Summary Notes
Residential Advisory Committee Meeting
Tuesday, January 30, 2018
NEEA Office (Portland)

Attendees:

In Person:
Josh Mitchell – Chelan PUD
Lis Saunders – Tacoma Power
Thomas Elzinga – Consumers Power
Becky Arte-Howell – Idaho Power
David Murphy – Bonneville Power Administration (BPA)
Zach Bates – Puget Sound Energy (PSE)
Chrissy Crowell – Puget Sound Energy (PSE)
Hillary Olson – Snohomish PUD
Victor Couto – Seattle City Light
Todd Blackman – Franklin PUD
Doug Dickson – Snohomish PUD
Thad Roth – Energy Trust of Oregon
Blake Shelide – OR Dept of Energy
Jeff Tamboro – NW Natural

By Phone:
Marshall Johnson – Energy Trust of Oregon
Kevin Holland – Avista Utilities
Deb Martin Young – NorthWestern Energy
Kathy L Moore – Umatilla PUD

NEEA Staff: Jeff Mitchell, Beth Littlehales, Stephanie Baker, Ryan Brown, Alisyn Maggiora, Eugene Rosolie, Julia Harper, Dulane Moran, Suzi Asmus, Neil Grigsby, Jon Clark, Jonathon Belmont, Jill Reynolds, Josh Pelham (phone), Amy Webb

Public Attendees: Janice Boman, Embertec, Patrice Flint, CLEAResult, Nick Shudder, CLEAResult, Dan McDonald, CLEAResult (phone) Shoshana Pena, SDG&E, Nathan Bauer-Spector, SDG&E

Packet link: https://conduitnw.org/Pages/File.aspx?rid=4278
Slides link: https://conduitnw.org/Pages/File.aspx?rid=4285

Housekeeping and Agenda Items

A. Follow up on action items from October 12, 2017 committee meeting.
    1) Residential and commercial lighting topic will be discussed at Q3 meeting
    2) Jill (NEEA) and Todd (Franklin PUD) have connected on HPWHs
    3) Suzi's (NEEA)updates on DHP quick connect study resolved; will have a webinar Q1 as follow up on this.
    4) Dave (BPA) action item on savings on water heaters: current savings is 1544 kwh, RTF discussing this today to create a retail measure; BPA will follow suit in the new implementation manual, but will be 50 kwh lower.
    5) Neil followed up with Josh (Chelan PUD) on the residential new construction performance path.

B. RAC 2017 work plan (page 4-5 of packet)
    1) 2018 remaining proposed dates:
        a) Q2 – April 17 @ Portland
        b) Q3 – August 02 @ SeaTac
        c) Q4 – October 11 @ Portland
    2) Review of upcoming milestone votes

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C. Charter Review
   1) Only change, as noted in the memo on page 4 of the packet, was to change two seats for indirect funders. Link to the revised charter on Conduit is in the memo. Please advise Eugene if you have any concerns (erosolie@neea.org | 503-688-5406)

D. Announcements
   1) SDG&E presenting today
   2) New member of the Residential/MM team: Jonathon Belmont, handling Next Step Homes
   3) Level set on defining “collaboration”
      a) Cooperation, coordination, exchange of resources
      b) Mutual respect for individuals, their goals, and the joint goals of the alliance
      c) Encourages everyone at the table to speak up and contribute ideas around modified approach, etc.

Discussion:

- **BPA** noted it was a good definition of collaboration.

2018 Residential Evaluation Workplan (page 8 in packet | slides 5-11)

Dulane Moran (NEEA) gave the overview. *The desired outcome is for RAC members to be up to date on the Workplan and have the opportunity to provide feedback and advice.*

Presentation Highlights:

A. DHPs

Research Planned	MPER 7 • Market update: estimate # of installations by RTF tier, indoor heads, state • Continue efforts to refine sizing approach for non-incented units • Market survey to estimate awareness, purchase drivers • Research to better understand drivers behind current pricing as well as interactions during point of sale
Potential touch points	• No utility interviews planned for 2018 • Installers will be recruited for in-depth interviews • Regional on-line target market survey
Timeframe	• Q1-Q3 2018 (Kickoff February 1)

   1) Q2 online survey – data collection activity going out regionally
   2) Seeking to glean insights into pricing and positioning

Discussion:

- **NorthWestern**: Anything in research looking at cold climate vs. standard units on what kind of progress we’re making on pricing and installation and such? Early on we did work and looked at there are differences on cost and performance of cold climate units, but all MPERs have been focused just on technology in general. I’m going back to some of our rural market commitments we made at early in this business plan and wondering how we’re addressing that particular barrier for this technology – the “quote ‘climate unit market penetration, pricing, performance, etc.’ ”. Would like to follow up with someone offline about this.
   - **NEEA (Suzi):** Nothing specific on cold climates right now. Manufacturers designate which units are cold climate models. The only way for NEEA to infer pricing is from the incented utility data. We can look back at 2017 data for that; will need to evaluate how we’ll glean that for 2018 as our data collection activities are changing.

  - ACTION ITEM: Suzi and/or Dulane to follow up with NorthWestern
- **Tacoma Power**: *How are you training/recruiting installers for the MPER interviews? When will this start?*
  - **NEEA (Dulane)** Noted she will need to follow up on this; notifications will be sent through the workgroup. Once the sampling approach is established, that will be shared out as well.
  - **NEEA (Suzi)** Suzi was just communicating with Amy Webb (DHP MRE Manager) about the timing of this. Because this is currently the down time for installers, Suzi asked that these interviews be prioritized above consumer interviews, as far as timing.
- **Snohomish PUD (Doug):** If you are asking contractors how they position DHPs compared to other systems, it seems you ought to ask consumers the same thing.– it seems you could get a bit of contrast.
  - **NEEA (Dulane)**: We will. We can only find these people – the ones who had a bid or attempted sale but chose another product, those are the people we want to find but they are hard to find – they are like needles in the hay; consumer survey will provide some insight about positioning. Haven't resolved whether we can extract individuals for follow up in-depth qualitative interviews – working with survey contractor now to figure this out.
  - **NEEA (Suzi)**: This year we're not doing a survey of folks who own DHPs. We're doing a general population survey of people who do NOT own DHPs to find out their awareness and understanding and we are also trying to find these folks who decided not to buy it and establish why they didn't buy it.
  - **Snohomish PUD (Doug):** The reason I ask is because I don't think BPA gets all our information about our projects and I wanted to make sure those customers are in the pool and it sounds like you get them a different way.
  - **Energy Trust:** In your first bullet on your research plan, you call out state level that you're collecting this information. *How far down are you able to provide state level information on this?*
    - ACTION ITEM: Dulane to follow up with NEEA planner on state level detail to figure out how this can be provided

