

Summary Notes
Residential Advisory Committee Meeting
Thursday, August 10, 2017
SeaTac Conference Center (Seattle)



Attendees:

In person:

Lis Saunders – Tacoma Power
Andrew Gibb – Seattle City Light (Seattle)
Josh Mitchell – Chelan PUD
Todd Blackman – Franklin PUD
Hillary Olsen – Snohomish PUD
Zach Bates – Puget Sound Energy (PSE)
Roger Kainu – Oregon Department of Energy

By Phone:

Thomas Elzinga – Consumers Power
Becky Arte-Howell – Idaho Power
David Murphy – Bonneville Power Administration (BPA)
Maitri Dirmeyer – Bonneville Power Administration
Kathy L Moore – Umatilla PUD
Matt Babbitts – Clark PUD
Deb Young – Northwestern Energy
Mark Wyman – Energy Trust of Oregon
Marshall Johnson – Energy Trust of Oregon (ETO)
Kevin Holland – Avista Utilities
James Marker – Puget Sound Energy (PSE)
Tina Jayaweera – Northwest Power & Conservation Council (NWPCC)

NEEA Staff: Jeff Mitchell, Neil Grigsby, Stephanie Baker (phone), Suzi Asmus (phone), Jill Reynolds, Beth Littlehales, Josh Pelham (phone), Alisyn Maggiora, Eugene Rosolie, Harvey Mathews

Public Attendees: Janice Boman, Embertec

Housekeeping and Agenda Items

- A. Follow up on action items from April 20, 2017 committee meeting.
 - 1) April breakout discussion summary is still in progress
 - 2) Committee members to discuss low-e storm windows with RPAC members
 - 3) Quick connect DHP units – will have something by next RPAC meeting
 - 4) Webinar on Manufactured Homes was May 31; Neil will discuss further in his presentation.
- B. RAC 2017 work plan (page 16 of [packet](#))
 - 1) Nothing required here, just a review of the plan for the year.
 - a) Hope to have 2018 draft work plan laid out for the Committee at the October meeting.
 - 2) Meeting locations:
 - a) Q4 will be in Wenatchee (Chelan PUD hosting)
 - b) Date set for October 12.

Residential/Mass Markets Portfolio Update (overview details on page 38 of [packet](#)):

Jeff Mitchell (NEEA) gave a quick update on the progress with the portfolio.

- A. Next Step Homes and Manufactured Homes votes will be coming up. Next Step Homes will come forward at Q4 meeting for a combined “product readiness assessment/scale-up” vote. With Manufactured Homes, will likely keep those two milestone votes separate due to slowing of market/code progress.
 - 1) **ConsumersPower:** Is Bend or Ashland (Oregon) being targeted for local Government/home certification program partnerships through the New (Next Step) Homes program? **NEEA (Neil)** confirmed they are included in the targeted outreach.

Northwest Energy Efficiency Alliance
421 SW Sixth Avenue, Suite 600, Portland, OR 97204
503.688.5400 | Fax 503.688.5447
neea.org | info@neea.org

- B. Packet/Informational Updates (not agenda topics)
 - 1) Program Updates:
 - a) Dryers (pages 23-24 of [packet](#))
 - b) Ductless Heat Pumps (pages 25-26 of [packet](#))
 - c) Next Step Homes (pages 27-28 of [packet](#))
 - 2) Appendices overview
 - a) MR&E Update ([Newsletter link](#))
 - b) Milestone progress (page 30 of [packet](#))
 - c) Emerging Technology Update ([web link](#))
 - d) Strategic Markets (HPWH) update (page 31 of [packet](#))

Manufactured Homes Update (pages 17-18 in [packet](#))

Neil Grigsby (NEEA) gave an introduction to the purpose of the discussion. *The desired outcome is to update RAC on feedback received from workgroups and other stakeholder on the Manufactured Homes initiative strategy.*

A. Presentation highlights:

- 1) Discussions to-date:
 - a) Q2 RAC update and discussion (April 20, 2017)
 - b) Work Group webinar discussion, including RAC members (May 31, 2017)
 - c) Work Group follow-up discussion (July 27, 2017)
- 2) Changing Market Conditions
 - a) HUD code change delayed due to new Administration; it’s business as usual for manufacturers and with the EnergyStar spec still in place, this reduced their motivation to change practice.
 - b) Manufacturers are busy
 - c) NEEM 2.0 savings for region reduced by about half
- 3) Previously Received Utility Feedback
 - a) Supportive of NEEA continuing a NEEM 2.0 Pilot
 - b) NEEM 1.1 adoption suggests it’s time for a higher tier
 - c) MH buyers are an important customer base
 - d) Encourages ongoing relationships with the market
 - e) Future replacement programs can include NEEM 2.0
 - f) “Sounds like NEEA wants out because it got hard”
- 4) Additional Feedback Provided Today
 - a) **Energy Trust** – Utilities should show support of NEEM 2.0 adoption (in absence of code change) by putting a sunset date out to the market on the NEEM 1.1 program to create pressure.
- 5) Proposed Plan Revisions:

