# Summary Notes – DRAFT
# Commercial Advisory Committee (CAC)
# Thursday, September 21, 2017

## Attendees:

On Phone:
Joe Fernandi – Seattle City Light
Lorri Kirstein – Avista
Mattias Jarvegren – Clallam PUD
Nancy Goddard - PacifiCorp
Peter Meyer – Tacoma Power
Oliver Kesting – Energy Trust of Oregon
Zeke VanHooser – Idaho Power
Bill Hibbs – Clark PUD
John Wilson – Bonneville Power Administration (BPA)
Kevin Smit – NW Power & Conservation Council (NWPCC)
Blake Shelide – OR Dept of Energy (ODOE)

In Person:
Mark Lenssen - PSE

**NEEA Staff:** BJ Moghadam, Emily Moore, Elaine Miller, Maria Murphy, Christian Miner, Anne Curran, Debbie Driscoll, Alisyn Maggiora, Julia Harper, Stacy Blumberg, Josh Pelham

## Welcome, Introductions, and Housekeeping Items

A. Meeting packet review
B. Informational updates
   1) Reminder: Extended Motor Products Initiative (XMP) will come forward for review at Q4 meeting (Oct. 18) for Initiative Start (IS) milestone
   2) Reminder: Oct. 10 is All Advisory Committee webinar for 2018 operations plan review

## Commercial Portfolio Update

Emily Moore (NEEA) gave an overview of the commercial portfolio. *The desired outcome is to level-set on the current portfolio.* Highlights included:

1) Staffing changes:
   a) Emily Moore is now acting commercial/industrial lead as Sepideh Rezania has moved back to Canada. Emily Moore's role as Senior Manager, Strategic Markets will remain open given that the Regional Strategic Market Plans for C+I Lighting and Consumer Products have been developed and the new construction regional strategy work has been put on pause for now.
   b) Debbie Driscoll will join the Commercial/Industrial team and continue to monitor and help move the Lighting regional strategy work going forward.
   c) Kim Hughes has retired from the energy efficiency industry to pursue entrepreneurial endeavors in personal skin care; the Commercial Code Enhancement (CCE) program will transition to Neil Grigsby (now the NEEA Portfolio Program Manager for all new construction work, including Next Step and Manufactured Homes). Neil will work across both the residential and commercial programs and leverage codes and standards activities.
   d) Maria Murphy has returned from maternity leave and is managing a commercial HVAC program coming into the portfolio soon.
   e) Warren Fish recently moved the Certified Refrigeration & Energy Specialist (CRES) program into Long-Term Monitoring and Tracking and will bring the XMP initiative forward for Initiative Start at the next meeting.
2) High level status update for Commercial Lighting:

| Program | Q3 Update |
|---|---|
| **Reduced Wattage Lamp Replacement** | • Touching 44% of overall lamp sales via 14 distributors (250+ branches)<br>• 27% market penetration of low wattage lamps<br>• Planning transition to LTMT in late 2018/early 2019<br>• Continuing focus in 2018 on leverage of the lighting distributor platform |
| **Luminaire Level Lighting Controls** | • Seeing strong availability of qualified product<br>• Initial LLLC-focused training well received by trade allies and Idaho Power<br>• Growing interest from utilities in offering incentives<br>• Planning to expand engagement with manufacturer reps, distributors, designers and specifiers |
| **Top Tier Trade Ally Advanced Training** | • Grown to 89 individuals and 32 companies with designation<br>• NXT Level 2 is designed and in development<br>• Need utility engagement to bolster value proposition for trade allies |
| **Commercial Lighting Resources** | • Staying the course |

**Presentation Highlights (in addition to slide above) & Discussion:**

A. Lamp Replacement:
   1) Expect the market penetration of low watt lamps to continue to climb from a current, cumulative 27% to hopefully 40-50% by end of year for some of the largest partners.
   2) But, TLEDs continue to erode the fluorescent lamp market. The current rate of decline of fluorescents is trending towards 22% a year.

