aug-2040
Bypass	9.96	Jun-2023	Jun-2043	MC6 Hydro	2.30	Apr-2021	Sep-2040
Canyon Springs	0.11	Jan-2019	Jan-2039	Mile 28	1.50	Jun-1994	Jun-2029
Cedar Draw	1.55	Jun-2019	Jun-2039	Mitchell Butte	2.09	May-1989	Dec-2034
Clear Springs Trout	0.56	Nov-2018	Nov-2038	Mora Drop	1.85	Sep-2006	Sep-2026
Coleman Hydro	0.80	Oct-2023	Oct-2043	Mud Creek S and S	0.52	Feb-2017	Feb-2037
Crystal Springs	2.55	Apr-2021	Apr-2041	Mud Creek/White	0.29	Jan-2021	Jan-2041
Curry Cattle Company	0.25	Jun-2018	Jun-2033	North Gooding Main Hydro	1.30	Oct-2016	Oct-2036
Dietrich Drop	4.77	Sep-2023	Sep-2043	Owyhee Dam CSPP	5.00	Aug-1985	May-2034
Eightmile Hydro Project	0.36	Oct-2014	Oct-2034	Pigeon Cove	1.75	Nov-2019	Nov-2039
Elk Creek Hydro	2.35	Jun-2021	Jun-2041	Pristine Springs #1	0.13	May-2020	May-2040
Fall River	9.10	Aug-1993	Aug-2028	Pristine Springs #3	0.20	May-2020	May-2040
Fargo Drop Hydroelectric	1.27	Apr-2013	Apr-2033	Reynolds Irrigation	0.35	Sep-2021	Sep-2041
Faulkner Ranch Hydro	0.87	Aug-2022	Aug-2042	Rock Creek #1	2.17	Jan-2018	Jan-2038
Fisheries Dev.	0.26	Jul-1990	Jul-2040	Rock Creek II	1.90	Jun-2024	Jun-2044
Geo-Bon #2	1.06	Nov-2021	Nov-2041	Sagebrush Hydro Project	0.58	Jun-2021	Jun-2040
Hailey CSPP	0.04	Jun-2020	Jun-2030	Sahko Hydro	0.50	Feb-2021	Feb-2041
Hazelton A	8.69	Mar-2011	Feb-2026	Shingle Creek	0.22	Aug-2022	Aug-2027
Hazelton B	7.60	May-1993	May-2028	Shoshone #2	0.58	May-1996	May-2031
Head of U Canal Project	1.28	Jun-2015	Jun-2035	Shoshone Hydro	0.36	Feb-2017	Feb-2037
Horseshoe Bend Hydro	9.50	Sep-1995	Sep-2030	Snake River Pottery	0.09	Dec-2019	Dec-2027
Jim Knight	0.48	May-2021	May-2040	Snedigar	0.50	Jan-2020	Jan-2040
Koyle Small Hydro	1.25	Apr-2019	Apr-2039	Trout-Co	0.28	Dec-2021	Dec-2041
Lateral #10	2.06	May-2020	May-2040	Tunnel #1	7.00	Jun-1993	Jun-2036
Lemhi Hydro	0.45	Aug-2021	Aug-2041	White Water Ranch	0.16	Aug-2020	Aug-2040
LeMoyne Hydro	0.08	Jun-2020	Jun-2030	Wilson Lake Hydro	8.40	May-1993	May-2028

Total Hydro Nameplate Rating 144.35 MW

Cogeneration/Thermal Projects

Project	MW	Contract On-line Date	Contract End Date
Pico Energy, LLC	2.13	Aug-2020	Aug-2030
Simplot Pocatello Cogen	15.90	Mar-2025	Mar-2030
TASCO—Nampa Natural Gas	2.00	Sep-2003	Sept-2040
TASCO—Twin Falls Natural Gas	3.00	Aug-2001	Jan-2040
Total Thermal Nameplate Rating 23.03 MW			

Biomass Projects

Project	MW	Contract On-line Date	Contract End Date	Project	MW	Contract On-line Date	Contract End Date
Bannock County Landfill	3.20	May-2014	May-2034	Pocatello Waste	0.50	Jan-2021	Jan-2041
Fighting Creek Landfill Gas to Energy Station	3.06	Apr-2014	Apr-2029	SISW LFGE	3.92	Sept-2018	Sept-2038
Hidden Hollow Landfill Gas	3.20	Jan-2007	Jan-2027	Tamarack CSPP	6.25	Jun-2018	Jun-2038
Total Biomass Nameplate Rating 20.13 MW							

Solar Projects

Project	MW	Contract On-line Date	Contract End Date	Project	MW	Contract On-line Date	Contract End Date
American Falls Solar II, LLC	20.00	Mar-2017	Mar-2037	Murphy Flat Power, LLC	20.00	Apr-2017	Apr-2037
American Falls Solar, LLC	20.00	Mar-2017	Mar-2037	Ontario Solar Center	3.00	Mar-2020	Mar-2040
Baker Solar Center	15.00	Feb-2020	Feb-2040	Open Range Solar Center, LLC	10.00	Oct-2016	Oct-2036
Brush Solar	2.75	Dec-2019	Dec-2039	Orchard Ranch Solar, LLC	20.00	Mar-2017	Mar-2037
Grand View PV Solar Two	80.00	Dec-2016	Dec-2036	Railroad Solar Center, LLC	4.50	Dec-2016	Dec-2036
Grove Solar Center, LLC	6.00	Oct-2016	Oct-2036	Simcoe Solar, LLC	20.00	Mar-2017	Mar-2037
Hyline Solar Center, LLC	9.00	Nov-2016	Nov-2036	Thunderegg Solar Center, LLC	10.00	Nov-2016	Nov-2036
ID Solar 1	40.00	Aug-2016	Jan-2036	Vale Air Solar Center, LLC	10.00	Nov-2016	Nov-2036
Morgan Solar	3.00	Apr-2020	Apr-2040	Vale I Solar	3.00	Jul-2020	Jul-2040
Mt. Home Solar 1, LLC	20.00	Mar-2017	Mar-2037				
Total Solar Nameplate Rating 316.25 MW							

Wind Projects

Project	MW	Contract On-line Date	Contract End Date	Project	MW	Contract On-line Date	Contract End Date
Bennett Creek Wind Farm	21.00	Dec-2008	Dec-2028	Mainline Windfarm	23.00	Dec-2012	Dec-2032
Benson Creek Windfarm	10.00	Mar-2017	Mar-2037	Milner Dam Wind	19.92	Feb-2011	Feb-2031
Burley Butte Wind Park	21.30	Feb-2011	Feb-2031	Oregon Trail Wind Park	13.50	Jan-2011	Jan-2031
Camp Reed Wind Park	22.50	Dec-2010	Dec-2030	Payne's Ferry Wind Park	21.00	Dec-2010	Dec-2030
Cassia Wind Farm LLC	8.40	Mar-2009	Mar-2029	Pilgrim Stage Station Wind Park	10.50	Jan-2011	Jan-2031
Cold Springs Windfarm	23.00	Dec-2012	Dec-2032	Prospector Windfarm	10.00	Mar-2017	Mar-2037
Desert Meadow Windfarm	23.00	Dec-2012	Dec-2032	Rockland Wind Farm	80.00	Dec-2011	Dec-2036
Durbin Creek Windfarm	10.00	Mar-2017	Mar-2037	Ryegrass Windfarm	23.00	Dec-2012	Dec-2032
Fossil Gulch Wind	10.50	Sep-2005	Sep-2025	Salmon Falls Wind	22.00	Apr-2011	Apr-2031
Golden Valley Wind Park	12.00	Feb-2011	Feb-2031	Sawtooth Wind Project	22.00	Nov-2011	Nov-2031
Hammett Hill Windfarm	23.00	Dec-2012	Dec-2032	Thousand Springs Wind Park	12.00	Jan-2011	Jan-2031
High Mesa Wind Project	40.00	Dec-2012	Dec-2032	Tuana Gulch Wind Park	10.50	Jan-2011	Jan-2031
Horseshoe Bend Wind	9.00	Feb-2006	Feb-2026	Tuana Springs Expansion	35.70	May-2010	May-2030
Hot Springs Wind Farm	21.00	Dec-2008	Dec-2028	Two Ponds Windfarm	23.00	Dec-2012	Dec-2032
Jett Creek Windfarm	10.00	Mar-2017	Mar-2037	Willow Spring Windfarm	10.00	Mar-2017	Mar-2037
Lime Wind Energy	3.00	Dec-2011	Dec-2031	Yahoo Creek Wind Park	21.00	Dec-2010	Dec-2030
Total Wind Nameplate Rating 624.82 MW							
Total Nameplate Rating 1,128.58 MW							

The above is a summary of the nameplate rating for the CSPP projects under contract with Idaho Power as of April 1, 2025. In the case of CSPP projects, nameplate rating of the actual generation units is not an accurate or reasonable estimate of the actual energy these projects will deliver to Idaho Power. Historical generation information, resource specific industry standard capacity factors, and other known and measurable operating characteristics are accounted for in determining a reasonable estimate of the energy these projects will produce.

Qualifying Facilities Forecast (average MW nameplate)

Year	Solar	Wind	Biomass	Thermal	Cogen	Hydro
2026	322	620	20	5	18	144
2027	327	619	17	5	19	145
2028	333	617	17	5	19	145
2029	338	604	16	5	20	145
2030	344	596	15	5	20	146
2031	349	539	15	5	20	146
2032	354	524	15	5	21	147
2033	360	437	15	5	21	147
2034	365	426	13	5	22	148
2035	370	361	12	5	22	148
2036	365	353	12	5	23	149
2037	314	274	12	5	23	149
2038	307	265	8	5	23	150
2039	279	213	4	5	24	150
2040	269	209	4	2	24	151
2041	248	170	3	0	25	151
2042	246	166	3	0	25	151
2043	232	137	3	0	26	152
2044	232	135	3	0	26	152
2045	223	113	3	0	26	152

Power Purchase Agreement Data

Project	MW	On-Line Date	Contract End Date
Wind Projects			
Elkhorn Wind Project	101	Dec-2007	Dec-2027
Jackalope Wind Project (PPA and Idaho Power-Owned)	600	Expected Jun-2027	35-year PPA term
Total Wind Nameplate Rating	**701**		
Geothermal Projects			
Raft River Unit 1	13	Apr-2008	Apr-2033
Neal Hot Springs	22	Nov-2012	Nov-2037
Total Geothermal Nameplate Rating	**35**		
Solar Projects			
Black Mesa Solar	40	Jun-2023	Jun-2043
Franklin Solar	100	Jun-2024	Jun-2049
Jackpot Solar Facility	120	Dec-2022	Dec-2042
Pleasant Valley Solar	200	Mar-2025	Mar-2045
PVS2 Solar	125	Expected May-2026	20-year PPA term
Crimson Orchard Solar (combined project with Crimson Orchard BESS)	100	Expected Apr-2027	20-year PPA term
Blacks Creek Solar	320	Expected Dec-2027	20-year PPA term
Total Solar Nameplate Rating	**1,005**		
Total Nameplate Rating (All Non-PURPA Resource Types)	**1,741**		

The above is a summary of the nameplate rating for the projects under contract with Idaho Power as of April 1, 2025. In the case of variable-energy resource projects, nameplate rating of the actual generation units is not an accurate or reasonable estimate of the actual energy these projects will deliver to Idaho Power. Historical generation information, resource specific industry standard capacity factors, and other known and measurable operating characteristics are accounted for in determining a reasonable estimate of the energy these projects will produce.

Battery Energy Storage System (BESS) Data

Project	MW	On-Line Date	Contract End Date (if applicable)
BESS Projects—Idaho Power-Owned			
Distribution BESS Sites	11	2023	
Hemingway	80	2023	
Hemingway Expansion	36	2025	
Black Mesa	40	2023	
Franklin	60	2024	
Happy Valley	80	Expected 2025	
Boise Bench	200	Expected 2026	
Hemingway Expansion II	50	Expected 2026	
Total BESS projects—Idaho Power-Owned	557		
BESS Projects—Tolling Agreements			
Kuna BESS	150	Expected Jun-2025	20-year agreement term
Crimson Orchard BESS (combined project with Crimson Orchard Solar)	100	Expected Apr-2027	20-year agreement term
Total BESS Projects—Tolling Agreements	250		
Total BESS Nameplate Rating	**807**		

*Black Mesa Solar and BESS, Franklin Solar and BESS, and Crimson Orchard Solar and BESS are combined solar/BESS sites, where both the solar and the BESS facility are located behind a common limited point of interconnection (for Black Mesa, combined limit of 40 MW; for Franklin, combined limited of 100 MW; and for Crimson Orchard, combined limit of 100 MW).

Hydro Flow Modeling

Hydro Models

Idaho Power uses two modeling methods for the development of future hydro flow scenarios for the IRP. The first method accounts for surface water regulation in the system while the second method addresses groundwater processes.

The first modeling method consists of two models built in the Center for Advanced Decision Support for Water and Environmental Systems (CADSWES) RiverWare modeling framework[1]. The first of these models covers the spatial extent of the Snake River basin from the headwaters to Brownlee inflow. The second model uses the results of the first and regulates the flows through the Hells Canyon Complex (HCC). The water management models have been updated to include hydrologic conditions for water years 1981 through 2018.

The second modeling method uses the Eastern Snake Plain Aquifer Model (ESPAM) from the Idaho Department of Water Resources (IDWR) to model aquifer management practices implemented on the Eastern Snake Plain Aquifer (ESPA). ESPAM version 2.2[2] has been used for this modeling, which is the latest version and was released in 2020.

Hydro Model Inputs

The inputs for the 2025 IRP were derived, in part, from management practices outlined in an agreement between the Surface Water Coalition (SWC) and Idaho Groundwater Appropriators (IGWA). The agreement set out specific targets for several management practices that include aquifer recharge, irrigation system conversions from groundwater to surface water, and a total reduction in groundwater diversions of 240,000 acre-ft annually. The modeling also included inputs from other entities diverting groundwater on the ESPA who have separate mitigation agreements with SWC. Model inputs also included a long-term analysis of trends in reach gains to the Snake River from Palisades Dam to King Hill. Weather modification activities conducted by Idaho Power and other collaborative partners were included in the modeling effort. The modeling also included aquifer recharge by the Idaho Water Resource Board (IWRB), which has a stated target of an average annual natural flow recharge of 350,000 acre-ft per year[3].

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[1] colorado.edu/cadswes/creative-works/riverware

[2] idwr.idaho.gov/water-data/projects/espam/

[3] Idaho Legislative Session – Senate Concurrent Resolution 110 (legislature.idaho.gov/sessioninfo/2025/legislation/SCR110/)

Recharge capacity modeled for the 2025 IRP included diversions with the capability of diverting all available water at the Snake River below Milner Dam during the winter months under typical release conditions. These diversions can have a significant impact to flows downstream of Milner Dam.

System conversions on the Southwest Irrigation District (SWID) were included in the modeling. Diversions for conversion projects are modeled at approximately 90,000 acre-ft and are held essentially constant through all years of the IRP. The model accounted for an approximately 90,000 acre-ft decrease in groundwater pumping from ESPA. The decrease was spread evenly over groundwater irrigated lands in SWID's service area subject to the agreement between SWC and SWID.

The SWC and IGWA agreement requires a total reduction of 240,000 acre-ft/year, but the agreement allows for a portion to be offset by aquifer recharge activities. Based on recent management activity, an approximate 100,000 acre-ft/year reduction is accomplished through other forms of mitigation, such as private aquifer recharge.

The 2025 IRP modeling also recognized ongoing declines in specific reaches. Future reach declines were determined using statistical analysis. Trend data indicate reach gains from Blackfoot to Neely and from Lower Salmon Falls Dam to King Hill demonstrated a statistically significant decline from 1994 to 2023. The long-term declines are still present and are relatively the same as the declines used in the 2023 IRP.

Weather modification was included in the model at various levels of development. For IRP years 2026 through 2030, weather modification reflects the 2024 level of program development in the Upper Snake, Wood, Boise, and Payette River basins. From IRP year 2031 and onward, weather modification levels in Upper Snake, Wood, and Boise River basins were increased to reflect a possible expansion of the cloud seeding program. The level of weather modification was held constant at the current level in the Payette River Basin throughout the IRP planning horizon. The modeling also accounts for changes in reach gains from observed water management activities on the ESPA since 2014. Idaho Power used data from IDWR and other sources to determine the magnitude of the management activities and ESPAM was used to model the projected reach gains. Those management activities can have impacts on reach gains for up to 30 years.

Hydro Model Results

Overall inflow to Brownlee Reservoir increases from IRP modeled year 2026 through 2031. Flows peak in 2031 with the 50% exceedance water year annual inflow to Brownlee Reservoir at 11.4 million acre-ft/year. In 2045, those flows declined to approximately 11.3 million acre-ft/year.

Hydro Modeling Potential Energy Limits (aMW)

		50th Percentile (planning case)			Extreme Weather Scenario		
Year	Month	HCC*	ROR**	Total	HCC	ROR	Total
2026	Jan	593	232	824	526	189	716
	Feb	737	230	967	636	190	826
	Mar	709	281	990	544	200	744
	Apr	854	343	1,197	651	228	879
	May	885	306	1,191	662	254	916
	June	785	350	1,134	588	286	874
	July	554	365	919	499	326	825
	Aug	454	279	733	420	241	661
	Sept	503	231	733	453	217	670
	Oct	381	209	591	367	200	567
	Nov	338	192	531	334	185	519
	Dec	461	187	648	434	181	615
Annual aMW		**604**	**267**	**872**	**509**	**225**	**734**
2027	Jan	594	233	827	527	190	717
	Feb	738	232	970	638	191	829
	Mar	710	283	993	545	201	747
	Apr	853	345	1,198	651	229	880
	May	886	307	1,193	663	255	917
	June	784	352	1,136	588	286	874
	July	555	365	920	499	326	826
	Aug	455	279	734	420	241	662
	Sept	503	231	734	454	218	672
	Oct	382	209	591	367	201	568
	Nov	338	193	531	334	185	519
	Dec	461	187	648	434	181	615
Annual aMW		**605**	**268**	**873**	**510**	**225**	**735**

*HCC=Hells Canyon Complex, **ROR=Run of River

		50th Percentile (planning case)			Extreme Weather Scenario		
Year	Month	HCC*	ROR**	Total	HCC	ROR	Total
2028	Jan	595	234	829	528	191	718
	Feb	738	234	972	640	191	831
	Mar	711	283	994	546	202	748
	Apr	853	345	1,198	652	229	881
	May	886	307	1,193	663	255	918
	June	785	352	1,137	588	287	875
	July	555	365	920	500	327	826
	Aug	455	279	735	421	241	662
	Sept	504	231	735	455	218	673
	Oct	382	210	592	367	201	568
	Nov	338	193	531	334	185	519
	Dec	461	187	649	434	181	616
Annual aMW		**605**	**268**	**874**	**511**	**226**	**736**
2029	Jan	596	235	831	528	191	719
	Feb	739	235	974	640	192	832
	Mar	711	284	996	546	202	748
	Apr	853	346	1,199	652	230	882
	May	886	307	1,194	663	255	918
	June	786	352	1,138	588	287	875
	July	555	365	921	500	327	826
	Aug	455	279	735	421	242	662
	Sept	504	231	735	455	218	673
	Oct	382	210	592	367	201	568
	Nov	338	193	531	334	185	519
	Dec	461	187	649	435	181	616
Annual aMW		**606**	**269**	**874**	**511**	**226**	**737**

*HCC=Hells Canyon Complex, **ROR=Run of River

Year	Month	50th Percentile (planning case) HCC*	ROR**	Total	Extreme Weather Scenario HCC	ROR	Total
2030	Jan	597	236	833	528	191	719
	Feb	739	236	975	640	192	831
	Mar	710	285	994	545	202	748
	Apr	854	346	1,199	653	230	883
	May	884	308	1,192	658	255	913
	June	780	353	1,133	582	288	870
	July	556	365	921	501	328	829
	Aug	456	280	736	420	242	661
	Sept	504	231	735	455	218	673
	Oct	382	210	592	367	201	568
	Nov	338	193	531	334	185	519
	Dec	461	188	649	435	181	616
Annual aMW		**605**	**269**	**874**	**510**	**226**	**736**
2031	Jan	637	271	908	540	199	739
	Feb	753	279	1,032	658	198	857
	Mar	787	325	1,112	587	215	802
	Apr	854	355	1,209	677	246	923
	May	898	352	1,250	671	264	935
	June	803	361	1,164	620	306	926
	July	562	366	928	501	333	834
	Aug	459	284	744	423	260	683
	Sept	506	234	740	456	221	677
	Oct	384	211	594	368	202	570
	Nov	338	194	532	333	186	519
	Dec	474	189	662	435	182	617
Annual aMW		**621**	**285**	**906**	**522**	**234**	**757**

*HCC=Hells Canyon Complex, **ROR=Run of River

		50th Percentile (planning case)			Extreme Weather Scenario		
Year	Month	HCC*	ROR**	Total	HCC	ROR	Total
2032	Jan	638	272	910	540	199	739
	Feb	754	280	1,034	659	199	857
	Mar	787	325	1,112	588	215	803
	Apr	854	356	1,210	677	247	924
	May	898	353	1,251	670	265	935
	June	803	362	1,164	620	304	925
	July	562	366	928	501	333	834
	Aug	459	285	744	423	261	683
	Sept	506	235	740	456	222	677
	Oct	384	211	595	367	202	570
	Nov	338	194	532	333	186	519
	Dec	474	189	663	435	182	617
Annual aMW		**621**	**286**	**907**	**522**	**235**	**757**
2033	Jan	638	272	910	540	200	739
	Feb	755	278	1,033	659	199	857
	Mar	788	325	1,113	588	215	803
	Apr	854	356	1,211	678	247	925
	May	898	353	1,251	670	265	935
	June	803	362	1,164	620	310	930
	July	562	366	929	501	334	834
	Aug	459	285	744	423	261	683
	Sept	506	235	740	456	222	677
	Oct	384	211	595	367	203	570
	Nov	338	194	532	333	186	519
	Dec	474	189	663	435	182	617
Annual aMW		**622**	**286**	**907**	**522**	**235**	**758**