| | Original Plan | New Plan |
|--|-----------------|--|
| Adoption Goal (2017 - 2020) | 30%+ | 5-10% |
| Manufacturer Incentive | \$800/home | \$1,000/home |
| Incentive Budget (2017 - 2020) | \$2M+ | \$640k - \$1.3k |
| Key Window of Opportunity (2019 - 2020) | HUD code change | All Utilities offer NEEM 2.0 incentives; end NEEM 1.1 incentives |

Discussion:

- **Chelan PUD:** *What’s the incremental cost between NEEM 1.1 and NEEM 2.0 for a manufacturer?*

- **NEEA (Neil):** \$800 to \$1200, depends on strategies they're using to meet the NEEM 2.0 performance level.
- **ConsumersPower:** My concern with utilities switching over to 2.0 is that manufacturers are busy enough that they only push out product based on HUD code. That might also affect smaller utilities. *To BPA, how many NEEM 1.1 activities are in rural areas?*
 - **BPA** replied that they could look into this to provide solid numbers. BPA wants to wait for more data from NEEM 2.0 uptake before they agree to an end date for NEEM 1.1. These homes can be affordable/senior housing and they are not willing to make any decisions until further information is available.
- **Energy Trust** – This is a balancing act. Can't wait for perfect evidence; may need to send signal/prompt to the market. It's a two-step process: 1) signal the market that we're going to sunset at end of 2019 (for example), 2) wait to see what happens with that and make the decision at that point to actually sunset if it's appropriate. We could be missing an opportunity if we wait.
- **Umatilla PUD:** Can appreciate sending a signal; however, downside may cause challenges for utilities and implementers in terms of how consumers view the stability of programs. Just need to be cautious with signals.
- **Energy Trust:** *How do we get a sense of where folks stand on this?* Happy to go with where the group desires.
 - **NEEA (Jeff)** replied that this proposal and Energy Trust's suggestion is a good start for a discussion, we need to cue up the market somehow. Neil added that the next step is to engage with manufacturers. Expect to have good feedback from manufacturers in 2018, which can help inform whether we're ready in 2019 to shift all utility incentives to NEEM 2.0. Jeff recapped that this is an initiative that had a clear path that's now been adjusted – from a savings standpoint this is a small opportunity, but because of the market that it serves it still has great non-energy benefits. This is still a discussion happening at the Work Group level.
 - **BPA:** Need to have an offering for all customers, concerned NEEM 2.0 won't be available for everyone.
- **Energy Trust:** Important to acknowledge where we place our incentives. Good to keep in mind as we head into Work Group discussion.
- **Chelan PUD:** Have seen only four rebates come through in 2017, so there's still a lot of opportunity in rural markets from our perspective.
- **Energy Trust:** Northwest Energy Works has data that's been certified on this. Incentive redemption is not necessarily a proxy for sale. Look at data to evaluate what market penetration is in individual territories.
- **ConsumersPower:** *What's the NEEA incentive currently for NEEM 1.1?*
 - **NEEA (Neil)** replied that NEEA doesn't actually provide any financial support for this program, it's **industry run and self-supporting. This will be NEEA's first foray in to the NEEM program/market.**
 - **ACTION ITEM:** Determine whether or not to offer utility incentives on NEEM 1.1 in, post-2019. Need to discuss in detail at Work Group level and again at RAC in 2018 before final approach is determined.

6) Timeline:

- a) August
 - Q3 RAC – August 10
 - Q3 RPAC – August 31
- b) September – December
 - Develop marketing strategy
 - Manufacturer engagement

- Finalize manufacturer commitments
 - Utility outreach on NEEM 2.0 planning
- c) January – Q1
- Launch upstream incentive pilot with Manufacturers

Discussion:

- **NEEA (Jeff): ACTION ITEM: Committee members to prep RPAC members before their meeting.**
- **Clark PUD:** *Have question related to Dryers, will we discuss the latest progress with RTF measure?*
 - **NEEA (Jeff/Stephanie):** In July RTF meeting they reopened the Dryers workbook and moved savings for EnergyStar tier 1 non heat pump from 93 kWh down to 9 kWh. Working on a plan to evaluate what we would need to do to get the RTF to look at that again. Will discuss in further detail with Work Group and bring update back to October RAC meeting. Stephanie added that the work group meeting has not been scheduled yet but will likely be in late August. Matt at Clark said he would like to be included in that even though they don't have workgroup representation. Additional detail can be found in the Dryers memo on page 23 of the [packet](#).

