

# Commercial Advisory Committee



**DATE:** January 17, 2017

**LOCATION:** NEEA – 421 SW 6<sup>th</sup> Ave, 6<sup>th</sup> Floor (Cedar Conference Room)

**TIME:** 10:00 am – 3:30 pm Pacific

**WEBINAR:** <http://neea.adobeconnect.com/cacjan2017/> (includes phone option)

**DIAL-IN:** 1-877-890-9502, Participant Code: 0094737 (for those dialing in directly)

AGENDA			Packet Page #
10:00-10:15 am	Welcome, Introductions and Housekeeping Items <ul style="list-style-type: none"> <li>Meeting packet, informational updates</li> </ul> <p><i>Desired Outcome:</i> Align on preparation materials and meeting objectives</p>	BJ Moghadam	1-3
10:15-10:30 am	Commercial Portfolio Update <ul style="list-style-type: none"> <li>2016 Q-4 Progress Review</li> </ul> <p><i>Desired Outcome:</i> Level-set on current portfolio status</p>	Sepideh Rezania	--
10:30-10:40 am	Commercial Building Stock Assessment – Status update	Dulane Moran	4
10:40-10:50 am	SEM Hub – <i>It's live and ready to use!!</i> <ul style="list-style-type: none"> <li><a href="http://www.semhub.com">www.semhub.com</a></li> </ul> <p><i>Desired Outcome:</i> Familiarize CAC with SEM Hub features</p>	Warren Fish Josh Pelham	--
10:50-11:50 am	CAC Member Share Out/Round Robin <p><i>Desired Outcome:</i> Awareness of current activities and issues in the region</p>	All	--
11:50-12:35 pm	Lunch (provided)	All	--
12:35-1:40 pm	Emerging Technology <ul style="list-style-type: none"> <li>Emerging technology update and a discussion about program strategies for the following technologies                             <ul style="list-style-type: none"> <li>High efficiency heat recovery ventilation systems</li> <li>Extended motor products</li> <li>Residential window attachments</li> </ul> </li> </ul>	Mark Rehley	5

	<i><u>Desired Outcome:</u> Feedback about program strategies on technologies that will be presented to RPAC for portfolio considerations in 2017.</i>		
1:40-2:10 pm	Commercial Code Enhancement – Initiative Design Process <i><u>Desired Outcome:</u> CAC experience thus far and guidance on initiative design</i>	Kim Hughes	6-7
2:10-2:25 pm	Break	All	--
2:25-3:25 pm	Commercial Real Estate – Market activity Review and Feedback <i><u>Desired Outcome:</u> Enhance the value delivered by Commercial Real Estate Infrastructure program for the funding Utilities</i>	Sepideh Rezania	8
3:25-3:30 pm	Opportunity for public comment, and adjourn	BJ Moghadam	--

# Memorandum – *Agenda item (Tier 1)*



January 10, 2017

TO: Commercial Advisory Committee (CAC)  
FROM: BJ Moghadam, Stakeholder Relations Manager  
SUBJECT: Meeting Packet, Informational Updates, Additional Details

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## **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. Input appreciated on room for improvement.

## **INFORMATIONAL UPDATES**

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

- Page 9: Luminaire Level Lighting Controls update
- Page 10: Building Operator Certification initiative update
- Page 11: Northwest Lighting Network update
- Page 12: Codes & Standards update
- Page 13: Regional Strategic Market Planning update

## **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:

- October 12, 2016 [CAC](#) meeting notes (previously distributed to CAC 10/26/16)
- November 15, 2016 [RPAC](#) meeting notes
- [Commercial & Industrial Lighting Quarterly Progress Newsletter](#)
- [Q1-2017 Emerging Technology Report](#)

# Memorandum – *Agenda item (Tier 1)*



January 10, 2017

TO: Commercial Advisory Committee (CAC)  
FROM: Dulane Moran, CBSA Project Manager  
SUBJECT: CBSA Status Update

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## **CBSA Status**

In December 2016, a selection committee heard presentations from three finalist firms. SBW was selected to conduct the Phase I planning work. Following a kickoff meeting at the NEEA offices on January 11, the SBW team will immediately begin tasks associated with 1) assessing the accuracy/adequacy of the population frame, 2) providing guidance for decisions on sampling approaches, and 3) reviewing the building variables that were collected on site during the last CBSA.