*HCC=Hells Canyon Complex, **ROR=Run of River

		50th Percentile (planning case)			Extreme Weather Scenario		
Year	Month	HCC*	ROR**	Total	HCC	ROR	Total
2034	Jan	638	272	910	540	200	739
	Feb	755	278	1,033	659	199	858
	Mar	788	326	1,113	588	215	803
	Apr	854	357	1,211	678	247	925
	May	898	353	1,252	670	265	935
	June	803	362	1,164	620	310	931
	July	562	366	929	501	334	834
	Aug	459	285	744	423	261	683
	Sept	506	235	740	455	222	677
	Oct	384	211	595	367	203	570
	Nov	338	194	532	333	186	519
	Dec	474	189	663	435	182	617
Annual aMW		**622**	**286**	**907**	**522**	**235**	**758**
2035	Jan	638	272	910	540	200	739
	Feb	755	278	1,033	659	199	857
	Mar	788	326	1,113	588	215	803
	Apr	854	356	1,211	678	247	925
	May	898	353	1,252	671	265	936
	June	803	362	1,164	620	310	930
	July	562	366	928	500	334	834
	Aug	459	285	744	422	261	683
	Sept	505	235	740	455	222	677
	Oct	383	211	595	367	203	570
	Nov	338	194	532	333	186	519
	Dec	474	189	663	434	182	617
Annual aMW		**621**	**286**	**907**	**522**	**235**	**758**

*HCC=Hells Canyon Complex, **ROR=Run of River

Year	Month	50th Percentile (planning case)			Extreme Weather Scenario		
		HCC*	ROR**	Total	HCC	ROR	Total
2036	Jan	638	272	910	539	199	739
	Feb	754	278	1,032	658	199	857
	Mar	787	325	1,113	588	215	803
	Apr	854	356	1,210	677	247	925
	May	898	353	1,251	671	265	936
	June	802	362	1,164	620	310	930
	July	562	366	928	500	334	834
	Aug	459	285	744	422	261	683
	Sept	505	235	740	455	222	676
	Oct	383	211	594	367	203	570
	Nov	338	194	532	333	186	519
	Dec	473	189	662	434	183	617
Annual aMW		**621**	**286**	**907**	**522**	**235**	**757**
2037	Jan	637	271	908	539	199	739
	Feb	753	278	1,031	658	199	857
	Mar	787	325	1,112	587	215	802
	Apr	854	356	1,210	677	247	924
	May	898	353	1,251	671	265	935
	June	801	362	1,163	619	310	930
	July	561	366	927	500	334	834
	Aug	459	285	743	422	261	683
	Sept	505	235	739	454	222	676
	Oct	383	211	594	367	202	570
	Nov	338	194	532	333	186	519
	Dec	473	189	662	434	182	617
Annual aMW		**621**	**285**	**906**	**522**	**235**	**757**

*HCC=Hells Canyon Complex, **ROR=Run of River

		50th Percentile (planning case)			Extreme Weather Scenario		
Year	**Month**	**HCC***	**ROR****	**Total**	**HCC**	**ROR**	**Total**
2038	Jan	636	274	910	539	199	738
	Feb	752	278	1,030	658	199	856
	Mar	787	325	1,111	586	215	800
	Apr	854	355	1,209	677	247	924
	May	898	353	1,251	670	265	935
	June	801	362	1,163	619	310	929
	July	561	366	927	500	334	833
	Aug	458	285	743	422	261	682
	Sept	504	235	739	453	222	675
	Oct	383	211	594	367	202	569
	Nov	338	194	532	333	186	519
	Dec	473	189	662	434	182	616
Annual aMW		**620**	**285**	**906**	**521**	**235**	**757**
2039	Jan	635	273	909	539	199	738
	Feb	751	277	1,028	657	199	856
	Mar	786	324	1,110	585	214	799
	Apr	854	355	1,208	676	247	923
	May	898	353	1,250	670	264	935
	June	801	361	1,162	618	312	930
	July	561	366	927	499	333	833
	Aug	458	285	743	421	261	682
	Sept	504	235	738	453	222	674
	Oct	383	211	594	367	202	569
	Nov	338	194	532	333	186	519
	Dec	472	189	661	434	182	616
Annual aMW		**620**	**285**	**905**	**521**	**235**	**756**

*HCC=Hells Canyon Complex, **ROR=Run of River

Year	Month	50th Percentile (planning case)			Extreme Weather Scenario		
		HCC*	ROR**	Total	HCC	ROR	Total
2040	Jan	635	269	904	538	199	737
	Feb	750	276	1,026	657	198	855
	Mar	785	323	1,108	583	214	797
	Apr	854	354	1,208	676	247	922
	May	897	352	1,249	670	264	935
	June	800	361	1,162	618	312	930
	July	560	366	926	499	333	832
	Aug	458	284	742	421	260	682
	Sept	503	235	738	452	221	673
	Oct	382	211	593	366	202	569
	Nov	338	194	532	333	186	519
	Dec	472	189	661	434	182	616
Annual aMW		**620**	**285**	**904**	**521**	**235**	**756**
2041	Jan	634	268	902	538	199	737
	Feb	749	275	1,024	656	198	854
	Mar	785	322	1,107	583	214	796
	Apr	854	353	1,207	675	246	922
	May	897	352	1,249	670	264	934
	June	800	361	1,161	617	312	929
	July	560	366	926	499	333	832
	Aug	457	284	742	421	260	681
	Sept	503	234	737	451	221	673
	Oct	382	211	593	366	202	568
	Nov	338	194	532	333	186	519
	Dec	471	189	660	433	182	616
Annual aMW		**619**	**284**	**903**	**520**	**235**	**755**

*HCC=Hells Canyon Complex, **ROR=Run of River

Year	Month	50th Percentile (planning case) HCC*	ROR**	Total	Extreme Weather Scenario HCC	ROR	Total
2042	Jan	633	268	901	538	198	736
	Feb	748	274	1,022	655	197	852
	Mar	784	322	1,105	582	213	795
	Apr	854	352	1,206	675	246	921
	May	897	351	1,248	670	264	934
	June	800	361	1,161	617	312	928
	July	560	366	925	498	333	832
	Aug	457	284	741	420	260	681
	Sept	502	234	736	450	221	672
	Oct	382	211	593	366	202	568
	Nov	338	194	532	333	186	519
	Dec	471	189	660	433	182	615
Annual aMW		**619**	**284**	**903**	**520**	**235**	**754**
2043	Jan	632	267	899	537	197	735
	Feb	747	273	1,021	655	197	851
	Mar	783	321	1,104	580	213	793
	Apr	854	351	1,205	674	246	920
	May	897	351	1,247	670	264	934
	June	799	361	1,160	616	311	927
	July	559	366	925	498	333	831
	Aug	457	284	741	420	260	680
	Sept	502	234	736	450	221	671
	Oct	382	211	592	366	202	568
	Nov	338	194	532	333	186	519
	Dec	470	189	659	433	182	615
Annual aMW		**618**	**283**	**902**	**519**	**234**	**754**

*HCC=Hells Canyon Complex, **ROR=Run of River

Year	Month	50th Percentile (planning case)			Extreme Weather Scenario		
		HCC*	ROR**	Total	HCC	ROR	Total
2044	Jan	630	268	899	537	197	734
	Feb	746	272	1,018	654	197	851
	Mar	782	320	1,102	580	212	792
	Apr	854	350	1,203	674	245	919
	May	896	351	1,247	670	264	934
	June	799	361	1,159	616	311	926
	July	559	366	924	498	333	830
	Aug	456	284	740	420	260	680
	Sept	501	234	735	449	221	670
	Oct	381	211	592	366	202	567
	Nov	338	194	532	333	186	519
	Dec	469	189	658	433	182	615
Annual aMW		**618**	**283**	**901**	**519**	**234**	**753**
2045	Jan	629	267	897	536	196	733
	Feb	745	271	1,016	653	196	849
	Mar	781	319	1,100	579	212	791
	Apr	854	349	1,202	673	245	918
	May	896	350	1,246	670	263	933
	June	798	361	1,159	615	310	925
	July	558	365	924	497	333	830
	Aug	456	284	740	419	260	679
	Sept	500	234	734	448	221	669
	Oct	381	211	592	365	202	567
	Nov	338	194	532	333	186	519
	Dec	467	188	656	432	182	615
Annual aMW		**617**	**283**	**900**	**518**	**234**	**752**

LONG-TERM CAPACITY EXPANSION RESULTS (MW)

Main Cases

Preferred Portfolio—With 111(d) Bridger 3&4 NG

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	100	50	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	10	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	7
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	2
Subtotal	-484	611	550	0	700	1,445	835	0	0	50		0	0	20	287	58
Total	**4,071**	**Portfolio Cost: $10,966 M**														

With 111(d) Bridger 3&4 Exit

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	205	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	0	400	0	0	100	5	0	0	50	0	0	0	0	16	30
2031	0	0	0	0	0	400	5	0	0	0	0	0	0	10	17	26
2032	0	0	0	0	0	200	5	0	0	0	0	0	0	10	17	24
2033	0	0	50	0	0	100	50	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	5	0	0	0	0	0	0	0	14	12
2039	0	0	50	0	0	0	5	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	10
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	8
2042	0	0	100	0	0	0	0	0	0	0	0	0	0	0	11	8
2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2045	0	0	0	0	0	200	100	50	0	0	0	0	0	0	8	0
Subtotal	-484	261	800	0	600	1,745	985	50	0	50		0	0	20	287	166
Total	**4,479**	**Portfolio Cost: $11,438 M**														

With 111(d) Bridger 3&4 CCS

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	200	0	0	0	SWIP-N	0	0	0	16	0
2030	-78	0	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	5	0	0	0	0	0	0	0	14	0
2039	0	0	50	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	100	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	0	0	0	0	5	0	0	50	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	0
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	6
Subtotal	-212	261	600	0	600	1,345	825	0	0	100		0	0	0	287	6
Total	**3,811**	**Portfolio Cost: $11,577 M**														

With 111(d) 300 MW

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	255	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	300	0	0	200	0	0	0	0	0	0	0	0	17	24
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	50	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3
2043	0	0	0	0	0	0	5	0	0	50	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	0
Subtotal	-484	611	850	0	700	1,345	870	0	0	100		0	0	10	287	77
Total	**4,366**	**Portfolio Cost: $12,348 M**														

With 111(d) 500 MW

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	255	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	30
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	26
2032	0	0	150	0	0	200	5	0	0	0	0	0	0	0	17	24
2033	0	0	300	0	0	300	155	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	5	0	0	0	0	0	0	10	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	50	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	0
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	3
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	0	50	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	0
Subtotal	-484	611	1,100	0	700	1,645	1,030	0	0	50		0	0	20	287	125
Total	**5,083**	**Portfolio Cost: $13,317 M**														

Without 111(d) Bridger 3&4 NG

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	24
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	100	50	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	8
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	3
2044	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2045	0	0	50	0	0	0	0	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	650	0	700	1,445	765	0	0	0		0	0	10	287	91
Total	**4,074**	**Portfolio Cost: $10,782 M**														

Without 111(d) Bridger 3&4 PRB

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	0	0	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	0	0	0	50	0	0	0	0	11	0
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	0
Subtotal	-134	261	550	0	700	1,345	780	0	0	100		0	0	10	287	0
Total	**3,898**	**Portfolio Cost: $10,684 M**														

Without 111(d) Bridger 3&4 Exit

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	205	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	0	400	0	0	100	5	0	0	50	0	0	0	0	16	30
2031	0	0	0	0	0	400	5	0	0	0	0	0	0	10	17	26
2032	0	0	0	0	0	200	5	0	0	0	0	0	0	10	17	24
2033	0	0	50	0	0	0	5	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	15
2037	0	0	0	0	0	100	55	0	0	0	0	0	0	0	15	13
2038	0	0	0	0	0	100	55	0	0	0	0	0	0	0	14	12
2039	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	10
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	10
2041	0	0	0	0	0	200	100	0	0	0	0	0	0	0	12	13
2042	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	8
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	7
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	7
2045	0	0	50	0	0	200	100	0	0	0	0	0	0	0	8	0
Subtotal	-484	261	800	0	600	2,045	1,140	0	0	50		0	0	20	287	218
Total	**4,937**	**Portfolio Cost: $11,309 M**														

Without 111(d) Bridger 3&4 CCS

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	200	0	0	0	SWIP-N	0	0	0	16	0
2030	-78	0	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	5	0	0	0	0	0	0	0	14	0
2039	0	0	50	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	0	5	0	0	0	0	0	0	0	8	0
Subtotal	-212	261	700	0	600	1,345	820	0	0	0		0	0	0	287	0
Total	**3,801**	**Portfolio Cost: $11,441 M**														

Without 111(d) 300 MW Bridger 3&4 NG

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	300	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	300	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4
2039	0	0	50	0	0	0	0	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	3
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	3
2042	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	8
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	7
2045	0	0	0	0	0	100	50	0	0	0	0	0	0	0	8	2
Subtotal	-484	611	950	0	600	1,445	920	0	0	0		0	0	0	287	34
Total	**4,362**	**Portfolio Cost: $12,035 M**														

Without 111(d) 300 MW Bridger 3&4 PRB

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	300	0	0	0	SWIP-N	0	0	0	16	0
2030	0	0	300	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	50	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	200	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	100	55	0	0	0	0	0	0	0	14	4
2039	0	0	50	0	0	0	5	0	0	0	0	0	0	0	13	10
2040	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	3
2041	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	3
2042	0	0	0	0	0	200	105	0	0	0	0	0	0	10	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	5
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	2
Subtotal	-134	261	850	0	600	1,645	1,085	0	0	50		0	0	10	287	94
Total	**4,748**	**Portfolio Cost: $12,017 M**														

Without 111(d) 500 MW Bridger 3&4 NG

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	300	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	300	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	300	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2044	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	100	50	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	1,200	0	600	1,445	920	0	0	0		0	0	0	287	24
Total	**4,602**	**Portfolio Cost: $12,798 M**														

Without 111(d) 500 MW Bridger 3&4 PRB

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	300	0	0	0	SWIP-N	0	0	0	16	0
2030	0	0	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	150	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	300	0	0	0	0	0	0	0	0	0	0	0	17	21
2034	0	0	50	0	0	0	5	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	0	5	0	0	0	0	0	0	0	16	15
2037	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	5	0	0	0	0	0	0	0	14	12
2039	0	0	50	0	0	0	0	0	0	0	0	0	0	0	13	10
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	10
2041	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	0
Subtotal	-134	261	1,150	0	600	1,345	875	0	0	50		0	0	0	287	129
Total	**4,562**	**Portfolio Cost: $12,714 M**														

Scenarios and Sensitivities

High Gas & Carbon Prices

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	30
2031	0	0	0	0	0	600	100	0	0	0	0	0	0	0	17	42
2032	0	0	0	0	0	200	5	0	0	0	0	0	0	0	17	24
2033	0	0	0	0	0	100	55	0	0	0	0	0	0	10	17	34
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	300	150	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	600	300	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	100	50	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	100	50	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3
2041	0	0	0	0	0	100	50	0	0	0	0	0	0	0	12	8
2042	0	0	50	0	0	100	50	0	0	0	0	0	0	0	11	3
2043	0	0	0	0	0	300	155	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	100	55	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	200	100	0	0	0	0	0	0	0	8	6
Subtotal	-484	611	400	0	700	3,645	1,875	0	0	0		0	0	20	287	203
Total	**7,256**	**Portfolio Cost: $14,167 M**														

Low Gas Price

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	100	205	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	0	0	0	100	50	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	10	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	0	5	0	0	0	0	0	0	0	8	6
Subtotal	-484	611	600	0	600	1,545	875	0	0	0		0	0	10	287	63
Total	**4,107**	**Portfolio Cost: $10,162 M**														

Constrained Markets

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	300	250	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	30
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	42
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	24
2033	0	0	50	0	0	0	0	0	0	0	0	0	0	0	17	34
2034	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	31
2035	0	0	0	0	200	100	150	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	13
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	12
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	10
2040	0	0	0	0	0	100	50	0	0	0	0	0	0	0	12	10
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	10	12	3
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	10	11	8
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	300	150	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	100	50	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	500	0	800	2,345	1,255	0	0	0		0	0	20	287	241
Total	**5,574**	**Portfolio Cost: $12,586 M**														

100% Clean by 2045

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	200	100	200	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	30
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	26
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	38
2033	0	0	0	0	100	200	150	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	31
2035	0	-90	-150	240	0	200	100	0	0	0	0	0	0	0	16	5
2036	0	-127	0	127	0	200	100	0	0	0	0	30	0	0	16	5
2037	0	-134	0	134	0	200	100	0	0	0	0	0	0	0	15	4
2038	0	-177	0	177	0	300	150	0	0	0	0	0	0	0	14	12
2039	0	-180	0	180	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	-174	-150	324	0	300	150	0	0	0	0	0	0	0	12	0
2041	0	-175	0	175	0	200	100	0	0	0	0	0	0	0	12	0
2042	0	-179	0	179	0	600	300	0	0	0	0	0	0	0	11	0
2043	0	-179	0	179	0	400	200	0	0	0	0	0	0	0	11	0
2044	0	-321	0	321	0	200	100	0	0	0	0	0	0	0	11	0
2045	0	0	0	0	0	200	105	0	0	0	0	0	0	0	8	2
Subtotal	-484	-1,126	0	2,037	900	4,445	2,305	0	0	0		30	0	0	287	175
Total	**8,568**	**Portfolio Cost: $13,387 M**														

No PURPA Replacement Contracts

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	100	255	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	300	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	5	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	10	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	7
2045	0	0	0	0	0	0	0	0	0	50	0	0	0	0	8	2
Subtotal	-484	611	700	0	600	1,445	840	0	0	50		0	0	20	287	58
Total	**4,126**	**Portfolio Cost: $11,216 M**														

Extreme Weather

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	600	400	955	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	50	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	150	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	27
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	24
2037	0	0	0	0	0	300	150	0	0	0	0	0	0	0	15	22
2038	0	0	0	0	0	100	50	0	0	0	0	0	0	0	14	12
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	10
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	17
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	8
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	8
2043	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	7
2044	0	0	0	0	0	0	0	0	0	0	0	30	0	0	11	3
2045	0	0	0	0	0	0	5	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	400	0	1,200	2,145	1,720	0	0	0		30	0	0	287	187
Total	**6,095**	**Portfolio Cost: $13,712 M**														

High Resource Costs

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	0	0	0	100	50	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	0	0	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	650	0	700	1,445	755	0	0	0		0	0	10	287	38
Total	**4,011**	**Portfolio Cost: $11,016 M**														

Load Shift

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	50	105	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	150	0	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	10	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	7
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	2
Subtotal	-484	611	550	0	700	1,545	735	0	0	50		0	0	20	287	58
Total	**4,071**	**Portfolio Cost: $10,939 M**														

No SWIP

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	350	0	100	0	105	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	200	100	0	0	0	0	0	0	0	15	13
2038	0	0	0	0	0	100	50	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	100	50	0	0	0	0	0	0	0	13	0
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	2
Subtotal	-484	611	750	0	700	1,745	920	0	0	50		0	0	0	287	46
Total	**4,574**	**Portfolio Cost: $##,### M**														

Validation and Verification

No Gas 2029

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	0	0	0	100	605	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	0
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	300	150	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	600	300	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	200	100	0	0	0	0	0	0	0	14	12
2039	0	0	0	0	0	100	50	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	10
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	8
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3
2043	0	0	0	0	0	100	50	0	0	0	0	0	0	0	11	7
2044	0	0	0	0	0	100	50	0	0	0	0	0	0	0	11	13
2045	0	0	50	0	0	0	5	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	350	0	600	2,845	1,860	0	0	0		0	0	10	287	101
Total	**6,180**	**Portfolio Cost: $11,723 M**														

No Gas 2029/2030

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	0	0	200	0	550	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	0	0	0	100	0	0	0	150	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	200	5	0	0	0	0	0	0	0	17	24
2033	0	0	50	0	0	0	0	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	400	200	0	0	0	0	0	0	0	16	15
2037	0	0	0	0	0	600	300	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	200	100	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	200	100	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	10
2041	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	8
2042	0	0	0	0	0	100	55	0	0	0	0	0	0	0	11	3
2043	0	0	50	0	0	100	50	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	200	100	0	0	0	0	0	0	0	11	3
2045	0	0	50	0	0	100	50	0	0	0	0	0	0	0	8	2
Subtotal	-484	611	150	0	800	3,245	2,065	0	0	150		0	0	0	287	125
Total	**6,949**	**Portfolio Cost: $12,038 M**														

Forced SCCT 2030

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	300	50	0	0	0	0	0	0	0	17	24
2033	0	0	50	0	0	100	50	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4
2039	0	0	50	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	0
Subtotal	-484	611	550	0	700	1,645	915	0	0	50		0	0	10	287	70
Total	**4,353**	**Portfolio Cost: $11,037 M**														

No New Gas

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	0	0	200	0	555	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	0	0	0	100	5	0	0	150	0	0	0	0	16	30
2031	0	0	0	0	0	400	5	0	0	0	0	0	0	0	17	26
2032	0	0	0	0	0	200	5	0	0	0	0	0	0	0	17	24
2033	0	0	0	0	0	200	105	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17
2036	0	0	0	0	0	200	100	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	600	300	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	200	100	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	200	105	0	0	0	0	0	0	0	13	4
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3
2041	0	0	0	0	0	0	5	0	0	0	0	0	0	10	12	8
2042	0	0	0	0	0	0	0	0	0	50	0	0	0	0	11	3
2043	0	0	0	0	0	200	150	0	0	0	0	0	0	0	11	3
2044	0	0	0	0	0	100	100	0	0	0	0	0	0	0	11	3
2045	0	0	0	0	0	100	50	0	0	50	0	0	0	0	8	16
Subtotal	-484	611	0	0	800	3,145	2,135	0	0	250		0	0	10	287	190
Total	**6,944**	**Portfolio Cost: $12,063 M**														

More EE

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	0	0	200	0	0	0	SWIP-N	0	0	0	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	0	16	30
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	26
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	0	17	24
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2036	0	0	0	0	0	100	50	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	100	50	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	100	50	0	0	0	0	0	0	0	12	0
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	50	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2045	0	0	50	0	0	0	0	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	600	0	600	1,645	900	0	0	0		0	0	0	287	121
Total	**4,279**	**Portfolio Cost: $10,985 M**														

