



In the Community to Serve®

Targeted TAG #2 – TAG Meeting

Date & time: 01/25/2024, 9:00 AM to 10:00 AM

Location: Microsoft Teams Meeting

Presenters: Caleb Reimer, Brian Robertson, Jenny De Boer

In attendance: Abe Abdallah, Alessandra de la Torre, Jacinda Ashby, Desiree Bickmore, Lori Blattner, Kary Burin, Debra Campbell, Mark Chiles, Corey Dahl, Patrick Darras, Jenny De Boer, Rebecca Eaton, Bruce Folsom, Michael Freels, John Garrett, Will Gehrke, Byron Harmon, Kim Herb, Abbie Krebsbach, Joseph Lennan, Scott Madison, Devin McGreal, Heather Moline, Russ Nishikawa, Noemi Ortiz, Michael Parvinen, Caleb Reimer, Brian Robertson, Carra Sahler, Eric Shierman, Zachary Sowards, Matt Steele, Bailey Steeves, Carolyn Stone, Claire Valentine-Fossum, Mahon Walsh, Quinn Weber, Kathy Wold

Brian Robertson, Supervisor of Resource Planning, opened the meeting by welcoming and thanking stakeholders for participating in Cascade’s IRP Process. Brian reminded folks that we wouldn’t be doing introductions at the beginning of the meeting but asked if/when people interjected throughout the meeting to please introduce themselves.

Presentation #1 – Safety Moment (Jenny De Boer)

- Jenny gave a quick safety moment on stress.

Presentation #2 – Demand Side Management Forecast (Caleb Reimer)

- Caleb Reimer, the manager for Cascade's Energy Efficiency Program in Washington, presented on the demand-side management forecast for the Washington IRP. He discussed the program's focus and highlighted key points, including an overview of the program's performance historically and in 2023. Caleb also talked about the conservation potential assessment (CPA) and methodologies behind it, as well as energy efficiency forecasts and programs. He noted that the residential program had a record year in 2023, with over 100 projects completed, and discussed savings in terms of therms for residential, commercial, and low-income programs. Caleb congratulated the teams for their achievements and encouraged questions throughout the presentation.
- Energy Efficiency Preliminary 2023 Savings
 - Residential—604,132 (new record by a lot)
 - Commercial—429,519
 - Low-Income—15,612

Question: Byron Harmon praised the “impressive” work done in the last year and asked whether this level of achievement could be sustained as a growing trend or if it was more of a temporary dip in an otherwise upward trend.

Answer: Caleb responded that while they aim for a continuing upward trend, achieving over 600,000 therms in savings, as they did in the past year, would be exceptional. He mentioned that their goal for 2024 is around 450,000 therms, but they are currently ahead of that pace. Caleb expressed that hitting 600,000 therms again would be a fantastic result.

Presentation #3 – Conservation Potential Assessment (Caleb Reimer)

- Caleb Reimer continued his presentation by discussing the conservation potential assessment (CPA) and its complexity. He explained that the CPA is a collaborative effort that takes about nine months to produce, working with Applied Energy Group (AEG). Caleb highlighted two slides that outline the process and framework of the CPA. He emphasized the importance of understanding what the model does and does not do, noting that it produces new outputs based on inputs but does not create new inputs. Caleb then detailed the three categories of market characterization: customer segmentation, market size, and equipment saturation, tech shares, and vintage distribution. He explained how data is collected from internal historical records and assessments provided by organizations like NIA. Caleb also discussed unit energy consumption and new construction profiles, focusing on forecasting market trends and available energy-efficient equipment.
- He then described the process of producing a baseline projection, which serves as a reference case for total energy usage if there were no energy efficiency programs. He explained how the model modifies usage based on various factors such as income group, type of home, home turnovers, and type of commercial business. Caleb concluded by mentioning the potential module, which estimates the potential based on the baseline, technical potential, achievable technical potential, and achievable economic potential.
- LoadMAP Analysis Framework
 - Inputs
 - Market Characterization
 - Projection Data
 - Energy-efficiency Analysis
 - Outputs
 - Base-year Energy Consumption
 - Projection Results

Question: Byron from UTC asked Caleb and Brian about the process of integrating the conservation potential assessment (CPA) into the IRP model. He inquired whether a new CPA would be created for the IRP or if the 2023 CPA would be used for the 2025 IRP.

Answer: Caleb responded that, most likely, the 2023 CPA would be plugged into the upcoming IRP. However, they have the ability to run alternative scenario analysis if the IRP team wants to experiment with ideas not considered in the last CPA. Caleb also mentioned that they are starting the upcoming CPA earlier than in the past, planning to kick it off late in the summer, allowing them to incorporate new ideas or scenarios into the CPA if desired.

Question: Quinn from UTC asked Caleb about how they are incorporating provisions from the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) into their economic analysis.

Answer: Caleb responded that their company is reviewing these acts from a broader company perspective, not just focusing on energy efficiency. He mentioned that the emphasis of these acts seems to be more on electric or electricity conversion, which has not yet had a significant impact on their energy efficiency analysis. However, Caleb expressed openness to input from the Conservation

Advisory Group meetings, the Commission, or any other parties to help incorporate these provisions into their upcoming CPA analysis.