These Phase I planning activities will be followed by a Phase II solicitation through which we will select a contractor to conduct the field services work: building recruitment, onsite audits, and EUI calculations.

## **Opportunities for Involvement**

Work group participation:

- Work groups for sample design and building variable review are recruited and will meet about every 4-5 weeks throughout the spring..
- A solicitation work group for Phase II will be recruited in May/June.
- A customer contact work group for Phase II will be recruited in August/September. This will be an important component of effective regional engagement and specific building recruitment. Energy use for selected buildings will be required to support EUI calculations. Extensive utility involvement will ensure success for the overall project.

Oversampling:

- Increase the confidence/precision associated with specific service territories through directly funded oversample.

Milestone decisions and items needing regional review will be posted to a CBSA Conduit group To engage more directly in any of these processes, please contact Dulane Moran (see contact info below).

For more information, please contact Dulane Moran, [dmoran@neea.org](mailto:dmoran@neea.org) 503-688-5413

# Memorandum – Agenda item (Tier 1)



January 10, 2017

TO: Commercial Advisory Committee (CAC)  
 FROM: Mark Rehley, Senior Manager Emerging Technology / Product Management  
 SUBJECT: Emerging Technology Update for Q4 CAC Meeting

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### Our Ask of You

- Provide your thoughts on the merits or challenges of the program strategies we are considering for the technologies listed below.
- Bring any ideas or questions for other commercial technologies we should consider. [Here](#) is the Q1 Emerging Technology Report.

### Commercial Ventilation / Heating & Air Conditioning

Technology	Program Strategy Idea	Things to consider
Residential Low-e Storm Windows	Incorporate into the Commercial Window Attachments Program as a second product.	The Attachment Energy Rating Council (AERC) is planning to rate both secondary glazing systems for commercial and low-e storm windows for residential. These products are similar and there is some cross over between residential and commercial. As a starting point, the main market intervention is to have a nationally recognized energy rating applied to these products so that the market can tell good products from bad. Since AERC is going to rate these and several other commercial and residential products, NEEA staff believes a single program would be best to manage this.
Extended Motor Products – Clear water pumps	Start a new program to support ACEEE’s program to develop test methods and ratings for several types of motor products (motor, control, pump / blower/ compressor)	Hydraulic Institute’s test method and rating for clear water pump motor systems is the first of potential several motor system ratings. NEEA staff believes that a single program would make best use of resources as we participate in the development and rating approaches for this and other extended motor products.
Efficient Heat Recovery Ventilation System	Start a new program focused on commercial Heating, Ventilation, and Air Conditioning (HVAC). The program would also support other HVAC technologies that are valuable but not as significant as heat recovery ventilation systems.	Efficient heat recovery ventilation systems will achieve maximum efficiency when they are coupled with a right sized heating and cooling system and a dedicated outside air system. This is not a simple one for one replacement and each system will be different. A broader program will enable other technologies to be incorporated to support efficient HVAC.

# Memorandum – Agenda Item (Tier 1)



January 10, 2017

TO: Commercial Advisory Committee (CAC)

FROM: Kim Hughes, Senior Program Manager – [khughes@neea.org](mailto:khughes@neea.org); 503-688-5467

SUBJECT: Commercial Code Enhancement (CCE) Initiative – Midpoint Progress Update and Check-in

This memorandum summarizes the NEEA/Utility-coordinated CCE Initiative design process, status and next steps. The Jan 17<sup>th</sup> agenda discussion provides an opportunity to weigh-in midpoint in the design process. Please check-in with your participating staff member (listed on next page) before Jan 17<sup>th</sup> and discuss any questions, feedback or suggestions on the CCE Initiative concept or design process. A list of the participating staff members is on the back of this memo.

