

# ***Removing Barriers to Luminaire Level Lighting Controls***

## **Charting the Path for a New Technology**

For almost two decades, Northwest utilities and efficiency organizations have provided their customers with innovative, energy-efficient lighting solutions. But, as lighting has become more efficient, capturing energy savings from upgrades has grown harder. To take the next big leap in lighting efficiency, the region is turning to a new solution: luminaire level lighting controls (LLLCs). These innovative lighting systems combine LEDs with integrated controls and sensors to offer improved building performance and occupant comfort while increasing energy savings.

The alliance's emerging technology efforts identified LLLCs as an emerging trend in lighting and, after conducting pilot tests, worked with national partners to establish a specification and qualified products list for these new products. However, the technology faces some hurdles to widespread adoption, including higher upfront cost and a lack of awareness among customers and contractors. In 2017, NEEA's Luminaire Level Lighting Controls program worked with utilities and energy efficiency organizations to better understand these barriers and prepare the market for this next evolution in lighting.

## **Preparing the Market for Innovative Lighting Solutions**

For LLLCs to be successful, it is crucial that customers have a good experience with these new products. In 2017, the alliance worked closely with national lighting experts to develop customized trade ally training, and then partnered with Idaho Power to pilot and refine the curriculum.

“The feedback that we got from the Luminaire Level Lighting Control training was incredible—the contractors said it was one of the most valuable classes we have ever brought them.” - Shelley Martin, Program Specialist, Idaho Power

“Contractors won't sell something they're not comfortable with, so education will be make-or-break when it comes to the success of this technology,” said Shelley Martin, Idaho Power program specialist. “The feedback that we got from the training was incredible—the contractors said it was one of the most valuable classes we've ever brought them.” Following the successful training pilot, the alliance collaborated with Snohomish County PUD to offer the training to its trade ally network.



## Reducing Costs for Early Adopters

To encourage their customers to adopt LLLC technology, Puget Sound Energy took the important step of launching the Northwest's first incentives for the product in 2017. "Where it's right for their space, we want to encourage our customers to choose Luminaire Level Lighting Controls because that's where they'll get the best experience and the most energy savings," said Michael Lane, Business Energy Supervisor for Puget Sound Energy. "To do that, our incentive program covers most of the cost of the control module."

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Another boost for LLLC technology came when Bonneville Power Administration (BPA) incorporated network lighting controls into its lighting calculator for the first time, enabling BPA customer utilities across the region to calculate energy savings and create LLLC incentive programs. Energy Trust of Oregon also launched its own LLLC pilot to help the region collect additional data. The lessons learned from these first utility efforts will help the region understand how prepared the market is to embrace LLLCs and will inform future strategies to help reduce the cost for customers.

## Readying the Region for the Next Step in Lighting

Working together, the region is priming the market for a high-impact, reliable and cost-effective new approach to saving energy in the commercial and industrial lighting market. In 2018, the alliance will continue ramping up its LLLC program by encouraging more qualified products, supporting utility program development and driving awareness and education with supply-chain and building influencers and decision-makers.

**TOGETHER** *We Are Transforming the Northwest*