Retail Product Portfolio (RPP) Update (pages 19-20 in [packet](#))

Beth Littlehales (NEEA) gave an introduction to the purpose of the discussion. *The desired outcome is to bring RAC up to date on 2017 RPP activities, preview data analysis capabilities and gather feedback from RAC on program strategy and direction.*

A. Presentation highlights:

- 1) Program Overview:
 - a) Portfolio includes eight products; NEEA runs the program in collaboration with ENERGY STAR and several other program administrators (“Program Sponsors”) around the country.
 - b) Four primary objectives during Strategy Testing and Finalization stage of NEEA lifecycle:
 - i. Improve data administration and access;
 - ii. Build scale through retail and extra-regional engagement;
 - iii. Improve product selection process;
 - iv. Build consensus on evaluation approach.
- 2) Program Updates:
 - a) Nationwide Marketing joined ENERGY STAR Retail Product Portfolio (ESRPP)
 - i. Lowe’s planning to join in Q4
 - b) Added clothes washers and refrigerators (advanced tiers only)
 - c) ESRPP Program Sponsors represent 17.5% of US households; goal is 25%.
 - d) Market Test Assessment complete. Four objectives above were assessed and program received a clean bill of health!
 - i. First three objectives were deemed “complete”; remaining objective to build consensus on evaluation approach was deemed “in progress.”
 - ii. **ACTION ITEM: Will share out market assessment report with the Work Group by end of the month**
 - e) NEEA not adding any new products next year at the request of funders.
- 3) Retailer Updates:
 - a) Staff from Best Buy, Sears, and Home Depot have been joining ESRPP taskforce calls each quarter to provide updates on their activities.
 - b) Home Depot recently provided their update, and gave several examples of how they view RPP incentives, and how the program has influenced their purchasing and planning:

- i. HD staff confirmed that they generally assort based on customer preference. With programs like this, incentive is deal-breaker between two similar models.
 - ii. Freezer merchant learning about RPP – “Oh okay, I know which supplier to go with for more efficient models.”
 - iii. HD has already switched to 100% assortment on air purifiers – that is, they now only sell ENERGY STAR air purifiers (though they are not all qualified for RPP since our incentive tiers are above base ENERGY STAR).
 - iv. Sustainability director: “RPP program structure lends itself to become a future model for program design”
 - v. We’re also hearing that they want to take the program online. HD is doing a lot of online and social marketing but they don’t always know how it drives in-store purchases. Clear opportunity for RPP.
- c) In addition, with the news that Amazon is now selling Kenmore appliances, there may be a good opportunity to capitalize in the online market place through our partnership with Sears. Will be looking into this going forward as we develop an online strategy for RPP.

Discussion:

BPA: Interesting about the online piece, finally got the MOU with Amazon and CLEAResult. RPP and Simple Steps have slight crossover, looking to expand that. Want to be really deliberate about online approach.

4) Product selection decisions:

- a) ESRPP collaboration group has adopted NEEA’s product selection process
- b) National group will be in alignment with NEEA portfolio
- c) Two key decisions:
 - i. Add UHD TVs and dehumidifiers (getting NEEA territory sales data on dehumidifiers as well as have the ability to check in with other program sponsors to see how data looks in their region).
 - ii. Allow Program Sponsors to choose to *not incent* one product

5) Program Evolution - two big changes:

- a) “Menu” approach to portfolio management allows for greater flexibility in product choice and better accommodates regional variation; this is a really big deal.

Discussion:

Tacoma Power: *Did you say this came about as feedback from retailers?* **NEEA (Beth)** clarified that retailers also want to bring on more program sponsors, so they support the idea of making changes that might make the program more attractive to a wide variety of utilities.

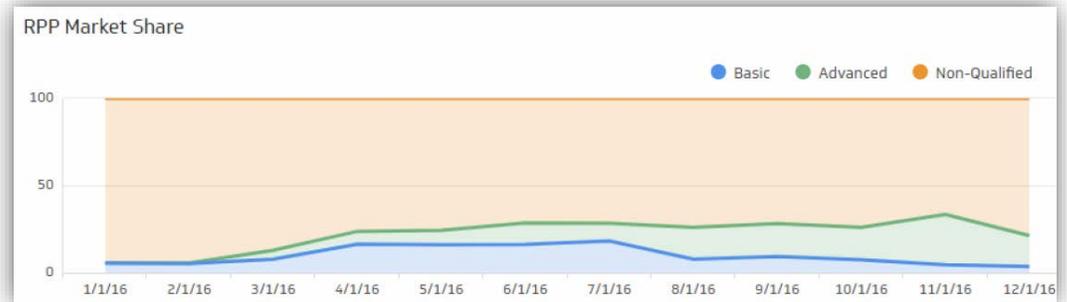
b) Alternatives to data management structure

- i. Considering changing “data administrator” role to having a single data warehouse with room for multiple data implementers.
- ii. Intent for new structure is to better accommodate smaller utilities’ cost constraints as well as potential competition with ICF for those utilities that already use a different data administrator or program implementer.
- iii. No impacts to NEEA

Discussion:

BPA: *What factors impact the cost of data management? Why would costs be different for smaller utilities?* **NEEA (Beth)** replied that it could be varying data analysis needs, could be that they’re not offering the whole portfolio or don’t need support on all eight products. We are finding that different utilities have different needs for support and analysis – maybe along the lines of platinum-gold-silver “tiers” of service.

