

Summary Notes (Final)
Industrial Advisory Committee (IAC)
Thursday, August 1, 2017



Attendees:

In Person:

Nancy Goddard – PacifiCorp
Randy Thorn – Idaho Power
Doug Swier – Cowlitz PUD
Kevin Smit – NWPPCC
Lindsey Diercksen – Energy Trust of Oregon
Zeecha Van Hoose – Clark Co. PUD

Phone:

Natasha Houldson – Tacoma Power
Nick O’Neil – Energy 350
Jim White – Chelan Co. PUD
Jim Conlan – Snohomish Co. PUD
Chao Chen – Puget Sound Energy (PSE)
Jim Barron, RETA

NEEA Staff: Eugene Rosolie, Sepideh Rezania, Kyle Bellici, Dulane Moran, Julia Harper, Warren Fish, Geoff Wickes, Emily Moore, Alisyn Maggiora

Welcome, Introductions and Housekeeping Items

- A. Agenda review/Introductions
- B. Announcements/Updates:
 - 1. Sepideh Rezania departing in September.
 - 2. Operations Planning Update:
 - i. Between now and mid-September there will be a check-in with the advisory committee on the overall plan.
 - ii. The All Advisory Committee meeting is scheduled for Oct. 10.

RETA Certified Refrigeration Energy Specialist (CRES) – p. 3 in packet

The desired outcome is for committee members to provide input and support for moving the program to the Long-Term Monitoring and Tracking (LTMT) phase.

- A. Presentation Highlights (refer to [slides 2-31](#)):
 - 1. Approximately 50 have passed the exam to-date (45 percent pass rate); activity requirement has been a hang-up for some who have gone through the training but not acquired the certification. RETA recently reduced the required activities from five down to three to help ease this burden and encourage a greater number of certified specialists.
 - 2. RETA will include ANSI certification in their CRES certification training going forward.
 - 3. [RETA website](#) recently overhauled to better incorporate CRES.
 - 4. Energy 350 provided the CRES activity overview.
 - 5. Tracking CRES overtime will involve NEEA light monitoring including, watching for certification numbers, the ANSI application, market saturation levels, and generation of case studies. NEEA does not plan to fully re-engage with RETA unless progress stalls.
 - 6. CRES certification compliments Refrigeration Operator Coaching (ROC) and Strategic Energy Management (SEM) engagement strategies.

- i. **COMMITTEE ACTION ITEM: Let NEEA know when you engage with CRES certified folks or encounter/hear of issues.**

B. Discussion:

1. **Energy Trust:** *Is the low pass rate expected?*
 - i. **NEEA (Warren)** confirmed that was expected in the beginning; it's estimated that the pass rate will grow to 60-70% as improvements are made to the exam. *What seems to be the barrier to passing?*
 - ii. **Energy 350** replied that when the certification was new, there weren't adequate resources for exam preparation. Since then, the types of preparatory resources available have increased, the curriculum improved and the variety of exam questions increased.
2. **Clark PUD:** *Our territory highly relies on vendors; is there a way for the vendor to become certified?*
 - i. **NEEA (Warren)** confirmed they can – likely best for vendor and customer to be working together on that.
 - ii. **Energy 350** added that privacy concerns should be discussed with RETA.
 - iii. **NEEA (Warren)** asked if there was any opportunity to incentivize the operation based on having a CRES certified member.
 - iv. **Clark PUD** replied that was their thinking, make it parallel to Top Tier Trade Ally.
3. **Energy 350:** *What would program requirements be for that, aside from a list of certified vendors?*
 - i. **Clark PUD:** Calculator-based savings would have to be approved through the RTF. If you looked at calculators for activities in the interim, you could pursue that without using the calculator from the savings.
4. Jim Barron from RETA joined the meeting by phone; comment highlights included:
 - i. Excited to build ANSI into certification
 - ii. Thanks to NEEA and funders for supporting this venture
 - iii. Have taken this program both nationally and internationally

Committee Questions for RETA:

- **Idaho Power:** *Value proposition question continually comes up, what is it, can we find this somewhere to help share?*
 - **RETA** replied that the value proposition is monetary savings for owners that engage, as well as safety. We're not quite there yet in articulating that.
- **NEEA (Geoff):** Owners will see those savings at the bottom line will realize the value of RETA in that way. RETA and NEEA partnering with the Global Cold Chain Alliance (GCCA) to build Strategic Energy Management (SEM).
- **NEEA (Warren):** *What does RETA need from utilities and beyond?* In work w/ manufacturers, utilities can talk about RETA and ask whether folks are getting trained – helps reduce carbon footprint.

