

Memorandum



February 28, 2023

TO: Cost Effectiveness Advisory Committee

FROM: Jonathan Belais, NEEA

SUBJECT: Key Takeaways & Action Items – February 28, 2023

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To Committee Members,

Thank you for your attendance and participation at our February 28th 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, Ben Spearing, Chris Cardiel, Christina Steinhoff, Havala Hanson, Jonathan Belais, Lauren Bates, Meghan Bean, Ryan Brown, Stephanie Rider, Tim Runyan, Traci Franz, Zdanna King

On the Phone: Ben Cartwright (Energy Trust of Oregon), Bryan Russo (Tacoma Power), Caleb Reimer (Cascade Natural Gas), Haixiao Huang (Northwest Natural), Jonathan Belmont (), Kasey Curtis (Puget Sound Energy), Kathy Yi (Idaho Power), Kevin Smit (Northwest Power and Conservation Council), Michael Coe (Snohomish PUD), Phillip Kelsven (Bonneville Power Administration), Roger Kainu (Oregon Department of Energy)

Announcements:

- Please take a look at the CEAC Charter if you have any questions around the framework or objectives of these meetings.
- Efficiency Exchange early bird registration is now open, and you can register at this link. The conference will be held from May 2nd and 3rd, and early bird registration is open until March 1st.

Preliminary Questions

- *Question – Kathy Yi:* Are cost effectiveness benefit cost ratios posted already from NEEA?

Response - Ryan Brown: We talk about this in April usually, but we should be able to provide that information at any time. We update the calculations annually, but they don't change a ton from year to year. They are reported through our annual and quarterly reports to the board as well. The second quarter is usually where the conversation picks up on this, but could get something to you sooner.

Market Transformation Framework (Presenter: Jonathan Belais, NEEA Staff)

Description – NEEA staff presented information on what, why, and how market transformation is achieved in the northwest region. The diffusion of innovation was discussed and how it represents change in markets across cultures. NEEA's purpose was covered to give reasons why market transformation is important to the objective of NEEA and the region's energy efficiency metrics. As well, market transformation was shown to provide sustained savings across long timelines. Staff also described how NEEA works upstream in the market to allow greater distribution of market transformation efforts. Market transformation is achieved through NEEA's Initiation Lifecycle (ILC). NEEA takes into account the baseline of the market, barriers within the market, effective interventions for the market, and proper implementation of interventions and evaluation of the market. Market progress indicators are an important part of the ILC which give information on the magnitude of which market transformation goals are achieved from logic models.

Feedback/Questions –

- *Question – Haixiao Huang:* Is there any kind of certification or recognition that is given to a product after it has gone through this process? What does an ENERGY STAR certification bring to the product and how do we know how much this process played into the adoption of the specification?

Response – Jonathan Belais: In step 2 we are designing the process and coming up with outcomes that lead to sustained savings. Then in step 3, we are doing the work that drives it. Adoption of a specification would require having a third party come in to evaluate how effective the program is.

Meghan Bean: We hold off our evaluation until a specification update has been adopted, then we do an evaluation of how integral NEEA's work was in getting that specification in place and adopted.

Action Items –

- None

Market Transformation Savings (Presenter: Ryan Brown, NEEA Staff)

Description – NEEA staff presented on the importance of savings. Savings reports help support market transformation work over time. The market transformation curve was discussed, where the difference between the naturally occurring baseline and the actual market adoption leads to savings. The timeline of market transformation was shown to be crucial in terms of investment, as most investment into a program happens at the beginning of the timeline. This is a disconnect between when savings are realized, since they don't come about until later on in the program's lifetime. NEEA's annual report sheds more light on the savings realized through programs over longer timeframes. NEEA showed the two methodologies for reporting, which consist of a market transformation approach and a power plan approach. NEEA has used the market transformation approach for many years now, which compares progress to a naturally occurring baseline. The power plan approach compares progress to a baseline that increases in a step-wise fashion. NEEA staff described how NEEA calculates their savings, and differences in these calculations between a market transformation approach and a power plan approach. The savings reports completed by NEEA are a service to its funders, and wants to work with each funder to help reach their needs.

Feedback/Questions –

- *Question – Haixiao Huang:* What do you need to do to be able to identify the amount of investment for a program while keeping cost effectiveness in mind?

Response – Ryan Brown: We try to air on the side of conservative forecasts. We need to make sure that the benefits of the market transformation efforts outweigh the costs.

The understanding is that the risk of this process is mitigated by having a large portfolio of programs and having the whole region buy in to these programs.

- *Question – Haixiao Huang:* Does NEEA contract the savings work and calculations with a third party in order to evaluate the work? If so, who?

Response – Ryan Brown: We can use a third party to help calculate savings, though often times having a third party evaluate savings can reduce the cost-effectiveness of a program. Third parties do also help in evaluation of different parts of the ILC for each program. Every report done through a third party is posted publicly to the [Resources and Reports](#) portion of neea.org, which can be reviewed. NEEA often uses different third parties depending on their qualifications around each report.

