

Meeting Notes

Q3 2023 Natural Gas Advisory Committee

July 26, 2023

Webinar Only



Attendees:

Kevin Duell – NW Natural

Carlos Limon – Avista

Jackie Goss – Energy Trust of Oregon

Michelle Wildie – Puget Sound Energy

Laney Ralph – NW Natural

Peter Kernan – Oregon Public Utility Commission

NEEA Staff: Alisyn Maggiora, Peter Christeleit, Brandon Lindquist, Noe Contreras, Ryan Brown, Aaron Winer, Becky Walker, Tamara Anderson, Jason Jones, Jeff Harris, Aaron Winer, Mark Rehley, Meghan Bean

Resources

- **Agenda packet on NEEA.org:** [Agenda Packet](#)
- **Master slide deck on NEEA.org:** [Slide Deck](#)
- **Meeting Recordings:** Part 1 <https://vimeo.com/851078282>
Part 2 <https://vimeo.com/851079467>

Welcome and Introductions

If you have questions regarding general content in this meeting, please contact Alisyn Maggiora. (amaggiora@neea.org).

- A. Welcome and Introductions

Round Robin

Utility members and NEEA program staff shared updates since the last quarterly meeting.

A. **Michelle Wildie (PSE)**

- Corey Corbett has moved on. PSE's Clean Energy Implementation Plan was just approved. Were a finalist but did not win for the Edison award for Clean Buildings Accelerator. STEP program has just finalized the RFP and selected a candidate, will work on this for a year and a half. Working on hybrid heat. Demand response will have evaluation completed within the next month. Next winter, planning for a commercial and industrial demand response. Still in biannual planning process. Kicked off 2023 CPA process.

B. **Jackie Goss (ETO)**

- Getting hybrid pilot kicked off. Have been working on launching this for a while now.

C. **Laney Ralph (NWN)**

- Waiting to hear back from Oregon Commission on IRP. Engaging with stakeholders and the development of a transportation energy efficiency program. Filed CPA and annual report, waiting to hear back on those items. Planning for the next two-year cycle in Washington. Having a feasibility study done for commercial gas heat pump low-income programs.

D. **Kevin Duell**

- Working on getting gas heat pumps into residential homes partially using IRA funds. Working on channel and supply chain management to help construction and other partners with training and measurement verification for supplying data to incentives programs. This is a three-to-five-year effort.

E. **Carlos Limon (Avista)**

- Looking to put out an RFP within the next few months for a two-year project on dual fuel heat pumps with about a dozen site locations. Interested in the Washington State Energy Code outcome.

Housekeeping and Looking Ahead (Slides 8-22)

- A. Product Council Updates

- a. Product Council is now using Microsoft Teams, previously it was GoToMeeting. Product Council is on neea.org (Go to "Get Involved" and then "Product Council"). You can access archives, see future session, and suggest a topic [Northwest Energy Efficiency Alliance \(NEEA\) | Product Council](#). Product Council recently looked at a modeling exercise for displacing central air conditioning with ASHPs.
- B. Workgroups
 - a. NGAC dual fuel workgroup has begun. The workgroup is for anyone working on dual fuel and meets three to four times a year for two to five hours a quarter. The CEAC workgroup has begun as well. The purpose of the NGAC workgroup is to build on each other's work and avoid duplication. The CEAC workgroup is concerned with developing guidelines for NEEA to use when calculating and reporting savings, peak load reductions, and avoided emissions from dual fuel market transformation programs. The CEAC workgroup is ten to fifteen members and will be three to five meetings from Q3 2023 to Q1 2024. Email Ryan Brown (rbrown@neea.org) and your organization's representative with questions. Outcomes may be applicable beyond dual fuel programs.
- C. Business Planning Update
 - a. The board has been working on the next cycle strategic business plan. Draft of business plan is out for public comment through August 4. If you want to comment on plan, let your board representative know. Next regional webinar is August 1. Goal is to get plan approved in December 2023.
- D. 2024 Operations Plan
 - a. Doing an Ops Plan webinar that is both gas and electric this year on October 26. Agenda will be sent out ahead of time so one can know when the gas discussions take place. NEEA board will vote on final 2024 Operations Plan on December 5.
- E. Upcoming Meetings
 - a. September 7 interim webinar, if needed
 - b. Dual Fuel Measurement Workgroup will kick off soon
 - c. Q4 NGAC Meeting October 19
 - d. October 26 Draft Operations Plan Webinar
 - e. Potential Commercial Gas Heat Pump Water Heater in Q4 2023 or Q1 2024.
 - f. What should the 2024 NGAC meeting schedule look like? Could meet three times a year instead and leave the summer free. Looking at in-person meeting frequency and meeting in the Seattle area as an in-person option.
- F. Leadership in Energy Efficiency awards nomination window is August 14 through September 15. The three categories for nominations are Rising Star, Innovative Collaboration, and Lifetime Achievement.