Presentation continued:

B. HPWHs

Research Planned	MPER 4 • Market update: estimate number of installs by tier, state, supply channel, urban/rural, incented/non-incented, new construction • Customer satisfaction survey, depending on access to customer contact information • Document trends in retail and wholesale pricing, monitor evidence of code influence
Potential touch points	• Consumer survey (satisfaction, purchase triggers, sources of information, installer interactions). Will require your input/assistance. • No utility interviews planned • Regional distributor interviews
Timeframe	• Q1-Q3 2018 (Kickoff February 8)

1) Will do a customer satisfaction survey this year
   i. Funders will get a request for purchaser contact info of HPWHs
   ii. Request will go out to workgroup members, RAC members will be cc'd.
2) This is code as an option for meeting new residential construction
3) Will also do regional distributor interviews

C. Retail Product Portfolio

Research Planned	• Product-level market characterization as needed to support product strategy approach • Confirm planning approach through review of baseline setting process and validation of key input assumptions • Continue to refine approach to quantitative analyses of sales data—balancing need to measure near-term and long-term outcomes
Timeframe	• Q2-Q3 2018 (RFP released by end of February 2018)

1) Combination of some evaluation and market research questions in addition to verifying planning assumptions.
2) Due to multitude of products in program (8 total), need to do a baseline review of each of the products, should be resolved this year
3) Seeking to make sales data analysis as robust and easy to run as possible; spent much of 2016 getting that system stable so should be able to do a majority of this work in the portal

D. Super-Efficient Dryers

Research Planned	Market Research Online Community • Obtain insight into the multifamily market and decision-making around appliances, maintenance, and other issues
Timeframe	• Recruitment underway • On-going community discussion framework

1) No major evaluation task this year
2) Setting up online market research online community (MROC) – establish how purchases happen in the multi-family sector
    i. This is not just focused on dryers, will include other appliance products later in the year.

E. Manufactured Homes
1) Nothing substantial – planning marketing research for Q1-Q2 2018

F. Low-E Storm Windows

Research Planned	Preliminary market characterization • Document current supply chain and product flow • Estimate size of market (units sold regionally, by type)
Timeframe	• Q2-Q3 2018

1) Falls under Window Attachments initiative
2) Conducted some product evaluation baseline work for commercial sector already
3) Need to do some market characterization work to support the residential product

Discussion:

- <u>**Northwestern**</u>: *Can these be put up on operable windows?*

- **Dulane:** Per RTF, the window technology has to match the operability characteristics of the existing window. Trading off between whether this can be a retail measure or contractors will sell/install to establish how these products can best come to market.
- **Chelan PUD** added that it also needs to be sealed and permanently installed, it is different.
- **NEEA (Jeff):** This program is being managed by the Commercial team, Christian Miner, as the Attachment Energy Rating Council (AERC) is the primary leverage point in that market.
- **Dulane:** Energy Star is in the process of finalizing a specification, which will provide an Energy Star label to help differentiate and promote the product.
- **NEEA (Jeff):** Will provide update in Q2 or 3 of this year.
- **Franklin PUD:** Best hope of getting any traction is to work with a retailer. The trick is sizing them correctly.
- **Snohomish PUD (Hillary):** Participation with previous retailer for primary window program didn't go well on our end. Was a small effort with Lowes and their contractor desk, incenting their windows. Found it was different contractors than those in our networks, ultimately uptake was pretty small.

Smart Thermostat Workshop Highlights (slides 12-16)

Doug Dickson (Snohomish PUD) gave an overview of the workshop, held January 11, 2018 at the Northwest Power and Conservation Council (NWPCC) office. *The desired outcome is to inform the Committee on the results of the workshop.*

A. Objective of meeting was to identify barriers and opportunities. Barriers included:
    1) Savings determination is very difficult
    2) Devices do not cover full range of HVAC systems (DHPs, baseboards, variable capacity, mixed-HVAC systems)
    3) Difficult to manage a QPL (based on fast changing market, uncertain savings, device compatibility questions)
    4) Retail delivery channel: utility free ridership concerns

B. Opportunities included:
    1) Coordinated manufacturer engagement
    2) Develop data and research requirements
    3) Regional action on marketing, education, and training
    4) Regional coordination in retail channel
        i. Desire to work with Energy Star that works with NW requirements as well
        ii. Retail allocation model was discussed at length
    5) Regionally coordinated research and testing of new products
        i. Forward looking perspective for how they fit in with the overall smart home

C. Next Steps:
    1) Share findings with Consumer Products Regional Market Strategy Steering Team
        i. Next meeting will likely be in March
    2) Potential: Convene two regional workgroups, one focused on Savings/Data, the other on Customer/Program delivery
    3) Potential: NEEA scope out a MT Initiative and work through portfolio management process

Discussion:

