

Commercial Advisory Committee



DATE: August 6, 2019

LOCATION: **Puget Sound Energy (PSE) Office/Service Center**
6905 S. 228th Street, Kent, WA 98032

TIME: 10:00 am – 3:00 pm Pacific

WEBINAR: <https://neea.adobeconnect.com/neeacac2019q3/> (includes phone option)

DIAL-IN: 1-877-890-9502, Participant Code: 7702378329 (for those dialing in directly)

AGENDA			Page#
10:00-10:30 am	Welcome, Introductions, Packet Review, Housekeeping <i>Desired Outcome:</i> <i>CAC alignment on preparation materials and meeting objectives.</i>	Maria Alexandra Ramirez	1-2
10:30-11:00 am	Commercial Portfolio Update, Cycle 6 Planning <i>Desired Outcome:</i> Level-set on commercial portfolio	Emily Moore	3-5
11:00-11:45 pm	Window Attachments Program Update <i>Desired Outcome:</i> CAC understanding of program progress and current activities.	Natalie Fish	6
11:45-12:30 pm	Lunch (provided)	All	--
12:30-1:30 pm	CAC Member Share Out/Round Robin <i>Desired Outcome:</i> Awareness of current activities and issues within the region.	All	--
1:30-1:45 pm	Break	All	--
1:45– 2:45pm	Commercial Real Estate Infrastructure program: Transition to BetterBricks <i>Desired Outcome:</i> CAC awareness of program transition at the end of 2019, and understanding of the BetterBricks Platform going forward.	Natalie Fish	7
2:45-3:00 pm	Wrap Up, opportunity for public comment and adjourn	Maria Alexandra Ramirez	--

Memorandum – *Agenda Item (Tier 1)*

August 6, 2019



TO: Commercial Advisory Committee (CAC)
FROM: Maria Alexandra Ramirez, Stakeholder Relations Manager
SUBJECT: Meeting Packet Informational Updates and Additional Details

MEETING PACKET APPROACH

This packet continues the “tiered” approach:

- Tier-1 memos for active agenda items;
- Tier-2 memos for informational updates on items not currently requiring agenda time;
- Tier-3 materials provided as additional detail for those interested, accessible via links in the Tier-1 and Tier-2 memos.

This approach helps keep packets concise and digestible. Any input for improvement is appreciated.

INFORMATIONAL UPDATES

Enclosed please find Tier-2 informational updates on the following:

- Pages 8-9: Integrated Design Lab (IDL) Q1&2 Progress Report
- Page 10: CAC Conference Coordination
- Page 11: MRE Field Activities Planned in Q3 and Q4

ADDITIONAL DETAILS (Tier 3)

Tier-3 materials related to the agenda items and informational updates listed above will be accessible through links in those memos. Additional Tier-3 details are available here:

- Q2 2019 [CAC Meeting Notes](#)
- Q2 2019 [Codes & Standards Update Report](#)
- Q2 2019 [Marketing Newsletter](#)
- Q2 2019 [Market Research & Evaluation Newsletter](#)
- Q3 2019 [Emerging Technology Newsletter](#)
- Q3 2019 [C&I Regional Strategic Market Plan Update](#)

Memorandum – *Agenda item (Tier 1)*



August 6, 2019

TO: Commercial Advisory Committee (CAC)
FROM: Emily Moore, Senior Manager, Commercial/Industrial
SUBJECT: Commercial Portfolio Updates

Our Ask of You:

In the CAC meeting, NEEA staff will provide a brief review and update on the commercial program portfolio. Please review the program highlights from the last quarter and bring any questions or comments you may have to the meeting.

PROGRAM HIGHLIGHTS:

Lighting

Reduced Wattage Lamp Replacement (RWLR)

- All RWLR distributor participants have entered Long Term Monitoring and Tracking (LTMT) as of June 2019, with at least one additional lead to collect full category data to serve LTMT.
- The low wattage market penetration in the lamp maintenance market continues to increase over 2018, with low wattage market penetration through Q2 2019 above 50%. One distributor continues to maintain market penetration above 60%.
- Five RWLR participants have enrolled in the Seattle City Light (SCL) midstream pilot aimed at increasing market penetration of LED lamps in SCL territory.

