

Summary Notes
Residential Advisory Committee Meeting
Thursday, August 2, 2018
NEEA Office (Portland)



Attendees:

In Person:

Josh Mitchell – Chelan PUD
Lis Saunders – Tacoma Power
Becky Arte-Howell – Idaho Power
Jess Kincaid – Bonneville Power Admin. (BPA)
Thad Roth – Energy Trust of Oregon
Chrissy Crowell – Puget Sound Energy (PSE)

Doug Dickson – Snohomish PUD
Kevin Holland – Avista Utilities

By Phone:

Matt Babbitts – Clark PUD
Deb Martin Young – NorthWestern Energy
Clint Stewart – Puget Sound Energy (PSE)

NEEA Staff: Jeff Mitchell, Beth Littlehales, Stephanie Baker, Alisyn Maggiora, Eugene Rosolie, Jill Reynolds, Jon Clark, Kyle Stuart, Neil Grigsby, Tamara Anderson, Josh Pelham (phone)

Public Attendees: Janice Boman – Embertec

Packet link: <https://conduitnw.org/Pages/File.aspx?rid=4556>

Slides link: <https://conduitnw.org/Pages/File.aspx?rid=4573>

Housekeeping and Agenda Items

- A. Packet Review
- B. Follow up on action items from April 17, 2018 committee meeting.
 - 1) Eugene will follow up with an email to the Committee on EFX free workshop attendance
 - 2) Jill to share HPWH video link (note, this link is now included in the notes as well)
 - 3) Jill to share list of contractor/installer participants from collaborative focus group
 - 4) Jill to check on whether email marketing tactics were an option for installer marketing preferences
 - 5) Jon B to share After Action Review document (Axis issues)
- C. Operations and Business Planning Updates
 - 1) Business Planning and 2019 Operations Planning is happening at the same time
 - 2) Board members have a copy of the second draft, and should feel free to share within their organizations
 - 3) Discussions with workgroups will happen soon
 - 4) The public, including committee members, will have an opportunity to review the draft Business Plan in the fall (Sept. 17- Oct. 12)
 - 5) Outreach includes
 - 6) 3-5 in-person sessions around region, co-hosted by Board
 - 7) Draft Business and Strategic Plans posted on Conduit for comment and feedback
 - 8) Two regional webinars if needed for back-up
 - 9) An All Advisory Committee meeting to review the 2019 Operations Plan is scheduled for October 9th. It will follow the same format as last year.

Retail Product Portfolio Update (page 4-5 in [packet | slides 7-31](#))

Beth Littlehales (NEEA) provided the update. *The desired outcome is for RAC members to be informed of lessons learned from 2+ years of ENERGY STAR collaboration, the focus on product-specific strategies, and near-term portfolio and evaluation plans.*

Presentation Highlights:

- A. Background overview/reminder
 - 1) Currently in Strategy Testing & Finalization phase
 - 2) Market Test Assessment (2016-17) validated program infrastructure & overall approach
 - a) Improve data administration
 - b) Build scale through retail and extra regional engagement.
 - c) Improve transparency and streamline the Portfolio Management Process.
 - d) Build consensus and buy-in on evaluation activities and approach
 - 3) With portfolio-level strategies set, we are developing product-level strategies
 - 4) Several touch-points with Workgroup along the way
- B. Lessons learned from last 2+ years of
 - 1) Savings Strategy
 - a) Initially thought all products would require the same interventions
 - b) Learned each product is different and needs a needs a different mix of strategies or levers to increase efficiency
 - c) Now using the sales data to identify product characteristics, trends, technology, etc., that drives specific strategies to deliver savings
 - 2) Role of Data
 - a) Initially thought incentives drive savings
 - b) Learned retail data is noisy; tracking market share requires long-term view
 - c) Adjusted to leverage data to influence ENERGY STAR; the data we have is detailed, convincing, and timely, and they've been blown away by it.
 - 3) Role of ENERGY STAR
 - a) Initially joined ESRPP to build scale and influence
 - b) The national scale of the data has helped us to speak with a powerful voice to ENERGY STAR itself.
 - c) We originally saw them as a partner, and now we have come to see them as a really important channel of influence

Discussion

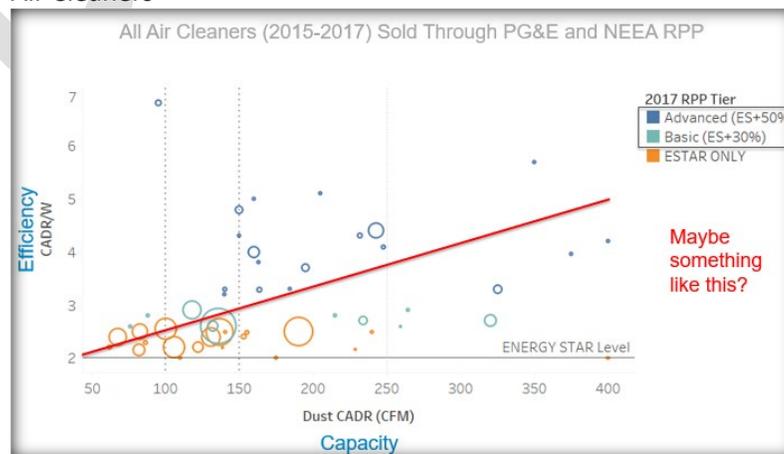
- **Snohomish PUD:** *How are we tracking progress with RPP against NEEA's savings goals? NEEA's savings goal is long-term and thus far the savings on this has been low. We have metrics for our activities that are short-, mid-, and long-term; tracking well on the short term, starting to shift into mid-term. We're working to influence two specs now and if those are updated, that's where the savings comes through. Snohomish PUD noted that it's hard for utilities to use the savings if it's more than we planned on; can't re-plan our goal after the fact.*
- **Tacoma Power:** *Difference between NEEA sales data and national sales data? NEEA clarified that all individual sponsors have access to their own sales data that occurs within their territory; NEEA has full visibility in NEEA sales data. NEEA also has access to national reporting that consolidates and aggregates all the data for all the program sponsors. Have view into market characteristics, etc. from that national data set. Currently we're comprising 18% of the national market.*
- **Energy Trust:** *You're saying that the national sales data is having a positive impact on how we interact with ENERGY STAR? Correct.*
 - *Do retailers have visibility into this data national level sales data? NEEA clarified that retailers likely see comparative earnings and check-payment reports; not sure what they see in terms of market share, but the platform was built out to their specs.*