- c) Sales data on air conditioners and clothes washers was shared. Refer to [slides 38-44](#).
 - i. 2016 clothes washer sales shown on slide 43 (screen shot below). This is the kind of data NEEA is looking at as we establish or consider revising incentive tiers.
 - o Blue/basic is ENERGY STAR Most Efficient (ESME), green/advanced is ESME +5%. NEEA only pays incentives on the advanced tier for washers.
 - ii. NEEA's Market Intelligence group helping with visualization of this data.



Discussion:

- **NEEA:** *How do you feel about having access to this data?*
- **PSE:** Very supportive of data by region.
- **NEEA:** What about sharing list of NEEA funders and their respective sales data (i.e., BPA had x sales; PSE had y sales; Chelan had z sales) – concerns about that?
- **BPA, PSE, Chelan PUD & Snohomish PUD:** Interested in regional as opposed to just territorial data. No concerns about sharing each funder's data with others.

Utility Share-outs/Round Robin

A. Tacoma Power:

October 1 new measures taking place: DHPs and smart thermostat and reducing incentives for DHPs by \$500. Also removing the installation requirement for DHPs at the same time. Working on manufactured home pilot right now. The city is asking us to help with low-income; plan to support even though it's not cost-effective for us. Looking at Manufactured Home pilot, installing shower heads, DHPs and LEDs in those low-income efforts – targeting areas based on census data. Looking at 2018 to possibly address split-incentive issues in the rental market, which would include installation, single-pane windows and serious shell improvements. Working on HPWH program development for 2018; colleagues went to Rheem demo at Home Depot. Still a lot of perception issues at Tacoma Power that complexities with installation will be a barrier. Will talk to Jill Reynolds at NEEA further about this. NEST rebate will be \$50 and has to be installed by an HVAC technician.

B. Chelan PUD:

Started a thermostat program May 1, offering \$75 incentive. Will increase DHP incentive from \$750 to \$1000, started that Aug 8. Allowing self-installs for HPWH and smart thermostats. Seeing slow growth in HPWH market, looking for ways to increase that growth. For Public Power Week we'll be promoting efficiency programs. Will play a "game of homes" with customers with a grand prize of a home efficiency makeover.

C. Franklin PUD:

Focusing on technologies that we want to see adopted in our community: upped rebate for HPWH to \$1000, introduced low-income measure at \$1500 and \$2500. Have a smart thermostat rebate going for \$100 and allowing self-installs on both measures. Still having trouble getting those two technologies to move, so working on SPIFF proposal to encourage installers to adapt these technologies in to their portfolio – specifically HVAC techs. Generally, using a couple

different strategies to make a fund, now using that fund to go aggressively after low and near-low income categories. Crafted a \$5000 air source heat pump measure for the customer. Investigated local, low interest, low dollar higher-risk loans for expensive measures – seeing low income customers go after the loans to get the projects done. Have a good budget and utility management giving Todd a lot of latitude. Buying MWs with deemed measures. Funds held in reserve and utility funding are going to public education, information, customer service – adding that to our rebates to make them better. Doing this in direct response to the severe weather this past winter. Have about three years before I-937 sunsets, then have to established new strategy; in the meantime, however, focusing on low-income. Also working on equity in programs; there is a sector out there that lives paycheck to paycheck that don't have the money or financial support to invest. Trying to quantify this sector. Will work with NEEA in the fall on a new homes program.

D. Oregon DOE:

Updated Residential code goes into effect Oct 1. Next year will be looking at commercial code. Always want to encourage folks that are interested in changing code to join the ODOE conversation. Was at the National Energy Codes Conference in Pittsburg in July that was really good; Tim McDonald spoke on affordable housing market in multifamily at the passive house level. Taking that information and sharing with local municipalities (Portland, etc) because to help improve understanding around affordable housing options. Excited about affordable housing project; encourages utilities to work with cities and states to get on board with this. 86 assessors in pipeline trained on asset-based home energy scoring – approximately 14,000 homes will need to be assessed (on-site) starting in 2018. Working with Energy Trust to ensure there's some follow up action in those homes that get scored to tackle priority items. Estimated cost is around \$200 for the assessment, this will be required in order to sell your house (at time of listing). RETC program still on track to sunset at the end of this year.

