

**Energy Efficiency Advisory Group (EEAG)  
May 4, 2022**

**Present:**

Anna Kim – Public Utilities Commission of Oregon  
Alexa Sakolsky-Basquill – Office of Energy & Mineral Resources  
Ben Otto – Idaho Conservation League  
Connie Aschenbrenner – Idaho Power  
Diego Rivas – Northwest Energy Coalition  
Don Strickler – Simplot

Donn English – Idaho Public Utilities Commission  
Kevin Keyt – Idaho Public Utilities Commission  
Nick Saven – Idaho Public Utilities Commission  
Quentin Nesbitt – Idaho Power  
Sid Erwin – Idaho Irrigation Pumpers Association  
Tina Jayaweera – Northwest Power & Conservation Council  
Wil Gehl – City of Boise

**Not Present:**

Evie Scrivner – Community Action Partnership  
Jim Hall – WaFd Bank  
Marissa Warren – Office of Energy & Mineral Resources

**Guests and Presenters\*:**

Alexis Freeman – Idaho Power  
Andee Morton – Idaho Power  
Andrea Simonsen – Idaho Power  
Annie Meyer – Idaho Power  
Becky Arte Howell – Idaho Power  
Billie McWinn\* - Idaho Power  
Chad Severson – Idaho Power  
Cassie Koerner – Boise State  
Chellie Jensen\* - Idaho Power  
Curtis Willis – Idaho Power  
Dahl Bietz- Idaho Power  
Denise Humphreys – Idaho Power  
Eli Morris – Applied Energy Group  
Fuong Nguyen – Applied Energy Group  
Grace Wroblewski – Applied Energy Group  
Heide Caswell – Oregon Public Utilities Commission  
Jared Hansen\* – Idaho Power  
Jim Swier – Micron  
Julie Rosendic – Idaho Power  
Kathleen Araujo – Boise State

Kathy Yi\* – Idaho Power  
Kim Herb – Oregon Public Utilities Commission  
Kimberly Bakalars\* – Tetra Tech  
Krista West – Idaho Power  
Laura Conilogue – Idaho Dep of Commerce  
Mark Bergum\* – Tetra Tech  
Melissa Thom\* – Idaho Power  
Michelle Toney – Idaho Power  
Mindi Shodeen – Idaho Power  
Neil Grigsby\* – AEG  
Quentin Nesbitt\* – Idaho Power  
Ray Short – Idaho Power  
Robert Ferguson – Verizon  
Rosemary Curtin – Facilitator  
Shelley Martin – Idaho Power  
Stephanie Wicks – St. Lukes (SLHS)  
Theresa Drake – Idaho Power  
Todd Greenwell – Idaho Power  
Zack Thompson – Idaho Power

**Note Takers:**

Michelle Toney (Idaho Power) with Kathy Yi (Idaho Power)

## **Meeting Facilitator: Rosemary Curtin**

### **Virtual Webex Meeting Convened at 9:32 a.m.**

Rosemary opened the meeting. There were no questions or comments on the February meeting notes.

### **9:35 a.m. Announcements**

Quentin went over agenda, who will present, and presentations subject matter.

Quentin highlighted the company filed annual DSM report with IPUC and OPUC on March 15<sup>th</sup>. Also, since the last meeting, the company received approval from both IPUC and OPUC on changes to the Demand Response programs.

### **9:43 AM-2021 Financials & Savings – Quentin Nesbitt**

Quentin provided preliminary first Quarter financials and savings (Jan-March). Advised the NEEA evaluation is part of the IPUC 2021 prudence order, and the company is working with Avista. Quentin went over the Evaluation Schedule for all program evaluations.

### **9:49 AM-Residential End Use Study – Kathy Yi**

Kathy presented the End Use Study: a self-reported survey to better understand residential customers and their usage by profiling various characteristics. Kathy presented high-level results and talked about survey responses. She noted the study results are utilized for the energy efficiency potential study.