Question: Claire Valentine-Fossum from the Oregon PUC asked if there is a process in place to learn from past examples or collaborate with other utilities when developing the framework for gas planning, especially since many entities, including AEG, work for multiple utilities.

Answer: Caleb Reimer explained that AEG produces CPAs for various entities, including Cascades, NW Natural, and Avista. He mentioned that there is collaboration and sharing of assumptions and knowledge among these entities, which helps in understanding emerging market trends, technological advancements, and rule changes. He emphasized the value of starting from a common source and being in line with assumptions from other utilities.

Question: Quinn Weber asked about equity analysis and levels of participation among low-income communities in the gas planning framework.

Answer: Caleb Reimer explained that they do consider equity, with a separate analysis for low-income weatherization programs. They segment customers into low, moderate, and regular income groups, as well as by climate zones and housing types, to account for different energy usage rates. Noemi Ortiz summarized the equity considerations in their low-income weatherization program, which prioritizes services for the elderly, persons with disabilities, households with children, high residential energy users, households with high energy burden, and Native American households. The program provides energy efficiency measures, health and safety repairs, and is funded by the Department of Commerce, offering services at no cost to qualified households.

Question: Heather Moline sought clarification on some terminology. She asked about the term "generator" in the context of the non-equipment measure input generator in the load MAP.

Answer: Caleb Reimer explained that it refers to a tool that creates something, in this case, information that informs the potential model of the CPA. Heather also asked about "ramp rates," and Caleb explained that they are part of the equipment stock and modifying usage, impacting different equipment items' lifespans and segmented by income style. These rates are influenced by the Northwest Power Conservation Council and then modified by AEG for relevance to the natural gas market.

Presentation #4 – Portfolio (Caleb Reimer)

- Caleb Reimer discussed the results of the 2023 CPA, focusing on the breakdown by portfolio, which includes residential, commercial, and industrial segments. He mentioned having half a dozen slides showing the results and explained that the energy efficiency potential is presented in thousands of therms, with a baseline projection and savings calculated based on usage. He also touched on ramp rates and how they impact equipment stock and usage modification. Caleb highlighted the UCT achievable economic potential, which is used for cost-effectiveness and savings assumptions, and mentioned that the program works on a biennium timeline. He concluded by discussing the cumulative savings as a percentage of baseline and how the technical potential decreases to achievable use potential and achievable economic potential. Caleb also provided a breakdown of the residential sector, showing the forecasted potential for space heating, insulation, furnaces, thermostats, and other heating measures.

Question: John Garrett from Oregon CUB asked about the impact of air conditioning on potential savings and how insulation, which is valuable for space heating, might also benefit air conditioning.

Answer: Caleb Reimer explained that since they don't incentivize gas use for air conditioning, it falls under a non-energy impact or benefit, typically represented as a 10% adder in their UCT forecast to incorporate unquantifiable factors. He mentioned that utilities like PSE, which provide both gas and electric services, can claim savings from decreased electric usage for air conditioning with insulation, but as a gas utility, they can't directly incorporate those savings. Caleb also hinted at future potential for fuel switching and indicated that they might explore this further in their 2025 CPA.

Presentation #5 – Residential (Caleb Reimer)

- Caleb Reimer presented a table showing the baseline forecast for energy usage, indicating a decrease in gas usage over time. He highlighted the achievable economic UCT potential in 2025, which informs their biennial savings goal, set at 970,000 therms. He noted that the top 10 residential measures according to the CPA include insulation, furnaces, water heaters, and duct sealing, which align with their current program focus. Caleb mentioned their hope to increase the number of insulation installations in the future and praised their trade ally coordinator, Stephanie, for her work in getting new contractors involved in the program.
 - Residential Forecast
 - Baseline Savings Projection (thousand therms) for 2024: 229,381
 - Cumulative Savings Projection (thousand therms) for 2024:
 - Achievable Econ UCT Potential 446
 - Achievable Econ TRC Potential 299
 - Achievable Technical Potential 563
 - Technical Potential 3,082
 - Residential Top Measures and Cumulative 2024 Savings Projection
 - Insulation – ceiling upgrade R-49 to R-60 – 115 thousand therms
 - Furnace – direct fuel AFUE 97% – 110 thousand therms
 - Insulation – wall cavity R-14 to R-21 – 46 thousand therms

Question: Heather Moline asked about the distinction between what's technically and economically available versus what Cascade will pursue or what people are actually doing.

Answer: Caleb Reimer explained that the slide was a forecast from the CPA for 2024 and 2025, indicating what they expect to see to reach their therm number goals. He mentioned that if there were a huge disconnect between the forecast and actual data, it would indicate a problem with their analysis or assumptions. However, since the forecast aligns with what they're seeing, it gives them confidence in their methods and suggests they won't need to change much for the next iteration.