**QUESTION FOR YOU:** In addition to the NEEA CCE Initiative Scale-up Approval Milestone document and presentation on the initiative business case and plan, both coming later, what information do you need in order to support this initiative and recommend approval to your RPAC member for the May vote?

## INITIATIVE CONCEPT OVERVIEW:

The Commercial Code Enhancement (CCE) initiative presents a significant opportunity to target and impact all commercial new construction (CNC) and major renovation projects in the region through progressively effective energy codes. End-users include code boards and officials, architects, engineers, building contractors and building developers. The CCE initiative design process, in coordination with regional commercial code stakeholders and NEEA utility partners, enables an initiative plan that:

- Builds-on and aligns voluntary efforts, CNC market practices, and utility programs
- Bridges the gap between market practices and state policies through state action plans
- Demonstrates feasibility and affordability of next-generation technologies and practices
- Builds market awareness and capability
- Demonstrates market support of new code measures

## INITIATIVE LIFECYCLE STATUS:



## INITIATIVE DESIGN PROGRESS TO DATE:

- Robust participation in NEEA/Utility funder-coordinated CCE Initiative design process
- Market characterization (codes landscape) research completed
- Shared understanding of regional commercial codes landscape and process
- Technology/practice assessment process and tech brief template established

## NEXT STEPS:

- Develop shared understanding of regional utility programs and alignment with CCE initiative
- Develop regional framework for state action plans
- Complete draft CCE Initiative design and plan
- Present draft CCE Initiative design and plan to CAC for input/feedback – April 26, 2017
- Present CCE initiative design and plan to RPAC; RPAC vote to move CCE to Market Development – May 17, 2017

## CCE Initiative Design Group - Current Membership

In order to provide regional representation and broad-based feedback, the membership of the design group is comprised of members from multiple organizations. The membership list is below for reference.

Tom Lienhard	Avista Utilities
Rachelle Humphrey	Avista Utilities
Katie Omweg	Bonneville Power Administration (BPA)
Bill Hibbs	Clark PUD
David Shepherd-Gaw	Cowlitz
Jessica Iplikci	Energy Trust of Oregon (ETO)
Sheree Willhite	Idaho Power Company
Rob Marks	Snohomish County PUD
Mark Aalfs	Tacoma Power
Blake Shelide	Oregon Dept of Energy
Deb Young	NorthWestern Energy
Nancy Goddard	PacifiCorp
Tom Anderson	Puget Sound Energy
Holly Townes	Puget Sound Energy
Colm Otten	Seattle City Light
Diane Chestnut	Grant PUD
Kevin Smit	NW Power Planning Council
Stan Price	Putnam Price Group
Lisa Rosenow	Putnam Price Group
Duane Jonlin	City of Seattle
Dale Horton	NCAT
Sharon Patterson	EcoEdge
Chuck Murray	WA State Dept. of Commerce
Kevin Van Den Wymelenberg	University of Oregon
Christopher Meek	University of Washington
Kim Hughes	NEEA
John Jennings	NEEA
Ken Baker	NEEA
Steve Phoutrides	NEEA
BJ Moghadam	NEEA
Emily Moore	NEEA

# Memorandum – Agenda item (Tier 1)

January 10, 2017



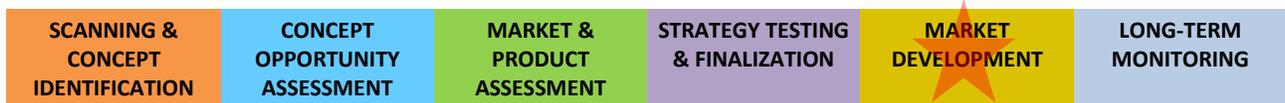
TO: Commercial Advisory Committee (CAC)  
FROM: Sepideh Rezania, Senior Manager  
SUBJECT: Commercial Real Estate Infrastructure Program Update

