Meeting Notes
Q1 2023 Products Coordinating Committee
Thursday, February 16, 2023
Webinar Only

Attendees:

Matt Babbitts –
Clark County Public Utilities (Clark)
Carolyn Beebe –
Snohomish PUD (Snohomish)
Dave Murphy –
Bonneville Power Administration (BPA)
Nancy Goddard – PacifiCorp (Pacific)
Michael Gump – Avista Utilities (Avista)
Haley Burk – Inland Power and Light (Inland)
Lars Henrikson – Seattle City Light (SCL)
Jill Reynolds – C+C on behalf of PacifiCorp
Ryan Perry – Tillamook PUD (Tillamook)
Lis Saunders – Tacoma Power (Tacoma)
Mindi Shodeen – Idaho Power (Idaho)
Trevor Frick – Clark County Public Utilities (Clark)
Wade Carey – Central Lincoln PUD (Lincoln)
Patrick Weaver – Puget Sound Energy (PSE)
Whitney Jurenic – NorthWestern Energy (NWE)
Thad Roth – Energy Trust of Oregon (ETO)
Kevin Watier – Snohomish PUD (Snohomish)
Sarah Cann – Puget Sound Energy (PSE)
Jay Olson – PacifiCorp (Pacific)

NEEA Staff: Alisyn Maggiora, Emily Moore, Emily Rosenbloom, Warren Fish, Tamara Anderson, Britt Cutsforth Dawkins, Jack Davidson, Stephanie Quinn

Resources

- **Agenda packet on NEEA.org**: Northwest Energy Efficiency Alliance (NEEA) | Q1 2023 PCC Agenda...
- **Master slide deck on NEEA.org:** Northwest Energy Efficiency Alliance (NEEA) | Q1 2023 PCC Slide Deck
- **Meeting Recording Part 1 :** https://attendee.gotowebinar.com/recording/5185345642142908674
- **Meeting Recording Part 2:** https://attendee.gotowebinar.com/recording/2268246737818926083

Welcome, Agenda, and Packet Review (slides 1-7 | packet p. 1-4)

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

Introductions & Regional Roundtable

A. **Regional Roundtable**

Matt Babbitts (Clark): Developing a new community solar project with a wrap-up target by the end of the year. Matt will be stepping back from his role as management of residential programs, will be replaced by Trevor Frick.

Emily Moore (NEEA): Worked closely with ISCC and PCC, but will be handing responsibilities to Stephanie Quinn. NEEA Board is in the midst of strategic and business planning for the next business cycle (Cycle 7 – 2025-29). It is expected that the Board will approve the next Cycle plans by the end of this year.

Carolyn Beebe (Snohomish): In 2022, Snohomish had about 440 electric hybrid water heaters go through their retailer and distributor platforms, 2500 clothes washers and dryers, over 800 smart thermostats, and that does not include the whole year. Snohomish also had about 35 Energy Star electrically heated homes rebated in 2022.

Emily Rosenbloom (NEEA): Boring but Efficient campaign was focused on regional consumers, and drove a 20% increase awareness among rural consumers. In 2022 training was also provided to over 200 installers, working with regional programs. Lastly, DOE has submitted their proposal for the standard to OIRA, which takes around 90 days to complete.

Whitney Jurenic (NWE): Is there a comment period for when the proposal is under review by OIRA?

Emily Rosenbloom (NEEA): Comments can always be submitted to the docket, but the DOE will not respond if it is not during a comment period.

Dave Murphy (BPA): Whole department has been focused on the EE Action Plan, and will be released for comment next week. There will also be the public release of changes to the implementation manual and measure list, coming April 1.

Nancy Goddard (Pacific): Jay Olson coming onboard to fill Pacific's residential program manager opening. Big focus for 2023 is to make up the shortfall in Washington, and to hit the two year target. Incentive and program changes are being implemented to help them reach that goal. Another area is Equity Initiatives aiming to support highly impacted areas and tribal lands.

Warren Fish (NEEA): XMP got through the milestone advancement with RPAC in Q2, increasing awareness by engaging through the manufacturers. Highly efficient pumps and circulators had a mixed 2022, just not as much growth as sought, partially due to supply chains. Looking forward to new models of smart pumps coming to market in 2023.

Michael Gump (Avista): Transferring low income program to iEnergy, and implementing a midstream program with a third party vendor.

Haley Burk (Inland): Starting a low income program with help from CETA, offering support to those with energy assistance payments on their accounts. Inland is also launching a new loan program with a target of later this year.

Lars Henrikson (SCL): Will be doing more targeting for low income programs. SCL now supporting efficient washers and dryers, as well as heat pump water heaters. Working with ICF for incentive setting for HPWH, with more information by Q3.

