“Room Controls” Summary from the 2022 DLC Summit

What was discussed

The DLC Networked Lighting Control Qualified Products List (NLC QPL) qualifies systems based on their capabilities. Due to this policy, the administration of prescriptive efficiency incentives is complicated by the fact that each project may or may not include or utilize any of these capabilities. To be used in prescriptive programs, NLCs need simplicity and scalability. Market adoption requires simple incentive programs that are easily administered and scalable, supporting lighting control projects that are easily specified, ordered, installed, configured, verified, and operated.

A qualified list of room control “bundles,” or groups of interoperable components, that enable a specific group of capabilities, along with project reporting guidelines, would ensure that capabilities are utilized and savings are realized. A report describing a conforming project could be eligible for prescriptive incentives from DLC members. Facility managers and efficiency programs could use the sequence of operations in the report to verify that the project works as planned.

High-level, key takeaways

The breakout groups identified a range of features that should be required for every project participating in a small-scale networked lighting controls program. Manual control, occupancy sensing, continuous dimming were reported as high importance from all groups with daylight harvesting, high-end trim and plug load control trailing close behind. However, all groups identified the highest priorities as simple installation and commissioning. Wireless controls are preferable to wired for installation purposes, and all groups reported a preference for out-of-the-box settings with automatic calibration that would provide built-in savings with features that are opt-out instead of opt-in.

Importance was placed on secondary features that would enable future scalability such as energy monitoring, scheduling, color tuning/circadian lighting, cloud communication, and interoperability. Energy monitoring is of special interest to utilities as it allows a pathway to measure actual savings but, to implement energy monitoring as part of any program, a standardized method of reporting would be a necessity.

Some attendees were open to the idea of placing a building size limit on project qualification, but most thought that building use or utility customer size might be better metrics, particularly in the retrofit market. Despite some attendees expressing opposition to including outdoor projects in the program, most agreed that covering as many project types as possible is important. Parking Garages were singled out as an unusual use case that should be included in any program offering.

Clear communication, standardized definitions, and effective education were reported from all groups as key components required for garnering their confidence in a small-scale networked lighting controls program. All groups expressed a desire to see a two-to-three-year return on investment, which would help to differentiate a small-scale networked lighting control system from other more high-end systems which tend to be more complex.

Next steps

1. DLC will be sure to include a clear glossary section in the DLC6 Technical Requirements
2. Support standards development processes around energy reporting
3. Continue development of tools to support the implementation of prescriptive incentives for small-scale networked lighting control systems.