Luminaire Level Lighting Controls (LLLC)

- Networked Lighting Controls training rollout continued with sessions hosted in Q2 by BPA in Eugene and Idaho Falls, by Energy Trust in Portland and by Pacific Power in Tri Cities area. In Q2, 76 trade allies were trained for a total of 145 year to date. This one day class is being delivered by Lighting Design Lab and is available for utilities to host.
- The LLLC program continues to seek to partner with NEEA funders on case studies of LLLC installations. If you have LLLC projects that may be good prospects to highlights, please reach out to Anne Curran (acurran@neea.org).

Top Tier Trade Ally (TTTA)

- The program reached over 30 new NXT Level 2 participants with a new two-part webinar version of the workshop portion of the training, engaging individuals unable to attend in-person workshop events.
- 20 trade allies achieved NXT Level 2 designation year-to-date, and the program expects to exceed its annual goal for NXT Level 2 designations in Q3, a sign that participants are engaged in the curriculum and motivated to earn designation quickly.
- An additional 26 individuals earned NXT Level 1 designation in Q2, a nearly 20% increase over designations in Q1 this year. In the previous two years, Q2 saw lowest designations. This year's improved Q2 result is attributed to increased outreach efforts.

C+I Lighting Regional Strategic Market Plan Implementation

- See C+I Lighting Quarterly Newsletter for updates [here](#).

Building Envelope

Window Attachments

- AERC continues to make progress in the development of a commercial products certification program, planned for launch in 2020. Additionally, with NEEA support, AERC recruited two secondary glazing system (SGS) manufacturers as members in Q2.
- See Tier 1 memo on page 6 for further updates and context for agenda item.

Pumps

Extended Motor Products

- Pumps Energy Savings Validation Research:
 - In Q2, the program team completed gathering the necessary data on pumps and circulators from data contributors across the Northwest, and reached or exceeded data targets for all subsets of the Pumps Research Study sample frame (454 pumps in total).
 - The final draft report was shared at the sixth and final meeting of the XMP Technical Workgroup in July. Notes and slides from all workgroup meetings are available on the XMP [Conduit page](#) and webinar recordings of all meetings are available on request.
- The Market Characterization and Baseline study of the Northwest pumps market is underway and on track with The Cadmus Group for completion in Q3.
- In Q2, we met our goal by executing participation agreements with five Northwest pump distributors and manufacturers representatives. Their participation will enable us to gain an understanding of the Northwest pump sales mix and to test and refine our initial XMP market shift intervention design. We are in learning-mode with XMP, leveraging assets of the NEEA Reduced Wattage Lamp Replacement initiative and other NEEA initiatives targeting distributors and manufacturers, and recording our learnings on pump market engagement as we go for the benefit of NEEA funders.

HVAC

High-Performance HVAC

- Following engagement with 10-12 heat recovery ventilation (HRV) and component manufacturers at AHRI in January, contractor support has been brought on to support outreach to 5-7 priority manufacturers.
- Presentation at International Facilities Manager Association (IFMA) Symposium in Everett held in June to 20+ facility managers and supply chain attendees, and planning is underway for additional awareness-building session in Q3 and one in Q4.
- Partnered with Energy Trust to present at their Energy Simulation Forum (BESF) in June on energy modeling lessons learned from pilot demonstration projects. Session had 42 attendees, of which approximately half were from industry design and engineering firms, as well as staff from several utility partners.
- Continuing to provide technical assistance on BPA-led project and two Tacoma-based projects to encourage meeting Very High Efficiency DOAS specification and guidelines.