Tamara Anderson (NEEA): Last year the big focus was efficient fans and getting that advanced through RPAC, as well as shifting over to take over the high performance windows program.

Jill Reynolds (Pacific): Home Energy Savings programs this year will focus on resource innovation, retail program, manufactured homes, and the trade ally program. HPWH program will be a focus this year as well, supported by a $900 instant rebate.

Ryan Perry (Tillamook): For 2023, they are getting into community solar, and will be piloting high capacity high temp heat pumps for use in an industrial setting.

Lis Saunders (Tacoma): Clay Norris and Steve Bicker have announced their retirements. In 2023, Tacoma is on track to meet their goals. They will be expanding an assistance program that provides funding support for those in need. Tacoma has not launched their behavior program, but will be getting this launched in 2023. Tacoma will also be offering rebates and loans in 2023, which will be interest free.

Britt Cutsforth Dawkins (NEEA): Ran the Boring but Efficient campaign in 2022, and translated the HPWH DIY Installation guide into Spanish.

Stephanie Quinn (NEEA): In 2022 moved into the new role of Manager of Program Management. Updates for RPP, Beth Littlehales left the role of Program Manager, but we are close to having a replacement. In Q4 of 2022, new spec for Energy Star v9 for TVs went into place, based on a test procedure developed by NEEA. Major manufacturers are engaging with the certification for this version. Another big development was that NYSERDSA is interested in joining ESRPP.

Mindi Shodeen (Idaho): Idaho is hoping to reformat their multifamily program. Continuing their lighting program through June of this year. Looking to increase participation in their demand response program.

Trevor Frick (Clark): Clark paid out incentives on over 800 force air heat pump systems. The PCTS program will be sunsetting after 25 years. Paid out incentives on over 600 ductless heat pumps. Window installs dominated the weatherization program. For HPWH, slight increase in the rebates despite the prices increasing, but rebates were paid out on 175. Had 800 HPWH go through the new construction path. Participate in the new homes performance path, saw a big shift between 2021 and 2022, where far more homes now have heat pump water heats, supported by the Washington State Code.

Wade Carey (Lincoln): Energy Services manager, utilize ESG for all rebate activities.

Patrick Weaver (PSE): Shy on targets for 2022, so really doubling down efforts this year and working to hit two year targets. Increased rebates for C&I, and on residential for a dozen different items. Big focus on equity and supporting impacted communities and customers. Increased incentives for moderate income customers. Added rebates for commercial food appliances. Demand response is starting up for PSE. Community solar expansion coming as well.

Whitney Jurenic (NWE): NWE is in a rate review, with final findings in Q2. A potential assessment will be kicking off, brought on new consultants to support new projects. Switched to regulatory, and bringing on new President and VP.

Housekeeping (slides 8-18 | packet p. 5-8)

If you have questions about this section, contact Alisyn Maggiora (amaggiora@neea.org).

A. **PCC Co-Chair Opportunity**
   - **a.** Matt Babbitts is stepping back from the committee due to other priorities at Clark PUD, thus he will no longer be able to serve as PCC Co-Chair.
   - **b.** Co-Chair position has not yet been filled, open for someone new to take that role

B. **Upcoming NEEA Meetings and Key Dates**
   - a. https://neea.org/events for all upcoming events.
   - b. Q1 RPAC February 27 (Virtual)
   - c. NEEA Q1 Board Meeting March 13 & 14 (Seattle)
   - d. Efficiency Exchange May 2 &3 (Hybrid, Portland); info here: neea.org/efx-register
   - e. Q2 ISCC May 15 & 16 (Hybrid, Portland)

    f. Q2 RPAC May 18 (Hybrid, Portland)
    g. Q2 PCC June 6 & 7 (Hybrid, Portland)

C. **Q2 Meeting Format – Hybrid Check-In**
    a. In Person Option, Hosted at NEEA Office
    b. PCC Check-In
        i. Poll results: 25% Yes, 25% No, 50% It Depends

D. **PCC 2023 Annual Workplan + Priority 2 Topics Proposal**
    a. Change from Draft – Consumer Products Topic Swap
        i. Only change is that the Consumer Products topics from Q2 and Q3 have been swapped
    b. Priority 2 Topics
        i. Topics that have moderate interest will have dedicated time this year
        ii. Next steps are slating which topics for which quarterly call, confirming with those who are relevant to these topics; Alisyn will be following up directly with those individuals

E. **Reminder of PCC Charter**
    a. Identifying implementation challenges and conflicting activities
    b. Leveraging opportunities to drive market influence
    c. Sharing knowledge, expertise & resources to improve regional programs
    d. Providing a regional forum for info exchange and collaboration

Regional Priority Topic: Motor-Driven Products (slides 19-37 | packet p.9)

If you have questions about this section, contract Tamara Anderson (tanderson@neea.org).