More DR

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	300	0	0	100	0	0	0	0	0	0	0	15	16	0
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	15	17	8
2032	0	0	0	0	0	200	0	0	0	0	0	0	0	15	17	0
2033	0	0	0	0	0	100	50	0	0	0	0	0	0	5	17	21
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	5	0	0	0	0	0	0	0	12	0
2041	0	0	50	0	0	0	5	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	5	0	0	0	0	0	0	10	11	3
2043	0	0	50	0	0	0	5	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	55	0	0	0	0	0	0	0	11	7
2045	0	0	0	0	0	0	5	0	0	50	0	0	0	0	8	2
Subtotal	-484	611	550	0	700	1,445	835	0	0	50		0	0	70	287	58
Total	**4,121**	**Portfolio Cost: $11,027 M**														

SMR

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	150	0	0	100	0	0	0	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	0	0	0	300	50	0	0	0	0	0	0	0	17	7
2033	0	0	50	0	0	100	50	0	0	0	0	0	0	0	17	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	500	0	16	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	100	50	0	0	0	0	0	0	0	11	0
2045	0	0	0	0	100	600	350	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	350	0	800	2,245	1,205	0	0	0		0	500	10	287	24
Total	**5,548**	**Portfolio Cost: $12,898 M**														

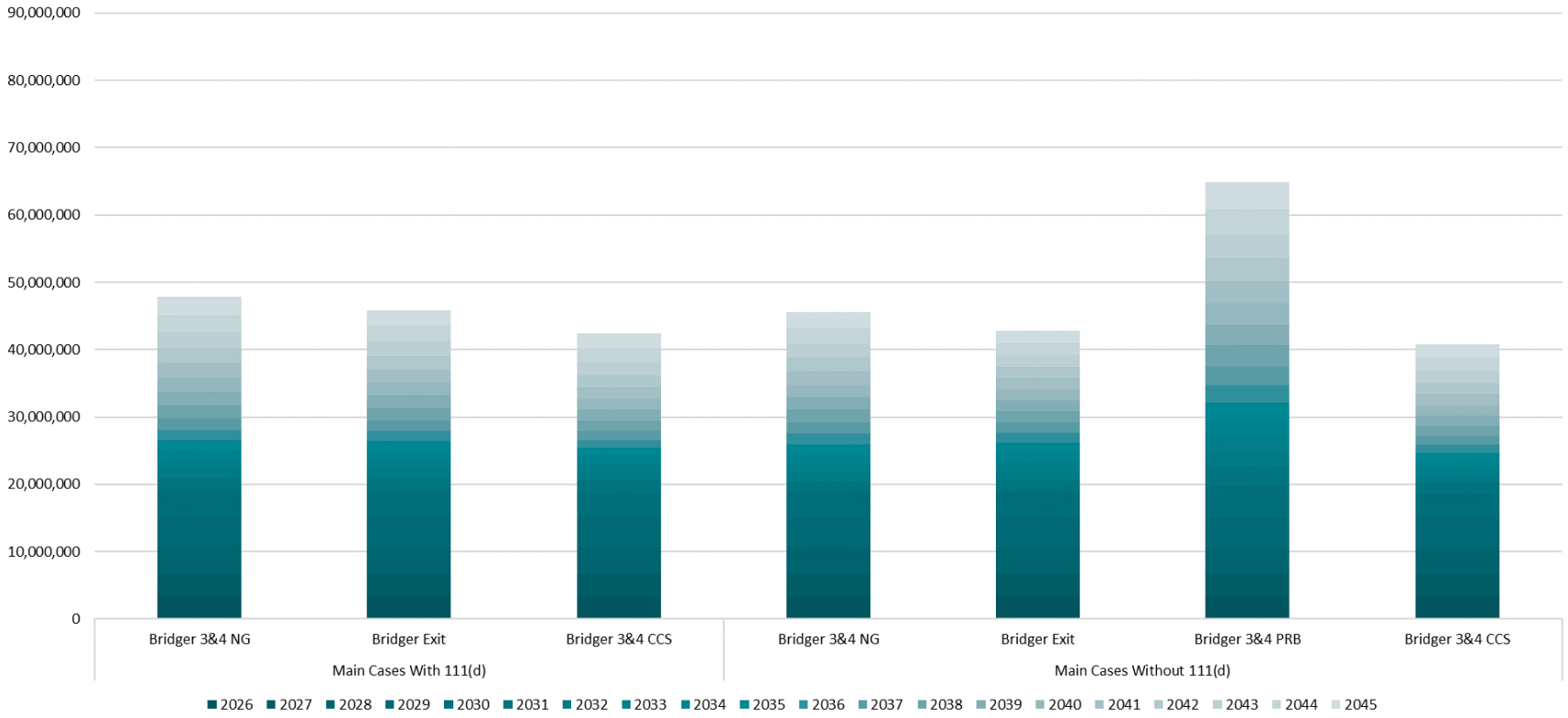
Pumped Hydro

Year	Coal Exits	Conv. Gas	New Gas	H2	Wind	Solar	4-Hr	8-Hr	Pumped Storage	100-Hr	Trans	Geo	Nuclear	DR	EE Forecast	EE Bundles
2026	-134	261	0	0	0	125	250	0	0	0	0	0	0	0	18	0
2027	0	0	0	0	600	420	100	0	0	0	0	0	0	0	14	0
2028	0	0	0	0	0	100	200	0	0	0	B2H	0	0	0	15	0
2029	0	0	150	0	100	0	155	0	0	0	SWIP-N	0	0	10	16	0
2030	-350	350	0	0	0	100	0	0	250	0	0	0	0	0	16	9
2031	0	0	0	0	0	400	0	0	0	0	0	0	0	0	17	8
2032	0	0	300	0	0	200	0	0	0	0	0	0	0	0	17	7
2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	6
2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	6
2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	5
2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4
2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4
2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Subtotal	-484	611	450	0	700	1,345	705	0	250	0		0	0	10	287	55
Total	**3,928**	**Portfolio Cost: $11,687 M**														

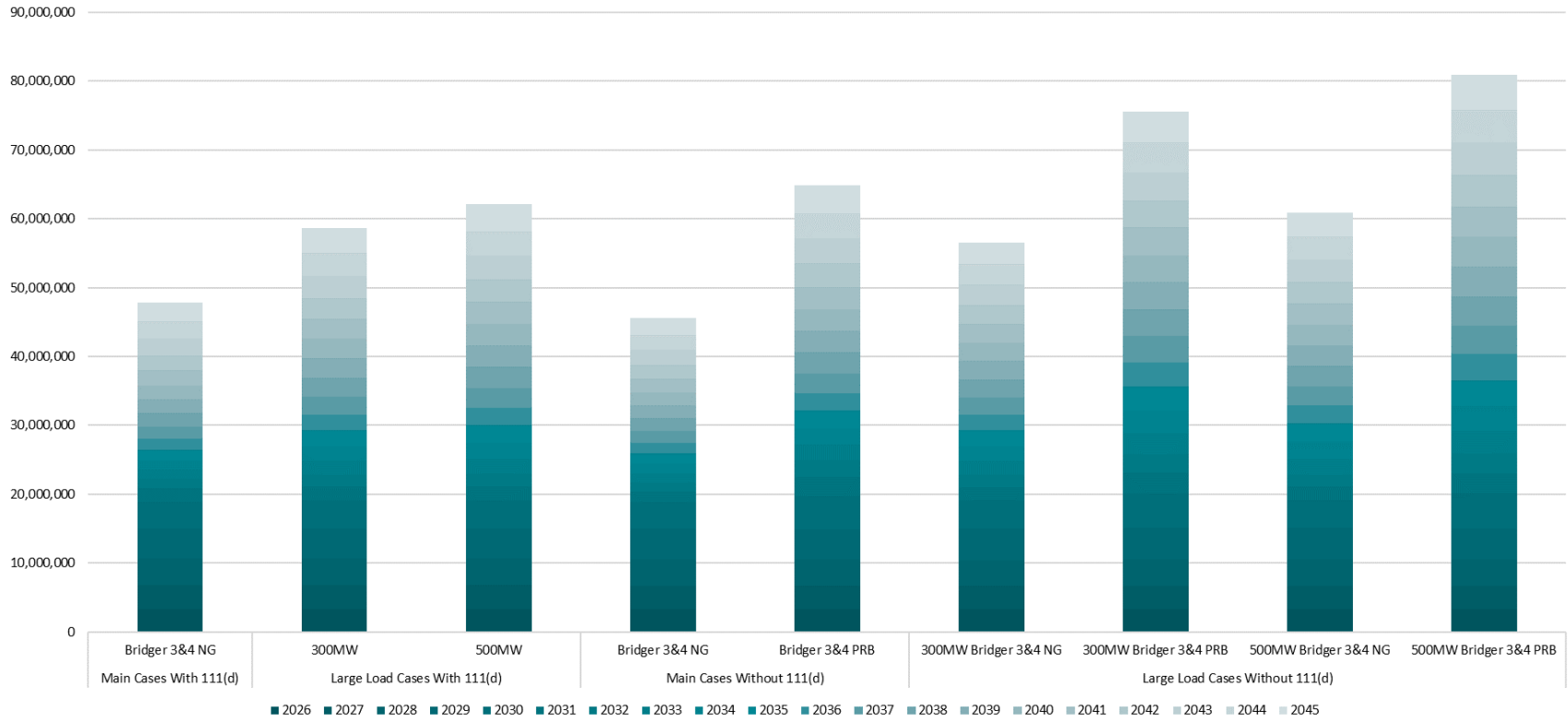
PORTFOLIO EMISSIONS FORECAST

Total emissions forecasts for Idaho Power's resources are outputs of the AURORA model and are presented below.

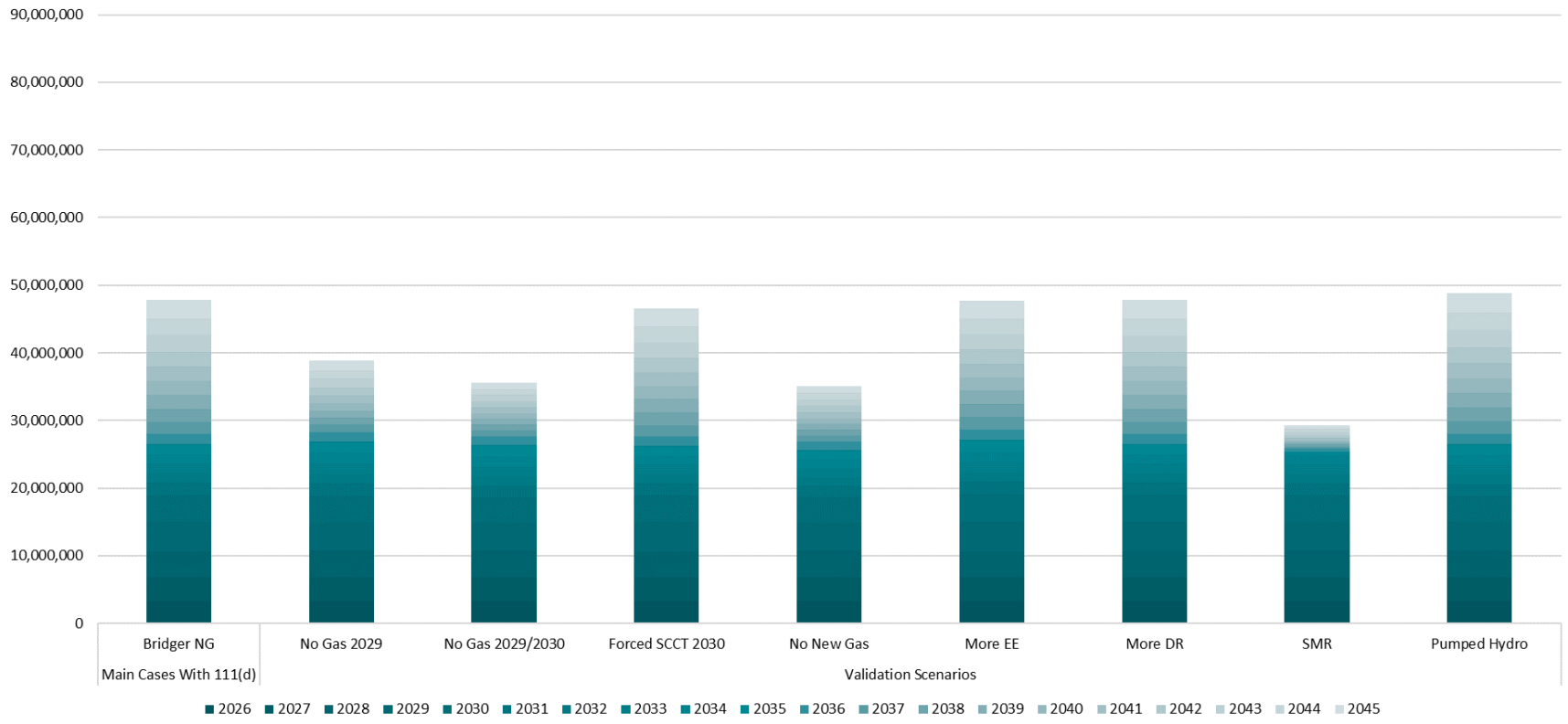
Main Cases CO_2 Emissions (Metric Tons)



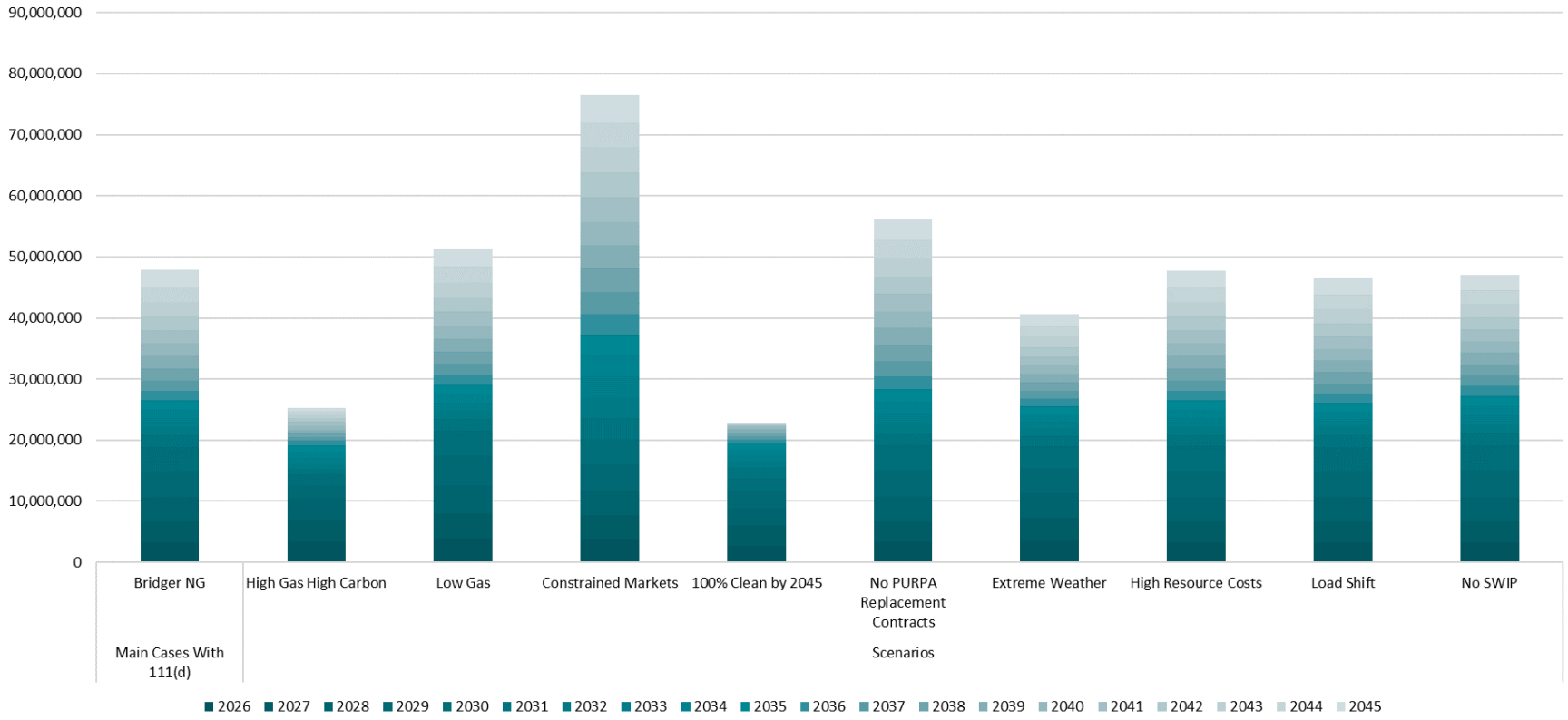
Large Load Cases CO_2 Emissions (Metric Tons)



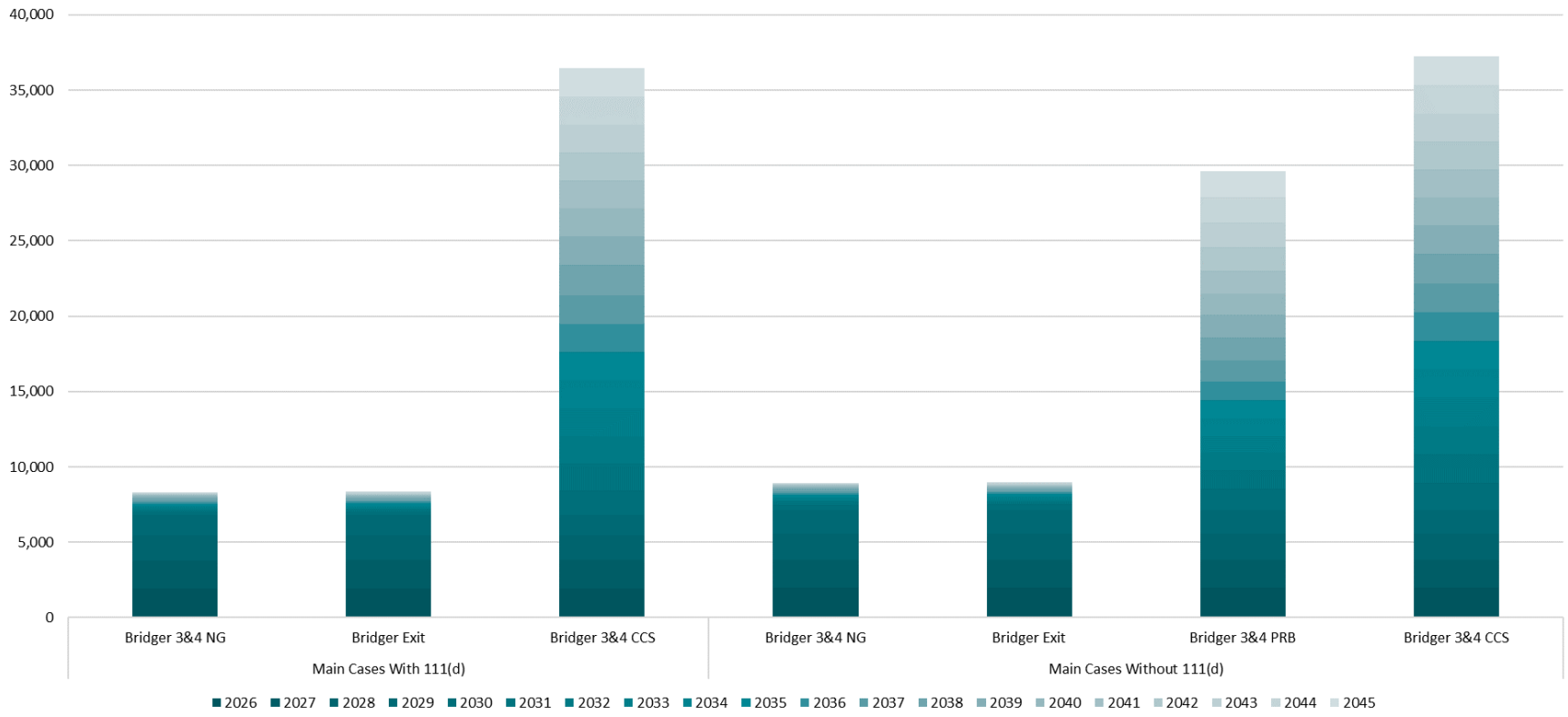
Validation Scenario CO_2 Emissions (Metric Tons)