- **BPA**: Any discussion between gas and electric? We can only count electric savings. Looking at how we can get this into electrically heated homes.
  - **Energy Trust**: We probably have more participation on the gas than the electric side.
- **NorthWestern**: *Looking at cooling opportunities with this as well? A*lso may have impact on the those dryer regions (Boise, Spokane, etc) that would need cooling component considerations.
  - **Snohomish PUD (Doug):** Some savings estimates were shared there, but also on top of heating savings that could be saved (based on heating zone)
  - **Franklin PUD**: RE the cooling component - this is what intrigued me about Nest product. It has a thermostat that anticipates coming to temperature and shuts the compressor off before the fan and runs out all the embedded energy in the coil before the fan shuts off. Looked at savings from both heating and cooling when we did our pilot, but don't recall off-hand what that was. Even in the summer our cooling load was only about 1/5 of the heating load, but the cooling savings are there.
- **Energy Trust**: Curious around Demand Response and use of these thermostats; *did this come up on the opportunities list?*
  - **Chelan PUD**: There are a lot of unknowns. Trying to get capacity values with DR.
  - **Snohomish PUD**: kept coming up as an added value topic.
  - **NEEA (Jeff):** PGE has a thermostat program as well.
  - **Energy Trust**: We're in a little different situation than utilities, but can see opportunity for multiple benefits with this product.
  - **NEEA (Eugene):** Noticed a lot of interest at the workshop in regional collaboration around the smart thermostat issues, along with how all the systems work together.
  - **Franklin PUD**: worried about the variable speed systems, potential for customers to xxx or even damage their systems; hope manufacturers are thinking about this. Would also like to see something on self-diagnostics. Also found the question around value of measure life interesting.
  - **Snohomish PUD (Doug)**: PSE had an issue; the short measure life made it so it's not cost-effective for them.
  - **SDG&E**: State of California is using 11 for their measure. All the utilities in California state adopted a state-wide work paper in mid-2017 so it's a deemed measure. It's still in question so it could potentially change in 2018/2019.
  - **Franklin PUD**: Regarding free-ridership; out of the box there's no guarantee of savings with a smart thermostat, no requirement to setup with EE settings. Understand all of these are capable of reporting how they're setup. We are able to inspect every installation; finding a multiple installation of gas units as well as those not wired up properly.
    - **Chelan PUD**: Finding that providing a checklist has been helpful.
  - **Energy Trust (Marshall):** *Is the NEEA Gas initiative relevant here? If there was a regional effort to get the right types of units into homes and the right characterization, perhaps there could be a way to leverage gas and electric funds to get at opportunities separately; is there any consideration of that?*
    - **Snohomish PUD (Doug**): It was noted that there's gas savings and that would be better customer service.
    - **Energy Trust (Marshall**): There is a benefit, just different for each utility. Assuming you got some data to see where that was. We saw some micro-regions where there were savings that were cost effective on the electric side for cooling in a small section of our territory that might be more relevant to the eastern territories.

- ACTION ITEM: Julia to follow up with NEEA gas team to identify possible synergies on Smart Thermostats.

- **Avista**: Would like to be copied on whatever information comes out of this.
- **NW Natural**: Can't comment because haven't been involved in the program, but we would be very interested in this.
- **Energy Trust (Marshall)**: Regarding self-installs, the key takeaway is that they're pretty user-friendly. They're not that hard to install. When it comes to the heat-pump lock out and more products can meet that expectation, there's a little more associated with that.
- **NW Natural**: Ecobee doing a contractor training February 15

SDG&E Smart Thermostat Rebate Program: Case Study

Guests Shoshana Pena and Nathan Bauer-Spector from San Diego Gas & Electric (SDG&E) shared details on their rebate program. *The desired outcome is for RAC members to gain additional insight into options for program design.*

Presentation Highlights:

1) Started in-store instant validation thermostat rebate process this past fall. Moved very quickly, got up and running in about 30 days
2) Options for program design:
   a) In-store instant validation for thermostat rebate - first to market
   b) Streamlined downstream process while still meeting program requirements
   c) Developed a downstream/midstream hybrid program that improves customer experience
   d) Customers responded positively, even changing customer's opinion of SDG&E
3) Program Need: Streamline program design, enhance customer experience, and improve cost-effectiveness while overcoming diminishing savings on existing measures.
4) Outcome Desired: Create a point-of-sale validation tool that instantly qualifies customers, in-store and online at checkout, for a smart thermostat rebate.
   a) Decrease rebate program adoption barriers, and enhance customer experience
   b) Create an incentive avenue different from traditional downstream/midstream
   c) Improve program cost-effectiveness (reduce the need for support staff, etc.)
   d) Meet strict workpaper requirements for validation and inspection for a deemed measure
5) Improved point-of-sale process flow
   a) Instant rebate service: real-time rebate validation occurring at point-of-sale
      i. Name, address and other pieces of validation (not account number)
      ii. CLEAResult built app to manage this, mitigates spelling error issues in real-time
      iii. Loads barcode instantly on customer smart phone OR, automatically provides the discount in their online shopping cart
         1. Unique experience with manufacturer where Nest is selling directly as retail as well
         2. Coupons can also be used at Lowes and at Lowes.com, along with utility site.
   b) Improved customer experience, increased cost-effectiveness and meets program requirements
6) Process:
   a) Quick link provided at product position in store, directing customers to go to SDG&E site
   b) Customer chooses qualifying product and taken to an account validation page
   c) Customer validates

i. Nest manufacturers are able to verify heating or cooling system
ii. ACTION ITEM: SDG&E to verify that Nest can also establish whether manufacturer can identify fuel type as well (remotely)

Discussion:

- **Chelan PUD**: You're giving an instant rebate and then receiving manufacturer data on installs; w*hat percentage of thermostats are not being installed where rebates are claimed?* SDG&E replied that 10% of downstream customers are getting inspections but on this particular model we're relying on manufacturers to ping the devices. Since the roll-out is so recent, we don't have manufacturer data yet. We do have inspection results from the downstream program. It's the same measure, it's just that this is much easier.
- **Snohomish PUD (Hillary):** Do you know how quickly the coupons are getting redeemed after activating/requesting one? SDG&E noted that it's about 44% that actually use the coupon; they also have a follow-up process in place to target those customers who haven't completed the process.

