Energy Efficiency Advisory Group (EEAG) November 17, 2022

Present

Alexa Bouvier – Office of Energy & Mineral Resources Brad Heusinkveld – Idaho Conservation League Connie Aschenbrenner – Idaho Power Diego Rivas – Northwest Energy Coalition Don Strickler – Simplot Evie Scrivner – Community Action Partnership Jim Hall – WaFd Bank

Not Present:

Anna Kim – Public Utility Commission of Oregon Donn English – Idaho Public Utilities Commission Marissa Warren – Office of Energy & Mineral Resources

Guests and Presenters*:

Andrea Simmonsen - Idaho Power Annie Meyer - Idaho Power Becky Arte Howell - Idaho Power Billie McWinn* - Idaho Power Chellie Jensen* - Idaho Power Curtis Willis - Idaho Power Dahl Bietz - Idaho Power Denise Humphreys - Idaho Power Eli Morris – Applied Energy Group Eric Shierman - PUC of Oregon Jason Talford - Idaho Public Utilities Commission Jared Hansen - Idaho Power Jeff Rigby - Idaho Power Jordan Prassinos – Idaho Power Julie Rosandick* - Idaho Power Kathy Yi* - Idaho Power

Quentin Nesbitt – Idaho Power Sid Erwin – Idaho Irrigation Pumpers Association Taylor Thomas – Idaho Public Utilities Commission Tina Jayaweera – Northwest Power & Conservation Council Wil Gehl – City of Boise

Kevin Keyt - Idaho Public Utilities Commission Kimberly Loskot – Applied Energy Group Krista West - Idaho Power Laura Conilogue - Idaho Public Utilities Commission Landon Barber - Idaho Power Maggie Buffum – Applied Energy Group Michelle Toney - Idaho Power Mindi Shodeen – Idaho Power Nathan Black - Idaho Power Nick Sayen – Public Utility Commission of Oregon Rosemary Curtin – Facilitator Shelley Martin - Idaho Power Theresa Drake – Idaho Power Todd Greenwell - Idaho Power Zack Thompson - Idaho Power

Note Takers: Michelle Toney and Kathy Yi – Idaho Power

Meeting Facilitator: Rosemary Curtin

Virtual Webex Meeting Convened at 9:33 a.m.

Rosemary convened the meeting and led introductions.

9:35 AM-Announcements

Quentin went over the agenda. There were no questions or comments about the August 2022 meeting notes or the November agenda. He introduced the newest member to EEAG, Brad Heusinkveld (representing ICL). Quentin added the February 2023 meeting will likely be in person and that the plan for the remaining 2023 meetings will be virtual.

Connie shared that the IPUC approved the prudence request for 2021 expenses and acknowledged the EEAG contributions to the success of Idaho Power's programs.

9:40 AM-2022 Financials & Savings – Quentin Nesbitt

Quentin presented the DSM savings and costs by sector and program from January through September 2022. He also provided an overview of the program evaluation plans and specific evaluations to be done in 2023 then asked for any feedback.

Questions & Comments:

One member asked if the company is going to separate out expenses from the carryover funding for HVAC systems from normal WAQC expenses in our reporting, noting it would be helpful for those to be separated out. Billie said those costs will be broken out in the annual report.

9:52 AM-Cost Effectiveness – Kathy Yi

Kathy presented the DSM program's cost-effectiveness (by sector) with a deeper dive on some specific programs. Kathy went into detail on Commercial Energy Saving Kits (ESK) and discussed several anticipated changes to the savings assumptions in programs such as Green Motors Rewinds, Heating & Cooling Efficiency, Shade Tree, and Weatherization programs. Kathy presented the Energy Independence & Security Act (EISA) timeline and standards then highlighted those programs that would be affected by EISA with a deeper dive on Student Kits and C&I Retrofits.

Discussion and Questions:

Lighting

One member asked if one of the purposes of evaluations is to compare measure weightings to the Technical Reference Manual (TRM) and whether those weightings are adjusted after the evaluation. Kathy said the evaluators do check the TRM numbers but she's unsure if they check the underlying weightings. Kathy indicated she would follow up directly after the meeting. Kathy followed up with the member through email after the meeting saying that the weightings for YTD numbers show some building types of weights are close to what we currently have in the TRM (retail and office for example), and other building types seem off (manufacturing and schools for example) and could still be experiencing lingering impacts from COVID. Also noting weightings mostly impact the HVAC

measures and we don't have many HVAC projects that come through, most projects are lighting which is a straightforward calculation. She also noted that rechecking the weightings with multiple years of data to absorb and any COVID impacts will be on our to-do list when we update the TRM or have our next program evaluation.