Cross-cutting Infrastructure

Distributor Platform

- Via the Distributor Platform, the region continues to maintain and build relationships with regional electrical, lighting, and maintenance and repair (MRO) market actors. With the transition of Reduced Wattage Lamp Replacement (RWLR) to long-term monitoring and tracking (LTMT), new agreements are in place with RWLR participants in order to continue data collection. Additionally, 5 RWLR participants have entered into participation agreements for the Seattle City Light midstream pilot, for which a total of 15 agreements are in place. In addition, 7 agreements are in place with distributors to collect Luminaire Level Lighting Controls (LLLC) sales data.

- The Seattle City Light midstream pilot is a partnership with SCL to administer a midstream rebate coupled with layered bonus structures by branch to accelerate the conversion to LED commodity lighting. The midstream rebate program has been active since August 2018, and market transformation (MT) incentive structures for select participants launched on May 1, 2019. Overall, participation in the pilot is increasing: program incentivized sales more than doubled in the second half of the program (January 2019—May 2019) versus the first half (August 2018 - December 2018), and the number of branches submitting each month has increased from only two in August 2018 to eight in recent months.
- A second pilot with Snohomish PUD launched in May with market transformation incentive structures approved and agreements now in place with four distributors. First monthly submissions of full category data were received for May from all four distributors. NEEA is tracking distributor sales and plans to review early pilot performance with participating distributors in August.

Commercial Real Estate (CRE)

- The BetterBricks Campaign launched in Q2. Traffic to the BetterBricks website increased 55% over Q1. LinkedIn advertisements garnered 580 clicks and over 90,000 impressions in Q2, more than double the target. Referrals from BetterBricks to utility websites increased 8%.
- See Tier 1 memo on page 7 for further updates and context for agenda item.

Strategic Energy Management (SEM)

- The program engaged funders one-on-one throughout Q2 to assess interest in funding the SEM Infrastructure program in Cycle 6. Based on conversations and commitments thus far, the program expects there will be sufficient interest to secure at least the minimum necessary funding for the program in Cycle 6.
- Regional collaboration in creating a regional SEM data plan made significant headway in Q2, and the program was able to identify several top priorities for data insights to inform a preliminary plan. Work is underway on a draft data plan to be shared with funders for feedback in Q3, with the possibility of commencing an initial data project in Q4.
- In Q2, NEEA delivered the first edition of SEM Hub News, a quarterly email newsletter that highlights new content and provides brief updates on SEM news and events throughout the region. Please contact Debbie if you or your staff would like to be added to the mailing list.
- Upcoming Events:
 - The North American SEM Collaborative's SEM Summit will be held in Portland on August 12th, immediately preceding ACEEE's Summer Study on Energy Efficiency in Industry. Registration for both the Summit and the Summer Study are available at <https://aceee.org/conferences/2019/ssi>.
 - This year's Northwest SEM Collaborative Fall Workshop will be held in Portland on October 24th. Registration is now open here: <https://semhub.com/events/2018-nw-sem-collaborative-fall-workshop>. We look forward to seeing you and your SEM staff there!

Memorandum – Agenda Item (Tier 1)



August 6, 2019

TO: Commercial Advisory Committee (CAC)
FROM: Natalie Fish, Program Manager
SUBJECT: Window Attachments Program Update

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Our Ask of You:

Please review this memo and be prepared to provide feedback after this presentation, regarding your organization’s interest in the field tests scheduled for 2020.

Program Overview

The Window Attachments Program (the Program) seeks to accelerate the adoption of high-performance window attachment products in existing commercial, residential and multifamily buildings. The program supports the Attachments Energy Rating Council (AERC) to deliver product differentiation and certification of two secondary window products, Low-e Storm Windows (LES) and Secondary Glazing Systems (SGS). The Program seeks to engage with key market actors including architects, designers, facility managers and manufacturers to simultaneously build product awareness and capability among key target audiences in the region.

