



**Energy Efficiency Board  
Commercial & Industrial Committee Meeting Minutes  
Webinar only**

**Tuesday October 13, 2020**

1:00 – 3:30 PM

Meeting Materials in Box.com: <https://app.box.com/s/ybm8xmqeykhqbqql0h54nfv9i1s6g6oj>

1. In attendance: Amanda De Vito-Trinsey, Amanda Gill, Dan Mellinger, Donna Wells, Elizabeth Murphy, Gabe Arnold, George Lawrence, Jack Traver, John Kibbee, Jordan Schellens, Michael Doucette, Neil Beup, Amanda Fargo-Johnson, Brandon Mark, Brendan Thomas, Dave McIntosh, Glenn Reed, Joel Kopylec, Philip Mosenthal, Linda King
2. Lighting Updates  
Internet of Things (IoT) Lighting Challenge, program overview – Gabe Arnold, Pacific Northwest National Lab.

Mr. Arnold described a new US Department of Energy (USDOE) Program (IoT Upgradeable Lighting Challenge) challenging industry and lighting manufacturers to develop capability to upgrade the future of sensors and control of IoT applications. Often fixtures have to be replaced rather than upgraded with most manufacturing systems being different. By bringing together users and manufactures definitions would be set for upgradable technology requirements; providing manufactures recognition for their solutions encouraging the market to adopt it. This is similar to the 2012 Rooftop Challenge and the Wireless Submeter Challenge from USDOE.

Five components are required: meet DLC (high efficacy); upgradable features; standardized interface; standardize sensor port; and, an affordable price component (<\$20). Data would be pre-programmed in the factory; limit errors and reduce installation time and costs; and, predict maintenance and monitor performance. Other benefits are UV lighting, tracking population of rooms, etc. The program launch is January 2021 with winners announced the Summer of 2021.

A discussion ensued about how this could be used by a utility and impact the future of lighting controls, HVAC and information management systems. Mr. Arnold responded utilities could incentivize this. Mr. Arnold responded new case studies are coming from US DOE on tying controls with lighting and HVAC system zones.

- a. IoT Lighting Challenge in Connecticut – Michael Doucette, UI  
Mr. Doucette spoke about utility CL&M responsibilities to customers consists of: staying current on services, products and energy efficiency; advocate Q&A with customers; assess viable solutions; be an active listener and recognize needs and opportunities for improvement. Motivating customers to take on new technology was discussed. Many customers' motivations go beyond energy savings to include integration with other building systems including directional lights or sensor occupancy. Typical lighting program approaches include predicting future savings from a snapshot of data, validation from third party studies and heat from lighting is used to predict cooling loads.

Evolving programs to reduce load management include: responding to markets with real time information; use on-going data rather than post-studies and use pay for performance incentive models.

Information is the key to strong specifications and standards enabling benefits of IoT. Pay for performance models require accurate and reliable data to validate performance and enable computer analytics.

b. Updated DLC Study on savings from networked controls – Dan Mellinger, EEB Consultant

Mr. Mellinger discussed a recently published 2020 study by Design Lights Consortium. In 2017, expected savings to be 47% from Networked Lighting Controls. In the 2020 study with more buildings, data and Networked Lighting Control (NLC) average savings was 49% and finds energy efficiency programs should include NLC monitoring with incentives for data sharing. Proper programming and commissioning is critical to achieving energy savings. High-end trim where network/controls set the light level at installation and commissioning to IES recommendations or the building facility manager wants. The savings comes from the Luminaire-Level Lighting Controls (LLLC). Recommendations for Connecticut from Mr. Mellinger consist of: 1) use 49% control savings for networked lighting controls when project-specific data are not available 2) consider revising the upstream program to emphasize LLLC; 3) Consider requiring/incenting energy monitoring; and, 4) Use the DLC study to inform lighting hours of operation assumptions.

3. DEEP feedback on Order 18 Metrics - DEEP

Ms. Wells stated she would provide emailed feedback on the quarterly reports to the utilities individually, rather than on the call today. Ms. Murphy will provide enhancements to the report out to Ms. Wells.