One member said, one problem with all surveys, there is a bias demographic (higher income) that is more inclined to respond than others. Does the company's vendor do anything to mitigate that? Kathy responded that the company sent population and census data to vendor. The company has past survey results to see if trends are in line with what we've seen in the past. The member said, it's good you use census as a data point. Any differences between mail and email? Kathy responded there is no difference - no bias. Vendor keeping an eye on it. Survey is not opinion based, helps reduce bias a little.

One member asked, if the resistance heating is referencing electric resistant furnace or zonal? It was confirmed that it includes electric central furnace, baseboard, ceiling cables, wall heaters and radiant heat.

One member asked if we compared customers that use a heat pump for heat and those that had a heat pump for cooling. Is there a good correlation there? It was followed up that electric resistance heating is defined as electric resistance central furnace, baseboards, ceiling cables, wall heaters, and other electric zonal units.

A member is wondering if a central furnace is gas or electric? Kathy responded it can be broken to that detail. The member then asked if there's a difference between stove or fireplace? Kathy explained that it depends if supplemental natural gas is used.

Another member said, I lived in a home for a long time with two pellet stoves. How prevalent is that? It's not the same as climate zone or market. Where would it fall within these definitions? Kathy said because this is a self-reported survey, the fuel type is up to the person to choose. The member said it could potentially be listed as a stove or fireplace. Kathy reminded everyone the survey questions referenced, "What Fuel" and "What System."

### **10:27 AM-Residential Programs – Billie McWinn**

Billie presented residential program specific updates, participation, and savings. She explained program impacts, supply chain constraints, and increased costs. Billie shared that the Energy House Calls program is no longer cost-effective and the company has a transition plan (the program will end). Billie also discussed Multi-Family and reminded everyone that the cost-effectiveness has a bleak outlook, and that the company is looking at other ways to offer energy efficiency measures to the multi-family sector. Billie reviewed the WAQC budget carry over plan to file with the commission to adjust program rules. Billie presented BRIO updates. She explained the details of the two ductless heat pumps campaigns, and customer outreach. Billie then showed an example letter sent out to customers then provided an update on the potential Marketplace programs noting that the company and vendor are still in negotiations.

One member asked about the supply chain with regards to Welcome Kits. Billie commented that the cost of materials has gone up and the Program Specialist added that product has been held in port longer than expected.

One member encourages the company to engage with the RTF if there are new measures for the multi-family program. It's important to put in a request with the RTF for those measures.

### **10:53 AM-Break 5 mins**

### **11:05 AM-Marketing – Melissa Thom**

Melissa introduced Julie Rosandick Marketing Specialist who is replacing Tracey Burtch.

Melissa presented the residential spring marketing campaigns. She discussed the company is using all major channels, new platforms, and target markets. Melissa presented the June Connections, showcasing an energy efficiency success story shared by a local Twin Falls couple. The annual energy efficiency guide goes out in June, and each of the demand response programs marketing materials have been updated. Melissa said the energy@work newsletter highlights the Irrigation Peak Rewards and Flex Peak programs. There were no questions.

### **11:10 PM-C&I&I Programs – Chellie Jensen**

Chellie introduced new Program Specialists, Ray Short & Jonathan Guynes and presented an update on activities the company is doing to promote the DR programs. Chellie provided an update on enrollment for Flex Peak and for Irrigation Peak Rewards.

One member asked about repeat customers in the Flex Peak program. What are the changes and impact particulars? Chellie answered there are 134-136 participants. Some leave, some drop off. We did receive some inquiries from new customers. We are about where we've been in the past few years, but we are trying to get a higher enrollment.

Another member commented that shifting the timing to later during the day and extending the season – going to Sept 15<sup>th</sup>. The member is concerned about those unable to or won't participate. Said the numbers are good for reenrollment but will have to see how it plays out this year. The member said that it looks like numbers are really close to where we've been, and this is encouraging. Chellie said we're excited to see the results as we get near June 15<sup>th</sup>.