Avoided Costs

One member asked how avoided costs are decreasing despite a recent filing showing increasing forecast prices for natural gas. Kathy said she is not familiar with the filing, but avoided costs are based on the company's Integrated Resource Plan (IRP) and forecasted gas prices are part of the avoided costs. She added that it is important not to make program changes too quick, however, if a program is not cost-effective for a particular year, then the company might factor in other considerations. Quentin added it is the company's practice to use acknowledged IRPs and if we see a program not cost-effective but know an update will increase the avoided costs, we will consider that before we make changes.

There was a question about the major driver of the avoided costs flattening out in the IRP. Quentin explained that the high-level reason is the impact of renewable resources. Another member agreed and added that the avoided costs that Kathy presented are annualized costs, but the shorter-term costs and load shapes are starting to change with the growth of certain renewables. The member used the California Duck Curve example to demonstrate the stress on the system due to the evening ramp.

EISA

One member asked for clarification about the July 1st enforcement date. Kathy said enforcement is progressive, expected by July 1st, but compliance can't be predicted. The member asked how the commercial kits will be cost-effective in 2023 compared to 2022. Kathy said she is waiting for the final result of the evaluation to determine the kit savings for 2022, but the new kit vendor had a late start with the new design and there have been fixed costs incurred this year which is why it won't be cost-effective this year. The evaluator recommended updating the savings using survey results. This could lead to 2023 being cost-effective if future survey results show higher installation rates.

Another member asked what assumptions are made for future savings and if they are strictly based on the life of the bulb. Kathy said the measure is based on the life of the bulb but because of the new standards, at some point when people replace them, they will have no choice but to get an efficient bulb anyway.

Home Energy Reports

One member asked about the Home Energy Reports one-year program life. Kathy explained that HERs have a one-year life because we send reports every year and claim annual savings. At some point, the program will end, and we will stop sending out reports. However, research shows that savings will continue to persist after customers stop receiving the reports. These savings are not reflected in the one-year life view.

10:35 AM-Break 10 mins

10:46 AM-Residential Programs – Billie McWinn

Billie presented the overall health of the residential programs in terms of YTD savings. She discussed program impacts from EISA and the Shade Tree program changes.

Discussion & Questions:

There was a question about the saving goals for each year and whether the company achieved its goal in 2021. Billie said savings are broken down by program then by the sector and she is presenting only the residential portfolio. Quentin added our goals are set based on the Energy Efficiency Potential Study and the company achieved its total savings goal in 2021.

Lighting Buy Down

One member asked how the company knows what bulbs are in the stores. Billie said that the program specialist monitors the stores. The member suggested the company also look at the NEEA shelf study.

Welcome Kits

One member asked what will occur after July in the welcome kits. Billie said that we anticipate the kits will contain two lightbulbs and two nightlights but will not claim savings for the lightbulbs beyond July. Funds will be associated with the Education Initiative.

Another member asked why showerheads were removed from the kits. Kathy said the welcome kits had only lighting and noted it was the Energy Saving Kits that had showerheads for customers with electric water heaters. Billie added that the company is always looking for new energy-saving widgets to include. The member added, with electrification, the company may want to look at other measures.

Multifamily

One member asked if the company has already started to close the Multifamily program. Billie said the program ends December 31st and the vendors have been notified.

Shade Tree

One member commented that the smaller trees will grow into the same size as the larger trees and asked how the company accounts for that longer measure and how will the company differentiate the lifespan of the trees (when they finish growing). Kathy said we adjusted the calculator out one year and the evaluation and audit will help us figure out what happened to those trees. She explained how contractors go out and look at the trees based on the customers program application that has a map of where the trees are located. If the trees aren't where the customer said, the auditors go back and recalculate. They will then gather all the data and come up with the new savings.