The Program passed Initiative Start in 2016 and is currently in the program development Market and Product Assessment phase. In 2019, the program has focused on identifying knowledge gaps in the market and supply chain to create the scope of the current market characterization work, understanding target audiences through audience research, supporting AERC in launching a certification program for commercial products in 2020, and building relationships with manufacturers to learn about their capabilities and secure ongoing access to sales data. The Program is using these learnings to inform the program strategy and create product specifications.

In 2020, the Program will identify target markets for field tests to gather energy savings data for multiple building types, observe installations and understand any barriers that exist to installers, and create case studies to serve as Northwest examples. The Program will financially incentivize manufacturers to certify commercial products with the AERC. Certified products that meet the Program’s specification will be put on a qualified products list for the field tests. The Program is seeking support from interested utilities to provide input on the design of field tests in 2020 and to support recruitment of participants.

PROGRAM LIFECYCLE STATUS



Please contact [Natalie Fish](#) if you have questions about the Window Attachments Program.

Memorandum – *Agenda Item (Tier 1)*



August 6, 2019

TO: Commercial Advisory Committee (CAC)

FROM: Natalie Fish, Program Manager

SUBJECT: Update on Transition of Commercial Real Estate Program to BetterBricks

Our Ask of You:

Please review this memo and be prepared to provide feedback on the future path of the Spark Tool, specifically if and how it should be maintained and utilized going forward.

Overview

The Commercial Real Estate (CRE) Program was originally focused on encouraging Strategic Energy Management (SEM) practices in CRE portfolios across the region. To accomplish this work, the CRE Program developed relationships with CRE member and trade organizations, such as BOMA Oregon and Seattle 2030. In Cycle 5, the CRE program combined with the Existing Building Renewal (EBR) Program, which promoted deep energy retrofits of large, leased commercial office buildings, and became an optional infrastructure program. As a result of Cycle 6 Business Planning, the CRE Program will sunset at the end of this year. Key tools, resources and market relationships have been transitioned already from the CRE Program to the BetterBricks Platform.

In Cycle 6, the BetterBricks Platform will serve as cross-cutting infrastructure, supporting the Alliance’s portfolio of commercial programs. The Platform will create awareness, increase capability and work to make energy efficiency a key part in planning and decision making for commercial building professionals. The Platform will accomplish this by providing tools, resources, industry knowledge and by connecting market actors that are ready to implement projects with their utility.

For the transition to Cycle 6 and operations planning for 2020, NEEA is considering what level to maintain Spark going forward. In Q2, NEEA staff conducted market research of tool users and some targeted one-on-one outreach with stakeholders to gather input. In the Q3 CAC meeting, NEEA staff will share an overview of the recent research and have a discussion with CAC on possible options for the tool.

Further Context on the Spark Tool

Spark is a free, online interactive tool for leased commercial office buildings considering a building renewal or deep energy retrofit targeting 35% or more energy savings. Spark is an early assessment tool, which quickly estimates total project costs and financial benefits of an “integrated package” of efficiency measures. Spark can help a financial decision maker decide if a building renewal strategy is right for her/his commercial building before investing in an energy audit. A user enters data on her/his building’s energy use and existing systems information into the Tool and then selects between measure options. Based on this information, Spark creates a customized report identifying a set of integrated measures to reposition the building. Spark assesses the business case for renewal by providing project cost estimates and allowing the user to adjust for a targeted rate of return. Spark is accessible at buildingrenewal.org.

Please contact [Natalie Fish](#) if you have questions about the Commercial Real Estate Program or Spark Tool.

Memorandum – *Informational (Tier 2)*



August 6, 2019

TO: Commercial Advisory Committee (CAC)

FROM: Debbie Driscoll, NEEA, and IDL Directors Jaya Mukhopadhyay and Kevin Amende, Montana State University Integrated Design Lab (MSU); Ken Baker & Elizabeth Cooper, University of Idaho Integrated Design Lab (UI); Kevin Van den Wymelenberg, University of Oregon Energy Studies in Buildings Lab (UO); and Chris Meek & Heather Burpee, University of Washington Integrated Design Lab (UW)

SUBJECT: Integrated Design Lab (IDL) Q1 and Q2 Progress Report

Our Ask of You: Please review this progress report to acquire greater visibility and understanding of the many activities the region’s Integrated Design Labs (IDLs) perform in support of the Alliance programs. This is an overview of the progress on the Labs’ service contracts with NEEA, between January and June 2019.