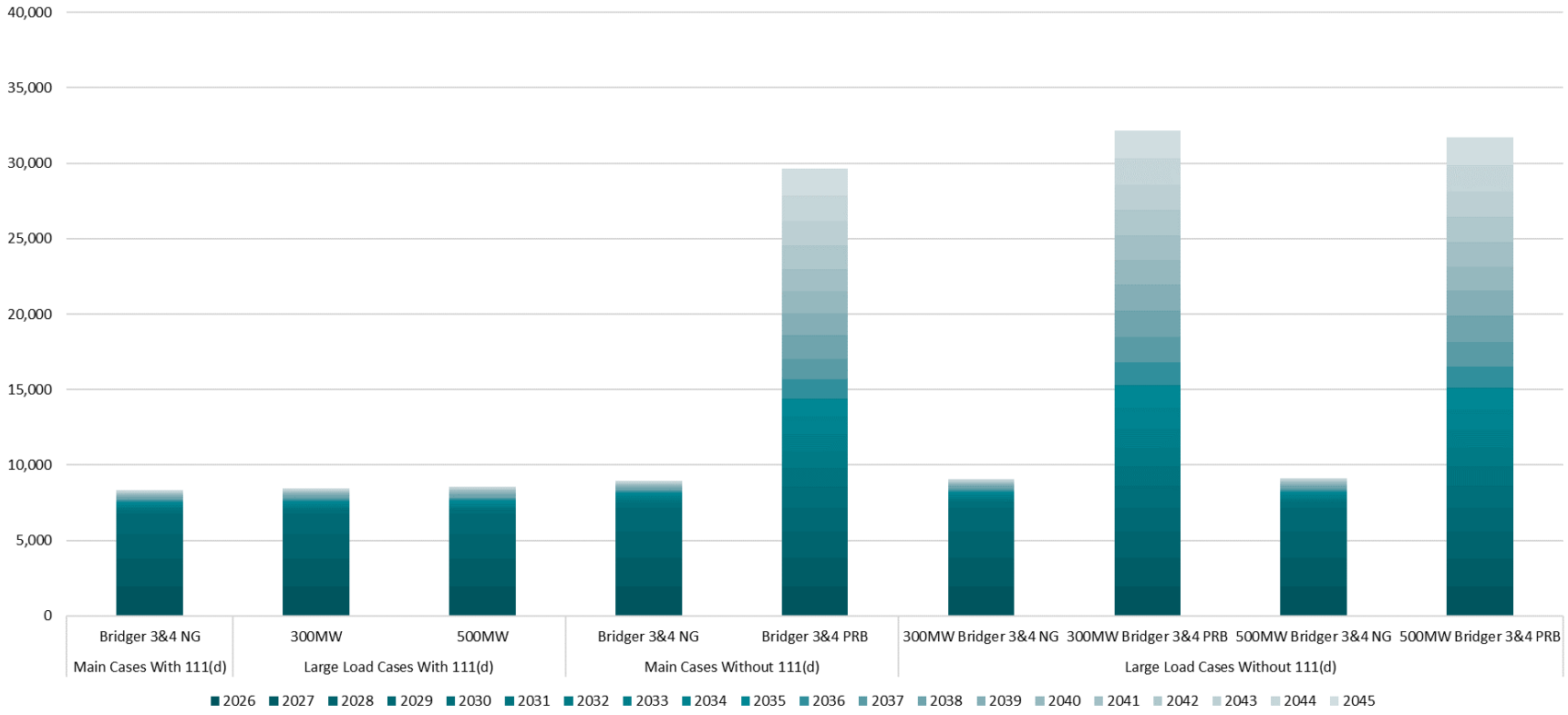
Scenarios and Sensitivities CO_2 Emissions (Metric Tons):



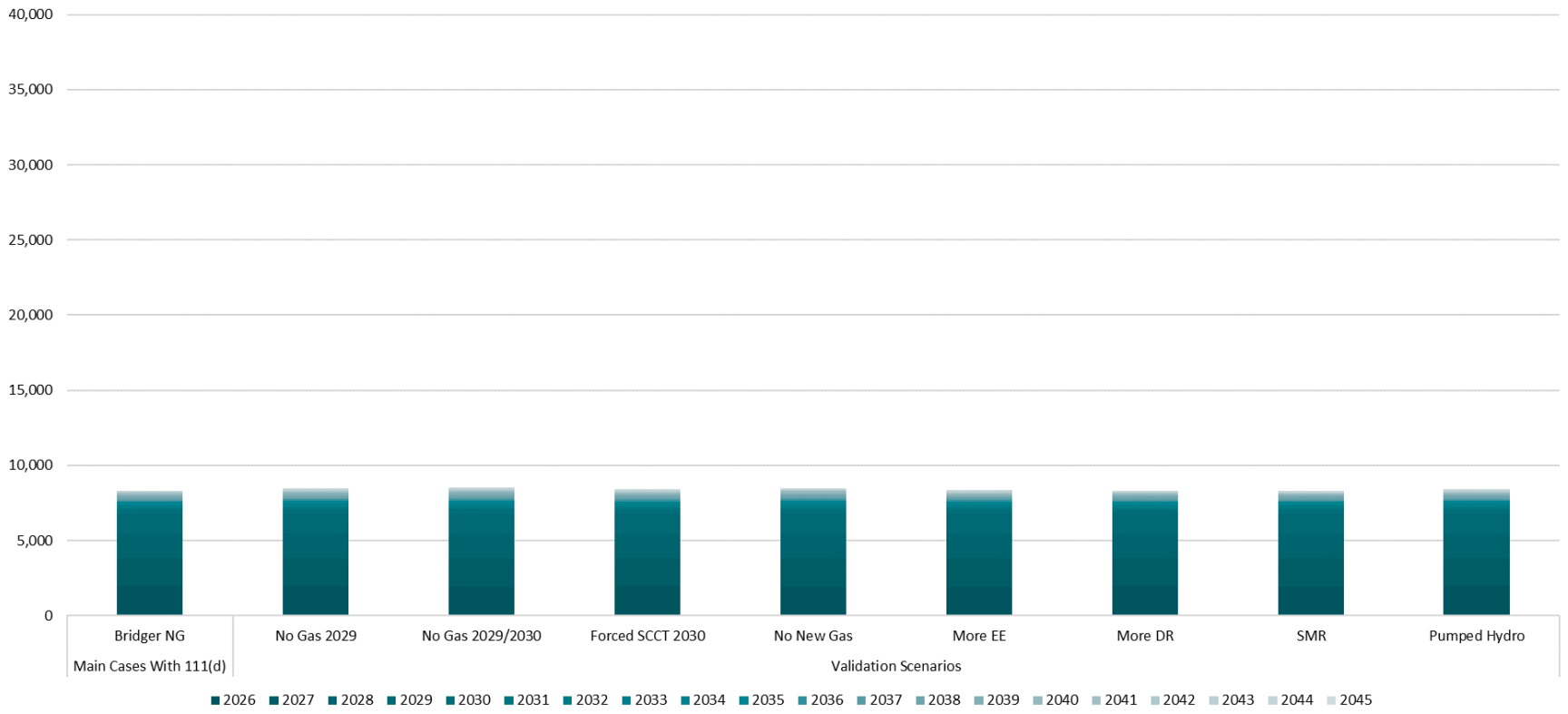
Main Cases SO_2 Emissions (Metric Tons)



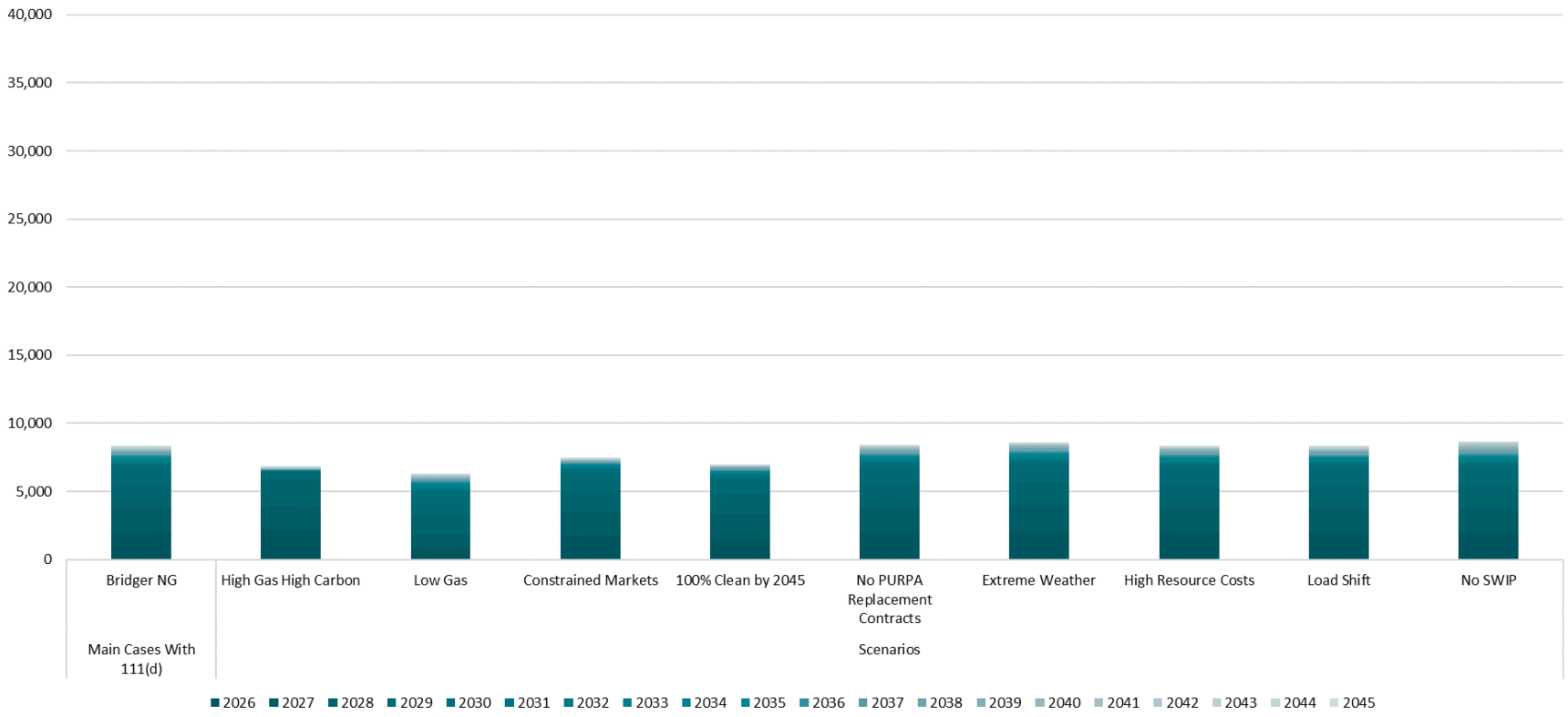
Large Load Cases SO_2 Emissions (Metric Tons)



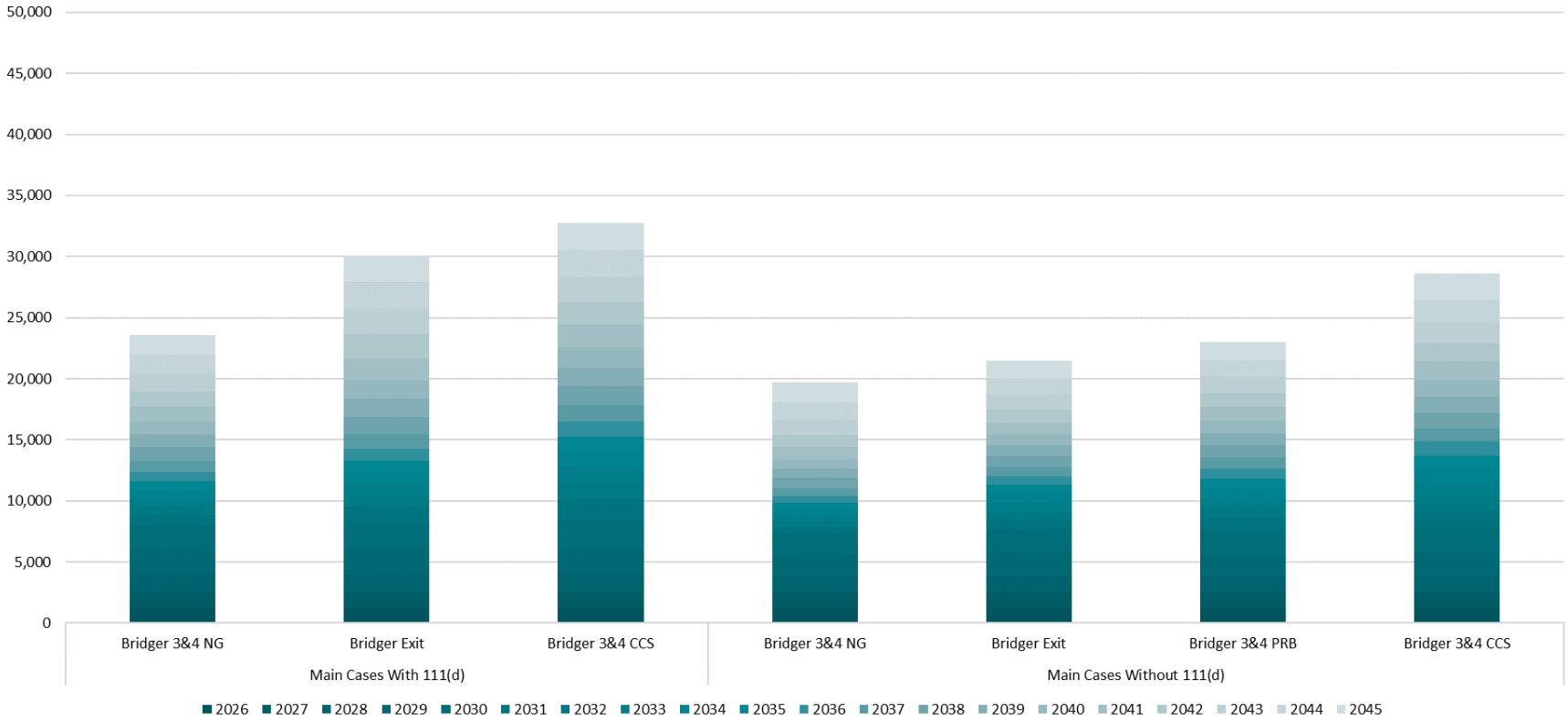
Validation Scenario SO_2 Emissions (Metric Tons)



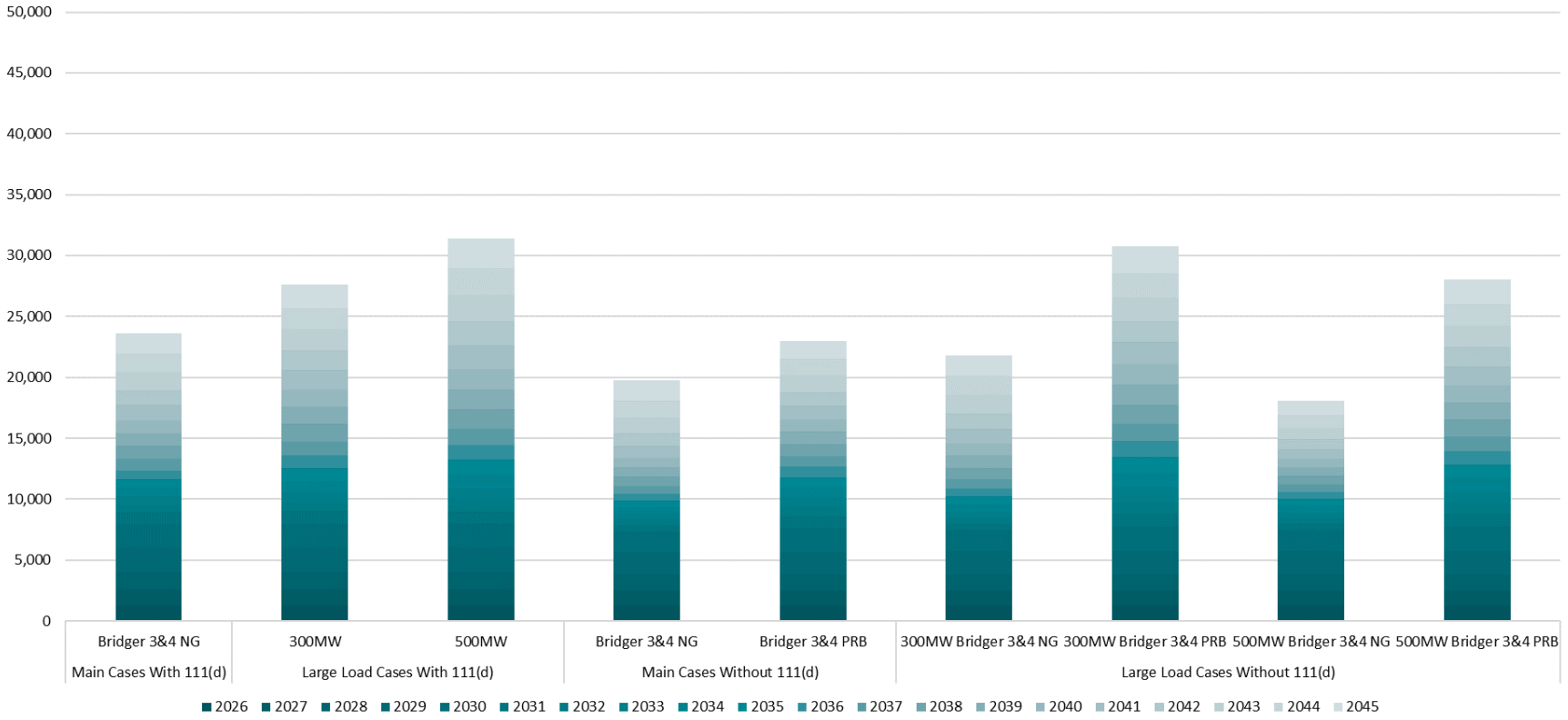
Scenarios and Sensitivities SO_2 Emissions (Metric Tons):



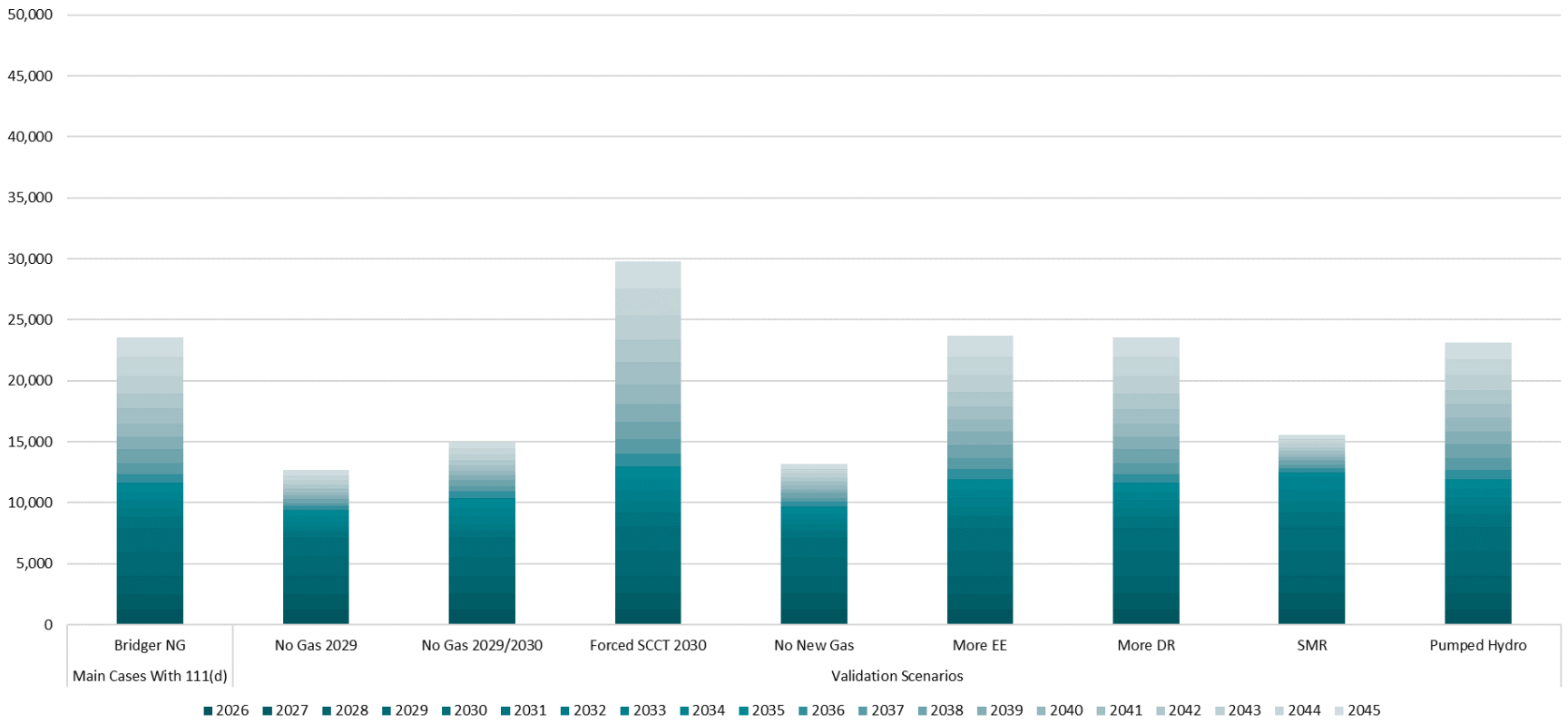
Main Cases NOx Emissions (Metric Tons)



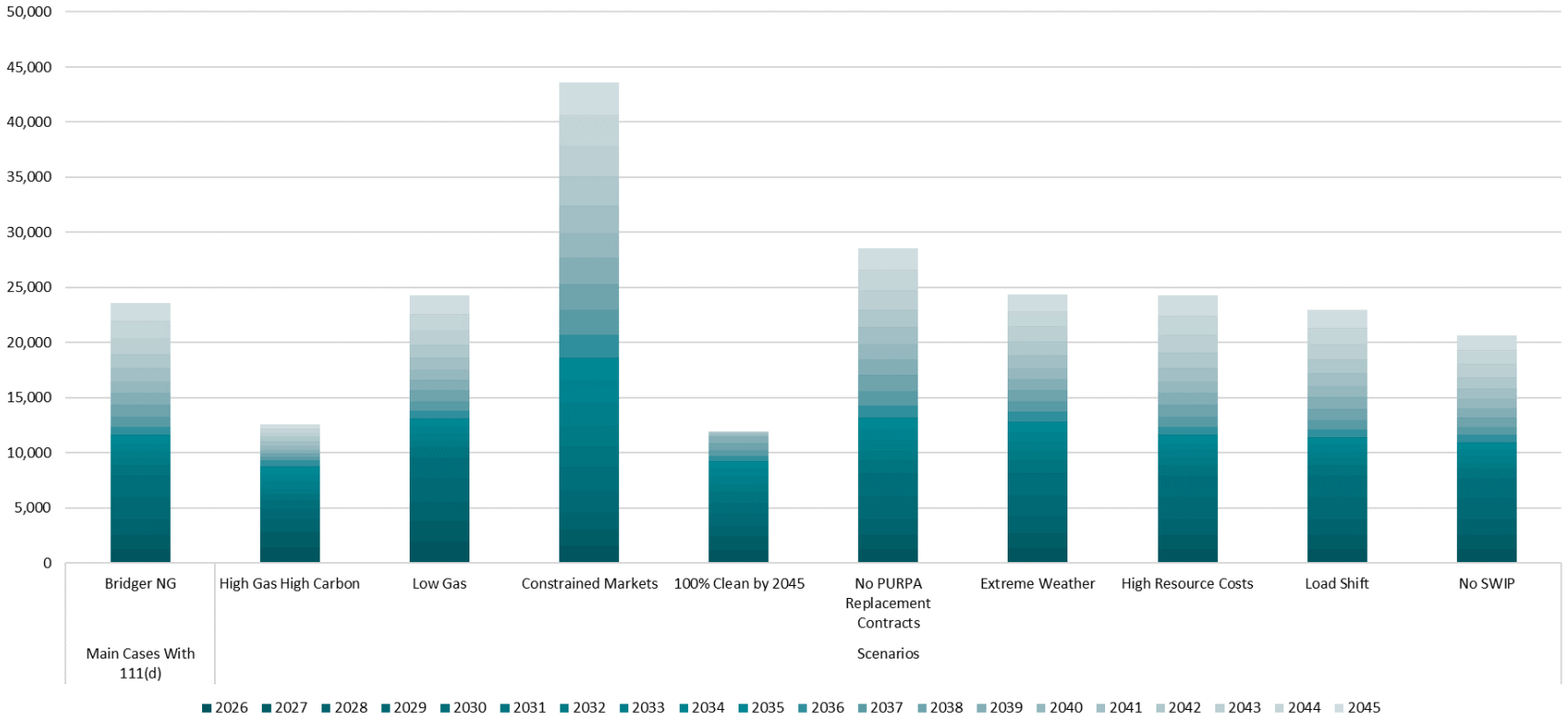
Large Load Cases NOx Emissions (Metric Tons)