E. Snohomish PUD:

Finally have a thermostat program starting Aug 15, \$75 rebate to customers available on that. Starting low-energy audits, talking with EnergySavvy to get data on that. Shared a comment on behalf of Doug Dickson: *The commercial lighting committee is having significant impact on residential side of things, but seems residential folks aren't getting a chance to weigh in.*

- **ACTION ITEM:** Jeff to follow up with Doug to establish specifics.

F. PSE:

Completed first phase of multifamily smart thermostat pilot, will be adding a couple more xxx in next phase. Opening multifamily contractor portal for submitting incentives. Relaunching single family new construction program in 2018; still in portfolio review planning phase. Gearing up new manufacturer incentive. For LAW – SB 5939 will hopefully allow us to fund low-income community solar programs. Now only providing transmission services to Microsoft (went to purchasing 100% renewables), asking that they still contribute funds for low-income weatherization as well as pay for the energy efficiency rider. Implementing software add-ons for smart thermostats; don't feel there's enough data so seeking folks to submit their data. Looking at adding smart thermostats to Home Audit program (already do LED lighting and shower heads). Have customer engagement campaigns with GE and increased appliance recycling program (incentive increase to \$50 from \$25).

G. Seattle City Light:

Thinking a lot about how to position ourselves for low-income. Interested in allowing ourselves more flexibility to do things beyond cost-effectiveness. Haven't developed revenue generation much, but might be investigating vehicle charging, leasing programs, or other activities that could benefit rate-payers. Emerging tech is now a focus area. Conservation department now housed under the Customer Energy Solutions group. Moving from Power Supply group toward customer service/communications group. A lot of focus on low-income. Looking at streamlining approach for low-income programs to save on paperwork barrier. Will be installing a HPWH Sanden unit in a

low-income building, interested to see how that plays out. Closing down refrigerator recycling program in September. Hitting marketing for DHP programs for low income. Rolling out smart meters and in the process of building the internal piece for customers, will take about a year and a half to have that all up and running. Been trying to manage retail lighting budget as the lighting program is transitioned.

H. Idaho Power:

Looking to add HPWH program in Q4 of this year. Fridge/freezer recycling program cut at end of this year because it's no longer cost-effective. In planning stages of a custom new homes program – anticipate that going forward in Q1 2018.

I. Energy Trust:

Residential group is in process of adjusting program delivery structure. Opportunity to deliver energy savings in next few years. Volatility in lighting market is causing anticipation of drawdown of ability to go after resources in the lighting space; evaluating strategy for right opportunity. Can expect us to stand up more strongly in the water heater aisle and leverage remaining potential of lighting savings to offset instore field services and drive those SKUs that do still qualify, as well as leverage relationships. Managed solicitation this spring for new program management (delivery) contractors (technical role), selected TRC to deliver new homes program in new year; working with Ecova to deliver retail promotions (water heating, lighting, showerheads and retail). CLEAResult will deliver program management for retrofit programs as well as marketing activities. Pivoting to anticipate savings opportunities. Working with NEEA and internally on lower cost installations of DHPs, seeking strategies that identify households that can benefit from upgrades to get total resource costs down. Recognize with the RETC sun setting, need to establish what the right targets should be; working with OPUC on this, not sure yet how it will play out. Considering what those niche markets applications are that are lagging from a market transformation approach where resources would get locked up if we don't get creative on energy savings. Similarly, making modifications to incentive structure on air source heat pump, targeting homes for conversion and reducing HSPF requirement to encourage lower cost installation. Trend at higher HSPF levels lead to higher costs. Implemented pilot to measure NEST smart thermostats savings algorithm; found that cooling season does not offer cost-effective thermostat optimization – just not enough run time in the summer; found more favorable results (greater than 4%) in the winter. Looking to expand the base of customers that engage in that kind of program. Also working with third party aggregator to engage manufacturers and products that are an alternative to thermostat optimization. There are two smart thermostats that look to continue to qualify for savings. *Multifamily DHP program – what do you use for energy savings?*

- **ACTION ITEM: Marshall at Energy Trust to follow up with Josh from Chelan PUD on the savings calculations on this.**

J. ConsumersPower:

Targeting DHP incentives – will go up to \$1000 (from \$900) starting Oct 1. Saw HPWH installation numbers drop for a little while, but it's starting to go back up. Excited to see Bradford-White products out in the market. 80-90% are self-installs in our territory; thought that new model might be a concern/challenge with self-installs but doesn't seem to be the case. Just launched smart thermostat program as well, plan to increase marketing efforts in the fall. Offer \$100 incentive for those. Following weather trends, found that the last three summers have been warmer and has driven ducted and ductless heat pump sales up as a result. Seeing a little growth from residential.