- **Snohomish PUD**: *How does the CRES certified person know who their local utility contacts are? How are the local utilities supposed to know who the local CRES certified people are?*
 - **RETA** replied that there is an honor roll published in their monthly newsletter; no problem sharing that with utilities.
 - **Energy 350** added that enhancements to the RCD have been made; when an activity is entered in the system, it pings them with opportunities for incentives with local utilities related to those activities.
 - **PSE**: *This may also create value for service providers. Is it a possibility for this certification to go in this direction?*
 - **RETA** replied that anyone can go through this certification. Have yet to see service providers engage, mostly operators at this point.
 - **ACTION ITEM**: NEEA to send final draft of activity cards to committee for review before it's finalized.
 - **ACTION ITEM**: Once final, NEEA will put activity cards up on SEM hub website, RETA website and/or Conduit for utility access going forward.
5. **Clark PUD**: *Is it possible for folks to submit more than three activities so they can claim that savings if they do it?*
- i. **NEEA (Warren)** confirmed they can.
6. **NEEA**: *Do you envision CRES becoming part of your Demand-side Management activities in the future?*
- i. **PacifiCorp**: *Would you consider making the review course available as an infrastructure training?* NEEA confirmed they would consider it. PacifiCorp added that they likely wouldn't be a co-sponsor but appreciate that the resource is available.
 - ii. **Energy Trust**: Will be interesting to see how strategic we'll be with this depending on how it compliments other programs. Not sure if we would look at behavior-based activities or vendor-driven services; need to discuss with other program managers.
 - iii. **NEEA (Warren)**: *Would there be a possibility of an incentive for obtaining CRES?*
 - **Energy Trust** replied that they might depending on incentive and savings implications. Currently do SEM internships so could see some alignment there, would need to evaluate where it could fit in.
 - iv. **NEEA (Warren)**: *If you knew your incentive was requiring three activities and you would get data from those activities, does that make it more attractive to incorporating into your programs?*
 - **Energy Trust** replied that's likely where the conversation would start.
 - v. **Idaho Power**: *Savings reported for each activity – have those been reviewed by RTF, who's approving?*
 - **NEEA (Geoff & Warren)**: Would continue to invest in validating savings, internally, through a third party and with the RTF. These savings calculations go through a rigorous review process.
 - **Energy 350**: Evaluation involves bottom-up approach looking at individual components and estimating savings through common best practices. It would stand up through typical RTF custom protocols, even if the activity submitted

is based on data at the time, the evaluation will involve ensuring data are still valid and relevant.

- **ACTION ITEM: NEEA Planning staff (Steve Phourides) to share savings evaluation plan.**
- vi. **Clark PUD:** *Do we just take the savings as NEEA savings, or are there components where you would want to take this down a customer track?* We need to know where you stand; given that we don't have a lot [of customer activity here] we would probably take the vendor-driven path.
- **NEEA (Geoff & Warren)** clarified that when activities are recorded, there is basic information gathered on whether an incentive was involved and if so, how much; rest assured that's not the only source of evaluating involvement.
 - **ACTION ITEM: Incorporate this topic (savings process and program integration) into future webinar.**

Extended Motor Products Labeling (EMPL) – p. 4 in [packet](#)

The desired outcome is to inform the committee and gather input.