One member asked about when the enrollment ends. Chellie said we asked that enrollment goes through June 15<sup>th</sup>. We want resources in place. Ag Reps are calling those who haven't got their enrollment papers in. What we're seeing is normal for this time of the year.

Chellie presented the first Quarter program performance for Commercial, Industrial and Irrigation Programs. She compared each program to the total projects and savings since 2013 and discussed supply chain issues. She discussed the company's ideas and recommendations to address participation issues and asked for ideas from EEAG.

One member asked about the difference between SBDI and Retrofits. Chellie explained that SBDI is aimed at small businesses that use 24,999kWh or less per year. The contractor targets customers in this range, performs an assessment, then changes out the lights on site. Customers don't have to go out and get bids, it is at no cost for the assessment and the installation for the target customer such as small mom & pops. It's a win-win for them and they are not spending extra time to learn the "art of possible." Retrofits are primarily marketed by trade allies. There's a lighting tool used and customers or trade allies indicate the existing and the proposed fixtures and the project cost and the incentive is populated. The potential exists that some measures could get up to 100% of the project cost, and is based on savings and equipment. Very simple, but SBDI is mostly a lighting concierge service for the smallest of our customer base.

Chellie highlighted Micron's Earth Day celebration and the history between Micron and the company. A Micron representative spoke about their appreciation for the company's support and the great collaborative effort. The representative said Micron has been in the area for more than 40 years. They have a good budget to upgrade equipment and doing lots of remodeling to old buildings to replace old systems. Micron does have supply chain issues. It takes 15 to 30 weeks to get larger equipment. They are putting in orders much earlier than normal, due to long lead times. The representative said Micron is participating with Flex Peak, but their overall loads are just so big sometimes it doesn't show.

Chellie also highlighted the City of Boise street lighting project that will be completed in September 2023. She discussed the benefits of LEDs, the MWh per year saved, safety, and the controls technology. A representative of the City of Boise is excited to partner with Idaho Power. Residents have been liking the changes. The City of Boise is looking forward to getting the project completed. They are looking into DR programs as well. They appreciate the company meeting them at City Hall to do the check presentation.

### **11:50 PM-Lunch Break**

### **1:06 PM-Meeting Reconvened Rosemary and Quentin**

Per Quentin's request, Rosemary introduced those who joined after lunch and that IRPAC members were specifically invited to this portion of the meeting.

### **1:10 PM-T&D Benefits – Jared Hansen**

Jared presented T&D Benefits starting with the deferral methodology explaining what makes up the energy efficiency value. He gave a T&D deferral example showing energy efficiency measures can bring down anticipated high demand that is triggering upgrades before the peak. Jared discussed the old methodology through the IRP time frame. He demonstrated the life span of an energy efficiency measure and went over the company's approach, deferral value, and iterative process.

One member said while the NWPCC council methodology is slightly different, the numbers are close to what they got. The member asked if the company is discounting over 20 years. Jared said all project costs are adjusted to current dollars and the savings occur for the deferral in the project start.

Another member questioned, depending on the savings in question, in a world with supply chain issues and inflation, would those factors persist here (do those factors impact this analysis). Jared replied that some of the forecast period is in the supply chain issue timeframe. But impacts are built into those near-term years. The member asked if a transformer cost \$800,000 and there is a 2% annual inflation, is that put into any of the savings at risk? Jared said we calibrated cost of capital and used an inflation rate that was a composite of a number of years. Not as drastic as what we're seeing right now because the analysis is a longer-term look. The member questioned if T&D values are represented together is it a composite of two different numbers, or can T&D be broken out, are they calculated the same? Jared answered that they are separate numbers. Three categories (called T&D deferral) are substation, transmission, and distribution deferral. Most savings from T&D are from the distribution side. Transmission is more difficult to defer. Not as many projects and harder to quantify.