Luminaire Level Lighting Controls (LLLC)

The Labs provide market intelligence, outreach, stakeholder engagement, and technical guidance to accelerate adoption of LLLC technology. Efforts have focused on identifying targets for building awareness and market intelligence and to share information for better technology uptake.

UI: Developed a presentation on LLLC for use in Idaho Power Lunch and Learns. The Lab is developing an Open Studio script for LLLC, and continues to seek a case study site.

UO: Designed and is conducting lab installations to test LLLC performance and occupant response. The Lab completed monitoring three of the four LLLC one-for-one replacement systems and completed specification for the next phase, testing of full lighting redesign controls and fixtures.

UW: Provided strategic awareness building with market actors and specifiers through retrofit customer engagement via the City of Seattle’s Tune-Up Accelerator program; presentations at architecture, engineering, construction, and ESCO firms; and general education programs offered in partnership with the Lighting Design Lab.



Commercial Code Enhancement (CCE)

The Labs provide research and technical support in support of state coordination plans, and successful adoption of proposed technologies and practices into state code.

MSU: Conducted lab testing and surveys to identify and evaluate advanced design and construction practices adopted in High Performance Buildings across Montana, with the intent of evaluating the feasibility and affordability of such practices and identifying potential code measures.

UI: Surveyed architects to identify above-code best practice design in commercial buildings, and will conduct a follow up case study of two buildings/technologies. This work is being coordinated with Idaho Power Company.

UW: Developed a memorandum outlining costing development for the Total System Performance Path (TSPR) code proposals to the Washington State Energy Code, and participated in regional and Washington State CCE teleconferences. UW IDL continued to provide support to AIA Seattle’s Energy in Design Award.



Window Attachments

The Labs' projects seek to reduce the risk to building owners by understanding, documenting, and addressing the technological and operational challenges associated the widespread adoption.

UO: Developed new manual blind modeling algorithm, and is working with the Illuminating Engineering Society and the Attachments Energy Rating Council to influence relevant standards of practice.

UW: UW IDL provided marketing support for NEEA's Commercial Window Attachment (CWA) Program via targeted media articles, market outreach, and presentations at conferences.



Commercial Real Estate/BetterBricks

Labs engaged municipalities, building owners, managers and vendors to develop market expertise and accelerate the voluntary implementation of energy efficiency improvements.

UO: Facilitated the creation a transition plan for the Spark Deep Energy Retrofit Tool, then submitted a final report summarizing recommendations.

UW: Deployed the Spark Tool as part of the City of Seattle's Tune-Up Accelerator program; presented a paper on the Building Renewal component of the program; participated in case study development and evaluation. The IDL also provided technical support for the BetterBricks website.



HVAC: Very High Efficiency Dedicated Outside Air System (VHE-DOAS)

The Labs provided recruiting and technical support during recruitment, design, installation and data collection for VHE DOAS pilot projects, along with monitoring of conventional RTUs for baseline comparison.

UO: Concluded long-term monitoring for a VHE DOAS school pilot project site, and submitted a report summarizing findings. Data collection continues at an existing RTU office baseline site.

UW: Continued to collect baseline data from three rooftop units at Clallam PUD's offices in Sequim, WA; developed a fact-sheet for practitioners that describe the VHE-DOAS concept; and is developing a VHE DOAS Design Guide aimed primarily at design engineers and contractors.



Emerging Technologies Support

UW: Conducted several interviews with select building owners and designers to understand the operational and maintenance implications of dynamic window shades and blinds, and is currently developing a knowledge base and technical recommendations based on those discussions, current stretch codes, and technical implementation.