- C. Initiative Market Transformation (MT) Theory revised

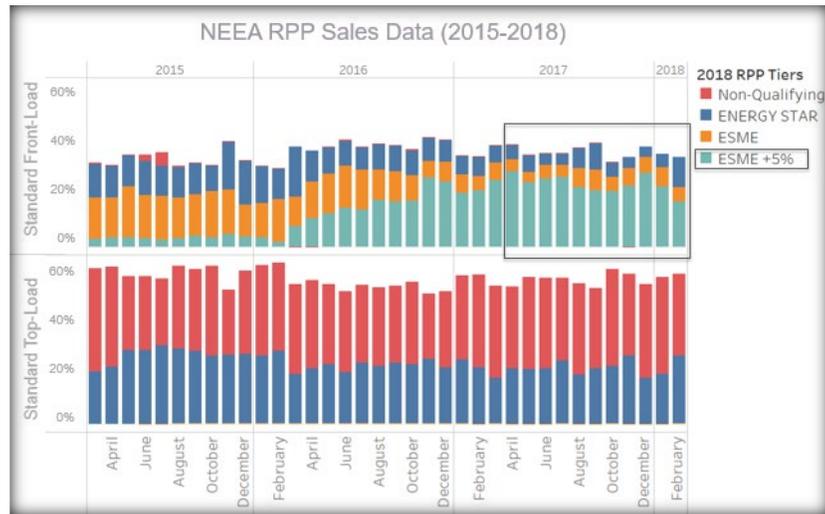
- 1) Old
 - a) Mid-stream incentives encourage retailers to assort more qualified models of each product in the portfolio.
 - b) Leverage points include ENERGY STAR collaboration and specifications process, DOE efficiency standards, and extra-regional scale of program participants.
 - c) Primary diffusion point is through the influence of retailer buying decisions with manufacturers
- 2) New
 - a) Mid-stream incentives provide an opportunity to affect retail assortment and access to full-category sales data for a portfolio of consumer products.
 - b) The program develops and deploys unique intervention strategies that reflect the nuance of each product.
 - c) Ultimate impact is through the influence of specifications and standards, which affects manufacturing of entire product category.

D. Product Strategies

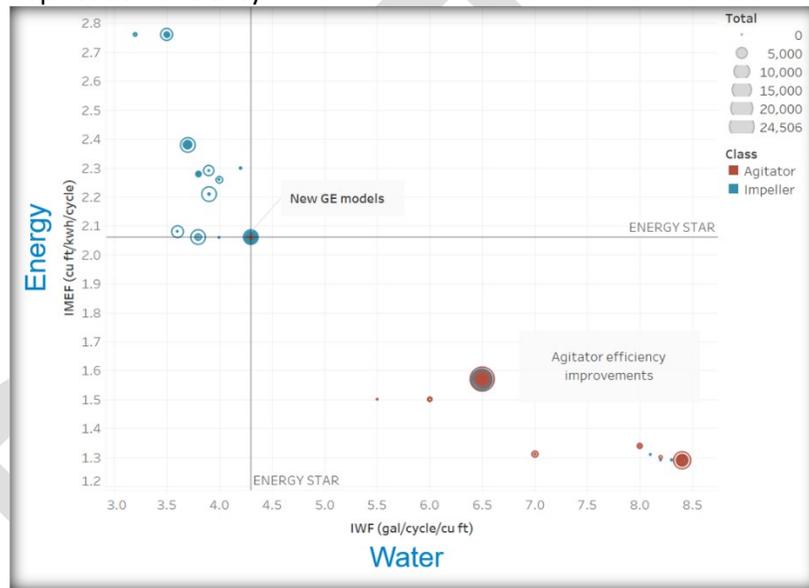
- 1) Overview
 - a) Analysis prepared by Energy Solutions, co-funded with PG&E
 - b) Based on combined data set
 - c) Sales data reveals unique MT paths for each product category (and sub-category)
 - d) Data analysis is ONE input into the overall product strategy
- 2) Summary
 - a) Tracking - this mostly applies to old incentive tiers that we are not currently paying on, like the basic ENERGY STAR tier for air cleaners
 - b) Midstream Incentives - using incentives to drive market share. This is effectively the default strategy for all products, but it's especially important for some products like freezers, which have stubbornly low market share
 - c) Emerging Technology - this applies to products like fridges and freezers where we know there is a technology coming down the pike that will significantly increase efficiency of the product
 - d) Measurement & Compliance - when there is a flaw or gap in the spec itself or the reporting that goes along with it. For example air cleaners – efficiency metric doesn't increase with capacity.
 - e) Specification Advancement - where the current spec has high market share and we want to push for a more stringent efficiency level
 - f) Standards - strategy applies when we are actively working to push for a more stringent standard, for those products that have a federal standard
- 3) Specific Examples
 - a) Air Cleaners