B. Luminaire Level Lighting Controls:
   a) Multiple utilities have, or are planning to have, incentives in place
   b) Team plans to increase engagement with mid-stream market (e.g., distributors, manufacturer reps, specifiers, and designers) in 2018

C. Top Tier Trade Ally:
   1) Initial uptake of NXT Level 1 was strong, though seeing some drop; still some work to do on value proposition and differentiation between Level 1 and Level 2. Looking to utilities to increase engagement and support.
   2) **Tacoma Power**: *When will NXT level 2 be ready for roll-out?* First class going out for workgroup review in early October, still discussing minimum Level 1 numbers for launch and geographical considerations (some in-person component involved). Campaign underway to increase base of Level 1 designees to draw upon for Level 2 recruitment. Exact date for Level 2 launch TBD, likely mid to late 2018. Curriculum will be ready early-2018.

D. Lighting Resources
   1) Comprised of NW lighting network, the Design Lights Consortium and Online Lighting Basics training.
   2) This program will continue as-is in 2018.

3) High-level status update for Commercial Buildings and New Construction:

| Program | Q3 Update |
|---|---|
| Commercial Real Estate | • Engagement with 15 industry groups and 20 CRE firms, representing 66M SF in NW<br>• Navigator tool is on track to launch in Q4 2017<br>• Continued Spark uptake, and included in City of Seattle Building Tune-Up Accelerator Program |
| Window Attachments | • Continued support and collaboration with AERC<br>• Market Characterization and Baseline are complete<br>• Provided SGS savings calculator to RTF to support RTF savings protocol |
| Commercial and Industrial SEM Infrastructure | • Continued collaboration and uptake at SEMHub<br>• Exploring evolution of NW SEM Collaborative due to national interest<br>• Securing additional DOE grant dollars to raise awareness of 50001 Ready |
| Commercial Code Enhancement | • Scale-up Approval in May 2017<br>• Focusing on 3-5 technologies and practices to support 2018 WA code proposals<br>• State coordination process will kick off in Q4, aims to be complete by end of Q1 2018 |

**Presentation Highlights (in addition to slide above) & Discussion:**

A. Commercial Real Estate:
   1) 30 commercial real estate firms have engaged (correction to slide above)
   2) To date, the CRE program has worked with 157 registered Spark users that have created 143 Spark projects. Unico Properties, a major property owner and manager in the NW, successfully input 30 properties into Spark.
   3) The City of Seattle Building Tune-Up Accelerator Program is also using Spark as part of its 2-Day, mandatory training. Additionally, as part of the Accelerator Program the University of Washington Integrated Design Lab has trained 60 engineering service providers in the use of Spark.
   4) 2018 focus will be on targeted engagement in the market with existing tools (Spark and Navigator).

B. Window Attachments:
   1) Primary intervention is working with Attachment Energy Rating Council (AERC) – covers both commercial and residential window attachments.
   2) Expect Scale Up milestone in 2018.
   3) Secondary Glazing Systems baseline expected to be at, or near, zero.
   4) Team working with EPA on releasing first draft of ENERGY STAR spec for Low-E Storm Windows; although this is mostly a residential applicator, it has important market impacts.
   5) There are 6 utilities running window attachment programs (Chelan, Cowlitz, Benton REA, Benton, Franklin PUD and City of Richland) for residential and small commercial.

C. Commercial & Industrial SEM Infrastructure
   1) In August, held first ever North American SEM Summit, with about 75 participants; program team will continue effort around this in 2018

2) 15 SEM online learning modules upgraded thanks to DOE grant dollars
3) Preparation for SEM Collaborative meeting coming up on October 24th in Portland.

D. Commercial Code Enhancement
1) First utility work group meeting coming up in November
2) **Tacoma Power**: *What are the first 3-5 technologies that are going in to the Washington code proposals?* NEEA (Emily) was unsure off-hand.
   - ACTION ITEM: List will be provided with meeting follow-up
3) **ODOE***: WA code proposal prep – should we watch for this in preparation for what might come to OR?* NEEA (Emily): absolutely, stay involved.

4) New Initiatives

A. Very High Efficiency Dedicated Outside Air Systems (VHE DOAS) focuses on separating heating and cooling from ventilation using a very high efficiency heating/cooling system coupled with a very high efficiency heat recovery ventilator (HRV). VHE DOAS is ramping up for Initiative Start (IS) in Q1 2018. NEEA staff will provide pre-IS program overview at the Q4 CAC meeting.

B. Extended Motor Products (XMP) aims to shift the NW pump market toward the top energy performance tiers for pumps and circulators in order to help customers make better pump selections. NEEA will work in close coordination with NW utilities and leverage the existing value exchange platform with NW distributors set up for low-wattage T8 lamps. In Q4, XMP will be brought to CAC for an Initiative Start (IS) review and then to RPAC for a vote.