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## PROGRAM OVERVIEW

This NEEA “infrastructure” program will deliver market resources (tools, training and best practices) to accelerate energy efficiency adoption and utility program participation by the commercial real estate (CRE) industry. The program incorporates the building renewal tool of the prior Existing Building Renewal Initiative to drive deep energy retrofits. The program will address key market barriers: C-Suite market actors don’t perceive the business case for energy efficiency; a “cluttered” market of undifferentiated offerings; and tools not segmented for key CRE audiences. NEEA will drive demand to its market resources through strategic partnerships with the region’s utilities, trade associations, municipalities, state energy offices, NGOs, and corporate-level market partners. Expected outcomes are continuous energy efficiency improvement and utility program participation by the CRE market. The target market is more than 600 million square feet of leased commercial office, warehouse and big-box retail. This represents a 20-year regional savings potential of approximately 129 aMW from replacement, retrofit and energy management measures. Target audiences are building owners, property managers, engineers and operators, service providers, and tenants.

## Initiative Lifecycle Status



## What You Need to Know

In 2016, this infrastructure program completed a utility pilot of Spark with Energy Trust of Oregon, supported City of Portland Benchmarking efforts, and provided market trainings and resources via Betterbricks.com.

In 2017, we intend to focus on the following:

- 1- **Spark tool:** Creating market awareness through trade associations and enhancing lead generation for the utility programs.
- 2- **Benchmarking:** Coordinating with City of Portland and Energy Trust of Oregon on creating opportunities for commercial building customers who want to improve their scores. The program will also support City of Seattle’s building tune-up program by coordinating Spark outreach and training.
- 3- **Market trainings:** Providing BOMA BEEP 2.0 in-person trainings and four market focused webinars on topics identified by the target audience through surveys.
- 4- **Navigators:** Launching on Betterbricks.com in Q3, allowing the target audience to pick the right tool and resource based on where their building is in its lifecycle.

## Guidance requested

We would like to get your advice on:

- 1- How else can we enhance the market decision maker connection to Utility programs?
- 2- How best to measure the success of this infrastructure program?

# Memorandum – *Informational (Tier 2)*



January 10, 2016

TO: Commercial Advisory Committee (CAC)  
FROM: Anne Curran, Sr. Program Manager  
SUBJECT: Luminaire Level Lighting Controls Update

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## **Program Description**

The Luminaire Level Lighting Controls (LLLC) program envisions that sensors and controls embedded in luminaires will become the standard practice for commercial buildings. To get there, we focus on creating a clear product specification that leverages market trends toward solid state lighting (SSL), so that we can communicate a value proposition that leads to high market adoption and ultimately incorporation in codes.

## **Recent Progress**

The Regional Technical Forum (RTF) approved its revised non-residential lighting calculator protocol to include LLLC as a controls measure option. This provides a key foundational element for future inclusion of LLLC in utility pilots and programs by enabling utilities to more easily support savings claims for LLLC installations.

Savings attributed to LLLC within the RTF lighting calculator is a reduction in hours from 35%-50%, depending on the space type chosen. As the LLLC Program compiles additional data on savings, we will work with the RTF to adjust the savings rates. At this time, we believe the savings that was incorporated in the calculator to be conservative.

The LLLC Specification administered by the Design Lights Consortium continues to gain market acceptance. Ten manufacturers have adopted the specification with thirteen controls systems now designated LLLC on the Qualified Products List. The supply of LLLC controls has expanded dramatically over the last year.

## **The Ask**

Utility programs play a key role in promoting LLLC and fostering market demand. The LLLC Program believes the breadth of product now available in the market combined with the RTF's recent decision to include LLLC in its calculator can serve to open up additional near term possibilities to advance LLLC adoption. The LLLC Program Manager will continue to reach out individually to utility lighting program managers to explore what utility programs can do in 2017 on implementing pilots, promoting LLLC through existing programs and/or collaborating to bring installer training to utility trade allies.