Action Items –

- None

Market Transformation Costs and Benefits (Presenter: Ryan Brown, NEEA Staff)

Description – Resources are available on the [Funder Portal](#) portion of neea.org that give guidelines to both electric and natural gas savings and cost-effectiveness. NEEA staff presented on their core values and how they are incorporated into market transformation strategies. The importance of a 20 year timeline for each program was discussed as many savings aren't realized until long after a program has been established. The benefits and costs that are included in calculations were covered. NEEA staff discussed the ProCost tool that NEEA uses to assess cost-effectiveness, and provided examples of inputs for portfolio cost-effectiveness calculations. These examples can be found in the [Funder Portal](#) portion of neea.org.

Feedback/Questions –

- *Question – Quentin Nesbit:* How often and accurately is the natural baseline forecast created on an energy efficient unit?

Response – Ryan Brown: We attempt to establish the baseline at the outset of a program, and would review it if external factors in the market might shift the baseline. As close to where we start to intervene, we want to know how market interventions could play out. Accuracy can be trickier as it is counter-factual. We have third party reviews, and we receive input from other sources to corroborate the rationale of each intervention. We strive to be objective and account for any market conditions that would lead to natural adoption.

- *Question – Kasey Curtis:* Most programs would be in the second to third phase of the graph right? When you calculate cost-effectiveness are you taking a blended approach to take into account the stage in which each program finds itself? NEEA does some programs of value that don't go into market transformation like RBSA and CBSA, so are those bundled in with overall cost effectiveness?

Response – Ryan Brown: By the time we are reporting cost-effectiveness and including programs in the portfolio estimation they would usually be past their initial stages. In general, for each program we include the whole forecasted stream of benefits and costs. If we did stop after initial interventions we would still take the whole benefit stream into account over time. For the portfolio, we include all NEEA costs, which brings in programs in the market development stage.

- *Question – Kathy Yi:* I understand NEEA's cost effectiveness approach in general, and we share net market effects with our shareholder. I am thinking that our shareholders will want to see cost effectiveness ratios presented along with net market effects in the future. Is that possible?

Response – Ryan Brown: It is possible, but the question comes around the resource needed to do that. We would need to think about some of our inputs differently, and discuss how the baseline changes over time.

Christina Steinhoff: Let us get back to you on that. It is a little more complicated to aligning the cost with the baseline each year. The purpose of the calculation is to find out if a product is a good investment and has a good cost-benefit ratio. Deciding if NEEA is a good investment for a funder is usually left up to the funder, but we would be happy to discuss this further.

- *Question – Kathy Yi:* Are codes and standards savings incorporated into cost-effectiveness analysis?

Response – Christina Steinhoff: They are not included in the cost-effectiveness calculations, but we do find information on the impact of codes and standards for each program.

- *Question – Kasey Curtis:* I was wondering if you could speak a little more on risk mitigation regarding supply adequacy.

Response – Ryan Brown: We usually align with the council on this one, so it is based on the power plan.

Response – Kevin Smit: This is something that comes out of the plan when the portfolio is looking out to the future. If it sees conservation as a risk mitigation resource. In the last plan it did come out to zero. When our portfolio assessment determines a need for conservation, it gives us an amount based on assumptions. It is one of the things that comes out of the investment.

- *Question – Quentin Nesbit:* Is there an example of an energy efficiency unit that was evaluated and found to not be a great investment?

Response – Ryan Brown: A few in our initial natural gas portfolio were found to be less cost effective, which includes natural gas dryers and hearth products.

Response – Lauren Bates: Commercial real estate and deep energy retrofit programs I think are examples. Their evaluations are on neea.org.

Response – Amy Webb: Commercial Secondary Windows is another example.

- *Comment – Kathy Yi:* About the government tax benefits, I know you tend to use the RTF workbooks. For the heat pump workbook, tax benefits are already included in the costs, so might be something to keep an eye on.

Response – Ryan Brown: Not many of our measures right now have tax benefits incorporated right now. There have been rebates for heat pumps over time.

Response – Kevin Smit: The RTF started doing that again in recently with all of the recent tax benefits and credits, so definitely good to keep an eye on.

Action Items –

- NEEA to follow-up with Kathy Yi to discuss how best to prove investment in NEEA with shareholders.

Market Research and Evaluation Update (Presenter: Amy Webb, NEEA Staff)

Description – NEEA presented on the Q4 2022 Market Research and Evaluation (MRE) Newsletter, and provided a detailed look at two specific reports from this newsletter. The Q1 2023 MRE Newsletter will be posted on March 15, 2023.

Commercial and Residential Codes Market Progress Evaluation Report (MPER) #2 (Meghan Bean) – NEEA had ADM review the logic model and provide improvements. There have been major changes to the logic model. This MPER ADM is focusing on the training and support efforts. A final report is anticipated in the next few months.

Fans Market Characterization (Chris Cardiel) – The efficient fans program has been moved through to the program development phase of the program lifecycle. DMV has been contracted for this study. A final report is expected for the end of 2023. The design of the study focuses on profiling the regional fan market, identify market barriers, and engage with market actors.

Feedback/Questions –

- None

Action Items –

- None

Final Announcements and Remarks

- Next CEAC meeting will be on April 27th, 2023. Please submit any topic requests to Jonathan Belais at jbelais@neea.org.

Meeting Feedback

- None

Public Comment

- None