11:00 AM-C&I&I Programs – Chellie Jensen

Chellie provided year-to-date updates (preliminary) participation and savings numbers, changes, and challenges, for the commercial, industrial, and irrigation programs. Chellie discussed the Small Business Direct Install challenges, reminding EEAG that the program ends in March. She discussed the Custom Project pipeline, the Industrial Wastewater Cohort, and the Find and Fix program. She then noted that some industrial training is back in person, but we are also offering hybrid training. There were no questions or comments.

11:26 AM-Marketing – Julie Rosandick

Julie provided an overview of Program Marketing, she discussed the DR thank you letters, postcards and print materials, Shade Tree, the contest results, College of Idaho signage, Fall Energy Efficiency residential campaign and the marketing campaign of "Joulie and Wattson" retiring. She showed the new Commercial ESK and Custom Projects flyers. Julie also discussed the latest Energy @Work newsletter for C&I customers.

Discussion & Questions:

Demand Response Marketing

One member highly encourages the company to have the VP or president sign the Irrigation Peak Rewards thank you letters to show how grateful the company is for DR participation. Julie said the company will consider the request. The member asked if there will be more marketing to irrigators. Julie said we will look at other marketing ideas and would like to collaborate further outside of EEAG.

Changes in Programs

One member asked how the marketing materials reflect changes within the programs. Julie said the marketing materials are reviewed by each program specialist with each program change. Annie added that the Corporate Communications and Customer Relations & Energy Efficiency groups frequently meet to discuss program changes. Quentin clarified that in some situations a direct letter is sent to all potential participants, depending on the type of change and how it may affect participation. It is the company's intent to give customers time to respond to program changes. Finally, Chellie added that on the commercial side, we also use our field staff the Key Account Energy Advisors and Energy Advisors to connect with customers directly.

11:39 AM-Lunch 1 Hour

1:00 PM-2022 DR Season Results - Billie McWinn - Chellie Jensen

Billie presented the residential A/C Cool Credit Demand Response (DR) program, discussing participants, enrollment levels, and 2022 event results.

Chellie presented the C&I Flex Peak and Irrigation Peak Rewards DR programs event results. Chellie highlighted some of our marketing and customer engagement on these programs.

Discussion & Questions:

A/C Cool Credit

One member asked why the projected participation declined. Billie said this is just a predictive model from Excel looking at historical numbers. It's purely based on the last four-year trend and not any other insight.

Another member asked if the company reaches out to customers who no longer participate and find out why they opted out. Billie said the drop out number is small in comparison to the attrition due to customers moving out of homes. Generally, there are only small amounts of opt outs per event because the program tends to be one where customers sign-up and forget. When people move, they sometimes come back to the program, but that occurs most common when they move into a house with the switch

already installed. She noted there are many participants who may move out of the area or into a home that may not be eligible as there are limiting factors that prevent them from participating.

The member also asked if the company is considering thermostat-based rather than a switch-based program. Regarding a thermostat Program, Billie said that the company has been meeting with vendors and getting price quotes. Quentin will also cover this subject in the next presentation.

Another member asked if the capacity in the program has been close to what it's been in the past. Billie said at one point we had almost double the number of participants we have, and that program capacity is completely dependent on the number of participants we have enrolled.

Irrigation

One member asked how the later-hour option called Group D is broken out. Chellie said Groups A, B, and C are broken out by region. Group D is the latter option, meaning we can call events up until 11 pm which offers a higher variable incentive, so a participant could be in any region. The member then asked if the company has considered breaking out groups by crop. Quentin explained we have considered that in the past, however that can be complicated. If groups were set by crops, it would have to change every year by site (depending on what the customer planted) and it is not uncommon for one system to irrigate multiple crop types. Quentin also pointed out that it is up to the farmer to consider their crop when looking at whether to participate in the program.

Another member asked about the breakdown between manual and automatic participants. Quentin responded that the number of manual customers is small, approximately 20 customers on 40 sites, however the load is a significant portion of the program at around 60MW of potential reduction. The DSM annual report will have the participation information in detail. The member asked if there are issues with manual participants. Chellie responded that they participate well and have a high realization rate during events.

One member requested clarification about the minimum number of events and asked if the program is economically dispatched. Quentin said there are multiple factors considered for dispatching and market price is one but not the purpose of the program. The main purpose is peak capacity. The minimum number of events also enables the program to regularly test its capabilities. We still have a minimum of three events, but the difference is that the variable payment doesn't kick in until the fifth event. Our Load Serving Operations group ultimately decides when the program is used, however the Customer Relations and Energy Efficiency department also advises on event timing. The main purpose of the program is for when there aren't other options for resources including the open market.