## **Program Lifecycle Status**



# Memorandum – Informational (Tier 2)



January 10, 2016

TO: Commercial Advisory Committee (CAC)

FROM: Kim Hughes, Senior Initiative Manager – [khughes@neea.org](mailto:khughes@neea.org); 503-688-5467

SUBJECT: Building Operator Certification Expansion (BOC E) Initiative – Transition March 2017

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This memo summarizes BOC E initiative progress in Montana and Idaho, through the final 12 months of market intervention.

## **INITIATIVE OVERVIEW AND PROGRESS:**

BOC E’s objective is to accelerate the market adoption of high performance operation and maintenance of commercial buildings, by creating market demand and increasing the supply of BOC-certified building operators. The target market is operating engineers and building technicians working in northwest commercial and institutional facilities. BOC-credentialed operators serve the K-12, government, higher education, healthcare, commercial real estate, hospitality, and manufacturing sectors.

NEEA is collaborating with the national administrator of BOC, Northwest Energy Efficiency Council (NEEC) and the Montana/Idaho BOC licensed provider, Intermountain Building Operators Association ([IBOA](#)) to create market demand in Montana and Idaho. The creative for the campaign is customizable for utilities to use their logos when promoting the BOC to customers. Click [here](#) for the latest Montana case studies demonstrating employer and operator business cases for the credential and [here](#) for upcoming BOC Level I and II courses and Tech Talks.

Additionally, NEEA is supporting IBOA to expand its organizational and administrative capacity to serve market stakeholders in 2017 and beyond. In 2016 IBOA successfully offered six BOC courses in its Idaho and Montana territory, serving 85 new building operators. This represents a 30% higher than average market penetration for BOC licensed partners. IBOA secured sponsorship agreements with its primary sponsors in Idaho, Montana and Utah for 2017 BOC, contributing toward IBOA’s financial self-sufficiency goals.

IBOA, in partnership with NorthWestern Energy, completed the first BOC blended learning course in IBOA’s territory, held in Butte, MT in August 2016. The course leverages NEEA’s BOC-E initiative to address travel and time barriers associated with Montana’s large geography and sparse population. The evaluation noted that students are ready and able to be successful with online learning. IBOA participates in the ongoing BOC Utility Work Group through biannual webinars, promoting the regional BOC/Utility Partnership [Plan](#) to drive demand for utility EE programs and projects, and build market demand for BOC.

## **INITIATIVE LIFECYCLE STATUS:**



## **EFFECTIVE COORDINATION OF BOC AND UTILITY PROGRAMS:**

Utilities are marketing BOC to their customers and presenting their energy efficiency incentives and programs during BOC classes, engaging in multi-year sponsorships with BOC and recommending or requiring BOC of customers participating in specific EE programs and incentives. BOC also serves many utilities’ training needs for project staff, resource conservation managers, and others with whom the utility partners for their energy efficiency efforts.