Validation Scenario NOx Emissions (Metric Tons)



Scenarios and Sensitivities NOx Emissions (Metric Tons):



Portfolio Emissions

Main Cases CO_2 Emissions (Metric Tons)

	Main Cases with 111(d)			Main Cases without 111(d)			
Year	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 CCS	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 PRB	Bridger 3&4 CCS
2026	3,294,824	3,294,591	3,300,050	3,293,127	3,290,672	3,294,768	3,296,683
2027	3,486,777	3,491,464	3,490,261	3,429,622	3,434,988	3,432,653	3,437,226
2028	3,894,210	3,896,198	3,899,644	3,760,432	3,760,564	3,749,170	3,759,263
2029	4,313,844	4,361,721	4,360,542	4,474,916	4,537,843	4,472,994	4,540,683
2030	3,934,450	3,793,705	3,587,362	3,847,957	3,861,520	4,798,907	3,601,650
2031	1,912,934	1,938,412	1,904,606	1,537,986	1,585,802	2,779,593	1,563,973
2032	1,404,822	1,426,485	1,453,363	1,326,144	1,380,187	2,371,299	1,226,607
2033	1,323,846	1,344,720	1,192,382	1,358,334	1,425,522	2,301,426	1,040,181
2034	1,408,267	1,407,574	1,078,498	1,414,911	1,454,736	2,408,759	1,076,222
2035	1,535,209	1,445,759	1,147,023	1,499,998	1,457,227	2,510,003	1,152,001
2036	1,531,747	1,461,712	1,151,441	1,559,634	1,477,472	2,588,854	1,181,821
2037	1,748,179	1,632,675	1,343,369	1,716,911	1,540,780	2,838,025	1,305,867
2038	1,955,102	1,832,587	1,541,488	1,869,360	1,605,439	3,068,654	1,462,171
2039	2,031,619	1,873,840	1,615,798	1,846,589	1,663,585	3,123,346	1,522,331
2040	2,045,915	1,880,989	1,603,296	1,855,104	1,649,723	3,118,672	1,527,809
2041	2,153,020	1,978,422	1,720,466	1,957,031	1,592,466	3,280,149	1,616,053
2042	2,208,106	1,971,546	1,760,316	2,006,644	1,627,559	3,376,249	1,669,475
2043	2,419,375	2,208,906	1,953,686	2,188,742	1,797,965	3,606,761	1,857,558
2044	2,480,744	2,274,790	2,005,207	2,211,943	1,830,966	3,715,353	1,894,602
2045	2,752,450	2,349,600	2,256,298	2,422,085	1,876,091	3,991,897	2,100,261
Total	47,835,438	45,865,697	42,365,095	45,577,472	42,851,108	64,827,531	40,832,436

Large Load CO_2 Emissions (Metric Tons)

	Main Cases with 111(d)	Large Load Cases with 111(d)		Main Cases without 111(d)		Large Load Cases without 111(d)			
Year	Bridger 3&4 NG	300 MW	500 MW	Bridger 3&4 NG	Bridger 3&4 PRB	300 MW Bridger 3&4 NG	300 MW Bridger 3&4 PRB	500 MW Bridger 3&4 NG	500 MW Bridger 3&4 PRB
2026	3,294,824	3,300,380	3,293,919	3,293,127	3,294,768	3,293,992	3,294,325	3,289,810	3,288,115
2027	3,486,777	3,484,287	3,484,162	3,429,622	3,432,653	3,423,099	3,438,526	3,435,217	3,434,320
2028	3,894,210	3,900,191	3,895,671	3,760,432	3,749,170	3,753,259	3,757,307	3,762,957	3,752,142
2029	4,313,844	4,370,393	4,372,219	4,474,916	4,472,994	4,592,526	4,597,844	4,596,628	4,593,795
2030	3,934,450	4,065,110	4,048,852	3,847,957	4,798,907	4,047,613	5,002,060	4,040,473	5,017,338
2031	1,912,934	2,023,618	2,007,500	1,537,986	2,779,593	1,923,514	2,944,493	1,923,759	2,937,637
2032	1,404,822	1,717,885	1,902,201	1,326,144	2,371,299	1,790,523	2,799,923	1,851,128	2,901,565
2033	1,323,846	1,957,230	2,030,005	1,358,334	2,301,426	2,007,910	3,038,313	2,229,296	3,228,546
2034	1,408,267	2,163,031	2,409,575	1,414,911	2,408,759	2,172,558	3,280,607	2,545,035	3,613,825
2035	1,535,209	2,293,123	2,563,804	1,499,998	2,510,003	2,278,918	3,459,346	2,610,461	3,772,964
2036	1,531,747	2,314,786	2,575,473	1,559,634	2,588,854	2,300,269	3,537,825	2,639,429	3,811,727
2037	1,748,179	2,553,736	2,842,554	1,716,911	2,838,025	2,471,489	3,805,778	2,784,325	4,096,079
2038	1,955,102	2,756,612	3,041,016	1,869,360	3,068,654	2,629,802	3,892,026	2,946,093	4,303,958
2039	2,031,619	2,813,482	3,124,395	1,846,589	3,123,346	2,659,482	3,927,940	2,967,452	4,344,907
2040	2,045,915	2,843,345	3,102,106	1,855,104	3,118,672	2,662,299	3,925,730	2,989,774	4,300,951
2041	2,153,020	2,953,372	3,216,582	1,957,031	3,280,149	2,748,650	4,034,405	3,066,437	4,428,194
2042	2,208,106	3,001,549	3,267,579	2,006,644	3,376,249	2,770,364	3,923,865	3,114,200	4,501,800
2043	2,419,375	3,235,222	3,473,097	2,188,742	3,606,761	2,946,953	4,128,103	3,283,616	4,723,470
2044	2,480,744	3,299,526	3,544,277	2,211,943	3,715,353	2,986,811	4,247,720	3,323,373	4,817,802
2045	2,752,450	3,602,827	3,893,081	2,422,085	3,991,897	3,143,491	4,511,294	3,446,704	5,084,157
Total	**47,835,438**	**58,649,703**	**62,088,066**	**45,577,472**	**64,827,531**	**56,603,521**	**75,547,428**	**60,846,165**	**80,953,292**

Validation Scenarios CO_2 Emissions (Metric Tons)

Year	Main Cases with 111(d)	Validation Scenarios							
	Bridger 3&4 NG	No Gas 2029	No Gas 2029/2030	Forced SCCT 2030	No New Gas	More EE	More DR	SMR	Pumped Hydro
2026	3,294,824	3,294,722	3,291,982	3,291,263	3,293,838	3,290,479	3,295,231	3,292,470	3,298,366
2027	3,486,777	3,486,991	3,492,109	3,484,704	3,487,750	3,486,679	3,488,456	3,498,737	3,488,529
2028	3,894,210	3,898,106	3,896,170	3,893,994	3,899,326	3,894,000	3,899,498	3,897,736	3,898,462
2029	4,313,844	4,278,039	4,214,505	4,318,959	4,208,597	4,360,952	4,313,930	4,309,776	4,314,678
2030	3,934,450	3,920,413	3,786,293	3,937,441	3,772,343	3,974,607	3,927,485	3,935,539	3,873,813
2031	1,912,934	1,838,284	1,618,671	1,816,990	1,621,989	1,934,622	1,918,404	1,813,868	1,729,347
2032	1,404,822	1,438,406	1,399,518	1,374,866	1,368,067	1,433,195	1,403,207	1,382,417	1,372,461
2033	1,323,846	1,500,868	1,451,489	1,323,751	1,241,309	1,488,781	1,321,908	1,346,249	1,405,450
2034	1,408,267	1,573,866	1,528,944	1,308,064	1,323,910	1,557,668	1,397,202	1,438,337	1,481,260
2035	1,535,209	1,696,290	1,660,601	1,456,513	1,442,837	1,690,340	1,532,986	500,395	1,610,234
2036	1,531,747	1,410,974	1,263,432	1,452,758	1,252,188	1,593,539	1,535,143	404,770	1,611,525
2037	1,748,179	1,037,374	894,109	1,682,880	878,697	1,815,819	1,747,388	311,688	1,826,221
2038	1,955,102	1,062,900	917,829	1,882,322	896,582	1,924,033	1,950,862	388,953	2,046,614
2039	2,031,619	1,040,804	822,590	1,946,272	791,679	1,996,704	2,031,653	296,525	2,117,419
2040	2,045,915	1,028,116	795,960	1,924,840	788,527	1,909,102	2,045,984	223,053	2,131,494
2041	2,153,020	1,150,650	918,173	2,042,532	907,283	2,042,914	2,151,917	326,343	2,268,392
2042	2,208,106	1,195,023	869,636	2,093,242	951,978	2,077,796	2,208,017	364,989	2,318,736
2043	2,419,375	1,315,884	982,017	2,310,887	974,964	2,287,921	2,423,279	561,716	2,562,846
2044	2,480,744	1,244,994	822,670	2,374,309	918,650	2,353,275	2,479,913	509,237	2,609,588
2045	2,752,450	1,487,315	955,396	2,653,900	1,041,060	2,608,205	2,754,201	466,095	2,900,818
Total	**47,835,438**	**38,900,018**	**35,582,093**	**46,570,488**	**35,061,575**	**47,720,631**	**47,826,664**	**29,268,893**	**48,866,253**

Scenarios and Sensitivities CO_2 Emissions (Metric Tons)

Year	Main Cases with 111(d)	Scenarios and Sensitivities								
	Bridger 3&4 NG	High Gas High Carbon	Low Gas	Constrained Markets	100% Clean by 2045	No PURPA Replacement Contracts	Extreme Weather	High Resource Costs	Load Shift	No SWIP
2026	3,294,824	3,354,847	3,970,377	3,762,972	2,720,998	3,302,369	3,523,856	3,289,133	3,293,967	3,290,599
2027	3,486,777	3,664,579	4,040,923	3,930,257	3,301,901	3,504,183	3,698,677	3,500,146	3,487,330	3,490,938
2028	3,894,210	3,451,120	4,514,670	4,104,611	2,739,367	3,912,288	4,096,463	3,901,308	3,893,491	3,895,029
2029	4,313,844	2,126,715	4,886,641	4,316,808	2,982,102	4,358,635	4,060,056	4,318,001	4,294,157	4,416,674
2030	3,934,450	1,776,996	4,147,196	4,036,111	1,973,755	3,998,126	3,631,424	3,930,484	3,913,630	4,053,457
2031	1,912,934	848,121	1,870,725	3,385,221	1,788,584	1,893,627	1,692,699	1,915,245	1,904,689	1,968,449
2032	1,404,822	861,796	1,414,926	3,400,353	1,166,905	1,685,568	1,162,886	1,398,094	1,394,346	1,417,470
2033	1,323,846	942,438	1,320,404	3,522,468	921,827	1,849,471	1,140,817	1,324,008	1,227,542	1,450,178
2034	1,408,267	1,053,103	1,382,580	3,480,252	969,318	1,911,922	1,199,512	1,398,883	1,303,934	1,522,951
2035	1,535,209	1,094,406	1,547,762	3,299,481	881,358	1,974,421	1,329,399	1,535,333	1,443,468	1,676,920
2036	1,531,747	842,006	1,555,927	3,362,834	641,242	2,001,242	1,307,977	1,531,077	1,440,428	1,699,020
2037	1,748,179	525,860	1,821,084	3,661,741	650,139	2,512,471	1,225,829	1,746,422	1,648,090	1,710,832
2038	1,955,102	560,307	2,004,625	3,851,430	542,253	2,751,759	1,328,139	1,963,178	1,860,832	1,865,142
2039	2,031,619	597,241	2,114,966	3,845,968	562,350	2,714,519	1,410,577	2,033,827	1,919,589	1,867,656
2040	2,045,915	638,573	2,135,968	3,794,284	353,362	2,741,637	1,387,529	2,043,673	1,938,649	1,823,949
2041	2,153,020	665,889	2,260,000	3,939,460	267,641	2,798,357	1,482,359	2,155,516	2,049,472	1,940,668
2042	2,208,106	609,783	2,307,776	4,038,113	41,467	2,849,000	1,521,798	2,185,484	2,103,420	1,992,246
2043	2,419,375	553,885	2,521,334	4,293,733	33,509	3,004,739	1,738,540	2,396,899	2,317,781	2,195,204
2044	2,480,744	503,536	2,596,427	4,114,598	31,659	3,070,311	1,671,293	2,468,566	2,373,697	2,234,372
2045	2,752,450	541,616	2,873,133	4,339,542	21,252	3,352,899	1,969,868	2,722,117	2,641,047	2,506,730
Total	**47,835,438**	**25,212,816**	**51,287,445**	**76,480,238**	**22,590,989**	**56,187,546**	**40,579,700**	**47,757,393**	**46,449,556**	**47,018,484**

Main Cases SO_2 Emissions (Metric Tons)

	Main Cases with 111(d)			Main Cases without 111(d)			
Year	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 CCS	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 PRB	Bridger 3&4 CCS
2026	1,943	1,945	1,951	1,957	1,954	1,959	1,960
2027	1,858	1,860	1,857	1,873	1,880	1,879	1,880
2028	1,636	1,636	1,638	1,761	1,756	1,755	1,756
2029	1,342	1,356	1,356	1,550	1,559	1,550	1,564
2030	236	249	1,631	356	357	1,409	1,760
2031	123	123	1,789	192	192	1,235	1,903
2032	97	97	1,802	133	134	1,137	1,872
2033	105	105	1,855	124	125	1,103	1,898
2034	107	110	1,869	116	119	1,170	1,887
2035	107	106	1,871	109	110	1,207	1,882
2036	95	98	1,882	103	105	1,260	1,893
2037	94	95	1,903	91	91	1,377	1,906
2038	161	162	1,979	160	160	1,531	1,983
2039	107	105	1,897	111	108	1,489	1,894
2040	64	65	1,862	61	61	1,432	1,861
2041	59	58	1,845	59	61	1,505	1,846
2042	48	47	1,852	49	49	1,557	1,856
2043	47	46	1,853	45	43	1,620	1,857
2044	43	43	1,880	45	42	1,682	1,880
2045	48	47	1,879	48	48	1,782	1,883
Total	**8,321**	**8,354**	**36,451**	**8,943**	**8,957**	**29,641**	**37,223**

Large Load SO_2 Emissions (Metric Tons)

	Main Cases with 111(d)	Large Load Cases with 111(d)		Main Cases without 111(d)		Large Load Cases without 111(d)			
Year	Bridger 3&4 NG	300 MW	500 MW	Bridger 3&4 NG	Bridger 3&4 PRB	300 MW Bridger 3&4 NG	300 MW Bridger 3&4 PRB	500 MW Bridger 3&4 NG	500 MW Bridger 3&4 PRB
2026	1,943	1,948	1,944	1,957	1,959	1,957	1,959	1,957	1,947
2027	1,858	1,850	1,860	1,873	1,879	1,883	1,882	1,879	1,876
2028	1,636	1,635	1,636	1,761	1,755	1,756	1,757	1,758	1,758
2029	1,342	1,353	1,355	1,550	1,550	1,574	1,575	1,572	1,576
2030	236	246	240	356	1,409	379	1,458	373	1,456
2031	123	138	138	192	1,235	182	1,283	182	1,281
2032	97	99	107	133	1,137	137	1,216	136	1,247
2033	105	112	119	124	1,103	133	1,270	135	1,198
2034	107	117	123	116	1,170	125	1,382	130	1,334
2035	107	117	123	109	1,207	118	1,490	121	1,423
2036	95	105	111	103	1,260	111	1,547	116	1,450
2037	94	99	106	91	1,377	97	1,666	100	1,594
2038	161	178	187	160	1,531	170	1,762	181	1,734
2039	107	112	129	111	1,489	114	1,700	120	1,686
2040	64	70	78	61	1,432	67	1,642	73	1,593
2041	59	63	71	59	1,505	65	1,649	70	1,619
2042	48	53	59	49	1,557	54	1,656	59	1,650
2043	47	52	56	45	1,620	51	1,684	55	1,707
2044	43	50	56	45	1,682	50	1,762	53	1,764
2045	48	54	58	48	1,782	53	1,844	58	1,838
Total	**8,321**	**8,449**	**8,556**	**8,943**	**29,641**	**9,077**	**32,184**	**9,128**	**31,731**

Validation Scenarios SO_2 Emissions (Metric Tons)

Year	Main Cases with 111(d)	Validation Scenarios							
	Bridger 3&4 NG	No Gas 2029	No Gas 2029/2030	Forced SCCT 2030	No New Gas	More EE	More DR	SMR	Pumped Hydro
2026	1,943	1,944	1,940	1,945	1,942	1,940	1,944	1,941	1,947
2027	1,858	1,851	1,858	1,862	1,858	1,860	1,852	1,859	1,860
2028	1,636	1,632	1,636	1,635	1,635	1,634	1,635	1,634	1,632
2029	1,342	1,375	1,360	1,345	1,360	1,358	1,344	1,343	1,341
2030	236	247	261	250	259	238	234	249	256
2031	123	131	143	140	143	129	125	143	140
2032	97	102	106	102	105	99	99	104	98
2033	105	113	114	107	113	110	104	106	112
2034	107	112	115	107	116	108	108	108	112
2035	107	112	113	109	115	108	108	89	111
2036	95	100	103	97	103	96	95	80	102
2037	94	93	96	96	97	94	94	79	100
2038	161	178	183	160	180	158	156	162	175
2039	107	130	142	116	133	110	108	114	112
2040	64	67	67	64	70	63	64	57	63
2041	59	61	65	61	63	58	58	54	58
2042	48	51	52	51	52	49	49	43	47
2043	47	47	49	49	47	45	46	37	47
2044	43	43	44	44	42	45	44	36	43
2045	48	46	46	52	45	48	48	39	47
Total	**8,321**	**8,437**	**8,493**	**8,390**	**8,475**	**8,351**	**8,314**	**8,276**	**8,401**

Scenarios and Sensitivities SO_2 Emissions (Metric Tons)

Year	Main Cases with 111(d)	Scenarios and Sensitivities								
	Bridger 3&4 NG	High Gas High Carbon	Low Gas	Constrained Markets	100% Clean by 2045	No PURPA Replacement Contracts	Extreme Weather	High Resource Costs	Load Shift	No SWIP
2026	1,943	2,155	836	1,754	1,453	1,948	2,047	1,941	1,945	1,940
2027	1,858	1,757	978	1,719	1,883	1,858	1,959	1,857	1,857	1,853
2028	1,636	1,942	1,470	1,575	1,406	1,636	1,710	1,634	1,635	1,644
2029	1,342	585	1,379	1,322	1,108	1,355	1,306	1,349	1,338	1,360
2030	236	50	339	237	313	252	236	234	231	245
2031	123	13	178	92	89	149	123	126	123	129
2032	97	13	126	67	68	100	96	96	98	96
2033	105	17	120	78	63	109	108	103	106	112
2034	107	17	115	76	67	108	108	109	106	113
2035	107	19	101	70	73	110	111	106	105	123
2036	95	14	93	62	57	102	100	95	95	115
2037	94	12	88	60	58	97	95	93	93	107
2038	161	32	121	73	78	169	167	166	163	212
2039	107	29	79	48	65	105	118	109	110	173
2040	64	29	47	38	32	64	62	63	64	90
2041	59	27	47	40	29	57	59	59	61	82
2042	48	24	38	38	24	49	48	49	50	72
2043	47	22	38	38	21	49	42	46	45	69
2044	43	21	34	35	17	46	43	45	45	58
2045	48	22	41	39	17	51	48	48	47	58
Total	**8,321**	**6,798**	**6,267**	**7,461**	**6,920**	**8,413**	**8,586**	**8,328**	**8,318**	**8,651**

Main Cases NOx Emissions (Metric Tons)

	Main Cases with 111(d)			Main Cases without 111(d)			
Year	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 CCS	Bridger 3&4 NG	Bridger Exit	Bridger 3&4 PRB	Bridger 3&4 CCS
2026	1,253	1,254	1,260	1,255	1,251	1,256	1,258
2027	1,314	1,320	1,318	1,265	1,278	1,265	1,275
2028	1,410	1,409	1,415	1,268	1,264	1,260	1,266
2029	2,026	2,047	2,047	1,923	1,946	1,925	1,947
2030	1,917	2,212	2,419	1,583	1,950	1,862	2,087
2031	948	1,224	1,624	587	812	997	1,322
2032	697	931	1,408	468	656	818	1,173
2033	641	932	1,288	480	712	774	1,127
2034	693	967	1,240	486	710	816	1,136
2035	721	955	1,238	536	707	829	1,123
2036	746	970	1,249	575	718	858	1,135
2037	917	1,198	1,341	635	747	854	1,108
2038	1,079	1,415	1,514	812	861	1,005	1,257
2039	1,070	1,521	1,565	775	909	1,017	1,324
2040	1,044	1,526	1,676	757	946	994	1,347
2041	1,232	1,728	1,773	962	909	1,127	1,476
2042	1,244	2,031	1,855	1,025	1,004	1,147	1,534
2043	1,481	2,105	2,122	1,269	1,306	1,344	1,755
2044	1,513	2,157	2,137	1,396	1,322	1,350	1,811
2045	1,637	2,209	2,288	1,686	1,468	1,496	2,134
Total	**23,584**	**30,111**	**32,779**	**19,741**	**21,476**	**22,994**	**28,598**