K. BPA:

In response to a followup item from the last meeting on quick connect DHPs: no rush on that. Program manager feels that will probably be a qualified product list. Transitioning to full use of NEEA-developed new home construction program performance path. Lighting savings cut that came from RTF – recall that BPA savings will be cut by about 41% if averaged out across all SKUs.

There will be additional cuts that BPA will plan to incorporate in Implementation Manual in Oct. 2018. Starting internal BPA work group to get more intel on future of lighting; likely want to look further at connected lighting. After two years, now have a Simple Steps offering for Amazon sales; can run under existing MOU with Simple Steps, so for anyone who wants to do this on their own it can be done through Simple Steps. Public comments being published soon, exact date TBD. Those who provided comments will have a chance to review.

L. NWPCC:

Sept. 7 is Conservation Resource Advisory Committee meeting, will explore identifying and connecting with hard to reach markets; this meeting will be a share out of findings thus far. Working with SmartGrid Northwest to hold a demand-response symposium Sept. 27-28. Dave Kresta (NEEA) organizing smart thermostat workshop in October, date still TBD.

M. Clark Public Utilities:

No longer on call.

N. Northwestern:

No longer on call.

Market Intelligence Report (presentation only)

Harvey Mathews (NEEA) gave an introduction to the purpose of the discussion and provided a recap to-date. *The desired outcome is to demonstrate how NEEA's Market Intelligence team can support data-based decision-making to quickly gain customer insights, target outreach efforts, and identify new market segments.*

A. Presentation highlights:

- 1) Energy Efficiency market data is organized into 12 primary buckets: structure, usage, demographic (Experian data), GIS, construction, sales, psychological, social, market rebates, GPS, firmographics.
- 2) Examples of possible uses (refer to [slides 59-76](#)):
 - a) Diagnosis
 - b) Characterizing
 - c) Forecasting
 - d) Connecting
- 3) 2018 NEEA Market Intelligence activities will depend on what utilities need. Looking to create repeatable, scalable value. Existing examples include:
 - a) Self-service portals for EE results by utility
 - b) On-demand market potential analysis
 - c) Geospatially coded, user-generated digital incentive uploading to decrease breakage (& improve sales data)
 - d) Web-scraped product research for pricing & product maturity indications in reviews
 - e) EE program impact analysis for distressed asset management
- 4) Follow up questions can be directed to mi@neea.org.

Discussion:

- **NEEA (Harvey):** *What data-enabled services/insights would you use most?*
 - **Tacoma Power:** *We have this data too, why would I come to NEEA if you can't do custom projects for us? How can I show value to Tacoma on this? This should be shared at the BPA Roundtable events.* **NEEA (Harvey)** replied that NEEA's data and tools can be purchased and used by anyone, but what make our offering special is our team's exclusive focus on energy efficiency in the Northwest. Internal GIS and data analytics teams often serve other parts of the utility, requiring ad hoc team identification and project scoping