# Memorandum – Informational (Tier 2)



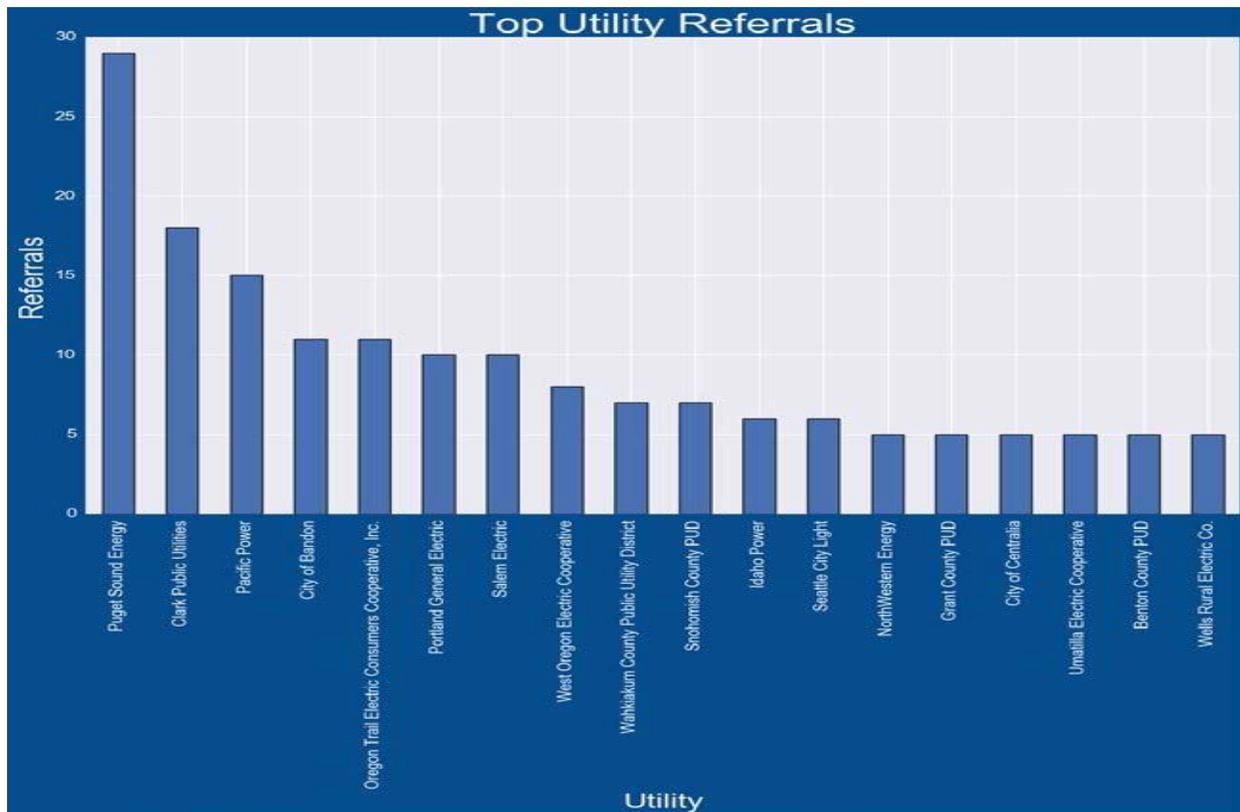
January 10, 2017

TO: Commercial Advisory Committee (CAC)  
FROM: Stacy Blumberg, Senior Manager, Marketing  
SUBJECT: Northwest Lighting Network Update

The [Northwest Lighting Network](#) website is a regional resource for lighting trade allies. The goals of the website are:

- Provide resources, tools, and information about energy efficient lighting technologies and projects
- Connect lighting professionals with utility trade ally networks and programs
- Increase awareness of and attendance at regional lighting trainings

In 2016, NEEA updated the Northwest Lighting Network (NWLN) to do a better job of driving visitors to the site to utility program websites. Due to these efforts, clicks from NWLN to utility websites rose from **51** in 2015 to **245** in 2016. A graph of the top utility referrals is below:



At the end of 2016, NEEA completed an audit of NWLN to determine the focus for 2017 updates to the site. The Tools page on the site provides direct access to only a limited number of the site’s tools and resources. Therefore, the focus in 2017 is to tag all of the content on the site and make it easily accessible from the Tools page. In addition to the redesign of the Tools page, NEEA plans to make some back end upgrades to the site that should improve load time and improve the site’s visibility to search engines.

We are always looking for new resources to include on NWLN. If you have any lighting tools, resources, case studies, etc. or if you have suggestions or questions about the site, please email [sblumberg@neea.org](mailto:sblumberg@neea.org).

# Memorandum – *Informational (Tier 2)*



January 10, 2017

TO: Commercial Advisory Committee (CAC)  
FROM: Ken Baker, Senior Manager – Codes & Standards  
SUBJECT: 2018 International Energy Conservation Code Webinar

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During a recent meeting of utility stakeholders who are helping to design the Commercial Code Enhancement Initiative, NEEA was asked to present, in webinar, the recently developed 2018 International Energy Conservation Code. This session will highlight both residential and commercial changes to the 2018 IECC providing utility program staff a view of new energy code measures Northwest states will likely adopt over the next three years.