7) Media Coverage
8) Key takeaways
   a) Leverage your manufacturers and their marketing strategies/tactics
      i. Ex: Nest did an in-store promo display
   b) Suggest getting a manufacturer to present at an AC meeting
   c) Have to talk to customers about it, they won't find it on their own for most part
   d) Lessons learned
      i. Stock issues
      ii. Agile collaborative team worked best
      iii. Call center
         1. Notifying reps early
         2. FAQs informative but reps needed information in a different format
      iv. Marketing
         1. Early and often check-ins (concurrent collaborative cumulative)
         2. Last chance messaging confusing
         3. Manufacturer partnerships were key
            a. co-branded videos
            b. social media
            c. emails
            d. in-store signage
            e. press

Panel Discussion: Online Sales Trends, Strategies, and Program Designs (slides 18-50)

Jon Clark (NEEA) provided an overview/introduction. Chrissy Crowell (PSE), Dave Murphy (BPA) and Hillary Olson (Snohomish PUD) led the panel discussion. *The desired outcome is for RAC members to learn from colleagues what strategies and lessons they've deployed and learned.*

Presentation Highlights: NEEA (Jon Clark)

1) Retail Apocalypse
   a) Impact of Amazon and online retail
   b) Online growing, largely starts as research but more and more consumers are buying online (approximately 10% of retail business now)

            i. Frightful 5: Amazon, Facebook, Apple, Google Microsoft
                1. Lawmakers are becoming increasing concerned about the power of these "monopolies"
    c) Reality today:
        i. Instore dominates, but for how long?
        ii. Starting to see "tangible" research done in stores, but ultimately purchase made online
    d) Why is shift to online important?
        i. It's the future: smart phone use revolutionizing retail
            1. 90% of smart phone shoppers using their device for pre-shopping activities
            2. Challenge for retailers (but those most likely to survive): streamlining what's in stock in-store with what's displayed online so customers can see whether they can get what they need in-person
                a. For these reasons, in-store purchases are just as important
        ii. Online is easily accessible
            1. Alexa and other in-home smart artificial intelligence devices

Discussion:

- **SDG&E**: We've found that 70% of purchases happen in-store, 30% online. The rebate purchases are tracked. Expect this to continue to shift more towards online. Targeted, segmented messaging, typically by email right now, has been the best way to reach our customers.
    - ACTION ITEM: NEEA (Jon) to share out KPNG report
- **NorthWestern:** Is the desire for acquiring the product immediately a driver at all? NEEA (Jon) confirmed that is a primary driver for local purchases.
- **NorthWestern:** As utilities we provide a lot of support for local economic development. *So how do we feel about driving sales online with Amazon?*
    - **Snohomish PUD (Hillary)** will be a very sensitive subject, we try hard to be retailer neutral; will need to be careful with this. The next year or two will be very telling, but don't envision us ever excluding them.
    - **NorthWestern:** It's not even about excluding the brick and mortar stores; from their perspective it's more about kicking them when they're down.
    - **NEEA (Jon):** The more progressive retailers are taking a more wholistic approach; as long as you're buying from their brand(s) they seem to be okay with this.
    - **NorthWestern:** Noticed that Nationwide is also seeing more online.
        - **NEEA (Jon)** reinforced that they suspect it's because it's a more efficient way for smaller retailers (mom and pop stores especially) to reach customers using social media as the interaction platform. Nationwide is a marketing company that can build websites, online presence, etc. for these smaller companies.
    - **NorthWestern**: Through NEEA NorthWestern has used Nationwide as a distribution channel to get to the smaller retailers.

Presentation Continued: BPA (David Murphy)

2) Online offerings for BPA Utilities
    a) Live November 5 2017
    b) Small QPL to easily promote
    c) Created an internal "landing page" until Amazon is able to create one, to assist in utility promotion:
    d) http://www.simplestepsnw.com/online-retail.html
3) Issues w/ Amazon:

a) Technical. Sometimes the incentivized price drops off between the product page and check-out
    i. When others' price drops it moves their product higher on the search results and ours drops
b) Structural. Amazon defaults to the seller with the lowest price, which is not always the incented bulb. Customer is able to select Amazon as the seller
c) Collaborative. Amazon pushed us hard, had last minute changes, now gone dark

4) Amazon Online Promotion
    a) The majority of utilities are comfortable moving forward with the promotion despite these challenges
    b) Moving forward, plan to expand the number of manufacturing partners and will closely monitor promotion performance
    c) Attribution for the incentive goes to the local utility. The retail sales allocation tool can break out by zip code. Key is that only one utility gets the credit.

Discussion:

- **NEEA (Kyle)**: *Are you using paid media as a strategy to promote products with Amazon?* BPA replied they are not.
- **PSE:** *We've been trying for about two years; they are not willing to negotiate on terms; are you accepting what Amazon is giving you?* BPA confirmed they were.

5) Home Depot Promotion – Lighting Products only
    a) Home Depot has already been offering online incentives on their own dime to align in-store and online pricing
    b) Home Depot won't participate in brick and mortar promotions if pricing doesn't match online

Discussion:

- **NEEA (Dulane)** sought clarification on whether they are matching incentives in store with online prices; BPA confirmed.
- **Snohomish PUD:** Lowes also doing this now. We found out by chance. Experiencing challenges with them on validation, because we don't have zip code data, etc. Not seeing any utility attribution with Lowes also, so we are not doing anything with them right now.

    c) Utility attribution online by early February 2018
    d) For zip codes where more than one utility receives sales allocations per the online version of the RSAT, the utility with the largest allocation will receive attribution online for that zip code
    e) Actual sales allocations will remain consistent with the online version of the RSAT

6) Online kit fulfillment: Partnered with Techniart to launch utility kit portal https://techniart.us/BPA/
    a) Kits customizable by utility
    b) Portal confirms user ZIP matches a ZIP serviced by the utilities
    c) Utility branded page displays the utility's name and logo and provides information on the kit configuration(s) and products supported

7) Online Store: Fully customizable online store options are also available
    a) Initial set up costs of $3,000 paid by utility
    b) No takers so far