One member asked if you look at energy efficiency forecasts, is it always a load reduction or shifting? Jared said that energy efficiency measures are load decreasing. With DR, we see more of a shift. We do separate out load reduction and energy efficiency reduction. The member said in instances you're trying to defer that installation of substation. Is there a way to account the risk of future growth that otherwise would be a greenfield opportunity and increase installation cost? Jared answered that there are risks like the one you mentioned. We didn't attempt to quantify for those in this analysis. The member inquired about load shifting. Anticipating same approach if demand was shifted instead of reduction, how would you compensate a surprising alteration potential that creates another challenge for the network (would the company use a similar approach if looking at load shifting through demand response)? Jared said it could because the company tends to give attention to local peak need (DR) versus targeted system need and there could be consequences. Not part of the scope of what we're doing here.

Another member asked, are you proposing this in the 2023 IRP as current method? Jared replied that \$6.73 is an input to the potential study that will be presented after today. Energy efficiency forecast is a decrement in load we must meet. The member said it seems like a big change from the previous methodology. Is there a reason we're now doing this instead of before? Jared said one member pushed him toward this before and was right. At the time, it was just a methodology change we didn't implement until this year. We didn't know the impact of the change. All this feeds into the IRP. That is why an invite was sent to IRPAC as well, to determine the needs on the system. Yes, we would be proposing the T&D deferral value would affect the IRP. The member asked, will you also be presenting this change to IRPAC? Jared answered that he is not planning on presenting but welcomes feedback. The member will follow up.

### **1:33 PM-Energy Efficiency Potential Study Introduction – Quentin Nesbit**

Quentin introduced the two topics the Applied Energy Group (AEG) will be presenting. He went over the timeline and the purpose of the energy efficiency potential study. There were no questions.

### **1:38 PM-Energy Efficiency Potential Study – AEG – Neil Grigsby, Eli Morris, & Fuong Nguyen**

Neil introduced the Applied Energy Group (AEG) and the team presenting. He presented the study objectives and noted that numbers shown are draft numbers for potential savings, and that the commercial, irrigation, and industrial are close and that they are still working on residential.

Eli presented the AEG's methodology, showing data collections and gave an overview of their modeling approach.

One member commented that for the 2021 power plan, they are moving away from calculating achievable potential as a max of 85% of economic potential. Are you using that assumption in this analysis? Fuong answered

that achievability is based upon measure level. We have incorporated the 2021 power plan updates. Some achievable rates may be larger for measures in which increased standards a present and would hope to get near 100% of the economic potential as achievable potential.

Another member asks, did you do any different analysis based on change in building code? Our code is lower than others around us. Eli replied, we didn't model what the code would look like. We model the current building code. We don't speculate on what a new building code would look like. Councils' achievability assumptions do include some information on this, but we don't forecast codes or understand what things would look like if there were potential new code changes. If a code is improved, it would reduce savings, but it is not included in this study.

### **2:02 PM-Demand Response (DR) – Quentin Nesbitt**

Quentin presented the introduction to the Demand Response Potential Study. He went over the timeline for the completion of the study and how will fit into IRP timeline. Quentin briefly described the company's DR programs. He reviewed the history and discussed the modifications recently approved by both commissions.

### **2:11 PM-Demand Response Potential Study – AEG – Maggie Buffum**

Maggie presented AEG's approach to the DR potential study and mentioned they will be starting with the NWPCC DR assessment assumptions. She explained overall approach and noted the study will be specific to the company's service territory taking into account that the Idaho Power is summer peaking which is different than the rest of the NWPCC region. Therefore, it's necessary to review and modify some of the council's assumptions. She shared council assumptions on DR resource and costs.

One member commented that in the 2021 IRP, the company limited DR to 20 MW additions. Will that occur in the 2023 IRP? Quentin answered that we have not yet determined how the possible capacity additions will be modeled. We will see what the potential study shows and make some judgement calls on how to grow the programs or add potential programs. There will be some assumptions with ramp rates that could replace the '20 MW rule' that we put in place in the 2021 IRP.

Another member commented about not seeing DVR on this. Was it included as part of the study? Eli answered that it wasn't because it is not a demand side program. Maggie said they planned to look at only things on the customer side of the meter. Quentin added we have been testing and piloting DVR. The member added that there is value with DVR and recommends the company keep exploring opportunities.