CAC ACTION ITEM FOR FOLLOW UP: Who from your organizations should engage on these new initiative efforts? Emily will be reaching out to CAC members over the coming week; please think about best Program Manager contacts in your organizations for these two programs.

In general, Emily Moore (NEEA) is interested in knowing the following from funders:

- What questions do you have?
- Which programs do you feel you need more information on?
- Looking forward, what programs or activities do you feel most excited about, or want to ensure your utility is plugged into?

## Extended Motor Products

**Presentation Highlights**

A. Pumps
1) Pump Energy Index (PEI) – rating established by Department of Energy (DOE) with heavy involvement from the industry, covers pumps between 1-200 HP. Takes effect in 2020.
2) Cost is typically more important when purchased, but the DOE wants to improve efficiency considerations so this is part of the effort to make the products more easily comparable.
3) Hydraulic Institute Energy Rating Portal has individual pump listings.

B. Labeling Initiatives are organized into three groups:
1) Pumps
2) Fans
3) Compressed Air

C. Savings for Pumps & Circulators
1) Savings potential for clear water pumps; 3400 measures, with savings potential around 25-50 aMW
2) Circulator pumps savings potential around 45 aMW, with 100 measures available.

    3) Measures will expire if not proven – a key component; some work already in place but still have more research to conduct.

D. Market Characterization
    1) Small Pumps (1-50 HP)
    2) Circulator pumps (1/40 – 5 HP)
        a) sweet spot is in commercial market; about 10,000 sold in Northwest each year.
        b) High Performance circulators comprise about 5% of the market; team feels there's market opportunity here.
    3) Overall, about 30,000 sales/year; 80%+ sold via distributors
    4) Efficient pump solutions available, yet few are sold.

E. Suggestions for a Regional XMP effort:
    1) Simplify process for distributors
    2) Obtain valuable and necessary data
    3) Cost effective solution for small savers
    4) Influence markets – supply side
    5) Capitalize on platform concept that lighting initiatives have built:
        a) Collaboration and exchange of value with distributors, manufacturers and other market actors.
        b) Benefit to utility programs: Cost-effective savings, speed to market and market insights.

**Discussion**

1) **PSE**: *How are we achieving the savings?* NEEA (Warren) replied hydraulic efficiency is part of it; greater savings potential can be realized by installing variable speed pumps where you previously had constant speed pumps. Cost of advanced controls and applicability to smaller and smaller pumps – smart pumps are now here.
2) **Tacoma Power**: *What's the scale on the energy rating label?* NEEA (Warren) replied that it is a 0-100 scale. The higher the number, the more efficient it is. Geoff Wickes (NEEA Product Manager) could provide greater detail.
3) **PSE**: *Which market is the focus?* NEEA (Warren) confirmed both replacement and new construction markets.
4) **PSE**: Be sure to get perspective from mechanical contractors given it seems they're the ones primarily making the purchases and doing the replacement. Would be great to see some initial interview data that supports this when you bring it forward to the CAC on October 18 for review.
5) **Tacoma Power**: *Do you envision NEEA providing incentives or utilities?* Warren clarified that further discussion and understanding is needed here – need more input from funders.
6) **Pacific Power**: This initiative seems on track. The incentive model RWLR uses could be applicable to this effort.
7) **Energy Trust**: In support.
8) **Idaho Power**: In support.

## Possible topics for Q4 CAC Meeting

- **Extended Motor Products:** Initiative Start review and prep for RPAC vote
- **Commercial HVAC - VHE DOAS:** Update and your input on program concept
- **Commercial Real Estate:** Update and your input on program activity

## Wrap up/Feedback on Meeting

A. **<u>PSE</u>**: I*s the XMP program working with Commercial Code to get a specification requirement in place?* Warren (NEEA) wasn't sure in the meeting, but checked with our codes team afterwards and determined that, no, not at this time. Code strategy for locking in savings is always among our considerations long term, but market adoption levels of efficient small pumps is too low to warrant a code play at this time.

B. Feedback on Emily's (NEEA) summary report shared ahead of time via email:
   1) **<u>Seattle City Light</u>** appreciated it, thought it was good, shared with team
   2) **<u>Energy Trust</u>** liked it, good summary