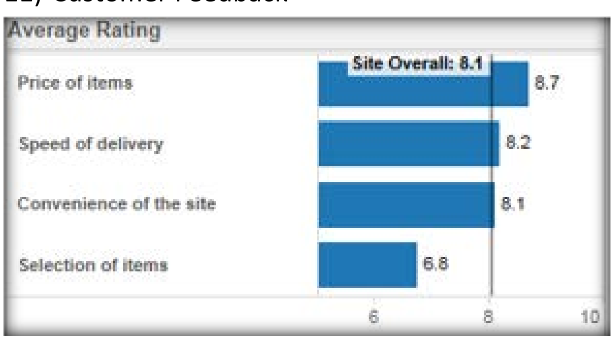
Discussion:

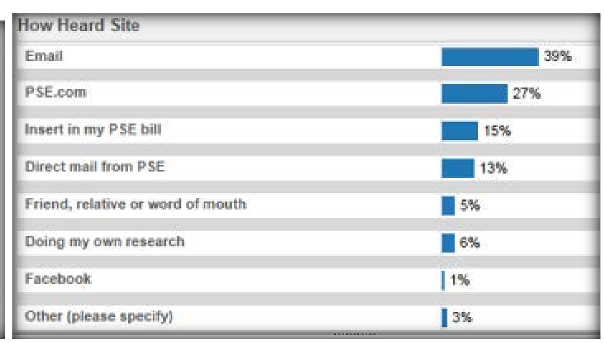
- **Franklin PUD**: *Was thinking about adding smart thermostats to the list (online store), but how would that work?* Hesitant to cut out local retailer

- **BPA** replied that they have some ideas around this. Possible a site like this could be used to verify the data the utilities need to validate savings.
- **Snohomish PUD** noted this approach was really successful with plug strips, was surprised. Cost was $10 for the customer, they're around $100 in the stores.
- **Embertec (Janice)** confirmed that right now they're selling for $79-$99 retail with no rebates.

Presentation continued: PSE (Chrissy Crowel)

8) Online retail portal, hosted by Shopify but has PSE look/feel
   a) http://shop.pse.com
   b) Sale of rebated products for PSE customers based on zip code.
   c) Utilize a local warehousing/shipping company to manage inventory and shipments.
   d) PSE staff manage online interface and inventory updates with assistance from an independent contractor who is familiar with Shopify.
   e) *Note: PSE owns inventory that they sell on this site*
9) Available products
   a) LEDs
      i. A-Lamps
      ii. Reflectors
      iii. MR-16s
      iv. Retrofit Kits
   b) Showerheads
      i. Includes Handheld Option
   c) Power Strips discontinued due to evaluation findings – looking at consumer education and outreach to find out how to bring this back, particularly because it was our top sale in the past.
10) Program Highlights
   a) 2017 ShopPSE Stats
      i. 4,000 orders placed via ShopPSE
      ii. Net Revenue = $47,000
      iii. Average order value (including shipping) = $20
   b) Top items sold
      i. Smart Power strips (now discontinued). More than 50% of sales.
      ii. Low flow showerheads
         1. Some versions are offered for free, customer only pays shipping.
         2. Handheld offerings are also popular
      iii. Lighting is a distant 3rd in terms of units and sales
11) Customer Feedback





12) 2017 Challenges
   a) Competition with global retailers is difficult.

b) Change in staffing mid-year, resourcing challenges.
c) Narrow focus in terms of products offered.

13) Future of ShopPSE
  a) Benefits include:
    i. Ability to offer instant discounts
    ii. Brand recognition & reputation
    iii. Energy Savings

14) Looking to expand product selection to further drive benefits, exploring things like:
  a) Vehicle for Distributor/manufacturer Limited Time Offers
    i. Connect to Trade Ally Network
  b) Ability to offer Web-enabled Thermostats
    i. Connect to Home Energy Assessments

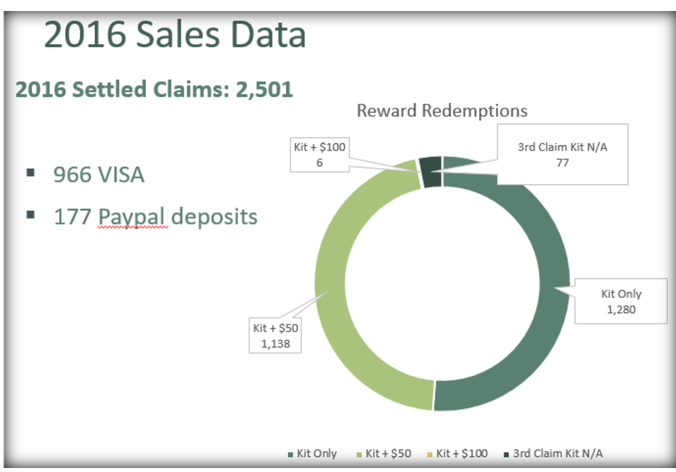
Discussion:

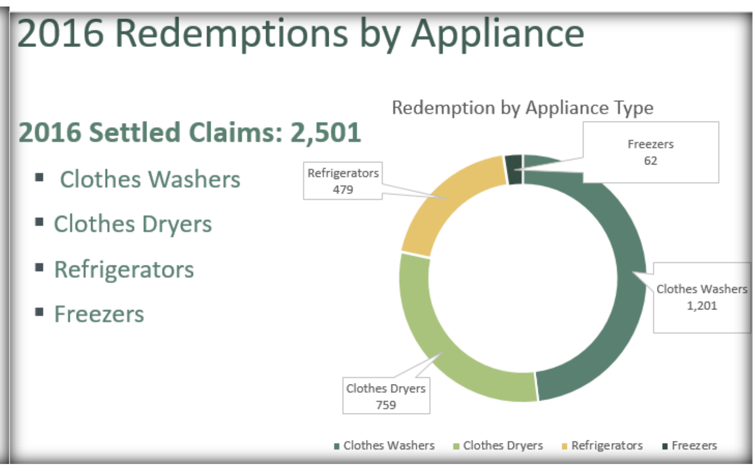
- **NEEA (Kyle)**: *What was the cost for site development?*
  - PSE ACTION ITEM: Chrissy to follow up and provide to NEEA details on the cost for their online store site development
- **Snohomish PUD:** *How frequently are you restocking inventory?* PSE noted that as stock gets low, we monitor it closely.
- **Chelan PUD:** Thermostatic shower valves, was that part of the low-flow? PSE noted it is part of low-flow, not currently available on ShopPSE; offering them through multifamily direct install, haven't added it to our home energy assessment program yet.
- **PSE**: This effort comes out of the EE budget because there are savings associated with it. Don't earn a return, just breaking even.