Discussion

Carlos Limon (Avista): Is there any Avista representation for the CEAC workgroup?

Ryan Brown (NEEA): Yes, Austin Oglesby.

Michelle Wilde (PSE): Hybrid is better than only in-person and three times a year sounds good.

Jackie Goss (Energy Trust): I agree with Michelle's comment.

Jackie Goss (Energy Trust): Coordination meetings can pileup and involve a lot of the same people. Avoiding repetitive overlap would be nice.

Portfolio Update (Packet p. 3-13)

Natural Gas Portfolio Manager Peter Christeleit (pchristeleit@neea.org) gave an overview of the NEEA Gas portfolio. Right now the portfolio is rolling up under budget. Noe Contreras (ncontreras@neea.org) gave an update on scanning work for gas heat pump (GHP) combi units, dual fuel work, gas commercial dryers, and engine-driven gas heat pumps. SMTI and Vicot both have GHP combi units being tested currently. Modeling work for dual fuel ASHP paired with a gas furnace is ongoing. A modulating gas dryer

technology draft final report is expected Q3 2023. There is current scoping work happening on a liquid desiccant-based heat recovery system for commercial clothes dryer systems. Mark Rehley (mrehley@neea.org) commented on Codes and Standards. There was one comment letter last quarter. Last quarter there was a delay to the Washington code both commercial and residential. Washington is currently asking for proposals in a targeted way. There will probably be more flexibility for natural gas than previously anticipated. The Oregon Building Code Division will review the changes made in ASHRAE 90.1-2022. The 2024 IECC development process continued in Q2 2023. NEEA staff is continuing to support utility programs for above code new construction. Data is collected monthly on homes built and rated. Aaron Winer (awiner@neea.org) talked about the Efficient Gas Water Heaters program and NEEA joining other members of the North American Gas Heat Pump Collaborative in submitting comments regarding ENERGY STAR proposals to sunset their boilers and furnace specification and launching a new hydronic heating. He also highlighted the commencement of lab testing of a residential gas heat pump water heater prototype that has been under development for the last 7 years. Test results are expected later this year and will inform efforts around the technology. Jason Jones (jjones@neea.org) updated NGAC on the Efficient Rooftop Units program's quarterly progress and Tamara Anderson (tanderson@neea.org) provided an update on the High-Performance Windows program quarterly progress.

Discussion

Carlos Limon (Avista): The SMTI combi product being field tested is a prototype, correct?

Noe (NEEA): Yes. It looks different but functionally it should be the same as the manufactured product.

Carlos Limon (Avista): What are the next steps for commercial dryer [modulating valve] systems?

Noe (NEEA): A developer said they could have a distributor in the Pacific Northwest in days. Starting down this path with manufacturers.

Carlos Limon (Avista): For High-Performance Windows, what's the main driver for the delay?

Tamara Anderson (NEEA): With the data we have at this time, the program is not looking cost-effective.

Michelle Wildie: Are differing control systems an issue for engine-driven gas heat pumps?

Noe Contreras (NEEA): Unknown right now, but we have seen a third-party thermostat operate their system.

Washington Residential Code Evaluation Findings (Packet p. 14 | Slides 27-55)

Meghan Bean from NEEA (mbean@neea.org) presented findings from the latest Washington Residential Code Evaluation. Lucy Albin from TRC also joined to help answer questions. The 2018 Washington State Energy Code (WSEC) was a major shift from the previous 2015 code. This evaluation was seeking to understand how the market was responding to the 2018 code. The new code went into effect in February 2021, and some of a notable shift from the previous code were the introduction of a fuel normalization table, where homes either received or lost energy credits based on the primary heating equipment that was installed.