A. Presentation Highlights (refer to [slides 33-53](#)):

1. Initial product focus will be on small pumps and circulators
2. This is not about custom or cost-effective projects, high customer touch, big saver opportunities or talking to key accounts; this is about leveraging platform resources.
3. Circulator pumps are described as fractional horsepower up to 5 horsepower; these are small enough that they are excluded from DOE rulemaking and thus, are excluded from RTF rule on Unit Energy Savings (UES).
4. Bottom 25 percent of pumps (inefficient) on market today will not be legal to sell after 2020.
5. The Hydraulic Institute (HI) (ANSI accredited) worked with DOE to develop a test standard, which eventually led to the development of a rating system, designed to help customers and sales associates identify the most appropriate pump.
6. ACEEE convened a group of people in 2013 (included ETO, BPA, NEEA, other utilities, some OEMs and all the trade associations); they established the Extended Motor Products Labelling Institute (EMPLI) designed to craft a label to achieve better understanding in the market. They are currently working to establish a labelling brand, like EnergyStar.
7. Leveraging "Distributor Platform," initially developed for commercial lighting products, to support utility goals, access market trends and data, influence markets and further engagement across distributors, manufacturers and other market actors.
 - i. A successful platform has gravity (attractiveness), connection (network building/leveraging) and flow (exchange of value).
 - ii. For example, NorthCoast or Platt, which sell products beyond lighting, have expressed that they have lighting figured out and want to know what other products we can help leverage using existing network relationships through data access and/or distributor and sales channel relationships.
 - iii. Utilities could utilize the platform

8. Eventually this will progress beyond pumps to fans, compressed air (small), and nozzles; NEEA will collaborate with utilities to ensure that there is not overlap with the programs they are running.

B. Discussion:

1. **Cowlitz PUD**: *Clear water pump savings calculation estimates about 15 horsepower per hour in savings, which seems optimistic, is that accurate?*
 - i. **NEEA (Geoff)** clarified that this encompasses the pump, motor and/or entire system (including controls).
2. **PSE**: Don't know how you're coming up with such big numbers, don't know if you can label the system design.
 - i. **NEEA (Geoff)** clarified that the big improvement will come with the system; they will come as a package or skid. There is a lot of research that needs to be completed to help satisfy the variability component in these measurements.
3. **PSE**: If there's a project, we will take it as a custom. Horsepower size doesn't matter. **Tacoma Power** seconded these comments.
4. **Snohomish PUD** noted that they don't incentive these, don't have a big enough market for them. In new construction and service replacement industries, they're working with large contractors so we don't hear about any of these; midstream is really the only way to approach it for us, not really cost-effective otherwise.
5. **PSE**: *Who pays the incentive?* NEEA replied that is yet to be determined.
6. **Energy Trust**: With pumps, there's a possibility we would need to evaluate an opportunity to claim savings for items purchased/stored on the shelf.
7. **PacifiCorp**: *Is there a market transformation play beyond just local incentives that you expect to occur?*
 - i. **NEEA** replied that is not yet developed, but we will talk about it going forward.
 - ii. **PacifiCorp** was concerned that not all products will be incented, which may be a problem for them and possibly other IOUs.
 - iii. **NEEA (Julia & Sepideh)** clarified that this initiative hasn't started, this is a concept; a more detailed plan will be brought back to the committee in Q4 (October) for further input.
8. **Clark PUD**: We often find that, like with Green Motors initiative, where shops aren't pushing the product because they don't want to do extra paperwork. Want to make sure that doesn't occur with these.

Utility Share-outs

The desired outcome is for committee members share their what their working on, ideas and highlights from their organization.

- A. **NWPCC**: Conducting research on industrial sector at a lower level; going through all 20 of the segments to seek out better data and beef up load forecast as well as how we estimate potential. Focus is on disaggregating the industrial load. This year focused on transportation segment, seeking to get better estimates on consumption and breakdowns of end-uses. Have a large miscellaneous piece, seeking to break that down as well. Doing additional work in pulp and paper. Working NEEA's Market Intelligence team on data analysis.