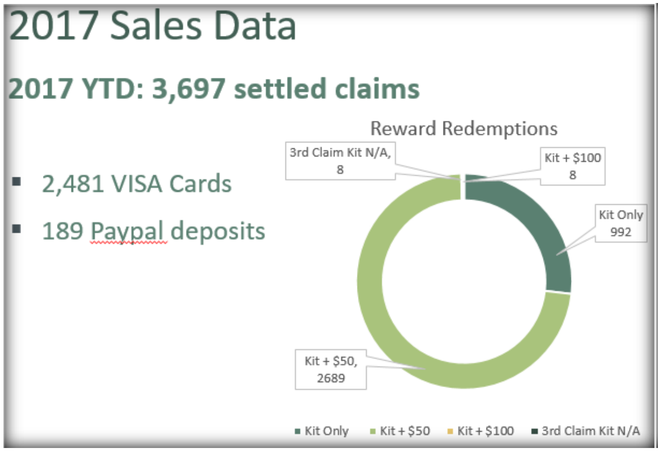
Presentation continued: Snohomish PUD

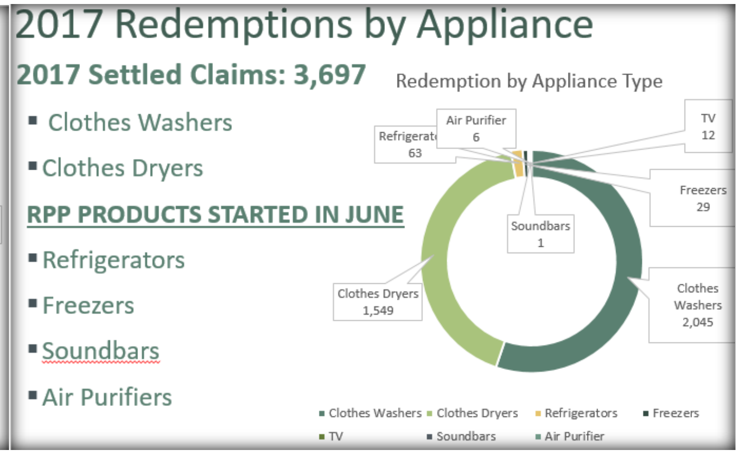
15) Smart Rewards Enervee Platform: https://SmartRewards.SnoPud.com
  a) Positioning ourselves as a resource
  b) Compare products and prices from multiple retailers in one place
  c) Use the filters to find products that meet your exact needs
  d) Submittals in as little as 5 minutes

16) Redemptions by Appliance type and sales data (2016 & 2017)









17) Customer Satisfaction and Experience – Survey Results
    a) 80% of respondents said the experience was “easy” or “very-easy”
    b) Only 26% of respondents went to the site prior to making their purchase.
    c) Over 99% would participate in the program again
    d) 82% of customer awareness comes from:
        i. Retailers Sales Staff
        ii. In Store Signage
        iii. PUD Website
18) Challenges and Lessons Learned
    a) Discrepancies between high tier efficiencies and score
    b) Not all models actively show online (must be available through partner retailer)
        i. There are scenarios where products are available in the store, but are not online. Not exactly sure how/why this occurs, have a note online to have customers call if they can’t find their product on the site.
    c) No live call-center
        i. Not ideal experience.
        ii. Snohomish PUD has added their own customer service line in the interim, will have a live call-center with Enervee as part of their contract soon.
    d) Training of Enervee staff
    e) Continued Process Improvements
        i. Fast Track Submittal
        ii. Submitting multiple appliances concurrently
    f) Example provided

Discussion:

- **Franklin PUD**: *Why isn’t NEEA working with CLEAResult to craft a turnkey program to hand off to utilities?*
- **Snohomish PUD (Doug)**: From a program delivery standpoint, that’s not really what NEEA is supposed to do.
- **Tacoma Power**: Sounds like form the smart thermostat workshop and the Consumer Products Market Strategy group, that’s where the conversation should happen – is it NEEA, is it BPA, etc.
- **NEEA (Julia):** Agreed with Tacoma Power. NEEA tends to look at things though a market transformation lens. However, if there is broad interest from the region to provide something like this (like a platform) as a scaled, cost-effective service, we’re absolutely open to it. We would need to get agreement on the requirements and details of how it would work.
- **ConsumersPower**: I think there is interest, at least from my perspective. Need to think about it further.
- **Snohomish PUD (Hillary)**: Details seem to be where the challenges arise (incentive rebate levels).

- **Tacoma Power**: Doesn't seem we would all need to agree on the same rebate level; the regional desire at a higher level would be beneficial.
- **Franklin PUD**: Coming up with some way to make it easier for utilities to launch a smart thermostat program would be nice. If there's a way to get Ecobee to report their thermostats online; seems like that would be a good regional benefit.
- **BPA**: A lot of interest in adding smart thermosats to the simple steps program. Will continue to be a process and will continue to pursue adding this to the Simple Steps program.
- **Snohomish PUD (Hillary):** Enervee platform is offering the "instant-off" with Nest.com is running. Enervee does not offer "instant-off" with other products currently, but they are working on it. For 2018 we will move to "tango" cards (e-card) for delivering rebates to customers, customer choses which vendor from the list they want to use and are provided a code.

Utility Share-outs/Round Robin

A. **Avista:**

Working on multifamily direct install, hired a contractor to go door-to-door. Still working on a smart thermostats pilot as well as fuel conversions. Still feel gas is the more efficient fuel source, regardless of the Governor's decision.