4. Equity Metric Discussion – All

Mr. Lawrence started the conversation by reminding the group of the goal to defining an equity metric in for the 2021 plan update. Mr. Beup followed up by saying broader feedback would be provided to the Board for consideration. Mr. Kibbee from Eversource clarified that strategically targeted high-need communities and disengaged populations as defined by the Connecticut DECD (aka the Distressed Communities List) are where commercial and industrial accounts will be flagged. Companies in those areas that are not in need of additional assistance would not have an additional focus. Historically customers in arrears and non-participating customer would be looked at for additional assistance.

Ms. Murphy noted the statutory language drives the mission of UI along with the equitable conversation. C&I incentives rolled out a Micro Business Energy Advantage Program targeting small users negatively impacted by the pandemic. Equitable distribution reports show funding coming in from the census tracks for small and large load customers. Connecticut DECD's list of distressed communities is also a focus for programs as well as Clean Energy Community programs.

Mr. Beup followed up with asking how equity will be defined moving forward, rather than describing existing programs. Mr. Kibbee stated it would help new customers to provide additional help with energy savings during their first five years rather than waiting until practices have been inefficient for a time. Also, a data driven discussion is necessary to help companies that need assistance the most and Eversource would want to be a part of that discussion. Ms. Murphy agreed data driven discussions are important and UI is eager to participate. Mr. Beup requested companies come back with data demonstrating equity gaps. Mr. Lawrence suggested listing customers who have not participated in energy efficiency programs in the last five years. Some business may not have the required capital for improvements, part of a distressed community or their awareness is limited due to language barriers. Ms. Wells added that the process will take time. In the short-term define equity and long-term address the law or tracking to benefit the ratepayer.

5. 2021 Plan Update – Companies and Consultants Mr. Lawrence went over the following updates: The Energy Conscious Blueprint for new construction will be updated at the November C&I meeting; New virtual commission pilot (UI only); Small Business Energy Advantage and BEA; a new small manufacturer initiative; new agricultural market segment; HVAC modernization pilot with process measures; a new C&I heat pump pilot; new upstream refrigeration incentives, new natural gas active demand reduction pilot (CNG and SCG only); COVID-19 incentive increases will continue to June of 2021 with different tiers of lighting; new Green Professional building skills training (GPRO) and new Sales Force training. Ms. Wells reminded the group that the planned incentives are open for public feedback. Ms. De Vito-Trinsey mentioned her members may comment on the increased incentives.

Mr. Lawrence also showed 2021 Program Savings Document (PSD) changes that include: guidance on how to calculate savings, qualifying equipment, etc.; evaluation of over 500 recommendations for updates to the PSD. Companies are making changes and the intent is to complete the process by the end of 2020. Ms. Wells commented the Evaluation Committee is making progress on the recommendations. Mr. Lawrence also discussed a 2021 Benefit Cost test for C&I electric programs including oil and propane savings, avoided costs and program costs.

- a. 2021 New additions to programs. Mr. Lawrence described 2021 Program Savings Document (PSD) changes that include: guidance on how to calculate savings, qualifying equipment, etc. with evaluators making over 500 recommendations for updates to the PSD. Companies are making changes and the intent is to complete the process by the end of 2020. Ms. Wells commented the Evaluation Committee is making progress on the recommendations.
  - b. Review C&I planned savings, costs, participation. Mr. Lawrence also discussed a 2021 Benefit Cost test for C&I electric programs including oil and propane savings, avoided costs and program costs. Codes and Standards are being investigated. The Companies' C&I electric evaluations had several favorable evaluations on the electric side and on the gas side were mixed.
  - c. Discuss Incentives for oil and gas fuel savings. Mr. Lawrence compared March 2019, November 2020 and that delta as effected by COVID-19.
6. Planning for November. Demand storage initiative update and a new construction update as well as additional discussion on equity.

The meeting adjourned at 2:51 pm