- b) Washers



c) Top Loader Efficiency



- Data reveals that nearly all front-loaders in 2017 were ENERGY STAR Most Efficient; waiting for 2018 to play out a little longer to see the impact of the new specification..
- LOTS of potential in top-load, including the trends around agitator vs. impeller.
- All brands selling agitator models have been replacing their 1.3-IMEF models with 1.57-IMEF models to comply with the federal standard.
- GE introduced two ENERGY STAR models in 2017. Previously, no agitator models met the requirements for ENERGY STAR.

Discussion:

- Chelan PUD:** If a model is 30 or 50% more efficient than ENERGY STAR, is that something that a consumer would be able to tell the difference on with air cleaners? NEEA clarified no, those models are not labeled and the average consumer would not dig through the QPL to calculate the efficiency of each model; if we promote a more stringent specification and then illustrate the greater level of savings at the Most Efficient level, that would be helpful.
- Snohomish PUD:** Seeking to switch market from top load to front load? NEEA clarified no, the goal is just to increase the efficiency of the top loaders.
- Tacoma Power:** Why the drop off in 2018? New spec has resulted in a drop in market share, but it's still a high volume.

- **Energy Trust:** *When you describe the different strategies, are these at the national level, or NEEA strategies focused on the region?* NEEA developing strategies to bring other utilities on board, using national data for national influence in order to recruit other ESRPP program sponsors to get on board with implementing MT strategies in the program; most are running pilots to start. NEEA runs three task forces that are national workgroups.
 - **Chelan PUD:** *Curious if EM-Power in Maryland and Energize Connecticut – did they have any concessions to joining ESRPP?* One had a shorter portfolio, so they've relaxed some of the portfolio requirements to encourage greater sponsor participation. No big negotiation that NEEA is aware of, though. Still targeting 25% participation, currently working on getting ComEd to join.
 - **Snohomish PUD:** *Scale-up in 2019, what might that entail?* Depends on evaluation happening between now and then; hope to build enough confidence in coming year to move towards that.
 - **Tacoma Power:** *Any program sponsors active at store level doing anything to indicate what's Most Efficient? Also, POP?* NEEA sends the QPL every month to Snohomish PUD and PSE. ENERGY STAR has a template that utilities can use in stores, pre-approved by the retailers. PSE is putting its own pre-existing marketing materials out.
 - **PSE** noted they are doing it for awareness attribution / customer interaction
- E. 2019 Portfolio will be the same as 2018
- 1) Sound bar
 - 2) Freezer
 - 3) Room AC
 - 4) Air Cleaner
 - 5) Electric Dryer (advanced tier only)
 - 6) Clothes Washer (advanced tier only)
 - 7) Refrigerator (advanced tier only)
 - 8) Dehumidifier (NEEA does not offer incentives)

Discussion:

- **Tacoma Power:** *What do others opt out of?* Sound bars and air cleaners.
- **Energy Trust:** *For the data available on air conditioners, what are the data points collected?* Brand, model, quantity by month; for non-ENERGY STAR the brand is blanked out but model number is still available. We then pull QPL and match data for analysis.
 - **Energy Trust:** *Can you see the range of efficiency?* Yes, but can't see actual sales price.
 - **Energy Trust:** *What about data sharing?* NEEA clarified they have a report that rolls it up by funder, but there's no distinction in the data between regions within a state. ICF does have zip code data, but once this data is loaded to the portal it's massed.
 - **Snohomish PUD:** *Do you incentivize those?*
 - **Energy Trust:** No but we have plenty of people interested in air conditioning; any data we can get is helpful. As capacity and summer peaking become more of a challenge interest in this grows.
 - **Energy Trust:** Short on cost data right now; **would be interesting to at least see market share in a generalized form. NEEA added that some of their web scraping tools could provide the cost data they're looking for.**
 - **BPA:** Think specific data could help with baseline development on another measure, **will follow up with NEEA on this after the meeting.**
 - **ACTION ITEM:** **NEEA to follow up with Energy Trust and BPA on this.**

F. Objectives

- 1) Validate product-level documentation and strategy
- 2) Identify data gaps and risks
- 3) Confirm approach to data QC, model matching, and market share analyses
- 4) Review baselines & corresponding savings calculations
- 5) Product-specific research Current Research

G. Timing

- 1) Follows on learnings from Market Test Assessment
- 2) Contract kicked off in July
- 3) Quarterly deliverables expected throughout: 2-3 products per quarter
- 4) Final report expected in Q2 2019

Retail Engagement in an Era of Declining Incentives

Thad Roth (Energy Trust) led the discussion on retail engagement, tactics and best practices.