- B. **Tacoma Power:** Hired a new engineer. Keeping busy with custom projects and SEM. For industrial, have 2 customers continuing in ROC effort through Energy Smart Industrial program. Only have a handful of cold-storage warehouses so don't have many candidates for the CRES training. On Industrial side, had 7 customers participating in training; 4 of those 7 continuing in SEM segment. Capital projects keeping us busy on both sides. Very interested in engaging with BPA and SEM on the commercial side as well. May launch Commercial SEM program around Q1 2018. Have had a handful of non-lighting cannabis projects, some related to heat recovery and HVAC.
- C. **Snohomish PUD:** Similar activities as Tacoma Power, working with them and BPA on SEM program. Also involved in Wastewater Energy Coaching SEM program. Good outlook for O&M low cost-no cost savings and capital projects. Recruiting for manufacturing SEM (4,000,000 (KWh) or larger is general criteria) – looking to launch in October. Cannabis market growing rapidly: estimate 2-3 million kWh across 10 customers; been low-key in approach so far, have a lot of potential out there with climate control and lighting needs. C&I budget has been allocated out for the year due to high influx of TLED lighting and relationships with trade allies. Program managers looking at workbooks, those will likely be modified/available for 2018 in November or December. Anticipate will get involved with non-lighting measures with cannabis as well.
- D. **PSE:** Program priming – have to do every two years. Don't have a lot of changes with programs. May adjust lighting program next year. Looking to do performance-based program and hard to reach areas. Have activity in cannabis sector; contact Dave Montgomery to discuss further. Trying to get in mechanical measures. Have four customers signed up for their Industrial SEM program.
- E. **Clark PUD:** Still working on conservation potential assessment; contractor had questionable assumptions so they're revisiting. Seeing load growth: increase of 2-2.5 aMW from the casino that went in north of Vancouver, expect that to grow further. Seeing additional 3 aMW from existing industrial customers, primarily economic driven. Seeing increased summer loads on residential side - set record summer peak yesterday and likely again today. Sitting well with I-937 targets, just finished large project and have another one coming on – estimating 3-3.5 million kWh with related incentives on the books next year. First two high performance energy management cohorts finished about a year ago; three have enrolled into a new SEM engagement and will start seeing reports from their progress soon now that year one is complete. Wrapped up BPA pilot for demand-response for territory. Seeking customer response data and future program data; freshwater delivery customers are good candidates. Have new schools coming in. Have large push for LED street lighting – expect all of it to hit in 2018.
- F. **Cowlitz PUD:** Have self-funding, no longer a direct funder of NEEA. Doug's supervisor left in February. That position has not been refilled and not sure if/when it will so currently reporting to Power Resources Director. Working on next CPA, which indicates future market prices are lower than a few years ago, expect it to drive down market potential. Personnel turnover with key customers making some things more challenging. Have compressed air SEM with large customer, looking forward to see that gain traction. Exceeded I-937 CPA targets. Dedicating an increased focus on levelized cost for offered programs.
- G. **PacifiCorp:** Working a lot on cost effectiveness with 2017 IRP. When running 2016 program through using the new avoided cost, the total resource cost (TRC) analysis went up to 1.95 from just over 1. Need to not spend any money on delivery because measure costs alone are bringing the TRC just under one, thus preventing them to operate in California. Basically having to reposition and try to get buy-off on a utility cost test (UCT) approach instead because the measurement comes in OK. Irrigation is interesting – evaluating based on payback buckets – have to go only with ones with a 1-year payback but then eliminates savings. UES measures using RTF are not passing. Doing planning for Washington for 2018/19 and California for 2018/19/20. These issues put a wrench in that plan.
- H. **Energy Trust:** Just completed a trends analysis; starting to see new incremental projects and seeing that increase run rates. Still seeing a lot of cost-effective projects on the gas side. Launched continuous SEM program last year so will see data coming in soon on that; had 15 sites participating. LED adoption is big for Energy Trust right now – seen it take over 89 percent of total industrial lighting market this

year, over 35 percent last year. Forecast to see a lot of cannabis lighting savings. Some staff transitions, Amanda Potter is new sector lead. Looking at compressed nozzles and products, will start measure development on that. Just started a measure for gas steam traps.