Large Load NOx Emissions (Metric Tons)

	Main Cases with 111(d)	Large Load Cases with 111(d)		Main Cases without 111(d)		Large Load Cases without 111(d)			
Year	Bridger 3&4 NG	300 MW	500 MW	Bridger 3&4 NG	Bridger 3&4 PRB	300 MW Bridger 3&4 NG	300 MW Bridger 3&4 PRB	500 MW Bridger 3&4 NG	500 MW Bridger 3&4 PRB
2026	1,253	1,260	1,253	1,255	1,256	1,255	1,258	1,254	1,248
2027	1,314	1,310	1,317	1,265	1,265	1,272	1,276	1,268	1,267
2028	1,410	1,415	1,411	1,268	1,260	1,261	1,263	1,272	1,262
2029	2,026	2,052	2,053	1,923	1,925	1,972	1,971	1,973	1,969
2030	1,917	1,978	1,967	1,583	1,862	1,655	1,940	1,654	1,944
2031	948	1,010	1,002	587	997	579	1,045	580	1,040
2032	697	709	983	468	818	468	1,014	480	968
2033	641	831	909	480	774	519	1,135	446	896
2034	693	945	1,112	486	816	595	1,232	530	1,089
2035	721	1,038	1,216	536	829	663	1,300	563	1,142
2036	746	1,050	1,207	575	858	654	1,325	557	1,137
2037	917	1,131	1,312	635	854	763	1,428	619	1,206
2038	1,079	1,442	1,622	812	1,005	911	1,572	750	1,368
2039	1,070	1,418	1,616	775	1,017	1,011	1,655	698	1,412
2040	1,044	1,402	1,725	757	994	992	1,678	660	1,404
2041	1,232	1,603	1,922	962	1,127	1,167	1,833	780	1,537
2042	1,244	1,621	1,947	1,025	1,147	1,322	1,705	813	1,606
2043	1,481	1,727	2,188	1,269	1,344	1,529	1,951	973	1,773
2044	1,513	1,739	2,203	1,396	1,350	1,514	1,976	1,026	1,762
2045	1,637	1,909	2,405	1,686	1,496	1,665	2,215	1,161	1,973
Total	**23,584**	**27,589**	**31,369**	**19,741**	**22,994**	**21,768**	**30,771**	**18,056**	**28,004**

Validation Scenarios NOx Emissions (Metric Tons)

Year	Main Cases with 111(d)	Validation Scenarios							
	Bridger 3&4 NG	No Gas 2029	No Gas 2029/2030	Forced SCCT 2030	No New Gas	More EE	More DR	SMR	Pumped Hydro
2026	1,253	1,254	1,251	1,252	1,252	1,250	1,255	1,252	1,257
2027	1,314	1,313	1,320	1,317	1,318	1,315	1,315	1,324	1,317
2028	1,410	1,415	1,413	1,411	1,416	1,409	1,414	1,411	1,410
2029	2,026	1,621	1,594	2,029	1,593	2,049	2,026	2,022	2,028
2030	1,917	1,525	1,597	2,091	1,591	1,933	1,911	2,091	2,018
2031	948	534	575	1,101	576	958	954	1,101	1,017
2032	697	366	490	879	478	712	696	875	670
2033	641	414	660	946	438	730	645	965	683
2034	693	445	700	926	477	763	686	1,009	727
2035	721	483	769	1,018	523	839	728	416	781
2036	746	368	566	1,043	440	776	729	351	778
2037	917	236	403	1,232	291	963	912	270	961
2038	1,079	332	481	1,374	381	1,063	1,075	362	1,120
2039	1,070	318	430	1,502	333	1,060	1,072	279	1,108
2040	1,044	262	374	1,607	298	989	1,042	219	1,079
2041	1,232	300	421	1,803	332	1,045	1,229	259	1,133
2042	1,244	310	396	1,820	344	1,198	1,243	281	1,138
2043	1,481	361	534	2,061	358	1,427	1,482	397	1,260
2044	1,513	327	443	2,106	338	1,461	1,513	347	1,262
2045	1,637	534	591	2,247	378	1,743	1,637	359	1,399
Total	**23,584**	**12,716**	**15,009**	**29,766**	**13,155**	**23,682**	**23,563**	**15,589**	**23,147**

Scenarios and Sensitivities NOx Emissions (Metric Tons)

	Main Cases with 111(d)	Scenarios and Sensitivities								
Year	Bridger 3&4 NG	High Gas High Carbon	Low Gas	Constrained Markets	100% Clean by 2045	No PURPA Replacement Contracts	Extreme Weather	High Resource Costs	Load Shift	No SWIP
2026	1,253	1,399	1,992	1,548	1,222	1,256	1,359	1,250	1,254	1,250
2027	1,314	1,388	1,839	1,511	1,173	1,323	1,416	1,321	1,318	1,317
2028	1,410	1,215	1,688	1,514	894	1,419	1,505	1,413	1,408	1,426
2029	2,026	899	2,204	2,013	1,244	2,043	1,879	2,031	2,019	1,917
2030	1,917	816	1,856	2,115	915	2,124	2,025	1,915	1,904	1,811
2031	948	513	893	1,884	1,007	1,151	1,159	951	945	822
2032	697	529	673	1,881	761	876	847	692	696	559
2033	641	600	620	2,096	652	979	830	648	599	585
2034	693	683	660	2,076	742	999	868	687	626	613
2035	721	726	706	1,995	654	1,045	925	734	678	678
2036	746	542	735	2,062	418	1,084	936	740	700	675
2037	917	293	849	2,264	604	1,291	915	911	851	696
2038	1,079	314	957	2,374	615	1,464	1,034	1,087	1,020	856
2039	1,070	349	966	2,335	630	1,400	1,016	1,075	1,038	837
2040	1,044	383	925	2,292	150	1,390	994	1,045	1,004	870
2041	1,232	405	1,097	2,505	145	1,566	1,156	1,235	1,195	962
2042	1,244	417	1,100	2,575	32	1,588	1,223	1,385	1,209	995
2043	1,481	369	1,391	2,850	27	1,794	1,391	1,615	1,440	1,217
2044	1,513	322	1,429	2,738	25	1,808	1,365	1,661	1,471	1,218
2045	1,637	414	1,684	3,009	18	1,968	1,499	1,936	1,592	1,327
Total	**23,584**	**12,577**	**24,263**	**43,637**	**11,928**	**28,567**	**24,343**	**24,333**	**22,965**	**20,632**

STOCHASTIC RISK ANALYSIS

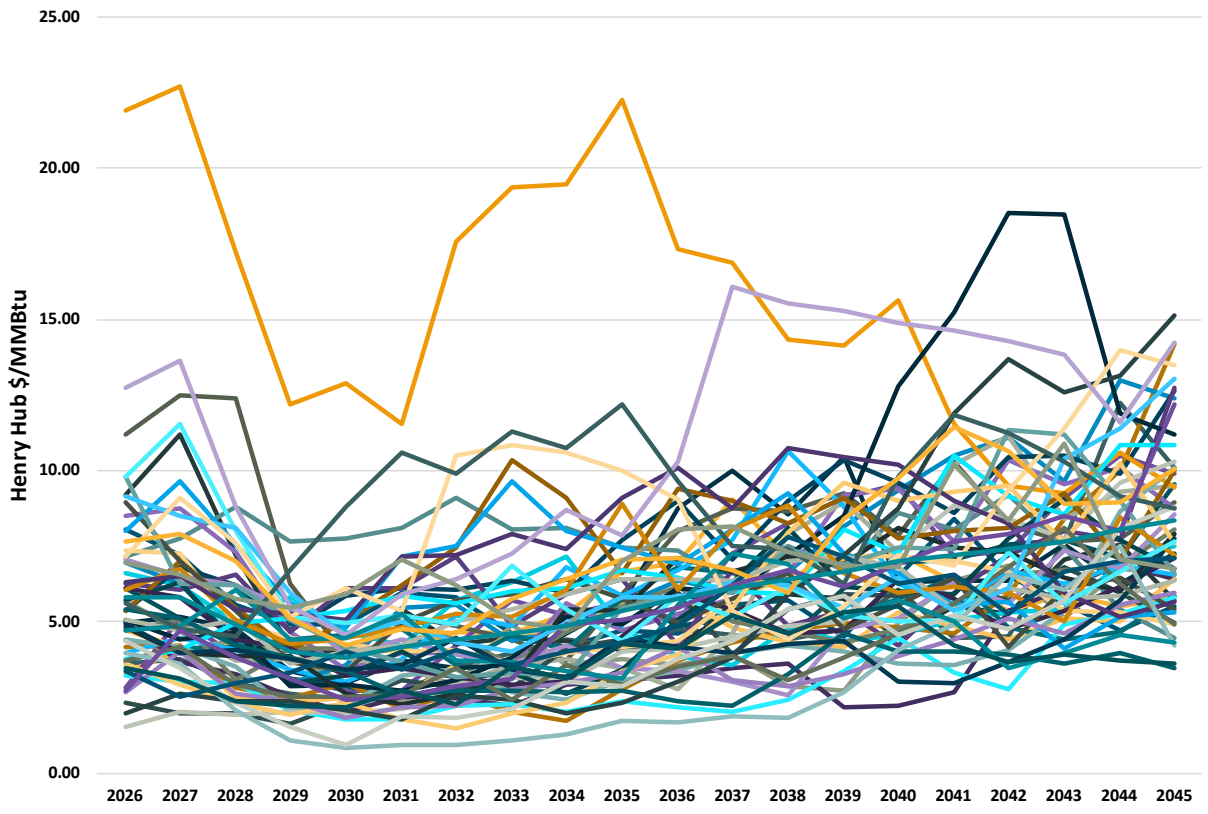
The stochastic analysis assesses the effect on portfolio costs when select variables take on values different from their planning-case levels. Stochastic variables are selected based on the degree to which there is uncertainty regarding their forecasts and the degree to which they can affect the analysis results (i.e., portfolio costs).

The purpose of the analysis is to understand the range of portfolio costs across a wide extent of stochastic shocks (i.e., across the full set of 60 stochastic iterations) and how the ranges for portfolio costs differ.

Idaho Power identified the following five variables for the stochastic analysis:

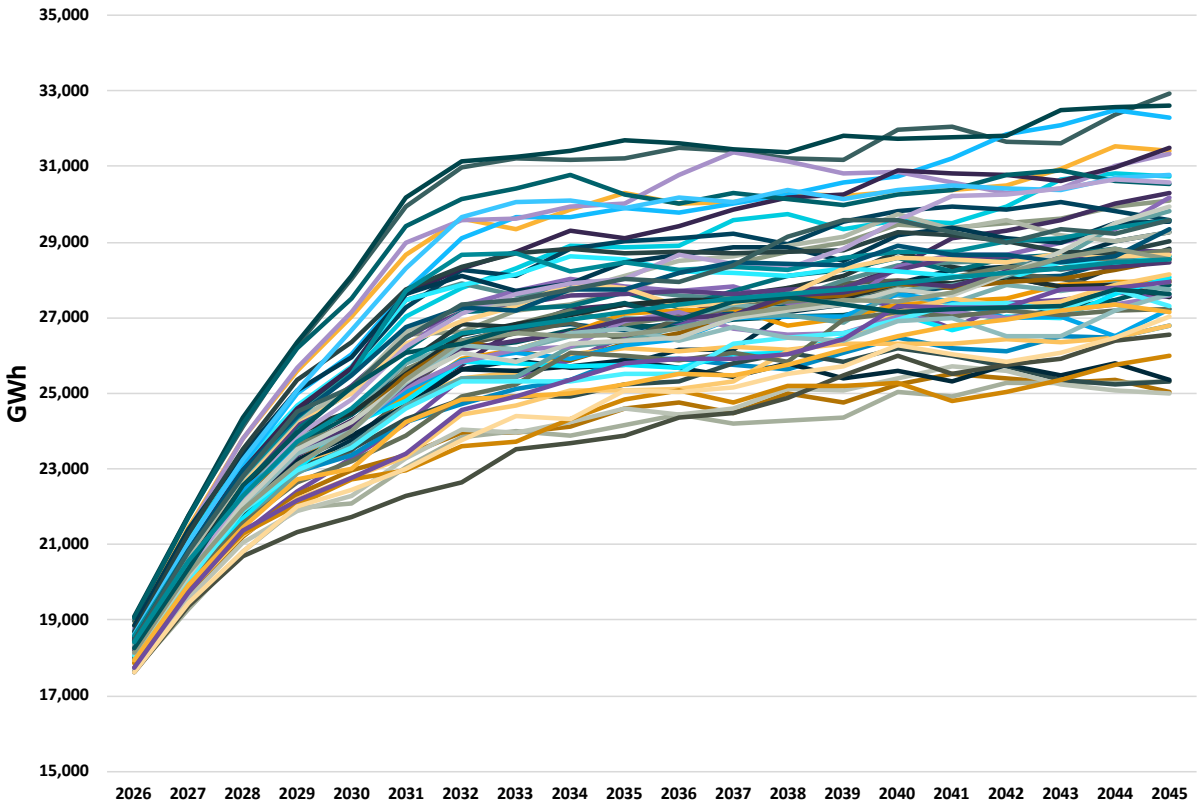
Natural Gas Sampling (Nominal $/MMBtu)

1. *Natural gas price*—Based on the historical Henry Hub natural gas price, it was determined that natural gas price variance around the trend approximates a log-normal distribution with year-to-year correlation. The colored lines in the graph below show the 60 different stochastic iterations for Henry Hub gas prices.



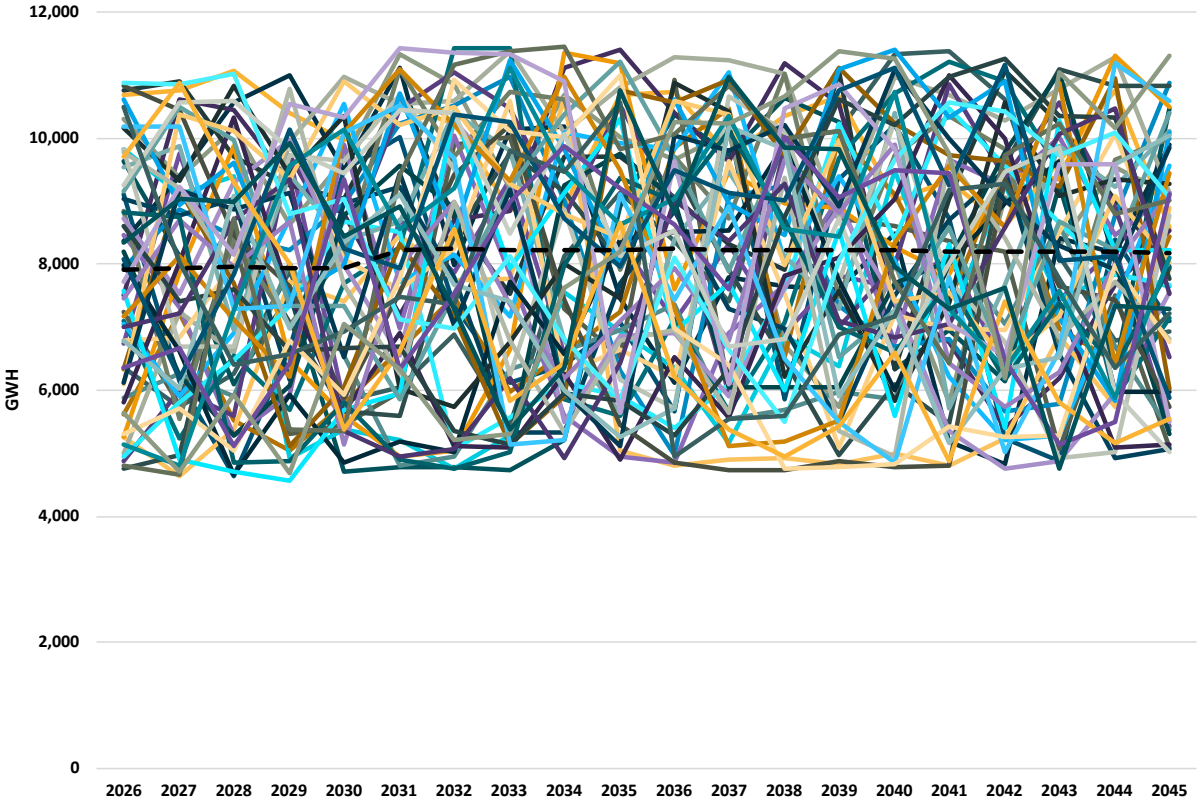
Customer Load Sampling (Annual GWh)

2. *Customer load*—Customer load follows a normal distribution and is adjusted around the planning case load forecast. The spread of values is meant to represent sustained changes in load growth.



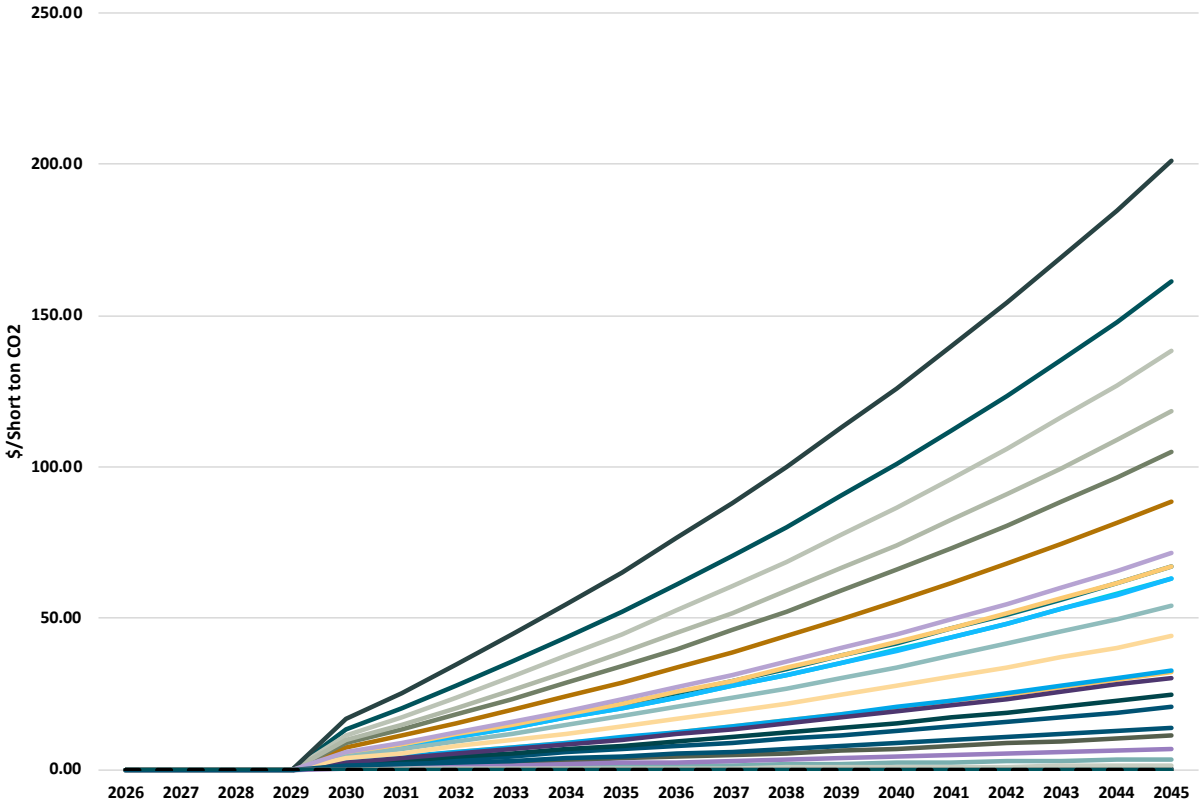
Hydro Generation Sampling (Annual MWh)

3. *Hydroelectric variability*—Hydroelectric generation variability was found to approximate a uniform distribution based on historical generation. Although the distribution of rainfall across the Snake River Basin is non-uniform, the regulation of streamflow likely explains the difference between rainfall and generation distributions. In addition to the distribution, the historical data also shows a correlation between years.