NEEA's evaluation contractor, TRC, calculated the proportion of homes that complied with 2018 WSEC energy credit requirements and assumed 100 percent compliance with prescriptive minimum requirements. TRC had comprehensive data on 49 homes and calculated 76% of homes complied. Meghan also shared results on gas use in homes built under the 2018 WSEC from the full sample of 56 homes.

Discussion:

Carlos Limon (Avista): How is compliance enforced?

Meghan Bean (NEEA): We'll get back to you on that.

Michelle Wildie: At what stage in the construction process were permits destroyed in jurisdictions that destroyed permits?

Lucy Albin: 90 days after the permits were finalized.

Kevin Duell: How was the sample sized determined?

Meghan Bean: 56 homes was a large enough sample to compare across strata for key dichotomous variables – compliance and primary space and water heating.

Carlos Limon (Avista): Was there any data collected on the cost difference between the various pathways?

Becky Walker (NEEA): We can send you a spreadsheet that had costs related to the different pathways, but we're unsure how up to date the data is and it is anecdotal.

Jackie Goss (Energy Trust): Where does the RESNET data come from?

Mark Rehley (NEEA): Normally the data would be of instances of homes built above code and are receiving utility incentives.

ACTION: Meghan Bean to follow-up with NEEA's Codes and Standards team about code compliance enforcement for Washington Energy Code.

ACTION: Mark Rehley to follow-up on the cost differences for the points pathways.

Gas Heat Pump Product Development Update (Packet p. 15)

Noe Contreras presented on a manufacturer who is in the process of launching a new gas heat pump product to the market. This is a thermally driven heat pump, similar to the SMTI product.

Discussion

Carlos Limon (Avista): Are they looking to bring a product to market in North America?

Noe Contreras (NEEA): Right now they are focused on Europe first. There would be some technical differences between the European product and the North American one. This would be an attractive option, though, for people looking to heat a home in North America.

Kevin Duell: What does SW stand for in relation to this product?

Noe Contreras: Service water.

Michelle Wildie: How does this compare cost-wise to existing technology?

Noe Contreras: The prices will be competitive in the market with other gas heat pumps. The manufacturer understands the need for a competitive pricing strategy. Ten years from now, cost may decrease with increased manufacturing.

Carlos Limon: Will this manufacturer be part of a product council meeting at some point in the future?

Noe Contreras: Brainstorming the right next steps right now.

Carlos Limon: Will this be going into the scanning bucket for NEEA?

Noe Contreras: We want to verify the manufacturer's claims and do our due diligence. We want to find applications for this kilowatt output they produce. We are cautiously moving towards scanning.

ACTION: Noe Contreras to bring new gas heat pump manufacturer to Product Council when they are ready.

Gas Portfolio Outlook (Packet p. 15 | Slides 68-76)

Peter Christeleit (pchristeleit@neea.org) went through the gas portfolio outlook. Peter walked through the gas portfolio from 2020 through 2023 to provide a historical context. Peter then spoke to current scanning opportunities and the outlook for programs in Concept Advancement (CA) or Program Development within the next couple of years. Commercial gas heat pumps may come forward for a vote in Q4 2023 or Q1 2024. Residential dual fuel HVAC is lined up for a potential vote in 2024. NGAC participants were in favor of potentially using the September 7 webinar to setup a commercial gas heat pump water heating CA vote for Q1 2024, or possibly Q4 2023.

Feedback, Wrap-Up, & Adjourn

A. Upcoming Meetings:

- 1) Dual Fuel Measurement Work Group kickoff to be determined
- 2) Interim Webinar: Thursday, September 7, if needed
- 3) Dual Fuel Product Work Group Q4 meeting to be determined
- 4) Q4 NGAC Meeting: Thursday, October 19 (virtual)
- 5) 2024 Gas and Electric Operational Planning Webinar: Thursday, October 26
- 6) NGAC meeting three times a year for 2024, hybrid option will be available at least one time a year and will consider SeaTac conference center for that option.