Presentation #6 – Commercial & Industrial (Caleb Reimer)

- Caleb Reimer discussed the forecasted gas usage for 2024 and 2025, highlighting the achievable economic UCT potential. He mentioned a large project on a Navy base coming up in 2024 and 2025 that would contribute to savings. Reimer expressed confidence in meeting the savings goals. He briefly shared the top ten measures for commercial and industrial sectors, mentioning common equipment replacements like installations, gas boilers, and water heaters. He noted that the CPA assumptions for equipment replacement seem reasonable and accurate. Reimer also touched on the industrial forecast, noting a slight increase in usage driven by average usage per industrial application and customer counts. He mentioned that factors like strategic energy management, a custom approach to energy efficiency, are being piloted and could contribute to future savings.
 - Commercial Forecast
 - Baseline Savings Projection (thousand therms) for 2024: 85,692
 - Cumulative Savings Projection (thousand therms) for 2024:

- Achievable Econ UCT Potential 301
- Achievable Econ TRC Potential 304
- Achievable Technical Potential 1,045
- Technical Potential 1,445
- Commercial Top Measures and Cumulative 2024 Savings Projection
 - Insulation – roof/ceiling R-38 – 48 thousand therms
 - Insulation – wall cavity R-21 – 44 thousand therms
 - Gas Boiler – insulate water lines – 22 thousand therms
- Industrial Forecast
 - Baseline Savings Projection (thousand therms) for 2024: 20,614
 - Cumulative Savings Projection (thousand therms) for 2024:
 - Achievable Econ UCT Potential 68
 - Achievable Econ TRC Potential 67
 - Achievable Technical Potential 77
 - Technical Potential 94
- Industrial Top Measures and Cumulative 2024 Savings Projection
 - Strategic Energy Management – energy management system – 17 thousand therms
 - Process – insulate process fluid lines – 10 thousand therms
 - Gas Boiler – insulate water lines – 8 thousand therms

Question: Claire Valentine-Fossum from PUC asked about the strategic energy management program, specifically whether it is conducted by the company itself or by a third party.

Answer: Caleb Reimer explained that the program is currently being run by their commercial partner, TRC (previously Lockheed Martin), as a pilot offering. This program involves conducting audits and walkthroughs of industrial and commercial buildings to ensure proper usage and sizing of equipment, as well as providing recommendations for efficiency improvements. Reimer clarified that TRC is doing the assessments in-house, and the information gathered will be available to the companies regardless of whether they choose to implement the recommendations.

Presentation #7 – Feedback for Cascade? (Caleb Reimer)

- Heather Moline from UTC provided feedback on the meeting, noting that while she appreciated the information provided, she suggested that the pace could be slowed down a bit and that more space could be left between slides to allow attendees to digest the information. She felt that the meeting moved a little fast, even for someone with four years of experience.
- Brian Robertson acknowledged the feedback and thanked her for it.

Presentation #8 – 2025 WA IRP Schedule (Brian Robertson)

- Brian outlined the upcoming meetings and timeline for the IRP process. The energy efficiency meeting took place at the end of March, followed by an equity in the IRP meeting in April, a customer and load forecast meeting in May, and a series of meetings in June, including discussions on CCA compliance, modeling, distribution, modeling, and resource integration. In June, there will also be a longer presentation to discuss methodology changes and results from different methodologies, with the aim of locking in numbers for the next steps. Feedback is expected at the end of June, with a second tag meeting at the end of July to discuss feedback and file a draft. A third tag meeting will be held to discuss final results, with the possibility of a fourth tag meeting in January if needed, before filing the final draft in February.
- Brian announced that the next meeting would focus on equity in the IRP and would be held on Thursday, March 28th. He also provided a website for comments, feedback, and questions. Afterward, he opened the floor for any additional questions or thoughts from the attendees.

Post Presentations –

- Carra Sahler asked about the industrial forecast summary, confirming if it was all about Washington with no mention of Oregon. Lori Blattner confirmed this, stating that all the numbers discussed were specific to Washington. Carra then inquired about plans for Oregon, to which Brian Robertson clarified that the IRP process being discussed was for Washington specifically. Carra apologized for the questions about Oregon and expressed appreciation for the information, noting the importance of informing the Commissioners about their plans. Brian acknowledged the feedback and mentioned that while the focus was on Washington, some information would be used for the Oregon IRP update. Carra thanked them for clarifying and suggested that the information about Washington be clearly indicated in future communications. Brian agreed and welcomed any additional questions or feedback.

The Meeting was Adjourned

Per Cascade Commitment #8 (Stakeholder Engagement Design Document, 2/22,2022: “Provide TAG minutes that include the action items from bullet #7 as well as any upcoming deadlines for feedback on the IRP”), here are additional action items to track, coming out of the TAG2 meeting:

1. Cascade will model scenarios around the Avoided Cost and CPA.
2. Cascade is investigating the impact of the IJJA and IRA for energy efficiency.
3. Cascade will make an effort to slow the pace of the meetings and to make it clear that this IRP process is for the Washington IRP filing.