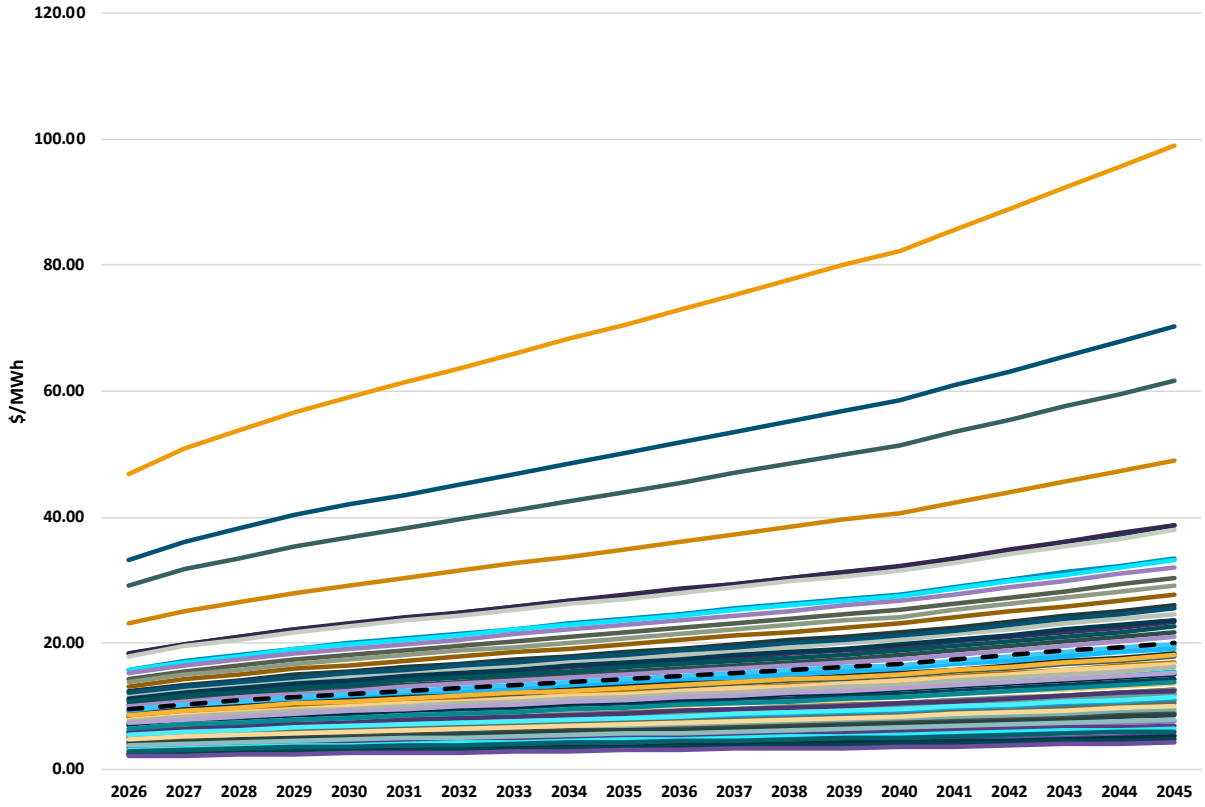
Carbon Price Sampling (Annual $/short ton)

4. *Carbon Price*—Although carbon prices have always been zero at the federal level, a wide-range of possible values are modeled into the future. Consistent with methodology discussed with IRPAC, the carbon prices are assumed to take a wide range of values with a heavy tail. Given the long history of inaction regarding carbon taxes at the federal level and consistent with discussions with IRPAC, 62% of draws have a zero carbon price.



REC Price Sampling ($/MWh)

REC Price—New to the 2025 IRP, a stochastic variable was incorporated into the analysis for REC prices. As demand has grown for RECs due to state based carbon goals, the REC market and Idaho Power's requirement to sell RECs, has become an important risk variable for the IRP analysis. Given limited historical data with which to formulate the future stochastic spread, the 2025 IRP model used a wide range of values using a log-normal distribution due to complexity and compounding factors that are likely to influence the future REC market.



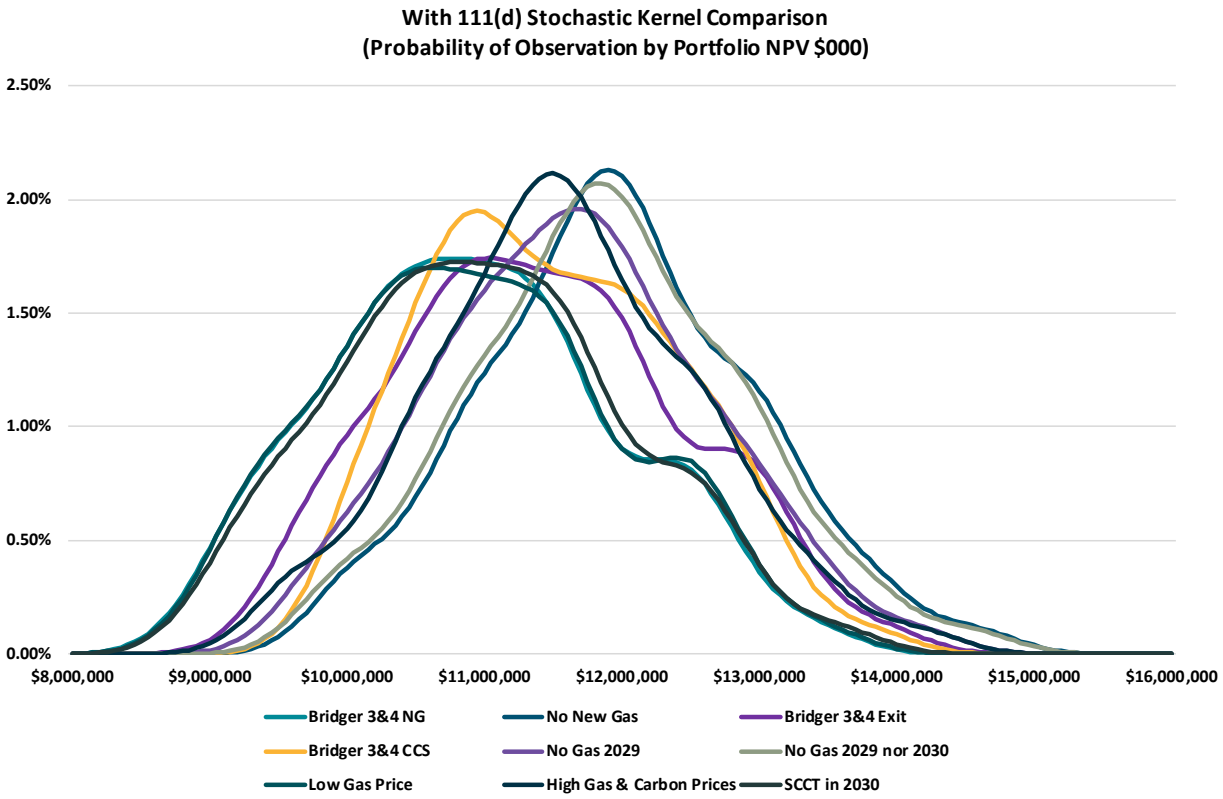
Stochastic Results

The five selected stochastic variables are key drivers of variability in year-to-year power-supply costs and therefore provide suitable stochastic shocks to allow differentiated results for analysis.

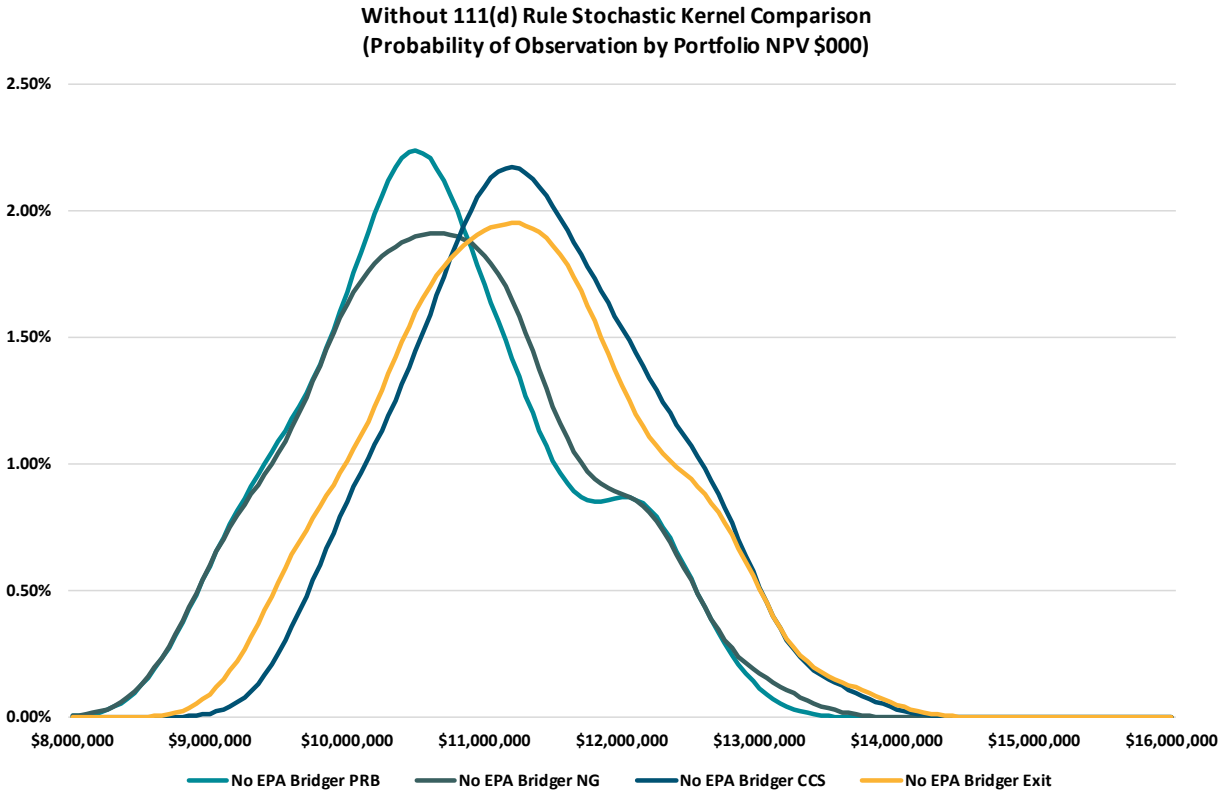
Due to the significant time required to perform the stochastic risk analysis, Idaho Power performed 60 risk iterations. Based on the sample size, the choice was made to use the Latin Hypercube sampling technique over a pure Monte Carlo method. The Latin Hypercube design samples the distribution range with a relatively smaller sample size, allowing a reduction in simulation run times. The Latin Hypercube method does this by sampling at regular intervals across the distribution spectrum. Contrast this to Monte Carlo methods where samples are

taken randomly from the distribution range. The random Monte Carlo draw requires far more than 60 iterations to ensure a good distribution of draws.

As a major branch point in the analysis, and because they represent two different operating futures, the stochastic analysis was performed on both With and Without 111(d) scenarios. These distinct futures can't be directly compared so the results are presented in either future. Once the stochastic elements are drawn, the company then calculated the 20-year NPV portfolio cost for each of the 60 iterations for all evaluated portfolios. The graph below shows the distribution of 20-year NPV portfolio costs by study case.



Rank	With 111(d) Portfolio	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	Bridger 3&4 NG	38	19	2	0	1	0	0	0	0
2	Low Gas Price	15	32	10	2	0	0	1	0	0
3	SCCT 2030	5	8	47	0	0	0	0	0	0
4	Bridger 3&4 Exit	0	0	0	33	16	6	2	2	1
5	Bridger 3&4 CCS	0	0	0	14	31	3	5	2	5
6	High Gas & Carbon Prices	2	1	0	10	8	13	26	0	0
7	No Gas 2029	0	0	0	0	4	36	20	0	0
8	No Gas 2029/2030	0	0	0	1	0	2	5	51	1
9	No New Gas	0	0	1	0	0	0	1	5	53



Rank	Without 111(d) Portfolio	1st	2nd	3rd	4th
1	Bridger 3&4 PRB	36	22	2	0
2	Bridger 3&4 NG	24	36	0	0
3	Bridger 3&4 Exit	0	2	49	9
4	Bridger 3&4 CCS	0	0	9	51

Portfolio Stochastic Analysis, Total Portfolio Cost

With 111(d) Portfolio Cost Comparison

In the figure above, each line represents the likelihood of occurrence by NPV. Higher values on the line represent a higher probability of occurrence with values near the horizontal axis representing improbable events. Values that occur toward the left have lower cost while values toward the right have higher cost. As indicated by the peak of the graph being furthest left, the results of the stochastic analysis show that the Preferred Portfolio (*With 111(d) Bridger 3&4 NG*) has a similar risk profile to the *Low Gas Price* and *Forced SCCT 2030* portfolios. A detailed look at the portfolio rank tables shows that the Preferred Portfolio performs the best in the stochastic analysis but the similarity of the three kernels reflects the similarity of the portfolios

overall. Consistent with the portfolio cost analysis, of the Bridger 3&4 options, the conversion of 3&4 to natural gas performs the best followed by the exit of Bridger 3&4 and the worst performing is the Bridger 3&4 CCS portfolio. Of the no-gas options tested, all performed poorly compared to the Preferred Portfolio as reflected by their significant right shift in the graph and low rank in the ranking table.

Without 111(d) Portfolio Cost Comparison

Comparing the similar graph and table ranking for the Without 111(d) cases shows that consistent with the costing results, the PRB conversion of Bridger 3&4 has a slight edge over the NG conversion of those units. The kernels largely overlap but the ranking shows the PRB conversion as least cost in 36 of 60 iterations beating the NG conversion 3:2. Either the PRB or NG conversion beat the exit scenario in almost all iterations, with the exit scenario beating the CCS option in most iterations.

COMPLIANCE WITH STATE OF OREGON IRP GUIDELINES

Guideline 1: Substantive Requirements

a. All resources must be evaluated on a consistent and comparable basis.
   - All known resources for meeting the utility's load should be considered, including supply-side options which focus on the generation, purchase and transmission of power or gas purchases, transportation, and storage and demand side options which focus on conservation and demand response.
   - Utilities should compare different resource fuel types, technologies, lead times, in-service dates, durations and locations in portfolio risk modeling.
   - Consistent assumptions and methods should be used for evaluation of all resources.
   - The after-tax marginal weighted-average cost of capital (WACC) should be used to discount all future resource costs.

Idaho Power response:

Idaho Power considered a range of resource types including renewables (e.g., wind and solar), demand-side management, transmission, market purchases, thermal resources, and energy storage. Each of these resources was included as an options in the AURORA capacity expansion modeling.

Supply-side and purchased resources for meeting the utility's load are discussed in *Chapter 4. Idaho Power Today;* demand-side options are discussed in *Chapter 6. Demand-Side Resources*; and transmission resources are discussed in *Chapter 7. Transmission Planning*.

New resource options including fuel types, technologies, lead times, in-service dates, durations, and locations are described in *Chapter 5. Future Supply-Side Generation and Storage Resources*, *Chapter 6. Demand-Side Resources*, *Chapter 7. Transmission Planning*, and *Chapter 8. Planning Period Forecasts*.

The consistent modeling method for evaluating new resource options is described in *Chapter 8. Planning Period Forecasts* and *Chapter 10. Modeling Analysis*.

The after-tax marginal WACC rate used to discount all future resource costs is discussed in Appendix C: Technical Appendix *Supply-Side Resource Data – Key Financial and Forecast Assumptions*.

b. Risk and uncertainty must be considered.
   - At a minimum, utilities should address the following sources of risk and uncertainty:
     1. Electric utilities: load requirements, hydroelectric generation, plant forced outages, fuel prices, electricity prices, and costs to comply with any regulation of greenhouse gas emissions.
     2. Natural gas utilities: demand (peak, swing, and baseload), commodity supply and price, transportation availability and price, and costs to comply with any regulation of greenhouse gas emissions.
   - Utilities should identify in their plans any additional sources of risk and uncertainty.

Idaho Power response:

Electric utility risk and uncertainty factors (load, natural gas, and hydroelectric generation) for resource portfolios are considered in Chapter 10. Modeling Analysis. Plant forced outages are modeled in RCAT on a unit basis and are discussed in *Appendix C: Technical Appendix Loss of Load Expectation*. Risk and uncertainty associated with fuel prices and greenhouse gas emissions are discussed in *Chapter 9 Portfolios*. The AURORA generated electricity prices are impacted by the above assumptions and are considered in the analysis.

Additional sources of risk and uncertainty, including qualitative risks are discussed in *Chapter 10. Modeling Analysis*.

c. The primary goal must be the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers.
   - The planning horizon for analyzing resource choices should be at least 20 years and account for end effects. Utilities should consider all costs with a reasonable likelihood of being included in rates over the long term, which extends beyond the planning horizon and the life of the resource.
   - Utilities should use present value of revenue requirement (PVRR) as the key cost metric. The plan should include analysis of current and estimated future costs for all long-lived resources such as power plants, gas storage facilities, and pipelines, as well as all short-lived resources such as gas supply and short-term power purchases.
   - To address risk, the plan should include, at a minimum:
     a. Two measures of PVRR risk: one that measures the variability of costs and one that measures the severity of bad outcomes.
     b. Discussion of the proposed use and impact on costs and risks of physical and financial hedging.
   - The utility should explain in its plan how its resource choices appropriately balance cost and risk.

Idaho Power response:

The IRP methodology and the planning horizon of 20 years are discussed in *Chapter 1. Background*.

Modeling analysis of current and estimated future costs for all long-lived resources such as power plants, gas storage facilities, and pipelines, as well as all short-lived resources such as gas supply and short-term power purchases is discussed in *Chapter 10. Modeling Analysis*.

The discussion of cost variability and extreme outcomes, including bad outcomes is discussed in *Chapter 10. Modeling Analysis*.

Idaho Power's Risk Management Policy regarding physical and financial hedging is discussed in *Chapter 1. Background*. Idaho Power's Energy Risk Management Program is designed to systematically identify, quantify, and manage the exposure of the company and its customers to the uncertainties related to the energy markets in which the company is an active participant. The company's Risk Management Standards limit term purchases to the prompt 18 months of the forward curve.

Idaho Power's plan and how the resource choices appropriately balance cost and risk is presented in *Chapter 11. Preferred Portfolio and Action Plan.*

d. The plan must be consistent with the long-run public interest as expressed in Oregon and federal energy policies.

Idaho Power response:

Long-run public interest issues are discussed in *Chapter 2. Political, Regulatory, and Operational Issues* and *Chapter 3. Clean Energy & Climate Change*. The company also evaluated future scenarios, including no new gas, high natural gas price and high carbon price, and 100% clean by 2045. These are discussed in *Chapter 9. Portfolios*.

Guideline 2: Procedural Requirements

a. The public, which includes other utilities, should be allowed significant involvement in the preparation of the IRP. Involvement includes opportunities to contribute information and ideas, as well as to receive information. Parties must have an opportunity to make relevant inquiries of the utility formulating the plan. Disputes about whether information requests are relevant or unreasonably burdensome, or whether a utility is being properly responsive, may be submitted to the Commission for resolution.

Idaho Power response:

The IRPAC meetings are open to the public. A roster of the IRPAC members along with meeting schedules and agendas is provided in *Appendix C: Technical Appendix*, *IRP Advisory Council*.

b. While confidential information must be protected, the utility should make public, in its plan, any non-confidential information that is relevant to its resource evaluation and action plan. Confidential information may be protected through use of a protective order, through aggregation or shielding of data, or through any other mechanism approved by the Commission.

Idaho Power response:

Idaho Power makes public extensive information relevant to its resource evaluation and action plan. This information is discussed in IRPAC meetings and found throughout the 2025 IRP, the 2025 Load and Sales Forecast, and in the 2025 Technical Appendix.

c. The utility must provide a draft IRP for public review and comment prior to filing a final plan with the Commission.

Idaho Power response:

Prior to filing, Idaho Power posted online a draft 2025 IRP Report for public review and comment in May 2025.

Guideline 3: Plan Filing, Review, and Updates

a. A utility must file an IRP within two years of its previous IRP acknowledgment order. If the utility does not intend to take any significant resource action for at least two years after its next IRP is due, the utility may request an extension of its filing date from the Commission.

Idaho Power response:

The OPUC acknowledged Idaho Power's 2023 IRP on August 26, 2024, in Order 24-285. Filing the 2025 IRP in June 2025 complies with the requirement to file the company's next IRP within two years of acknowledgement of the prior IRP.

b. The utility must present the results of its filed plan to the Commission at a public meeting prior to the deadline for written public comment.

Idaho Power response:

Idaho Power will work with OPUC staff and other interested parties to set a schedule for review of the 2025 IRP, including a public meeting with the Commission following the June 2025 filing.

c. Commission staff and parties should complete their comments and recommendations within six months of IRP filing.

Idaho Power response:

This will be conducted following the filing of this IRP.

d. The Commission will consider comments and recommendations on a utility's plan at a public meeting before issuing an order on acknowledgment. The Commission may provide the utility an opportunity to revise the plan before issuing an acknowledgment order.

Idaho Power response:

This will be conducted following the filing of this IRP.

e. The Commission may provide direction to a utility regarding any additional analyses or actions that the utility should undertake in its next IRP.

Idaho Power response:
No response needed.

f. Each utility must submit an annual update on its most recently acknowledged plan. The update is due on or before the acknowledgment order anniversary date. Once a utility anticipates a significant deviation from its acknowledged IRP, it must file an update with the Commission, unless the utility is within six months of filing its next IRP. The utility must summarize the update at a Commission public meeting. The utility may request acknowledgment of changes in proposed actions identified in an update.

Idaho Power response:
Idaho Power will file an annual update of the 2025 IRP, assuming the annual update will occur more than six months before filing the 2027 IRP.

g. Unless the utility requests acknowledgement of changes in proposed actions, the annual update is an informational filing that:
   - Describes what actions the utility has taken to implement the plan;
   - Provides an assessment of what has changed since the acknowledgment order that affects the action plan, including changes in such factors as load, expiration of resource contracts, supply-side and demand-side resource acquisitions, resource costs, and transmission availability; and
   - Justifies any deviations from the acknowledged action plan.

Idaho Power response:
Not applicable to this filling; this activity will be conducted at a later time.

Guideline 4: Plan Components

At a minimum, the plan must include the following elements:

a. An explanation of how the utility met each of the substantive and procedural requirements;

Idaho Power response:
The information in this section is intended to show how the company complied with this guideline.

b. Analysis of high and low load growth scenarios in addition to stochastic load risk analysis with an explanation of major assumptions;

Idaho Power response:

High-growth scenarios are tested using the 300 MW and 500 MW large load cases as discussed in *Chapter 9. Portfolios*. Stochastic analysis was performed on load (which creates high and low load conditions) and the details of that analysis are contained in *Chapter 10. Modeling Analysis.*

c. For electric utilities, a determination of the levels of peaking capacity and energy capability expected for each year of the plan, given existing resources; identification of capacity and energy needed to bridge the gap between expected loads and resources; modeling of all existing transmission rights, as well as future transmission additions associated with the resource portfolios tested;

Idaho Power response:

Peaking capacity and energy capability expected for existing resources are modeled in AURORA. Identification of capacity and energy needed to bridge the gap between expected loads and resources is an output of AURORA LTCE modeling; results of which are found in *Appendix C: Technical Appendix*. All existing transmission rights and future transmission additions are modeled in AURORA.