Presentation Highlights

A. Program Development Phase
    a. Efficient Fans are at the beginning of the program development phase, having been approved by RPAC in Q3 of 2022. 2023 is the first program year to have allocated budget and resources.
    b. Aiming to advance to market development phase by 2025

B. Program Focus
    a. Upstream with manufacturers
    b. Focus on fan selection software
    c. Leverage Fan Energy Index (FEI)
    d. Partnership with Air Movement and Controls Assoc. (AMCA)
    e. Commercial and industrial sectors

C. Fan Energy Index
    a. Brings new clarity for engineers and specifiers
    b. Gaining momentum as the new efficiency metric for fans, and has been adopted into the state and international codes (IECC)
    c. **AMCA: Introduction to FEI and why it will replace FEG**
    d. **Additional Resource: AMCA FEI One-Pager**
    e.

D. Market for efficient fans
    a. Commercial - Used in warehouses, parking garages, and tunnels
    b. Industrial – Processing exhaust, product drying, dust collection, and general manufacturing
    c. Preliminary research shows ‘stand-alone’ fans is not the current market term
    d. DNV’s 2021 C&I Stand-Alone Fan Research

E. Manufacturer Regional Market Share Study and Barriers / Opportunities
    a. Final report will be published on neea.org by the end of Q1 2023

b. Fans market is very diverse. State region makes up 6-9% of total US sales in 2021, Washington state has a larger market share than the other three Northwest states
c. Market Barriers & Opportunities
    i. Small part of budget & scope for projects
    ii. Efficiency not a priority selection criteria
    iii. Patchwork of codes & standards

F. Recent Efficient Fans News
    a. NEEA has a new Sr. Product Manager, Sean Spellman
    b. Power Drive System Retrofit Opportunities in the NW was published in December 2022
    c. RTF voted to extend C&I Fans planning measure through 2025

Questions:

Nancy Goddard (Pacific): Do specifiers have a role in the market?

Tamara Anderson (NEEA): Specifiers do have a role in the market, using proprietary software from manufacturers to select fans. One of our primary leverage points is to work with manufacturers to increase visibility of the FEI during the selection process.

Carolyn Beebe (Snohomish): Will you be using ENERGY STAR® to calculate savings for residential ceiling fans?

Tamara Anderson (NEEA): The program will focus on C&I Fans, so whether or not the program will be leveraging ENERGY STAR remains to be seen. It depends on which manufacturers and which products we will initially be working with and whether they include ceiling fans within their product mix

Regional Priority Topic: Water Heating (slides 38-62 | packet p.10)

If you have questions about this section, contract Emily Rosenbloom (erosenbloom@neea.org).

Presentation Highlights

A. Defining low adoption

a. Focus at NEEA is on the supply side, and how diffusion is occurring through the supply chain
b. **Manufacturers –** Measuring the number of products that meet the Advanced Water Heating Specification. The number of products has doubled since 2020.
c. **Distributors –** Measuring the stock of product as a result of installer demand, and looking at sales through distributor channels over time.
d. **Installers –** The goal is for installers to be confident in recommending and installing HPWH as the preferred technology. Comparing data for retrofit vs new construction, we see an increase for new construction units but not for retrofit year-on-year.
    i. NEEA did a full audit of installer websites. 75% of installers who are listed on Hot Water Solutions website did not have HPWH content, only 25% did have content present.

B. Northwest HPWH Market Share
    a. Market share of electric water heaters has increased to approximately 18% in 2022

C. Planned Activities
    a. Focusing on installers specifically:
        i. Marketing support (Plug-and-Play Content)
        ii. Training opportunities
            1. Looking at different ways to provide training. On-demand training is now live and information about it has gone out.
        iii. Distributor Funding
            1. No more per-unit incentives, we are working with them providing opportunities to drive the replacement market
        iv. Research
            1. Completing cold-climate demonstrations in Montana and installer focus groups

Questions:

Whitney Jurenic (NWE): Is the lack of content on installer websites due to lack of content, or do they not carry HPWH at all?

Emily Rosenbloom (NEEA): Not sure, this was surface audit, but we will be starting engagement. These installers took the training and agreed to be listed. Next quarter the PCC conversation will be more about installers, and how we list them in general.