B. **Chelan PUD:**

About to finalize contract with Efficient Northwest Software a great auditing and tracking tool designed w/ PNW utilities in mind; fairly low cost and rolls a lot of data up for EE audits and supports Conservation Potential Assessments. Easy to use with multiple platforms, including tablets, etc. Makes in-home audits easier, has a contractor portal, consumer web portal, and more. Chelan plans to use this in place of their CIS (customer information system) as well. The more customers that this vendor has, the more funding they can use to improve the product. Using state grant funding and incentives to fund street lighting replacement project. Have a couple WWU students working on a research project around how EVs can benefit Chelan county. Looking for a residential exterior light product that we can use for Night Sky project; want to do a POS rebate with this. Criteria: solid cut-out, oxygen sensors, photocells. Looking into Demand Response for residential and commercial thermostats. Ecobee product for commercial is yielding good results, in particular for small businesses. Average customer interacts with utility 8 min/year; local film series event featured movie "Switch" that had over 300 people turnout!

C. **Franklin PUD:**

Recently received discretionary funding to explore "near low-income" sector (will start at 200%); thinking that's the next market to tap. Will implement a tiered 1-2 year exploratory program in April to see what the uptake might be. Cap agency couldn't keep up with demand, regardless of funding, so when we launched our in-house program it took off. Programs offered will be pretty close to those offered in low-income. Just started BPA pilot program on HPWHs. Tri-Cities managers collaborated on EVs to go after some Department of Transportation funding; using that to get some experience on what it takes to get EV charging stations incorporated into our grid. 5-year pilot will be placing 10 chargers throughout some remote areas of the state. Looking to get new homes program launched with the other utilities in the area.

D. **Snohomish PUD:**

Developing low-income program, target is to reduce energy burden (utility bill divided by income). Will do 250 to start and monitor over time to find out the impact they had on the customers' energy burden. Opportunity for mini "in-home" audit basically and collecting some helpful information on appliances, etc. Changed online home energy program to EnergySavvy (was Apogy). Spending much less this year on retail (about $1MM) less and move more energy towards capacity. Are a winter peaking utility (Dec/Jan).

E. **PSE:**

Just finished 2018-19 planning. Done some work to align multi-family with single family (DHPs and HPWHS). Completed second phase of line-voltage connected thermostat pilot with WSU. Connected 300 multifamily homes; should have more data on that at next meeting. Participated in building competition with 4 large SEM building participants and used competition to drive heating savings; Cadmus will deliver a savings analysis off that. Residential new construction: soft-launched new manufactured home and single-family new construction programs. Working on branding strategies for trade ally networks. Low-income weatherization program got additional $2 million as a stop gap for the state budget. Got approval from UTC to remove low-income program from portfolio cost-effectiveness test. Launched online rebate process for smart thermostats, thus why we're not really keen on the Enervee system; only have a 4% rejection rate. Top 2 programs for those are gas home heating and windows. Home Energy Assessment program for single family homes – completed 10,000 audits in two years (water heating, space heating and windows). Looking to finalize scope on single family rental pilot; goal is to provide marketing outreach to renters and landlords; goal is 300 homes/year in 2018/2019. Added new ductless heat pump measure. Retired tier 2 heat pump that had the lower HSPF due to cost-effectiveness. Ran 2 manufacture campaigns last year, including 1 with Trane; still working on lessons learned there – spring or summer months would have been a better timeframe. Brought back gas water-heating measures: offering gas storage rebate and $250 tankless water heater rebate and discontinued fuel conversion program due to anticipated impacts on impending carbon tax. Expanding distribution of thank you kits on green power and ensuring they're not sending multiple kits to the same customer. No more door-to-door on outreach campaign. Looking at thermostat optimization pilot, should launch by Q4 2018. Demand response is stalled right now.

F. **Idaho Power:**

Finally launched HPWH program. Have internal program planning group, diving into Low-E windows. Have Home Energy Audit program, having auditors do the in-home education and installations. Got rid of fridge and freezer recycling program in December. Have a kit program available to all residential customers (customized by fuel type), they just have to go online and register for it. Starting customer on-boarding kits as well for new customers that will include EE information. For direct install programs, adding thermostatic shower heads. Launching residential new construction program in March.

G. **Energy Trust:**

Spent the past 1.5 years making changes to programs. Previously had 3 programs with 3 program managers. With retail lighting declining and saturation in the showerhead and aerator market, decided to consolidate those three programs into one as of the first of 2018. CLEAResult is the project management contractor, TRC managing new construction program and CLEAResult now managing retail programs previously handled by Ecova (bought out by CLEAResult). Now structured based on product development groups, customer acquisition (market-facing activities), and operations/fulfillment (external contracts, etc.). Expect some changes from folks you're familiar with in terms of responsibility. Looking to continue hard work on water heat. Thermostats also high on the list. New key initiative: diversity, equity and inclusion (broaden participation of customers)

H. **Seattle City Light:**

New public EV charging stations launched, rate will be $0.24/kWh. Green-up (new energy credits program) customers opt-into. Use some funds for grants for larger solar panel installations on larger facilities. Direct install multifamily program going out for RFP. City directed that we had to get opt-in approval, in lieu of opt-out. Working with NEEA (Neil) on residential new construction program that is now currently going through business case development – just launched initiative/program lifecycle process. In 2018, made some changes to residential rebates: home heating, now doing air source heat pump, split duct heat pump and DHP measure, as well as a DHP replacement measure. Not much traction yet on the replacement measure but have had some calls on it. Collaborating with Snohomish PUD and NEEA on discounts for HPWHs. Also working with CLEAResult on what SDG&E is doing. Have new executive director and 2 new staff members at the Lighting Design Lab. Got energy advisor roles reclassified, finally gave them ability to go out into the field and build customer relationships. Closed out hiring process for Andrew Gibb's role (Victor's supervisor), looking to hire someone in the next month or two.