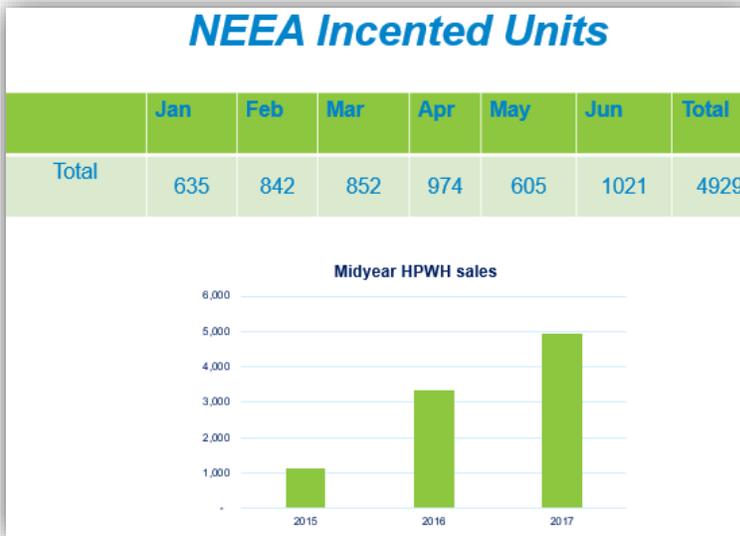
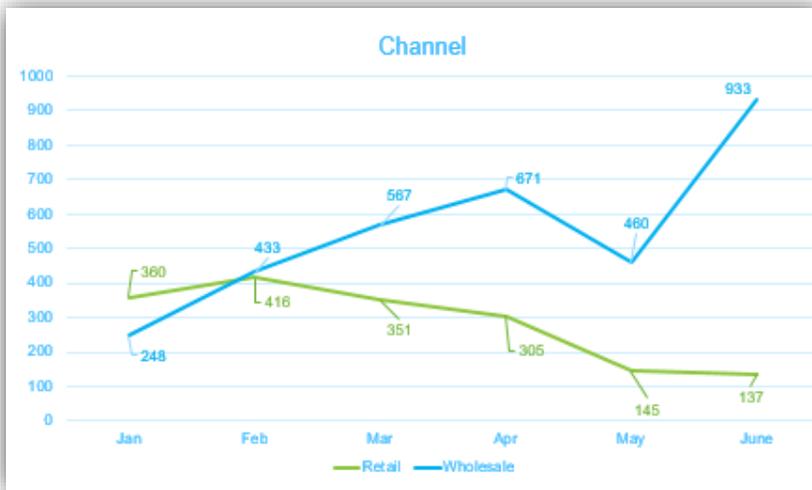
- **Chelan PUD:** *Would be interested in knowing moderate income customer – is that something we know needs EE upgrades, but can't afford it? Would that be doable?* **NEEA (Harvey)** replied yes, that's doable.
- **Snohomish PUD:** *Connected homes and products – a lot of unknowns exist around energy consumption and savings – is this something that could be garnered for researching that?* **NEEA (Harvey)** confirmed they are capable of doing it, have not been asked to-date.
- **Franklin PUD:** *How does a utility engage with this, how can you help us?* **NEEA (Harvey)** replied it can be ad-hoc; could start by getting your internal team member
- **PSE:** Finding with engagement campaigns that customers respond differently than anticipated. Your regional psychographic data would be of value to us. Looking to evaluate behavioral-based marketing tactics (social media over direct mail efforts) to better gauge effectiveness.
- **Snohomish PUD:** Been using social media and seeing a good deal of engagement with that medium. Continually surprised by number of customers we're reaching in that way so if there's a way to segment customers by program that would be very useful; that would provide resources for the marketing side.
- **NorthWestern:** We haven't had the detail to the level of electric-resistance heat customers for example (GIS census-type data), would be interested in this. Currently not sure we can find a cost-effective way to get this data. **NEEA (Harvey)** replied that it's likely they could be helpful on this, would need to connect with Montana counties to see what data is accessible. NorthWestern added that they're looking to engage in the commercial hard-to-reach markets as well.

Heat Pump Water Heater Update (pages 21-22 in packet)

Jill Reynolds gave an introduction to the purpose of the discussion. *The desired outcome is to update Committee with Q2 status, consumer products regional strategy activity, and national trends.*

A. Presentation highlights:

- 1) Example: national Home Depot pricing discrepancy.
 - a) NEEA has \$200 manufacturer incentive on HWPH.
 - b) Found in nationally that it was priced \$1199 on average, yet in Montana found it offered at \$1399, thus bringing down to \$1199 after the incentive, so the incentive was not serving its purpose.
 - c) Lessons learned:
 - i. Discovered that retailers have own pricing strategies that dictate how they do pricing
 - ii. Have identified an opportunity to strengthen market partner relationships and educate market actors about NEEA's work.
 - iii. Will continue to closely monitor national pricing
- 2) 2017 progress to-date:



- a) Looking to get to approximately 1500 units per month going forward in order to reach the 14,000 goal. June saw first 1000-unit month ever.
- b) Energy Trust just launched their mid-stream incentive program a few months ago.
- c) Have \$40 SPIFF for distributors that is just now rolling out.



Discussion

- **Seattle City Light, Snohomish PUD** and **Chelan PUD** shared similar stories they've experienced with retailers with price scrubbing.

3) Key Takeaways:

- a) Sales by Channel
 - i. Wholesale channel strong
 - ii. Retail channel lagging
 - A. O. Smith from GE in Lowes
 - Home Depot pricing variation
 - Minimal retail marketing
- b) Large Tank Sales
 - i. Trending higher; lower than anticipated
 - ii. Midsize tank option positive for sales
- c) Multiple manufacturers fostering more competition

4) Incentive Updates:

- a) Decreasing incentives overall due to large sales goal and similar budget to 2016

• Current:

| | Large tank | Small tank |
|-----------|------------|------------|
| Retail | \$300 | \$200 |
| Wholesale | \$300 | \$200 |

• September adjustment:

| | Large tank | Small tank |
|-----------|------------|------------|
| Retail | \$100 | \$100 |
| Wholesale | No change | No change |

5) Consumer Products Regional Strategy Update (refer also to the update memo on page 31 in the [packet](#)):

- a) Strategy Steering Committee agreed on pursuing HPWHs as the technology to support.
- b) The Committee requested data of utilities and received responses from eight.
- c) From the data provided, they found that 76% of installs were contractor installs, the remaining 24% by owners.
- d) Regional data snapshot is as follows:

| Rebates | | % Regional Sales | |
|------------------------|-----|---------------------------|-------|
| 1,260 | | 26% | |
| Average Purchase Price | | Average Installation Cost | |
| \$1,079 | | \$932 | |
| Install Location | | | |
| Garage | | Basement | |
| 61% | | 18% | |
| Brand | | | |
| AO Smith | GE | RHEEM | Other |
| 29% | 47% | 22% | 2% |