A. Retail Lighting

- 1) Who has a retail lighting program, who doesn't? Today, and for 2019?
 - i. **Snohomish PUD**: Yes, doing today and next year
 - ii. **Chelan PUD**: Simple steps
 - iii. **Tacoma Power**: Yes this year, no decisions on exit yet, probably end of 2019
 - iv. **BPA**: Will do public presentations next fall on analysis around remaining market potential and platform strategy. Looks like there's still enough lighting savings available to support a retail program. Early data shows lighting is trending with lots of new technologies coming out.
 - **ACTION ITEM: BPA to talk internally about providing a presentation to RAC, or provide details on the presentation**
 - v. **Seattle City Light**: Yes, goal is to have one active in 2019; may refocus towards an equity lens
 - vi. **Avista**: Simple steps, seeking to figure out how to reach and get buy-in on our rural areas
 - vii. **Idaho Power**: Simple steps, not sure where we'll be beyond 2019
 - viii. **PSE**: Yes, continuing through 2019
 - ix. **Northwestern**: Simple steps
- 2) *Standards not impacting your decisions?*
 - i. **Snohomish PUD** noted they're trying to phase out of it.
 - ii. **Energy Trust** noted that 20-25% of energy savings came from retail lighting.

B. Impacts how we do business with retailers. Pushing for water heating and smart thermostats going forward on the electric side; feel both have a large retail play. Question is whether we can generate enough interest from retailers as we phase out retail lighting. *Curious how other utilities are proceeding with retailers on these two technologies? Issues with retailers?*

- 1) **Snohomish PUD**: They seem to be really interested in connected devices. Seem some are thinking about replacements – what will replace lighting.
- 2) **SCL**: Ran into issues with Costco recently, wouldn't take an incentive less than 20% of the retail price; will result in a significant drop in our potential if that popular item goes away.
- 3) **BPA**: Not having any issues on engagement that I'm aware of, but starting to see issues in the longer-term shape up around infrastructure costs.

Energy Star Partners Meeting Discussion (page 9 in [packet](#))

Jon Clark (NEEA) led the discussion around attendance, planned meetings and coordination opportunities. *The desired outcome is for RAC members to be informed on the upcoming Partners meeting in September and coordinate efforts.*

Presentation Highlights:

- A. Partners meeting is in September in Phoenix, AZ
- B. Will send out list of meetings NEEA team is involved in and invite you to attend.
- C. Any topics of interest to bring forward?
 - 1) Lighting
 - 2) Smart thermostats

- 3) digital couponing
 - 4) **Seattle City Light** would be interested to know if there are any retailers that are NOT interested in doing digital couponing.
- D. Will share out additional detail after

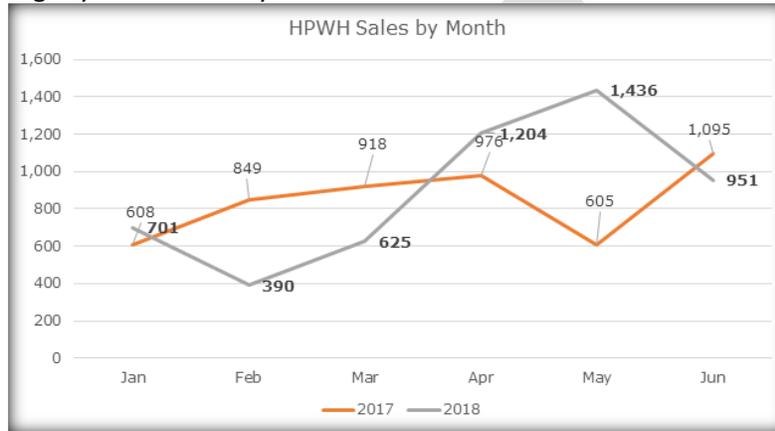
Heat Pump Water Heater Program Update (page 6-7 in packet | slides 33-53)

Jill Reynolds and Kyle Stuart (NEEA) provided the update on 2018 progress and the hot water solutions marketing activities. *The desired outcome is for RAC members to be informed on program process and marketing activities happening in the region.*

Presentation Highlights:

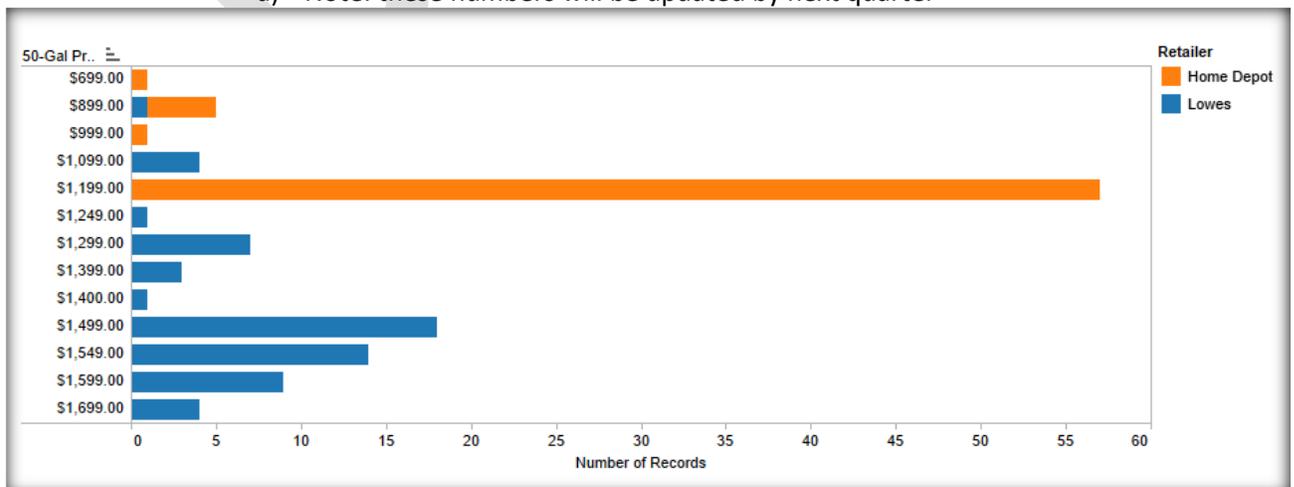
A. Sales Update

- 1) Total sales for this year are on par with last year – sales picked up a bit in May and June; slightly ahead of last year



B. Pricing

- 1) Increased by \$500 at some sales outlets this year due to a handful of reasons:
 - 2) National and OR Tax credits expired
 - 3) Per unit rebates phased out
 - 4) Utility midstream programs: slow to come online
 - 5) Steel tariff: announced/in effect – average price increase expected around 10%
 - 6) Lowes is charging more nationally than Home Depot; they're using pricing algorithms to calculate prices based on the highest market rate.
 - a) As a result, there's a risk with our rebate program – will be revisiting this
 - 7) Home Depot & Lowe's 50 gal price distribution
 - a) Note: these numbers will be updated by next quarter



Discussion:

- **BPA:** *Any indication of the tariff goes away that the prices will go back down?* NEEA was unsure, could potentially influence but hard to tell.
- **Seattle City Light:** *Have HVAC costs gone up as well?* NEEA noted they haven't seen that, but dryers and washers have gone up; this is due to both the import tariffs and the steel tariffs.
- **Snohomish PUD:** *Do you think having distributors involved could help with competition?* NEEA noted that was unlikely given Lowe's doesn't seem to care about what Home Depot is doing.
- **Seattle City Light:** *How frequently are stores are updating their prices?* Lowe's is doing it quarterly; Home Depot does it monthly.
- **Snohomish PUD:** *Will you talk to ENERGY STAR about this?* Yes. NEEA currently works through manufacturers on this kind of thing but Jon Clark (NEEA) has a relationship with some of the retailers so they'll approach them at the partners meeting this fall in Phoenix.

C. Installer Intel – Omission of the Commission

1) Sales Influencers

- a) Call center commission
- b) Installer commission
- c) Sales staff commission
- d) Employees vs sub-contractor
- e) Telephone bids
- f) Chance of two-person sale/install
- g) Place in supply chain

2) Commission Barriers

- a) Outside sales staff usually get paid sales commission
- b) Midstream incentive may be subtracted from HPWH price before commission applied
- c) So...they earn less commission on a HPWH than a standard tank or a gas water heater

3) Overview of primary water heater installers in the Portland area

D. Mix and Match Solutions

- 1) Find appropriate triggers
- 2) Commission the right people
- 3) Encourage conventional shops to always add HPWH as option
- 4) Work with distributors to base commission on gross not net
- 5) Generate traceable leads to the "right" contractors
- 6) Customize when possible

E. Marketing Activities - Media Campaign

1) Objectives:

- a) Goal: NEEA research and conversation with supply chain point to a need for greater consumer awareness
- b) Audience: We've targeted the DIY audience for this effort, not because we expect folks to do DIY installs. We're targeting people in the right mind-set for home improvement and consume that kind of content in cable or online
- c) Geography: The campaign is running throughout the region, aside from Idaho Power territory, and we are running cable media in specific markets
- d) Timing: Running an 8-week campaign, which launched this week. Working media budget is \$145K

2) Media Mix: YouTube, DynAdmic Video Network, Cable TV, Media Partnerships

- a) Video is primary form of ad content, great for awareness and can link back to the Hot Water Solutions site when served digitally.

Had a moratorium on bitcoin mining recently that also led to a decrease in illegal activity. Used enforcement and some heavy fines for compliance. Going in front of our board soon to try to recover the cost of our power for these high intensity customers (wholesale cost + upfront charges to upgrade infrastructure). Street light program running county wide – plan to hit 70% of all street and area lights in Chelan county through grant funding and incentives from our commercial lighting program. National Park Service came out and did a “before install” night sky impact – want to measure the impact of this as a non-energy benefit to demonstrate value; really pushing to get a residential light that has oxygen sensor, full cut-out and photocell built in. Pushing DHPs, heat wave is helping. Projected to do 40% more DHPs this year over last year and cost of installation has gone down; not sure exactly why, could possibly be installer comfort with the process. Offering a \$1000 rebate for that, increased from \$750 last year. Seeing an average of 2.5 heads per install. All our HVAC measures are doing better than projected. Weatherization measures are not.