I. **ConsumersPower:**

Reminder on utility profile: 22,000 meters, approximately 1.5 hours south of Portland. Offer HPWH in storefront and online; had a few hundred installations in the past couple of years. Will continue to incent these going forward. Opening store to Eugene PUD and Central Lincoln; not looking for major revenue source, just another opportunity to get the technology out there. Starting to see conversion away from gas but it's not on purpose, the city is pushing it. Seeing more hydronic heating in homes; Sanden product might be a good solution as we're seeing sizing issues arise. Education on HPWH technology has been successful in addressing install issues. Common barriers stem around cold air in the home. Seeing more multifamily units crop up in the DHP market, wherein there are multiple unit houses crop up – sometimes seeing up to 5 outdoor units per home due to an incentive program.

- **Franklin PUD**: find that with low-income homes they have high base-loads.

J. **NW Natural:**

Low carbon intiative picking up steam this year, working on Renewable Natural Gas. The city is using that on their garbage truck fleet. Looking to expand that to shipping companies, trucking and cab companies and even the city transit system. Working closely with Habitat for Humanity (HH) to provide condensing tankless water heaters for their facilities. HH wants to become more of a builder as opposed to a non-profit. Looking at 23 homes next year, up to 40 in 2019; all will be multifamily. We probably won't be able to meet that demand; meeting with Rinnai (manufacturer) to see what's possible.

K. **BPA:**

Regarding DHP comment from ConsumersPower – if you have a house with multiple DHP units please contact your Contracting Officers Technical Representative (COTR) ASAP, there will be a correction made in the implementation manual (1 per household). Residential lighting was make as an exception in the 2-year implementation manual; just received new information from RTF on lighting savings. Expecting 25% overall decrease in savings for lighting programs.Will be going to USB (Utility Sounding Board). Questions for consideration:

- Currently payments are same b/w lumens bins – is it important that the rate is the same across all bins, or different?
  - Snohomish PUD will be ok with it
  - Franklin PUD prefers simpler
  - ConsumersPower prefers simpler but if you go the other route, as much heads up would be appreciated.
- What if lumens bins are not at a whole dollar?
  - Similar sentiments as shared above

L. **Tacoma Power:**

Starting to implement programs according to 2018-19 conservation plan. Have offered grants for low-income (100% coverage) in the past, will no longer be able to offer in the same way. Will reduce them, looking at offering a loan, or a rebate, not both. Low-income certification program is really time/labor intensive. Working on implementing a rental program targeted at property owners with low-income to increase insulation.

M. **NorthWestern:**

Revamped natural gas rebates. Doing Simple Steps with LEDs, will do limited LED distribution with customers at home shows. In business as usual on Energy Efficiency front.

2017 Funder Satisfaction Survey Results and Discussion ([slides 53-67](#))

Jeff Mitchell (NEEA) shared the results of the survey. *The desired outcome is to inform RAC members of the results and collaborate on addressing highlighted issues.*

Overview & Highlighted Issues:

1) Data heavily weighted to OR and WA.
2) Leverages implicit associations to better understand stakeholder mindset
3) *What's confusing?*

Discussion:

- **Snohomish PUD**: Expect some of this comes from not understanding difference between market transformation and energy efficiency.
- **BPA:** Get overwhelmed with number of workgroups
- **Tacoma Power**: Setting context with every communication is really key. Some folks don't have all the context (i.e. some of my folks on workgroups), remind them why you're checking back in with them is really helpful.
    - **Chelan PUD:** Not sure what some people's role is with NEEA. Need people to be clear about who they are when they speak
- **PSE:** seems like NEEA's role changes with the initiative or product. Feels confusing.
- **Snohomish PUD:** confusion around where NEEA is competing with the utility and where it's not. An update once in a while would be helpful – i.e. NEEA 101 would be useful for new members. PSE noted they got this and it was helpful.

4) Funders felt that NEEA staff value their input, but aren't as effective at demonstrating that. NEEA staff effectiveness has improved on every measure except "values my input." *Tell us more about this:*

Discussion:

- **Energy Trust**: *could it be that this means they want to see their input always implemented?, could see how this would be really hard.*
- **Tacoma Power:** would have been reflecting on whether my input is sought, or whether I'm asked to come to these meetings to listen to what's going on. The way the question was worded may have also had an impact. The RPP Workgroup meeting yesterday felt like we were heard.
- **Snohomish PUD:** Sometimes feels like you're seeking our input because you have to? Sometimes feel like things are baked, not always, but occasionally. Example of yesterday, felt like discussion could have been leading to codes and standards as being the "answer."
- **Chelan PUD:** Night Sky initiative; feel like we've been pushing that with NEEA for a while and aren't getting much result.
- Please reach out to Jeff Mitchell if you'd like to discuss/share more. jmitchell@neea.org | 503-688-5482.

RPP Updates: Review of January 29 Workgroup Workshop (pages 6-7 in [packet](#))

Beth Littlehales (NEEA) provided the overview and updates on the program. *The desired outcome for RAC members to be up to date on the RPP program and have the opportunity to provide feedback and advice.*

Presentation Highlights:

1) Did a deep dive on the program
2) Program logic, activities, barriers, what is the market and what are we trying to do in the market

3) Feedback from fall deep dives and this workgroup session will be used to calibrate current thinking and logic to evaluate how to best move this program forward
4) In-person workgroup meetings really nice.

Public Comment Opportunity

Janice Bowman (Embertec) commented that she enjoyed the meeting. Retail online discussion was very interesting since Embertec sells strictly online.

Wrap up

Meeting Feedback

A. **NEEA (Jon)**: Last year put together a retail tour to go shopping at some retail stores at Jantzen Beach. Would like to fold that into online. If there's any interest in doing that again, please let Jon or Jeff know (Jon's contact info: jclark@neea.org | 503-688-5444)**.**
B. **Seattle City Light:** For RPP, would be interesting to see what those categories are in market and revisit with some cadence would be good to look at online and in-store and compare.
C. **BPA:** Very useful.
D. **Chelan PUD:** Nice to have external folks present.
E. **PSE**: Great to hear what another region is doing.

Next Meeting location

Tuesday, April 17, 2018 in Portland (NEEA Office)

- ACTION ITEM: NEEA staff to double check that this doesn't overlap the RTF and that it is in fact in Portland.