Discussion:

- **Franklin PUD:** Which trades are involved, do you have any ideas who is doing the professional installs? NEEA (Jill) noted they have installer data.
 - **ACTION ITEM:** NEEA to take a look at who is doing the professional installs and follow up with Franklin PUD.
- **Energy Trust:** surprised to see how much activity was coming through new construction as opposed to the replacement market. Would be nice to know housing type data as well.
- **NorthWestern:** Agrees with Energy Trust. Feels replacements are very different from new construction installs. New construction has great potential.
- **SCL:** Interested in study that NEEA did on proximity of water heater to proximity to space heating thermostat. *Will that change the way we talk about installation recommendations? Are we still seeing a lot of garage installations?* Spurring thoughts around how to best educate people on the appropriate siting. **NEEA (Jill)** noted that unless the heater was installed right next to the thermostat there shouldn't be an issue.
- **NWPCC:** The RTF is planning to look at HPWH at a meeting in September or November. The contract analyst is looking at the study, which might impact the savings estimates. At that meeting, mid-stream HWPB and new construction HPWH will be reviewed as well, will have UES savings estimates for those for that meeting.
- **Snohomish PUD:** We're hearing that in many cases that plumbers are doing installs but advising customers to have HVAC dealers handle servicing; would be nice to have some data evidence on that.
 - **ACTION ITEM:** NEEA to incorporate plumbers vs. HVAC dealers questioning as data request for Snohomish.
- **NEEA (Jeff):** The fact that the Rheem unit comes out of the box as "duct-ready" minimizes potential comfort issues.

6) National Activities & Trends:

a) Overview:

- i. Supporting utilities, DOE, national labs, manufacturers, distributors and sustainable communities on market collaboration

b) Goals:

- i. Increase market adoption to ensure manufacturers stay dedicated to product
- ii. Highlight HPWH opportunity to market actors
- iii. Share information and connect market actors

c) Trends:

- i. Midstream incentives
- ii. Sustainable communities
- iii. Requests to share best practices & resources
- iv. Adoption of Advanced Water Heater Specification

Discussion:

- **Franklin PUD:** *Warranty issues – what have you heard?* **NEEA (Jill)** replied that the Bradford-White issue in Franklin territory was the only one they've heard of. Jeff added that part of that was a result of Bradford-White taking over GE tanks and NEEA has since had a serious conversation with them about expectations.
 - **Franklin PUD** added that they haven't seen a strong hold take place in his area, so he's been hesitant to get an installer connected with Bradford-White. Did hear that some manufacturers are moving away from servicing to total replacement. Jill confirmed that she's heard that with both AO Smith and Rheem, seems to be more cost-effective for them.
- **Chelan PUD:** Experienced something similar with one of our customers.

Public Comment Opportunity

Jan Boman (Embterec) commented that she enjoyed catching up on the region.

Wrap up

Meeting Feedback

- A. **Snohomish PUD**: Good icebreaker
- B. **NEEA (Jeff)**: Good meeting
- C. **Seattle City Light**: Appreciates the utility share outs
- D. **Tacoma Power**: Good meeting, missed the candy
- E. **NEEA (Beth)**: Good job
- F. **NEEA (Neil)**: Thanks to utilities for good discussion
- G. **Chelan PUD**: Interesting time to be in the business
- H. **Franklin PUD**: Glad I came, always get something out of these
- I. **ODOE**: Always appreciate these meetings. Want to hear from Tacoma in the future on segmented marketing.
- J. **Snohomish PUD**: Nice to hear what others are doing, walking away with some good ideas
- K. **PSE**: A lot of good information shared
- L. **NEEA (Jill)**: Good meeting, thanks for the data feedback
- M. **NEEA (Eugene)**: Appreciate people being involved in sharing opinions, makes NEEA's work more useful and purposeful.
- N. **Idaho Power**: Good meeting, lots of useful information. Would rather be there in person.
- O. **NorthWestern**: Helpful and valuable, good information, will follow up with staff on a couple items.
- P. **ConsumersPower**: Good meeting. Always a fan of Portland every other meeting.
- Q. **NWPCC**: Afternoon was good, missed the morning.
- R. **NEEA (Suzi)**: Enjoyed the icebreaker and having some new folks represented at the table.
- S. **NEEA (Stephanie)**: Sound from phone is really good. Like hearing about all the ways we're using data.

Next meeting/location:

- A. Q4 (October 12) will be in Wenatchee (Chelan PUD hosting)
- B. Chelan (Josh) will send out info to the committee soon for hotel suggestions, etc. soon.