C. **Energy Trust:**

A lot of activity in OR on electric side on updates of avoided cost. Used to see this updated every two years, now an effort to shorten due to decreasing cost of power. Capacity also becoming a much bigger issue; expect avoided cost to result in much lower avoided costs for lighting, higher capacity costs that will result in greater EE interest in the summer. Expect to see a shift in value away from baseload measures towards measures that contribute to peak. Winter peaking measures will decline in value somewhat, and increase in summertime measures; expect this to roll out in a year or two. Retail lighting significantly reduced in coming year so looking to bolster electric savings with HPWH and smart thermostats. Continuing to drive HPWH through midstream program; recently proposed to increase incentive to \$500. Have been reasonably successful with HPWH in new construction (both gas and electric) seeing more gas tankless in our new construction program, but not dramatically more than HPWH. Had success on the heat pump side. Targeting manufactured homes in our territory; taking a fixed-bid approach with a range, incentive is around \$2500. Based on last year’s pilot, customer could expect to pay around \$2000 for a DHP install. On manufactured homes, working on a replacement program; working with housing advocates across the state to put together a suite of incentives and a financing mechanism to allow folks to apply for a new manufactured home (would need adequate credit). Expect to do around 25-30 home replacements in Oregon this year. Energy Trust board just seeded this effort with \$1MM.

D. **Tacoma Power:**

Had new director start yesterday. Tacoma Power management has gone through recent training. Reorganization in marketing and communications department, expect good improvements and some synergies/streamlining as a result. HPWH program launched and have four rebates to date. Changed messaging from HPWH to “water heat.” Doing an awareness campaign, aligns nicely with NEEA’s efforts, will do direct mail in the fall. Interested in setting up a \$3000 loan offer for HPWH, want to see if we can pre-qualify customers in preparation for emergency replacements. Launched “rental program” to help address split incentive challenges. weatherization rebates. Trying to appeal to renters to chat with landlords about weatherization rebates, and appeal to landlords to be good stewards of their properties. Finished phase one of Manufactured Home pilot, moving into phase 2; didn’t get savings as hoped with DHP install with manufactured homes – hoping to see up to 5000 kwh savings, but looks to be more like 2800. Discussing whether we want to remove the breaker to the forced air furnace and provide Enervee heaters for those rooms that don’t have the DHP. Seen a big uptick in the central heat pump loan, raised to \$10,000.

E. **BPA:**

Did an Resource Assessment of energy efficiency (EE) that evaluates different EE measures and how they match BPA’s future needs.; will allow us to overlay EE offering with needs to better assess value of KWH. What this means for residential programs primarily is it will shift the portfolio so we’re sending the right signals to meet the needs of the system. Lighting changes –

baselines are changing more frequently due to updated research and market intelligence. Trying to better accommodate rapid changes. Seeking to streamline administrative activities on incentives to make them as simple as possible. Lighting payments will decline as much as 60% on October 1; believe that will result in a shift of utilization measures and have a negative impact on our customers that rely on lighting for energy savings. So far all of the lighting changes are a response to changing baselines, EISA won't come in to play for a couple more years. Made payment to customers for manufactured homes replacements available a year ago, very different from Energy Trusts approach – BPA much more hands off, in part because it's a federal agency. Have one manufactured home on order for one of our utilities.

F. Seattle City Light:

New supervisor in place replacing Andrew Gibbs – Scott Cooper (existing SCL employee). Behind on EV program due to vacant program manager position. Utility is not allowed to incentivize EV chargers for homeowners, thinking about leasing out to homes, hoping to get that legislation adjusted. Down a few staff, no one managing home retrofit, direct install and behavioral programs. Direct install program now replacing CFLs with LEDs, found building owners were less inclined to let us in the building if we were only replacing about 15% of light bulbs. Going midstream with lamps as of Aug 1, now using Lighting-To-Go program. Interested to see how this shift may impact the new construction or contractors going into distributor networks for better pricing. Working on developing new DSM solution. About 60% complete on advanced meter installs residentially; working to craft conservation strategy that will incorporate this data.

G. Avista:



Heat pump water heater pilot going in Spirit Lake. Just started AMI deployment, that will run for next 18-24 months. To make the transition to what our customers will see, started a pilot project using the Sense module (load disaggregation equipment) . Have all 100 deployed and have first round of data coming in. Using Sense system that provides customer interface on the breaker box; connects to WIFI and monitorable via smart phones. Learning about load disaggregation through this effort. In deciding what system to acquire, wanted something that was physics-based, easy to install. Have a multifamily hard-to-reach direct install pilot program that just transitioned to a regular program. Have 1.5MM kwh versus code, 3400 therms versus code, served 2700 multifamily units over 56 sites and about 45,000 measures installed. This spun off a contractor program run by SPW, high demand from customers and building owners on this. Have several complex owners that want to do this now too. Will also spin this out into a low income program, will try to do a similar approach but bigger scale and add a lot more weatherization.



Measures include on lamps, water heater wraps, aerators, faucets, common area lighting (e.g. stairways, parking lots). Very interested in the MOBILE project.

H. Idaho Power:

Multifamily direct install program going gangbusters, have more than we can handle. Doing LED lighting, kitchen and bath aerators, and pipe wrap on the water heaters. New construction program has 15 homes in the pipeline ready to go through any day.