One member asked if A/C load control and bring your own thermostat are two separate programs? Quentin answered it's something we have contemplated in past. There are some issues with overlap and switches being abandoned going to thermostats. This impacts overall cost effectiveness. I anticipate if we add thermostats, we will try to keep it under the A/C Cool Credit umbrella. We do believe there are substantial differences in how the programs run and the results you get between the two. AEG will be evaluating overlap, technical, and customer issues. The member then asked what is your AMI situation for your customers? Quentin answered over 99% of customers have AMI hourly interval data. The member said it helps when you think about cost. Quentin replied that is correct.

One member had a comment geared towards Jared. One of the things we worked really hard on is to account for the interaction of energy efficiency and demand response in the total NWPCC plan. Have we thought about how to do this here? Smart thermostats are an energy efficiency measure but has demand response potential as well. Heat pump water heaters as well. Getting this integration was difficult and it was not necessarily done perfectly. How are we trying to think about this? Jerad said the brief answer is we need to continue thinking about this. Energy efficiency will reduce demand in the plan. Demand response will be able to act as it naturally would for the most part. It will be built into the IRP. The member said they will follow up later with Jared.

Another member has a question about irrigation. Seeing patterns of climate change and drought, how would this impact demand response? Will it impact irrigators when temperatures are high where they would be unwilling or unable to reduce water use? Quentin said drought is something that irrigators certainly have dealt with. It's not that uncommon. If farmers don't have much water, they will change crops and grow something different. That can impact our program especially later in the year. Quentin also noted that if irrigation load is down, the system load will be down as well, and there will be less potential need for DR.

### **2:34 PM-Break 10 mins**

### **2:41 PM-Customer Evaluations – Tetra Tech Kimberly Bakalars & Mark Bergum**

Quentin introduced Kimberly and Mark.

Kimberly presented the evaluation of 2020 custom projects for commercial and industrial efficiency program. She discussed the difference between impact and process focus then provided some background information. Kimberly went over the methodology objectives along with a follow up from previous evaluations. She reviewed impact and process steps and said the company does a great job with communicating to customers and documenting the program, resulting in good relationships. This also adds to the company's high satisfaction ratings. She also noted that customers appreciate the company's staff, and commented customers noted that incentive estimates were close to the actual final incentives.

Mark presented the impact results and recommendations stating the importance of maintaining long-term focus on cohort projects. He discussed sophisticated systems-based energy efficiency is delivered above the standard equipment improvements. He noted projects implemented with the support of the company's programs may not have occurred otherwise because customers would likely be unable to design the improvements, coordinate efforts of installation and operation and obtain engineering calculations of savings without the support from the program. Mark provided the recommendation that a consumption analysis approach for savings could be something the company look at. In his opinion the approach could provide energy savings from projects without complicated engineering reports to determine the impact of each project. There were no questions or comments.

### **3:15 PM-Wrap-up/Open Discussion**

Rosemary asked each member if there were any questions or comments.

Very informative thank you.

No thanks. Rosemary great meeting I enjoyed everything. Amazing to see the progress over the years.

Good meeting. As far as Tech Tetra, I'll echo everything said about IPC building relationships and being trusted. It is crucial. Our incentives are about what we expect them to be and fosters our future participation. Eco industrial. One idea: we have goals for energy, water, and carbon reduction. Might it be worth figuring out metric tons co2 equivalent was also avoided with that energy savings.

Thanks very much no questions / comments.

I will echo the members thoughts on program. I think you should track the co2 equivalent. For us, it was 44,000 metric tons of co2 that was avoided in our number.

Look forward to seeing results from DR potential study and how it will impact 2023 IRP. Interested to see 2022 summer performance for demand response programs.

I really liked today's meeting and the presentations. The guests and presenters did great. Thank you.

Rosemary reminded everyone that the next meeting is Thursday, August 11<sup>th</sup> at 9:30 A.M.

**3:30 PM-Adjourn**