Roundtable Discussion:

Whitney Jurenic (NWE):

- Montana is different from the other NW states due to size and make-up, so not every cost-effective opportunity is going to work there. Low adoption in the state: Distributors spread out over long distances; Installers cover large areas and many are not robust in experience, training, or confident in HPWH ET; Few customers have electric only water heating; NWE is updating their end-use requirements as they see moderate growth in electric only; Initial expenses are a challenge for all income levels; Retrofits may have additional costs; Cold climate concerns; Feel that the MT approach has not worked so far in Montana with HPWH.
- There are still opportunities: 2022 Training in Bozeman with more training opportunities planned; Campaigns in the works like Boring but Efficient, Bridger View, Installer Focus Group, Cold Climate study; Exploring other opportunities like a better understanding of installer adoption/rejection, collaboration with other entities.

Thad Roth (ETO): The general picture is not too different than the challenges Whitney outlined. New construction through EPS program has 43% of homes in the program having HPWH. Retrofit is the market that is the real challenge, particularly lower-income and rural customers. Some recent research showed high adopter were white home owners between 35-55 years of age. ETO is offering a $700 instant rebate at the moment. There is also a $240 amount given to communities that ETO has not served well in the past. Challenge is the high price. Community based organizations have to come up with around $2000 to match the funds ETO has available. Lack of supply of HPWH in Eastern Oregon as well.

Trevor Frick (Clark): Echoes a lot of what has been mentioned. New construction in WA is tilted towards HPWH. A lot of space heat is still Natural Gas, but they are also installing HPWH. Retrofit market has been slow, mostly home owner installs. Seeing pretty high installation costs, 3500 to 4000 for non-technical installs. Disproportionate price increases have hurt the HPWH more than a standard electric. Clark stays in lock step with ETO rebate levels, but cost-increases have outpaced rebate gains. Not sure what amount of plumbers out there still have negative impressions of HPWH from the early models. Is there space for planning ahead, letting people know if their water heater is 12 years old or older it is a good time to explore what options are out there.

Kevin Watier (Snohomish): Ongoing midstream program with SCL and PSE, moving rebates to the distributor level. $600 rebate for the retrofit rebate. New construction incentives have been lowered to $150, due to the code compliance of WA construction. Many gas heated homes are putting in HPWH to meet the WA energy code credits. 90% of HPWH sales were in new construction, relatively consistent with previous years. The hurdle is the high installation cost, so it is not something people do for retrofit. Code updates will be coming online in July requiring heat pumps for space and water heat, it will be interesting to see what happens. Getting data from distributors is challenging, more so after bulk orders.

Sarah Cann (PSE): Echoing Kevin's points. See low adoption rate through midstream program, with higher rate through the retail program. May be an indicator that more of those may be going to new construction. More installers are warehousing the HPWH and building stock. PSE will be implementing the cold climate HPWH in the 2024 program.

> **Emily Rosenbloom (NEEA):** What is meant by adding a cold climate HPWH?
>
> **Sarah Cann (PSE):** We do not yet have a metric for this, more to come.

Jay Olson (Pacific): Would agree with the concerns and challenges, particularly around lower-income and rural customers. Plumbers also seem to be less EE minded than industries like HVAC. Businesses that focus more on EE are more concentrated in larger metropolitan areas. There is also a demand issue around plumbing, as they are responding to emergency calls. There may be some more potential in engaging with HOAs.

Lis Saunders (Tacoma): Tacoma did a flat rate promotion in 2022, which was successful, but shows that cost is the primary barrier. Tacoma introduced a three-year interest free loan, and saw an uptick in people taking advantage of that. However, the process is tedious enough to not fit the need for emergency replacement. Most contractors and customers are installing in an unconditioned space (lower cost), and significant amount ~~some~~ of the housing stock in their territory is not suited for HPWH installs due to water heater location in homes. Spent money on advertising for the flat rate offer, and saw a significant drop in number of purchases ~~when they switched to the coupon~~at retail when we switched from instant rebate to requiring a QR code scan for a coupon.

Michael Gump (Avista): Challenges operating in Idaho and Washington state, with the former all about gas and the latter about electric. Rebate in Idaho is up to $500, and trying to find more ways to implement in Idaho.

Dave Murphy (BPA): Agree with all the previous barriers. BPA is no longer accepting units for new construction. There is the optional comfort ready homes promotion for retrofitting. Working to provide content and resources. BPA has produced videos about HPWH that are specifically for installer websites.

SPIFFs were hugely popular, budget was hit 6 months before planned. Aiming to be consistent and avoid waffling in the rates and availability.

Whitney (NWE): What are the next steps?

Emily (NEEA): This session was meant to provide a forum for utility sharing (gather experiences, hear themes). Our Q2 topic will be go deeper on Installers and ways to address barriers.

Recap, Next Steps, Adjourn

A. Comments from committee members or public attendees: None