I. PSE:

All resources RFP out right now, looking for generation and capacity storage, mostly to prepare for the coal strip plant coming off line. Working on refresh of PSE web, will impact what we do in EE – getting information to customers more effectively. Doing an AMI, plan to finish 2020. Big initiative to reduce carbon 50% by 2040; electrifying our fleet and corporate sustainability. Seeing community EV ride and drives. Multifamily and retrofits – continuing to pilot line voltage connected thermostats with Mysa, will have installed at end of month. Completing strategic energy management M&V assessment, resulted in combined commercial and residential savings of 2% above baseline. On new construction side, just launched manufactured homes and single family new construction programs, rolled out a redesign manufactured home new construction program based on tiered good, better, best guidance. Low income weatherization - released an RFP to CAP agencies for low income multifamily solar projects, targeting 5-7 projects. Also received \$300,000 in seed grants to go towards manufactured home replacements. On retail, just





switched over rebate processors, starting to see benefits from that. Launching in-store Nest rebate at retail events and validating customer on the spot. Have a couple Limited Time Offers (LTOs) running. Coordinated with NEEA on HPWH installer training; offering a \$75 SPIFF. Conducted targeted marketing campaign with 50% open rate. Really appreciated NEEA facilitated trainings, working with energy home assessment and facility advisors to continue awareness and education. On the LTO for DHPs, have 16 contractors signed up. Daikin offering financing and radius marketing. Weatherization - \$100 rebates and contractors offering additional \$100. Redesigning contractor alliance network, reevaluating referral process and exploring whether we can remove referral fees to help improve administrative process and benefit the contractor – would require online rebate application. Should have final results on HPWH numbers by October.

J. Clark PUD:

HPWH – volume, in particular on retrofits, has been lacking this year. Happy to see the number of direct installs occurring. Just received 75 from a builder; new construction installs have saved the day a bit. Launched performance path new construction program this year, seen a lot of activity and processed about 225 homes thus far in the Axis database. Incenting gas and electric homes. Board of commissioners dedicated \$2MM for low income smart thermostat project. Will be direct project, going to bid now. Will install for income qualified customers at no cost along with programmable line voltage thermostats for qualified multifamily customers. Will also install LEDs in the homes while contractors are installing the thermostats. In a question from Snohomish PUD about heat pump water heaters and new construction rebates, it was clarified that they pay \$300 for a tier 3 HPWH, so if the home goes through the performance path new construction program, they back out the kwh associated with the HPWH so they're not double reporting the savings.

Manufactured Homes Program Update (page 8 in packet | slides 64-85)

Neil Grigsby (NEEA) provided the update on the program name, participating manufacturers, and led a discussion on a 2018 proposed Limited Time Offer (LTO) opportunity. *The desired outcome is for RAC members to be informed on recent activities and provide input to NEEA Staff on the LTO proposal.*

Presentation Highlights:

A. Overview

- 1) NEEM nomenclature reminder
 - a) NEEM: Northwest Energy Efficient Manufactured Housing Program – completely market supported
 - b) NEW: Northwest Energy Works
 - c) NEEM 1.1: existing above code specification in the NW; also known as ENERGY STAR
 - d) NEEM 2.0: the upper tier specification; also known as ENERGY STAR w/ NEEM+

B. Roles & Responsibilities

- 1) NEEA:
 - a) Upstream incentive
 - b) Utility program support
 - c) NEEM marketing support
- 2) Utilities:
 - a) Homebuyer incentive
 - b) Retail SPIF (?)
 - c) Consumer marketing
- 3) NEEM (Northwest Energy Works):
- 4) Manufacturer technical assistance and training
- 5) Retailer outreach/marketing delivery
- 6) QA

C. 2018 Goals

- 1) Establish NEEM+ in the market

- a) 100-200 NEEM+ Homes
- 2) Utilities offer NEEM+ incentives
 - a) Utilities offering NEEM 1.1 offer NEEM+
- 3) Regional Availability
 - a) # Manufacturers/Retailers offering NEEM+

Discussion:

- **Chelan PUD:** *No retailers in my service territory so often my customers don't know anything about NEEM programs. When they sell a manufactured home, they don't always know where they'll go; have you thought about a website that would provide info on available programs?* NEEA noted that NW Energy Works has a document that includes all the incentives across utilities, which then gets reported to the utilities quarterly. This may actually be on the NEEM website, need to check. Ideally if a retailer is selling a home they would check to see whether the install territory has an incentive available.
 - **NEEA** recently provided Snohomish PUD with information on which retailers are selling homes in their county, could see about providing this to you. **ACTION ITEM: Neil to follow up with Northwest Energy Works and Chelan PUD.**

D. Activities to Date

- 1) RTF approval: Feb 2017
- 2) BPA IM: Oct 2017
- 3) Utilities shift emphasis on NEEM incentives
- 4) Future conversations – future utility incentive strategy, 2018 forecast
- 5) NEEA Upstream incentive strategy

| 2018-2019 Implementation Strategy | |
|---|--|
| Adoption Goal (2018 - 2019) | 5-10% NEEM+ |
| Manufacturer Incentive (from NEEA) | \$1,000/home (2018-2019) |
| Key Window of Opportunity (2018 - 2019) | <ul style="list-style-type: none"> • Increase NEEM+ market share • Utility NEEM+ programs • NEEA upstream support |

- a) Quick intervention and lighter lift than a typical MT opportunity because of the existing NEEM program infrastructure
- b) In 2018/2019 we'll increase adoption of NEEM+ through upstream incentives and hope to create sustained adoption by providing manufacturers and retailers with the resources they need to communicate the value of NEEM+ to homebuyers
- c) Transition utility incentives to from NEEM 1.1 to NEEM+ will also be a key driver
- d) By 2020 we'll be able to ramp down and exit the market, allowing the NEEM program to support both NEEM specs until the next the opportunity to influence the federal standard we'll be in good position to do so.
- 6) Manufacturer Outreach
 - a) 8 Demonstration Homes
 - b) 3 Manufacturer Agreements
 - Fleetwood Homes of Oregon
 - Palm Harbor Homes
 - Kit Custom Homebuilders
- 7) Manufacturer Onboarding
 - a) Make option available on specific models or on all
 - b) Retailer NEEM+ orientation visits informing process
- 8) Naming and Positioning
- 9) One NEEM+ home in the pipeline!

