

Memorandum



April 27, 2023

TO: Cost Effectiveness Advisory Committee
FROM: Jonathan Belais, NEEA
SUBJECT: Key Takeaways & Action Items – April 27, 2023

To Committee Members,

Thank you for your attendance and participation at our April 27th Cost Effectiveness Advisory Committee meeting. We appreciate your feedback and questions. Below is a high-level summary of the meeting and the feedback we heard. If we missed anything or you have additional questions, please contact Jonathan Belais (ibelais@neea.org).

- [Meeting Packet](#)
- [Slides](#)

NEEA Staff: Aaron Ingle, Amy Webb, Anu Teja, Ben Spearing, Chris Cardiel, Christina Steinhoff, Evan Hatteberg, Havala Hanson, Jonathan Belais, Kathryn Bae, Lauren Bates, Meghan Bean, Ryan Brown, Stephanie Rider, Susan Hermenet, Tim Runyan, Traci Franz, Zdanna King

On the Phone: Anna Kim, Caleb Reimer (Cascade Natural Gas), Haixiao Huang (NW Natural), Jake Kennedy (Energy Trust), Kathy Yi (Idaho Power), Landon Barber (Idaho Power), Michael Coe (Snohomish PUD), Phillip Kelsven (Bonneville Power Administration), Quentin Nesbitt (Idaho Power), Roger Kainu (ODOE), Tina Jayaweera (Northwest Power and Conservation Council)

Preliminary Question

- If the option were made available, what is the likelihood you would be able and interested in joining a Q3 CEAC meeting in-person?
 - 1 (no chance): 30% (3)
 - 2: 30% (3)
 - 3: 30% (3)
 - 4: 0% (0)
 - 5 (definitely): 10% (1)

Market Research and Evaluation Update (Presenter: Amy Webb)

Description – NEEA staff gave time to discuss current studies being held by the Market Research and Evaluation team.

Feedback/Questions –

- *Question – Tina Jayaweera: There is a lot going on in Idaho with codes, and was wondering if there was an update as to how the code is rolling out.*
Response – Christina Steinhoff: They haven't made any changes yet, and are expecting some hearings in June and August that could bring changes. The codes team is paying attention and will update our analysis as more information comes in.
Response – Meghan Bean: Our evaluation of the current residential code is kicking off this month. Once the final decisions this summer are made, we will make adjustments as needed. The research will include on site and permit data and interviews with market actors.
Response – Chris Cardiel: We have a corresponding commercial code study for Idaho that will kick off this summer. Timing is a little behind the residential study by design.
Response – Meghan Bean: We expect the report to be finished at the end of this calendar year.

Action Items –

- None

Dual Fuel Portfolio Overview (Presenter: Ryan Brown and Evan Hatteberg, NEEA Staff)

Description – NEEA staff presented on the current state of the electric and natural gas portfolios including where each program resides in the Initiative Lifecycle. The electric portfolio generated 38.7 aMW of co-created savings in 2022, the cost benefit ratio is 1.99, the co-created regional winter peak savings is 45 MW, summer peak savings were 35 MW, and 174,000 tons of carbon emissions were avoided. The natural gas portfolio estimates to land around 4 million therms of total regional savings for this business cycle. NEEA staff also presented on the updated input assumptions for the 2021 Power Plan. These updates include changing to ProCost version 5.x, updating model inputs, and changing the definition of peak hours.

Feedback/Questions –

- *Question – Tina Jayaweera: For reduced wattage lamp replacements, there is a bill in Oregon proposed to remove fluorescent bulbs from the market. If the bill passes how does that affect the tracking of the program?*
Response – Jonathan: This is a 2024-25 bill, so it wouldn't start to affect savings until that time.
Response – Kathryn: We anticipate the last year that we will be reporting energy savings is 2023. After that point, the retirements exceed total new lamp sales, so this aligns with the timing of the bill.
- *Question – Quentin Nesbitt: For the Residential Code Evaluation, did this include residential multifamily? Were there jurisdictions that claimed this had to be gas?*
Response – Meghan: These numbers are strictly single family, and there weren't any jurisdiction limitations in this code.
- *Question – Haixiao Huang: I wonder if you have a benefit cost ratio for the natural gas portfolio?*
Response – Evan Hatteberg: The gas portfolio is in the early stages so we only have one program to report for now, which is ERTUs. So there isn't really a portfolio value.

Action Items –

- None

Key Assumptions Updates (Presenter: Ryan Brown, NEEA Staff)

Description – NEEA staff presented on recent [key assumption updates](#) and the documents shared through the [Funder Portal on neea.org](#). The three key assumptions updates included XMP Baseline, LLLC Extrapolation Methodology, and the Naturally Occurring Baseline for ENERGY STAR Most Efficient Bottom Mount Refrigerators.