Please contact Debbie Driscoll at DDriscoll@neea.org if you have questions about NEEA's work with the IDLs.

Memorandum – Agenda item (Tier 2)



August 6, 2019

TO: Commercial Advisory Committee (CAC)
FROM: Maria Alexandra Ramirez, Stakeholder Relations Manager
SUBJECT: Conference Coordination

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Our Ask of You:

Please review the conferences linked below and email me at maramirez@neea.org if you'd like to coordinate with NEEA staff in advance of the event, and/or if there are specific topics/breakouts you'd like to hear about at the following CAC meetings on November 5th, 2019 or in Q1 2020.

Upcoming Events:

Date	Conference	Report
8/12/19	North American SEM Collaborative's SEM Summit	Internal
8/12/19 – 8/14/19	ACEEE's Summer Study on Energy Efficiency in Industry	Internal
10/9/19-10/11/19	Getting to Zero Forum	Internal
10/24/19	Northwest SEM Collaborative Fall Workshop	Internal
11/23/19-11/27/19	Greenbuild (USGBC)	Internal

Background:

This memo is in response to a NEEA Board discussion in 2018, about conference/event attendance, that resulted in NEEA developing a (1) Tracking system to improve the management of staff attendance to conferences/events, and a (2) Criteria that improves NEEA's ability to manage its annual operations plan and budget. The overall intention is to provide a coordination opportunity, so that we're connecting as appropriate in advance and sharing out key relevant takeaways afterwards with the region.

This will be a standing housekeeping item for this Advisory Committee moving forward.

Memorandum – Agenda item (Tier 2)



August 6, 2019

TO: Commercial Advisory Committee (CAC)
 FROM: Maria Alexandra Ramirez, Stakeholder Relations Manager
 SUBJECT: Market Research and Evaluation Field Activities Planned in Q3 and Q4

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Our Ask of You:

This update is provided to inform you on NEEA’s Market Research and Evaluation (MRE) activities, expected to field in Q3 and Q4. Normally, these activities would be listed in the MRE Newsletter, however, due to recent staff changes, this newsletter won’t be updated until the end of year. Should you have any questions, please feel free to reach out to the specific MRE project manager or contact name associated with each project below.

Market Research & Evaluation Update – Field Activities:

1) Washington Codes Research and Evaluation

- The Washington Residential New Construction project will field a survey with approximately 150 Washington jurisdictions officials and builders from August through September.
- The Washing Commercial Code Evaluation will be in the field a survey with 100 Washington-based building operators and code officials in August and September.

Please reach out to Steve Phoutrides if you have any questions about these studies. sphoutrides@neea.org

2) Long-Term Monitoring and Tracking (LTMT) Studies

Our annual LTMT efforts for **Green Motor Rewinds (GMR) Drive Power, Commissioning and Residential Lighting** will be in the field at different times between August and December of this year. Please reach out to Jen Stout, MRE Project Manager with any questions. jstout@neea.org

	Activity	Timing	Region	Audience	Sample size, n
GMR	Online survey	Aug, Nov-Dec	All four states	Motor Service Centers	80
Commissioning	Online survey	Nov-Dec	All four states	Commissioning Providers	140
Residential Lighting	Shelf stocking survey	Dec	All four states	Retail (Small hardware, Do-It-Yourself, Club)	34

3) Top Tier Trade Ally (TTA)

The TTA program will soon request proposals for research aimed at understanding the effect of NXT Level training on participating trade allies, such as changes in sales practices and inclusion of controls in projects. The research objectives were discussed with the Commercial Lighting Program Manager Workgroup and received a positive response. The research is likely to include survey trade allies who participated in NXT Level training and may also survey a control group of trade allies who did not participate in the training. Please reach out to Rachel Zakrasek, Sr Program Coordinator, with any questions. RZakrasek@neea.org