E. Introducing NEEM+

- 1) NEEA Marketing Manager Josh Pelham discussed the marketing aspect
- 2) Naming and Messaging
 - a) NEEA did market research and learned about MH consumers.
 - b) NEEM got a light refresh—through industry and WG feedback, we learned that we have to utilize the ES name indirectly, but have a way to educate and communicate with consumers.
 - c) NEEM has been synonymous with ENERGY STAR, which has served as the market-facing name for years.
 - ENERGY STAR did not give us permission to use “Most Efficient.” In addition, Workgroup feedback, retailer feedback, and manufacturer feedback resulted in suggestion to go with NEEM.
 - d) We intend for the NEEM 1.1 specification, which is ENERGY STAR in the market, to live on as ENERGY STAR.
 - e) But what about NEEM 2.0, now that it exists?
 - Now that NEEM has two available specification offerings it has introduced the persistent “NEEM+” designation, which will always be associated with the highest NEEM specification available in the market at any given time (currently NEEM 2.0).
 - This will always be used alongside the ENERGY STAR brand, and will be referred to as ENERGY STAR with NEEM+.
 - Reduces customer confusion
 - Allows region to continuously and consistently build consumer awareness and understanding
- 3) Resources to align with NEEM messaging: website, brochure, video
 - a) Brochure: NEEM distributing through retailers. Explains the NEEM program and its value.
 - b) Video: Sales training video and program overview for retail staff and manufacturers. Available on Vimeo now, will be accessible at NEEMhomes.com when it is ready.
 - c) Website: NEEM is working on their website. That is coming.
 - d) Additional resources utilities can use to align with NEEM+ will be found on Conduit, and include everything you see here, as well as messaging matrices, incentive information, and anything else we create going forward.
 - e) VIDEO: Selling ENERGY STAR Qualified Manufactured Homes (view from Conduit here:
<https://conduitnw.org/Pages/Group.aspx?rid=168&folder=719&tab=groupResourcesTab>)

Discussion:

- **Snohomish PUD:** *Did you change the spec, or is this just branding?* Just branding.

F. 2018 Limited Promotion

- 1) Slow to see NEEM+ sales through retailers – but they are happening
- 2) Opportunity
 - a) Upgrade purchased ENERGY STAR (NEEM 1.1) to NEEM+ at no additional charge to homebuyers
 - b) Knowing that manufacturers have a 2-4 month backlog, we’d like to upgrade NEEM 1.1 homes that have been ordered and are in the production pipeline during Q4
 - c) This will allow us to achieve a 3-5% market share on the year
- 3) Limited Time Offer Benefits

- a) NEEA will be providing outreach to funders that have a NEEM+ home in your territory and find out if and how you'd like to support the home.
- b) Manufacturer
 - Experience building NEEM+
 - Additional NEEA incentive bonus
- c) Retailer
 - Hero status
 - Increased knowledge of NEEM+
- d) Homebuyer
 - Free upgrade to NEEM+
 - Bragging rights
- e) Utility NEEM+ incentive (where available)
- f) Utility
- g) Energy savings from NEEM+

Discussion:

- **Snohomish PUD:** *How much additional cost above the \$1000 to build to NEEM+ for those homes that have already been sold? Incremental cost is generally \$800-1000, trying to cover that with the incentive. Might add a little extra to that to allow manufactures to recover their marginal cost increase.*

4) Regional Benefits

- a) NEEM+ 2018 Market Share : 3%
- b) Manufacturer experience building NEEM+
- c) Validation of NEEM+ to Manufacturers & Retailers
- d) Testimonials from NEEM+ homeowners
- e) Detailed cost data
- f) Homeowner utility data
- g) NEEM+ word of mouth

5) Timeline

- a) August: Outreach to Manufacturers
- b) September: Identify NEEM 1.1 Pipeline Homes
- c) September: Work with Retailers to contact homebuyers
- d) October – December: NEEM+ production

Discussion:

- **Tacoma Power:** *Will you be offering this to homes that have already been sold from NEEM 1.1? Yes. If there are other retailers that are selling NEEM+ sales organically, that can happen too.*
 - **Tacoma Power:** *Any idea how many homes? Manufacturers typically have around 100-125 homes in a quarterly pipeline so if we can get one manufacturer on board, we can get about 100 NEEM+ homes in the market.*
- **Energy Trust:** *What are the distinctions between 1.0 and NEEM+? BPA replied that each manufacturer has the capability to build to a standard, more like EUI than a specification for insulation levels. NEEM certifies by meeting an "overall" energy goal, so each manufacturer has the ability to customize approach. If you're beholden to the RTF for savings, it may be slightly different than if you're not given the different baselines. NEEA added that there are performance trade-offs to meet the spec that NEW works on with the manufacturers.*

Wrap up

Meeting Feedback:

None

Next Meeting location

Thursday, October 11, 2018 in Portland, OR at NEEA's office.