Feedback/Questions –

- Question – Tina Jayaweera: How dynamic is the LLLC market? How frequently do you need to revisit your assumptions
Response – Kathryn Bae: We reach out to our manufacturers as often as we can, and the 7 data sources are visited quarterly. Our relationships with distributors remain strong, so we can often discuss trends with them. Assumptions should be revisited annually or every other year
- Question – Phillip Kelsven: What made this so appealing to manufacturers?
Response – Ryan Brown: They did talk about how this was a point of competition in their products. They had some of these technologies in their product road maps, but this was influential in bringing more in. It also expanded the number of models with these technologies. These refrigerators actually are quieter and more efficient at keeping the environment cold.
- Question – Tina Jayaweera: Around my question earlier around standards and their influence. I believe the refrigerator standard was actually supported by manufacturers, which is rare. If the standard includes a lot of the same features as the most-efficient, then that could continue the market saturation right? Was Apex’s study done prior to the standard?
Response – Ryan Brown: Yes, I think that is all true. We did take standards into account. We made sure to have test procedures that are reliable, and had the ultimate goal of changing manufacturer behavior long term. The obvious tool for that is to support federal standards. Participating in the rule process is key. We do have more analysis to do on the specifics of the proposed rule to help inform our future studies.

Action Items –

- None

Market Updates (Presenter: Tim Runyan, NEEA Staff)

Description – NEEA staff presented market updates for Heat Pump Water Heaters, Ductless Heat Pumps, Retail Product Portfolio, XMP, and LLLC.

Heat Pump Water Heaters – Regional market growth observed to be 16% year over year. Idaho and Montana markets have notably increased, and new construction continues to be a predominant driver of sales through the entire region. Sales have declined slightly through retail channels. In 2021, local programs accounted for 60% of regional market units and this has fallen to 46% in 2022.

Ductless Heat Pumps – This program has entered Long Term Monitoring and Tracking, so market actions have ceased. Local program sales were at an all time high in 2021, but an 8% decrease was noted in 2022. A final report is available on [neea.org](#).

Retail Product Portfolio – 40+ television models have now been registered as ENERGY STAR v9, and more models are listed all of the time. Savings for televisions are expected to be listed starting in 2023. National appliance shipments have returned to historical norms after a spike in 2021. Refrigerators with advanced compressors are increasing in market share in recent years.

XMP – Highest efficiency residential circulators have been quite successful. Clean water pump market has grown overall, but have seen some backsliding with the efficiency mix.

LLLC – Two positive market trends include the increase in LLLC sales in the region, and the decrease in incremental cost of LLLC technologies. A drop in sales in 2021 is largely attributed to supply chain issues.

Feedback/Questions –

- Question – Quentin Nesbitt: For HPWH, are the savings in the market baseline from codes and standards being claimed?
Response – Tim Runyan: The Power Plan baseline savings reports include them, but NEEA's specific savings have a baseline that doesn't account for codes and standards that have developed since the initiative started.
Response – Ryan Brown: There is a substantial lower savings rate that is used for units being put into new homes. These codes have been a part of the program logic to help drive adoption and uptake.
Response – Tim Runyan: The deduction is determined by the post code studies that look at how adoption rates are effected.
Response – Ryan Brown: There is more detail on this in the funder reports if you would like to see it. The method has also been reviewed by a third party.
- Question – Kathy Yi: For HPWH and DHP, we provide the numbers that come through our programs each year. We don't usually break out numbers for new construction and retail sales, so what is happening there?
Response – Tim Runyan: We do the best we can to parse these numbers out using the information that is provided by the distributors we work with. We take those break downs and apply those as a market average to where the units we are given are unknown. We take the units that are reported to us, and apply weighting given by distributors.
Question – Ryan Brown: Do you know what proportions of these technologies are being sold through retrofits and retail?
Response – Kathy Yi: We might have that information.
Question – Ryan Brown: If you do have that information, we would be happy to incorporate it into our calculations.
- Question – Tina Jayaweera: You said the number includes front-load washers and top-load?
Response – Ryan Brown: The number for top-load has been relatively flat. NEEA's program is more focused on top-load, so that is why the team wants to spend time to make sure we are pulling the right levers in the market to see what we want to see. 70% of sales are top-load machines, and this trend has been quite stable.
- Question – Tina Jayaweera: On refrigerators, have there been trends or changes in configurations?
Response – Ryan Brown: That is a good question that I don't have at hand. We have looked at this. Directionally, bottom mount configurations continue to gain popularity. Top mounts are on a reverse trend.

Action Items –

- None

Final Announcements and Remarks

- Next CEAC meeting will be on August 24th, 2023. Please submit any topic requests to Jonathan Belais at jbelais@neea.org.

Meeting Feedback

- None

Public Comment

- None