Detailed forecasts are provided in *Appendix C: Technical Appendix*, *Sales and Load Forecast Data* and *Existing Resource Data*. Identification of capacity and energy needed to bridge the gap between expected loads and resources is discussed in *Chapter 11. Preferred Portfolio and Action Plan*.

d. For natural gas utilities, a determination of the peaking, swing and base-load gas supply and associated transportation and storage expected for each year of the plan, given existing resources; and identification of gas supplies (peak, swing, and baseload), transportation and storage needed to bridge the gap between expected loads and resources;

Idaho Power response:

Not applicable to Idaho Power.

e. Identification and estimated costs of all supply-side and demand-side resource options, taking into account anticipated advances in technology;

Idaho Power response:

Supply-side resources are discussed in *Chapter 5. Future Supply-Side Generation and Storage Resources*.

Demand-side resources are discussed in *Chapter 6. Demand-Side Resources*.

Resource costs are discussed in *Chapter 8. Planning Period Forecasts* and presented in *Appendix C: Technical Appendix, Supply-Side Resource Data*.

f. Analysis of measures the utility intends to take to provide reliable service, including cost-risk tradeoffs;

Idaho Power response:
Resource reliability and cost-risk tradeoffs are covered in *Chapter 10. Modeling Analysis.*

g. Identification of key assumptions about the future (e.g., fuel prices and environmental compliance costs) and alternative scenarios considered;

Idaho Power response:
Key assumptions including the natural gas price forecast are discussed in *Chapter 8. Planning Period Forecasts* and in *Appendix C: Technical Appendix, Key Financial and Forecast Assumptions*. Environmental compliance costs are addressed in *Chapter 10. Modeling Analysis*.

h. Construction of a representative set of resource portfolios to test various operating characteristics, resource types, fuels and sources, technologies, lead times, in-service dates, durations, and general locations – system-wide or delivered to a specific portion of the system;

Idaho Power response:
Resource portfolios considered for the 2025 IRP are described in *Chapter 9. Portfolios* and *Appendix C: Technical Appendix, Long-Term Capacity Expansion Results*.

i. Evaluation of the performance of the candidate portfolios over the range of identified risks and uncertainties;

Idaho Power response:
Evaluation of the portfolios over a range of risks and uncertainties is discussed in *Chapter 10. Modeling Analysis*.

j. Results of testing and rank ordering of the portfolios by cost and risk metric, and interpretation of those results;

Idaho Power response:
Portfolio cost, risk results, interpretations and the selection of the Preferred Portfolio are provided in *Chapter 10. Modeling Analysis.*

k. Analysis of the uncertainties associated with each portfolio evaluated;

Idaho Power response:
The quantitative and qualitative uncertainties associated with each portfolio are evaluated in *Chapter 10. Modeling Analysis*.

l. Selection of a portfolio that represents the best combination of cost and risk for the utility and its customers

Idaho Power response:

The Preferred Portfolio is identified in *Chapter 11. Preferred Portfolio and Action Plan* and represents the best combination of cost and risk.

m. Identification and explanation of any inconsistencies of the selected portfolio with any state and federal energy policies that may affect a utility's plan and any barriers to implementation; and

Idaho Power response:

The company has identified that its plans are consistent with all state and federal energy policies as of the time of filing.

n. An action plan with resource activities the utility intends to undertake over the next two to four years to acquire the identified resources, regardless of whether the activity was acknowledged in a previous IRP, with the key attributes of each resource specified as in portfolio testing.

Idaho Power response:

An action plan is provided in the *Executive Summary* and in *Chapter 11. Preferred Portfolio and Action Plan.*

Guideline 5: Transmission

Portfolio analysis should include costs to the utility for the fuel transportation and electric transmission required for each resource being considered. In addition, utilities should consider fuel transportation and electric transmission facilities as resource options, taking into account their value for making additional purchases and sales, accessing less costly resources in remote locations, acquiring alternative fuel supplies, and improving reliability.

Idaho Power response:

All identified requirements in Guideline 5: Transmission are met and modeled in AURORA. Transmission assumptions for supply-side resources and market access are included in *Chapter 7. Transmission Planning*. Transportation for natural gas is discussed in *Chapter 8. Planning Period Forecasts*.

Guideline 6: Conservation

a. Each utility should ensure that a conservation potential study is conducted periodically for its entire service territory.

Idaho Power response:

The contractor-provided conservation potential study for the 2025 IRP is described in *Chapter 6. Demand-Side Resources* and is included as *Appendix B: DSM Annual Report*.

b. To the extent that a utility controls the level of funding for conservation programs in its service territory, the utility should include in its action plan all best cost/risk portfolio conservation resources for meeting projected resource needs, specifying annual savings targets.

Idaho Power response:

A recast for energy efficiency is provided in Cha*pter 6. Demand-Side Resources*. The load forecast put into AURORA included the reduction to customer sales of all future achievable economic energy efficiency potential.

c. To the extent that an outside party administers conservation programs in a utility's service territory at a level of funding that is beyond the utility's control, the utility should:
    - Determine the amount of conservation resources in the best cost/risk portfolio without regard to any limits on funding of conservation programs; and
    - Identify the preferred portfolio and action plan consistent with the outside party's projection of conservation acquisition.

Idaho Power response:

Idaho Power administers all its conservation programs except market transformation. Third-party market transformation savings are provided by the Northwest Energy Efficiency Alliance (NEEA) and are discussed in *Appendix B: Idaho Power's Demand-Side Management 2024 Annual Report.* NEEA savings are included as savings to meet targets because of the overlap of NEEA initiatives and IPC's most recent potential study.

Guideline 7: Demand Response

Plans should evaluate demand response resources, including voluntary rate programs, on par with other options for meeting energy, capacity, and transmission needs (for electric utilities) or gas supply and transportation needs (for natural gas utilities).

Idaho Power response:

Idaho Power's examination of the potential for expanded DR resources is presented in *Chapter 6. Demand-Side Resources*.

Guideline 8: Environmental Costs

a. Base case and other compliance scenarios: The utility should construct a base-case scenario to reflect what it considers to be the most likely regulatory compliance future

for carbon dioxide (CO_2), nitrogen oxides, sulfur oxides, and mercury emissions. The utility should develop several compliance scenarios ranging from the present CO_2 regulatory level to the upper reaches of credible proposals by governing entities. Each compliance scenario should include a time profile of CO_2 compliance requirements. The utility should identify whether the basis of those requirements, or "costs," would be CO_2 taxes, a ban on certain types of resources, or CO_2 caps (with or without flexibility mechanisms such as an allowance for credit trading as a safety valve). The analysis should recognize significant and important upstream emissions that would likely have a significant impact on resource decisions. Each compliance scenario should maintain logical consistency, to the extent practicable, between the CO_2 regulatory requirements and other key inputs.

Idaho Power response:

The carbon price forecasts used in the 2025 IRP are found in *Chapter 9. Portfolios*. Compliance with existing environmental regulation and emissions for each portfolio are discussed in *Chapter 10. Modeling Analysis*. Emissions for each portfolio are shown in *Appendix C: Technical Appendix*, *Portfolio Emissions Forecast*.

b. Testing alternative portfolios against the compliance scenarios: The utility should estimate, under each of the compliance scenarios, the present value revenue requirement (PVRR) costs and risk measures, over at least 20 years, for a set of reasonable alternative portfolios from which the preferred portfolio is selected. The utility should incorporate end-effect considerations in the analyses to allow for comparisons of portfolios containing resources with economic or physical lives that extend beyond the planning period. The utility should also modify projected lifetimes as necessary to be consistent with the compliance scenario under analysis. In addition, the utility should include, if material, sensitivity analyses on a range of reasonably possible regulatory futures for nitrogen oxides, sulfur oxides, and mercury to further inform the preferred portfolio selection.

Idaho Power response:

See *Chapter 9. Portfolios* and *Chapter 10. Modeling Analysis* for discussion on the various scenarios and comparative analysis of the scenarios. Economic lives were adjusted based on portfolio conditions.

c. Trigger point analysis: The utility should identify at least one CO_2 compliance "turning point" scenario, which, if anticipated now, would lead to, or "trigger" the selection of a portfolio of resources that is substantially different from the preferred portfolio. The utility should develop a substitute portfolio appropriate for this trigger-point scenario and compare the substitute portfolio's expected cost and risk performance to that of

the preferred portfolio – under the base case and each of the above CO^2 compliance scenarios. The utility should provide its assessment of whether a CO_2 regulatory future that is equally or more stringent that the identified trigger point will be mandated.

Idaho Power response:

See *Chapter 9. Portfolios* and *Chapter 10. Modeling Analysis* for discussion on the various scenarios and comparative analysis of the scenarios.

d. Oregon compliance portfolio: If none of the above portfolios is consistent with Oregon energy policies (including state goals for reducing greenhouse gas emissions) as those policies are applied to the utility, the utility should construct the best cost/risk portfolio that achieves that consistency, present its cost and risk parameters, and compare it to those in the preferred and alternative portfolios.

Idaho Power response:

The company evaluated "no new gas" and "100% Clean by 2045" scenarios. The results of the portfolios are presented in *Appendix C: Technical Appendix, Long-Term Capacity Expansion Results*.

Guideline 9: Direct Access Loads

An electric utility's load-resource balance should exclude customer loads that are effectively committed to service by an alternative electricity supplier.

Idaho Power response:

Idaho Power does not have any customers served by alternative electricity suppliers and no direct access loads.

Guideline 10: Multi-state Utilities

Multi-state utilities should plan their generation and transmission systems, or gas supply and delivery, on an integrated-system basis that achieves a best cost/risk portfolio for all their retail customers.

Idaho Power response:

Idaho Power's analysis was performed on an integrated-system basis discussed in *Chapter 10. Modeling Analysis*. Idaho Power will file the 2025 IRP in both the Idaho and Oregon jurisdictions.

Guideline 11: Reliability

Electric utilities should analyze reliability within the risk modeling of the actual portfolios being considered. Loss of load probability, expected planning reserve margin, and expected

and worst-case unserved energy should be determined by year for top-performing portfolios. Natural gas utilities should analyze, on an integrated basis, gas supply, transportation, and storage, along with demand-side resources, to reliably meet peak, swing, and base-load system requirements. Electric and natural gas utility plans should demonstrate that the utility's chosen portfolio achieves its stated reliability, cost, and risk objectives.

Idaho Power response:

The capacity planning margin and regulating reserves are discussed in *Chapter 9. Portfolios*. A loss of load expectation analysis to determine the company's annual capacity positions is discussed in *Chapter 10. Modeling Analysis* and Appendix C: Technical Appendix, *Loss of Load Expectation.*

Guideline 12: Distributed Generation

Electric utilities should evaluate distributed generation technologies on par with other supply-side resources and should consider, and quantify where possible, the additional benefits of distributed generation.

Idaho Power response:

Distribution-connected storage technologies are evaluated in *Chapter 5. Future Supply-Side Generation and Storage Resources* and in *Chapter 8. Planning Period Forecasts*.

Guideline 13: Resource Acquisition

a. An electric utility should, in its IRP:
   - Identify its proposed acquisition strategy for each resource in its action plan.
   - Assess the advantages and disadvantages of owning a resource instead of purchasing power from another party.
   - Identify any Benchmark Resources it plans to consider in competitive bidding.

Idaho Power response:

Idaho Power identifies its proposed acquisition strategy in *Chapter 11. Preferred Portfolio and Action Plan.* Idaho Power follows an all-source RFP process where possible to acquire resources which may or may not be owned by the company and are evaluated to provide maximum benefit to its customers.

b. Natural gas utilities should either describe in the IRP their bidding practices for gas supply and transportation, or provide a description of those practices following IRP acknowledgment.

Idaho Power response:

Not applicable to Idaho Power.

COMPLIANCE WITH EV GUIDELINES

Guideline 1: Forecast the Demand for Flexible Capacity

Forecast the Demand for Flexible Capacity: The electric utilities shall forecast the balancing reserves needed at different time intervals (e.g., ramping needed within 5 minutes) to respond to variation in load and intermittent renewable generation over the 20-year planning period;

Idaho Power response:

A discussion of Idaho Power's analysis for the flexibility guideline is provided in *Chapter 9. Portfolios.*

Guideline 2: Forecast the Supply for Flexible Capacity

Forecast the Supply of Flexible Capacity: The electric utilities shall forecast the balancing reserves available at different time intervals (e.g., ramping available within 5 minutes) from existing generating resources over the 20-year planning period;

Idaho Power response:

A discussion of the capacity planning reserve margin and regulating reserves is found at *Chapter 9. Portfolios.*

Guideline 3: Evaluate Flexible Resources on a Consistent and Comparable Basis

In planning to fill any gap between the demand and supply of flexible capacity, the electric utilities shall evaluate all resource options, including the use of EVs, on a consistent and comparable basis.

Idaho Power response:

Future supply-side resource options are discussed in *Chapter 5. Future Supply Side Generation and Storage Resources*. Future demand-side resource options are discussed in *Chapter 6. Demand-Side Resources*. Demand response storage-related programs, like EVs could provide, were modeled; this is discussed in *Chapter 6. Demand-Side Resources*.

STATE OF OREGON ACTION ITEMS REGARDING IDAHO POWER'S 2023 IRP

Action Item 1: SWIP–North

Continue exploring Idaho Power's potential participation in the SWIP-N project.

Idaho Power response:

Idaho Power continued exploring potential participation in SWIP-N and executed agreements to that end. SWIP-North is discussed in *Chapter 7: Transmission Planning*.

Action Item 2: Storage Projects

Install cost-effective distribution-connected storage from 2025 through 2028.

Idaho Power response:

The implementation of four distribution-connected storage projects is discussed in *Chapter 5: Future Supply-Side Generation and Storage Resources.* The four projects were online as of 2024, and are located at Filer, Weiser, Melba, and Elmore substations.

Action Item 3: Convert Valmy Units 1 & 2

Convert Valmy units 1 and 2 from coal to natural gas by summer 2026

Idaho Power response:

Valmy Units 1 & 2 are on schedule to be converted from coal to natural gas by summer 2026.

Action Item 4: Acquire Resources in 2026 through 2028

If economic, acquire up to 1,425 MW of combined wind and solar, or other economic resources, in 2026 through 2028 (inclusive of 625 MW of forecast Clean Energy Your Way [CEYW] resources)

Idaho Power response:

Idaho Power completed RFP processes to meet the deficits identified in 2026 through 2028.

Action Item 5: Long-Duration Storage Pilot

Explore a 5 MW long-duration storage pilot project

Idaho Power response:

Idaho Power explored a 5 MW long-duration storage pilot project, but has not moved forward due to cost concerns and federal policy uncertainty.

Action Item 6: WRAP

Include 14 MW of capacity associated with the Western Resource Adequacy Program (WRAP)

Idaho Power response:

Idaho Power included capacity associated with WRAP.

Action Item 7: Gateway West

Midpoint–Hemingway #2 500 kV, Midpoint–Cedar Hill 500 kV, and Mayfield 500 kV substation (Gateway West Phase 1) online by end-of-year 2028

Idaho Power response:

Phase I of Gateway West is targeted to be online by end of 2028. More information can be found in *Chapter 7: Transmission Planning*

Additional Recommendation 1: Qualifying Facility Renewal Rate

Prior to portfolio optimization for the next IRP, the Company must work with Staff and Stakeholders to determine and employ a non-zero renewal rate for all QFs in line with PacifiCorp's estimation methodology, or other similar methodologies, to be adopted in the 2025 IRP

Idaho Power response:

Idaho Power addresses the assumed renewal rates of QFs in *Chapter 9: Portfolios.* Idaho Power and IRPAC revisited the QF renewal rates in the CSPP Forecast presentation on October 2024.

Additional Recommendation 2: QF Forecast

Idaho Power should assume a 75 percent wind QF renewal rate pending a non-zero renewal rate determination via a methodology accepted by the Commission in the next IRP.

Idaho Power response:

Idaho Power assumed a QF contract renegotiation rates consistent with feedback received from IRPAC and OPUC staff.

Additional Staff Expectation 1: Coal to Gas Conversion

Evaluate two alternative portfolios to address risks associated with coal to gas conversions:

1. Exit all coal plants by 2030 without Valmy and Bridger 3 and 4 conversions.
2. Delay Valmy conversion with a November 2026 online date for B2H

Idaho Power response:

Given the timeline and progress towards converting Valmy 1 and 2, those units were assumed to convert to natural gas in the 2025 IRP and an exit from those units was not studied. For Bridger units 3 and 4, there was extensive study on the available options (including and exit) and those details are reported throughout the report and Appendix C.

Additional Staff Expectation 2: Coal to Gas Conversion

The company should provide workpapers for the projected number of hours for both baseload and peaking operation of the Valmy coal-to-gas converted units, and the corresponding hours for CCCT, SCCT, 4-hour and 8-hour batteries, in the Preferred Portfolio.

Idaho Power response:

Idaho Power is prepared to provide the hourly resource details for the preferred portfolio resources.

Additional Staff Expectation 3: Coal to Gas Conversion

As suggested by RNW, IPC should evaluate an alternative portfolio with a "by" 2030 exit date from all coal operations and without the gas conversion of Valmy and Bridger 3 and 4 units for a better understanding of emissions implications of continued use of fossil fuel generation.

Idaho Power response:

Given the timeline and progress towards converting Valmy 1 and 2, those units were assumed to convert to natural gas in the 2025 IRP and an exit from those units was not studied. For Bridger units 3 and 4, there was extensive study on the available options (including an exit) and those details are reported throughout the report and Appendix C. Emissions for all studied portfolios are reporting in Appendix C.

Additional Staff Expectation 4: Coal to Gas Conversion

In the lead up to the 2025 IRP, Idaho Power should provide cost estimates of SO2 and NOX emissions related to the converted plant, in its advisory IRPAC meetings and incorporate those costs in the Aurora model.

Idaho Power response:

Idaho Power does not currently have nor are there current regulations that propose a cost to SO_2 and NOX that would impact its converted plants.

Additional Staff Expectation 5: Coal to Gas Conversion

The Company should reflect recently introduced EPA rules for GHG emissions' Standards and Guidelines for Fossil Fuel-fired power plants in its 2025 IRP

Idaho Power response:

Idaho Power incorporates current EPA rules for GHG emissions into its modelling of all GHG emitting resources.

Additional Staff Expectation 6: Wind and Solar Resources

The Company should elaborate on its anticipated cadence of RFPs and identify the future IRPs to which expected RFPs will be connected.

Idaho Power response:

Idaho Power does not have near term plans to issue another RFP given the 2028 RFP has already been issued and will update staff as resource procurement needs develop.

Additional Staff Expectation 7: Wind and Solar Resources

IPC should provide workpapers for the projected number of hours for regulation reserves operation of the Valmy coal-to-gas converted units, and the corresponding hours for SCCT, 4-hour and 8-hour batteries, in the Preferred Portfolio.

Idaho Power response:

Idaho Power is prepared to provide the hourly regulation reserve details for the preferred portfolio.

Additional Staff Expectation 8: Wind and Solar Resources

IPC should include the constraints related to system resilience in portfolio modeling if the estimated cost of ancillary services to preserve system resilience will be significant enough to warrant such inclusion.

Idaho Power response:

For details about reserve ancillary service modelling see Appendix D where the ancillary requirements are specified.

Integration analysis was filed December 2024 and there are plans to update after the filing of the 2025 IRP.

Additional Staff Expectation 9: Distribution-Connected Storage

IPC must share information with Staff about lessons learned regarding the incorporation of best-practices in battery project construction, commissioning, and operations to mitigate operational risks.

Idaho Power response:

Idaho Power is prepared to share lessons learned around best practices upon request.

Additional Staff Expectation 10: Load Forecast

Idaho Power should document and share the a priori reasons for all econometric model specification.

Idaho Power response:

Idaho Power has included an additional section of Appendix A in the 2025 IRP filing that outlines each econometric model used in the load forecasting process. This includes model data on error measurement, variable selection, indicator variables to potentially address outlier data, autocorrelation measures, estimates of variables, and statistical significance.

Additional Staff Expectation 11: Load Forecast

Idaho Power should use the 50th percentile for the expected case load forecast in future IRPs.

Idaho Power response:

Idaho Power used the 50th percentile within the Aurora model for the expected case load forecast in the 2025 IRP.

Additional Staff Expectation 12: Load Forecast

IPC should consider and demonstrate the steps taken to provide oversight for ESA customers' forecasting of load growth.

Idaho Power response:

Idaho Power elaborated on the Company's interactions with ESA customers from construction to operation to ensure best practices on load projections and energy efficiency. To the extent staff needs additional information, Idaho Power will continue to be available for discussion.

Additional Staff Expectation 13: Wholesale Electricity Prices

IPC should preserve and be prepared to provide hourly wholesale electricity price data from the stochastic risk analysis.

Idaho Power response:

Idaho Power is ready to provide this data for the preferred portfolio as requested.

Additional Staff Expectation 14: Wholesale Electricity Prices

IPC should investigate the possibility that migration of power sellers to balancing markets may cause Aurora to overestimate resources available for purchase by Idaho Power and report its findings in the next IRP.

Idaho Power response:

Idaho Power recognizes that liquidity at any market hub changes over time. The Pacific Northwest is a winter peaking region and even though the Mid-C market has seen some decline in liquidity these impacts are more significant in the winter operating season. Idaho Power is a summer peaking utility, the load and resource diversity in the Idaho Power service area are complimented by the load and resources in the Pacific Northwest, this has been evidenced by the modeling results provided by the Western Resource Adequacy Program. Northwest utilities will build resources to meet their winter load needs providing high confidence that the summer liquidity will be sustained. Load diversity is a key element of transmission and market strategy.

Additional Staff Expectation 15: Energy Efficiency

In the lead up to the 2025 IRP, IPC should work with and provide workpapers to Staff that explore the costs and benefits of portfolio runs with more 'low-cost' bundles, such as bundles of measures costing below $30/MWh.

Idaho Power response:

The availability and price of energy efficiency bundles was discussed with Staff and the rest of IRPAC on August 29, 2024. At the price mentioned in this request, energy efficiency measures were considered cost effective and included as a decrement to the load forecast.

Additional Staff Expectation 16: Demand Response

IPC will engage Staff and stakeholders regarding DR block size during the development of the 2025 IRP.

Idaho Power response:

Idaho Power engaged with staff and stakeholders during the November 14, 2024 IRPAC meeting to discuss DR block size during the development of the 2025 IRP.