The webinars will be live with Q&A available via the on line chat box. The sessions will be recorded and posted to the NEEA public code page for viewing by those that cannot make the live webinar.

Below are the logistics:

A few weeks ago the International Code Council made final the 2018 International Energy Conservation Code. This code will be published and available for state or jurisdiction adoption sometime in mid-2017. These sessions were developed to inform Northwest utilities about changes in the code that may affect their programs.

Please register for the 2018 IECC Residential and Commercial Code Change webinar on Jan 25, 2017 9:00 AM PST at:

<https://attendee.gotowebinar.com/register/3311816264044369410>

After registering, you will receive a confirmation email containing information about joining the webinar.

The Residential session will begin at 9 a.m. PST, Commercial at 10 a.m. PST.

Please share this information at your discretion.

Please call or email me with questions. [kbaker@neea.org](mailto:kbaker@neea.org) 208-861-5736

# Memorandum – *Informational (Tier 2)*



January 10, 2017

TO: Commercial Advisory Committee (CAC)  
FROM: Emily Moore, Senior Manager, Strategic Markets  
Debbie Driscoll, Strategic Market Manager, Commercial Lighting  
SUBJECT: Update on Regional Strategic Market Planning

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NEEA's 2015-19 Business Plan identifies strategic markets, or those in which a coordinated regional strategy can deliver the highest value to the region and maximize cost-effective, long-term energy efficiency opportunities. The Plan also calls for NEEA to facilitate a regional process to develop and evolve comprehensive Regional Strategic Market Plans (RSMP) that identify common goals and define roles and responsibilities. This memo provides a brief update on the RSMPs underway.

## **1. Commercial & Industrial Lighting: Approach for the first Strategy Review and Update**

### **What You Need to Know**

After one year of implementation, the C+I Lighting Steering Committee is reviewing progress and identifying any needed revisions to the Plan, which will be shared with RPAC for input and approval during its Q1-2017 meeting.

### **Additional Detail**

A key aspect of RSMP is the periodic review of our progress, the Plan's relevance to market conditions, and its adaptability to market changes. Since the Q3-2015 launch of the [C+I Lighting Regional Strategic Market Plan](#), the Steering Committee has met quarterly to review progress and provide strategic direction, and progress has been shared via [Quarterly Progress Updates](#) and various regional forums.

Key objectives of the Strategy Review:

- Review progress and assess key learnings: *What's changing as a result of our collaboration?*
- Identify any needed revisions: *Has anything changed that requires us to adjust the Plan?*
- Provide focus for the next implementation phase: *What should we prioritize our regional resources on?*

To meet these objectives, the Steering Committee has assessed progress and learning, conducted a regional stakeholder survey, and held a work session with strategy leads and key contributors on January 6. Outcomes from the work session will be shared with the Lighting Program Manager Work Group on January 18 and recommendations will be taken to RPAC on February 7.

## **2. Commercial New Construction: Needs Assessment for Regional Strategy**

### **What You Need to Know**

In Q2 2017, RPAC will revisit the scope, approach and timeline for the CNC regional market strategy. To prepare for the discussion, NEEA staff, with support from RPAC co-chairs, Brent Barclay (BPA) and Larry Blaufus (Clark Public Utilities), will conduct a high-level needs assessment for a regional strategy, aiming to identify a few key focus areas and an approach that best utilizes our limited regional resources.

### **Additional Detail**

At its Q3-2016 meeting, RPAC agreed that the issues regarding roles in the CNC market don't feel as pronounced as in [Lighting](#) and [Consumer Products](#), and may not warrant the urgency or same level of comprehensiveness for regional strategy. RPAC also raised concern about diverting resources from the two plans underway. Before beginning another strategic market planning process, RPAC agreed we should consider further the potential and key gaps, and prioritize a few key focus areas. NEEA staff, with support from RPAC co-chairs, are working closely with NEEA's Commercial Code Enhancement team's initiative design process to further assess regional strategy needs and will propose a more refined scope, approach and timeline to RPAC in Q2 2017.