- I. **Idaho Power:** Set a new system peak of 3,422 MW July 7. Have been doing demand response by requirement even though we don't really need them. Have 350 MW for agricultural, 350 for commercial and about 10 for residential. Summer peak early is from agricultural industry, crops done irrigating around July. Engaging cohort-based programs, working with schools right now, which is really successful. **ACTION ITEM: Randy to share school program link with NEEA to disseminate to committee.** Seeking to educate with wastewater programs; about 40 capital projects have spun out of that work in industrial sector. Working with Cascade on hydraulic models to better serve large freshwater customer (Suez). On track to hit target savings this year. Avoided cost numbers going down. Cost-effectiveness is on the table.

Pump System Assessment Professional Certification – p. 5-8 in [packet](#)

The desired outcome is to inform the committee and request participation.

- A. The Hydraulic Institute is coming out with a certification.
- B. Looking for participants to help test it out. It's a 2 hour exam, if passed, certification will be grandfathered in when ANSI accredits the training program.
- C. NEEA is pushing this through the Industrial Technical Training (ITT) program as well. Sign up is available on the [website](#).

Infrastructure Tools, Interest Beyond the Region – p. 9 in [packet](#)

The desired outcome is to inform the committee and gather input.

- A. In this business cycle, one component was to recognize infrastructure programs – tools that can help NEEA, utility or market capabilities around understanding energy efficiency.
- B. These programs are:
 - a. Strategic Energy Management (SEM) Infrastructure
 - b. Industrial Technical Training (ITT)
 - c. Top Tier Trade Ally (TTTA)
 - d. Commercial Real Estate (CRE)
- C. NEEA should invest in these because they provide regional resources and training consistency; there is an opportunity for folks outside our region to capitalize on work and resources.
- D. Concerned about confusion, desire is to make these tools available nationally. Northwest model wouldn't change.
- E. This has yet to go to RPAC, currently in the exploration stage. The NEEA Board Strategic Planning Committee is in support of this effort.
- F. **Ask to Committee:** *Would you be comfortable with this? Should NEEA seek to recoup costs of development and maintenance of those tools, or does it just enhance the development of additional work.*
- G. Discussion:
 - a. **Clark PUD:** Think this is a good thing.
 - b. **NEEA (Geoff):** One idea is to share the toolbox cards, but have the trade associations start loaning some of the content and feed you new material.
 - c. **PSE:** Should seek to exchange resources where available, depending on the organizations that are being engaged. Shouldn't be a one-way street.
 - d. **NWPCC:** *Have you received any input from other organizations around value here, whether anyone would pay for this?*

- i. **NEEA (Sepideh)** replied that there hasn't been any firm monetary conversations, but inquirers have been open to paying in some way for the value, whether through exchange of value, paying, etc.
- e. **Cowlitz PUD**: Supports sharing it.
- f. **Energy Trust**: Would be interesting to see how, resource-wise, distribution would play out. Conceptually it sounds great but would like to see the plan, a little more detail around the vision for this.
 - i. **NEEA (Sepideh)** clarified that the engagements should not impact funder commitments.
- g. **Clark PUD**: Rebranding at utility level – if that were to occur outside the region that might create concern with recognition/attribution.
- h. **PacifiCorp**: Hard to gauge for us, given that we have partner utilities outside the region (Nevada and Wyoming). Agree with the concept of ensuring an exchange of value when shared with anyone outside of the region.
- i. **Energy Trust**: We post a lot on our website, so anyone can access them and we're not concerned about that. Sounds like we're talking more about on-going engagement/maintenance here than what we're used to, just need to be clear with this and how to quantify it if necessary.

Opportunity for Public Comment

None.

Wrap up/Feedback on Meeting

- A. NWPCC: Good meeting, lunch was fine.
- B. Clark PUD: Like the share outs. Seems like there's never enough time for those.
- C. Cowlitz PUD: Good.
- D. PacifiCorp: Good. EMPLI concept – still need to wrap my head around this.
- E. Energy Trust: Really good for a first meeting.
- F. Tacoma Power: Good meeting. Always appreciate the share-out. Learned a lot from NEEA staff presentations.