Another member requested clarification about the event times for the groups and if those events would have been possible prior to the program parameter changes this year. Chellie explained many events went to 10 pm which is new, and Group D had the potential to go to 11 pm. The member then asked if the late option has sites with automatic restart switches and if we track specifically why those customers are willing to participate in the late evening hours. Quentin said we have not asked for that information, but know it is dependent on the customers willingness or ability to go out and turn their systems back on and how easy or hard it is for them to do that, so we know automation has a lot to do with it.

Flex Peak

One member asked about the July event that was called and then later canceled. Chellie said that this did not impact customer participation for the remainder of the season, but we are aware it can negatively

affect some customers, she added that the company having the ability to cancel events is an important feature as system conditions can sometimes change quickly.

One member asked if the later hours were a hurdle for the commercial/industrial customers. Another member responded that for their company there wasn't any negative feedback or issues. However, they had heard from the farm side of their company, when there's a late irrigation event, they still need to check pumps to ensure they come back on. That does cause overtime for the labor, so some fields have been opted out of participating in the program.

1:38 PM-DR Potential Study & EE Potential Study – AEG – Quentin Nesbitt

Quentin presented the potential study results for both DR and Energy Efficiency (EE). He discussed how the company utilizes the studies in its IRP. Quentin introduced AEG, hired to complete the studies, and said Eli Morris and Maggie Buffum from AEG were available to answer detailed questions on the studies.

Discussion & Questions:

One member asked about the assumptions and costs used to model the pricing-based DR programs. Quentin answered that this includes the fixed and variable costs, software, admin, and incentives. We look at the differential of the rate as being an incentive and include that in the costs.

Another member asked if the study accounts for the overlap in A/C switches and a Bring Your Own Thermostat (BYOT) program. Quentin answered that AEG did account for this, and in their study gave priority to the switches but recognized that there are customers that would not participate in A/C but would participate in BYOT. The member then asked if the BYOT overlapped other EE opportunities or measures. Eli answered that they did model the assumption that smart thermostats would grow over time, but they did not model the cost coincidence between EE/DR. The member asked if the \$92 for the BYOT program is a fixed cost. Quentin said it is an all-inclusive cost and includes software, incentives, and the cost that Idaho Power would have to incur to go through a third-party vendor to get access to the thermostats. All costs are gathered up and the \$92 is levelized over the life of the program. Eli added, it's levelized over a 20-year period.

One member asked if the DR program estimated costs included fixed costs underlying adoption of each program. Quentin answered that all aspects of each of the program's costs are estimated, including startup, vendor costs, and customer incentive costs. The member then asked if sunk costs of the DR programs are already accounted for. Quentin responded that those costs are not included, only estimated costs going forward are included.

Another member asked if the study looked at DR as a flexible resource. Jared said the company is modeling DR differently than in the past and asked for clarification on what aspect of flexibility is being referred to. The member said mostly due to significant ramping and the duck curve. Jared answered that the primary point of analysis surrounds the timing of the net peak. The member then asked why the grid enabled water heater is so expensive. Eli responded that this is due to the underlying assumptions and that there are high fixed costs being spread over a small number of units.

A guest asked how the costs are impacted by the assumption of how many events are called per season. Quentin answered depends on the program design. Our existing programs have fixed incentives, and then a variable incentive for our C&I and irrigation program after the 4th event. The costs assume full use of the programs. The guest then asked if this includes more costs than a supply side resource shown in the IRP information. Jared said that it depends on the data in the IRP, but that capacity and operating costs

are considered in the IRP. Jared also said the more cost-effective supply side resources tend to be closer to the \$50 per kW range but added that it is not always a perfect comparison from the numbers alone due to inherent differences in operating characteristics and timing availability of each resource.

2:14 PM-Wrap-up/Open Discussion – All

Quentin discussed future meetings. Our current plan for 2023 is one in person and three virtual meetings and stated that the plan is to have the February meeting in person, but we will continue to evaluate. He noted that we will send out a Doodle poll in December to narrow down the dates for 2023.

Rosemary asked everyone if there were any comments or further questions.

There we no further questions or comments.

2:16 PM-Adjourn