



COMMERCIAL LIGHTING SURVEY Results Presented to Xcel Energy | April 6, 2022

Meeting Debrief & Follow Up | MAY 11, 2022

LIGHTING ACTION GROUP CO-CHAIRS

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Recap – Follow up Discussions from the Xcel Energy and LAG Meeting Held April 6

Meeting Summary: "Thank you all (Xcel Energy Program Managers) for participating for a great meeting! We're excited to find that our Survey Results had good insights and align in many areas where we all perceive the lighting market is going with incentive opportunities. Especially, as we move into the future of Xcel Energy's BE, EE, DR, and Electrification goals. The Lighting Action Group is very encouraged and excited to collaborate with Xcel Energy going forward."

Patricia Rothwell, EEBC Executive Director

Review PPT: COMMERCIAL LIGHTING SURVEY

Results | Presented to Xcel Energy April 6, 2022

Lighting Action Group & Xcel Energy Meeting

Xcel Energy Program Managers:

Macauley, Robert J <robert.macauley@xcelenergy.com>; Sherman, Kim <Kim.Sherman@xcelenergy.com>; Currie, Madison A <Madison.A.Currie@xcelenergy.com>, Romero, Paige A <Paige.Romero@xcelenergy.com>











Next Steps & Requests Meeting Recap Emails

EMAIL SENT April 20, 2022 All Meeting Attendees

LAG Requests to Xcel Energy:

Please review of all Survey responses, rank them in order of interest and provide feedback based on:

- What about each ranking interests you or where you see future potential for incentives?
 - Rank which ideas are a priority in your next 2023 and/or 2024-25 DSM Plan?
- Identify which ideas Xcel Energy anticipates or is prioritizing for Beneficial Electrification goal support specifically?
- What are the top 5 answers/ideas the LAG industries could focus on to support Xcel's program success as well as to grow their business?

Xcel Energy Requests To LAG — from Kim Sherman, Xcel Energy:

- "How can your group give more details on costs we struggle with accurate information?"
 - For example, "Provide examples where wattages are too low in rebates. Include costs and labor, if possible."
- EEBC asks: To consider how to gather this data following Anti-trust Laws.
 Can Xcel Energy ask their legal team?
- "Ideas on how can elevate Horticulture Rebates with contractors?"











Next Steps & Requests Meeting Recap Emails

EMAIL April 20, 2022, All Meeting Attendees Continued...

LAG Request To Xcel Energy:

- How can EEBC/LAG be included in the Lighting Programs' first announcements? EEBC and some LAG members were not included in the recent announcement made at the meeting.
- What is the best way to get EEBC/LAG members prioritized to receive announcements. EEBC will also share them with EEBC members in our newsletter.

Xcel Energy Request to LAG | For Future Meetings:

- Invite Xcel to share their responses and discuss them at a follow-on meeting. Perhaps quarterly meeting check-in, brainstorming sessions.
- Xcel would like to bounce DSM program lighting ideas/proposals off the group in future meetings.











Further Requests Meeting Recap Emails - A Conversation

EMAIL May 2, 2022

REQUEST: From Xcel Energy

Paige Romero-Freeland: Something that I think would be helpful for us right now would be more info/examples on the comments about 'limitations on prescriptive program's inflexibility noted on slide 8. The items you noted were, "relying on DLC classifications when the same fixture can have multiple application" and "wattages below prescriptive program minimum for category".

If possible, could you please share some specific examples for both of these items so we can look into these more? For the wattage minimums if you could share which measures you most commonly run into this issue with specifically that would be really helpful.

Also, regarding controls are there any additional tools or information that you can think of that Xcel could create that would help highlight the importance of controls technology to customers and in turn help trade partners sell controls to their customers

Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group











Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group

EMAIL May 2, 2022

RESPONSE: From LAG Co-chair

Mike Bryant: If a fixture is in the DLC under a particular category that gets prescriptive rebates, I would strongly suggest that the first tier of rebate amounts have no minimum wattage. Because fixtures are getting increasingly efficient, the same lumen output is being achieved by fixtures that fall below these minimums. Examples:

- LED downlight fixtures: rather than min of 8W-25W required to receive a rebate, just revise lower tier to "up to 25W." Even if there are none now that fall below 8W, next year there may be some at 6W or 7W, etc.
- LED high/low bay fixtures and retrofits: same story. Now min must be 75W, but if you look at the DLC QPL, & filter wattage <75) you'll see many fixtures with primary use of High Bay meeting the definition required by Prescriptive rebates, but that use less than 75W. I stumbled on a specific: Alphalite ILL-8H/840, DLC primary use "Low-Bay Luminaires for Commercial and Industrial Buildings," but it's only 67W.











Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group

- Right now, I have a community with HID area lights on 14' posts. I have a perfect LED area light that is DLC premium and uses only 40W, but this falls below the min. of 45W and so technically would be ineligible for any rebate, even with a -10% allowance (which would be 40.5W).
- Same for LED canopies, parking garage fixtures, wall packs, linear direct ambients, anything with a min. wattage...
 - It seems nonsensical and counterproductive to basically create an incentive for people to buy a fixture with more wattage than is needed (or a less efficient model) in order to secure a rebate. As efficiencies increase (and so too do the price of the fixtures) with DLC Premium, you encounter the paradox of being able to offer a product that delivers the needed light, costs more, uses less energy, and receives no rebate. The irony and unintended consequence is that you use a less-efficient, older model, which usually costs less, but get the rebate.
 - Xcel's dilemma is that it writes a fixed prescriptive rebate while the technology keeps changing and improving, so the simplest solution seems to be get rid of any minimum wattage associated with rebates.











Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group

- For a good example of "relying on DLC classifications when the same fixture can have multiple application" let's consider a warehouse with 8' fluorescent strips that serve as high bays. One could use high wattage UFO high bays and easily get a rebate, but what if there is rigid conduit attached to the ends of the strips, and using UFOs would mean needing to rewire everything which would cost so much more in installation and materials. Instead, it makes more sense to use 8' LED fixtures. If you use Alphalite's ILL-8VH(90S)/835 direct linear ambient (DLA), 90W, 11,520lm you can get the \$50 High Bay rebate because Alphalite paid to have it listed as "High-Bay Luminaires for Commercial and Industrial Buildings" as well as as a DLA. But if you use Westgate's LSS-8FT-90W-MCTP, a functionally equivalent fixture and even brighter (90W, 12,500lm), you can only get the \$25 DLA rebate because it is not cross-listed as a High Bay, even if it can serve the same purpose equally well. Perhaps you can make the case as a non-DLC and get the \$37.50 rebate, but who wants to risk that this case is rejected, and they only get \$25? This is maddening to an Xcel energy partner/contractor.
- Another example: Stairwell fixtures—Consider a stairwell with basic T8 strips that operates 24/7. You can
 - retrofit to take LED T8s and get the instant rebate for T8s
 - Install an integrated LED DLA, and get \$15/fixture
 - Install an integrated LED DLA that happens to also be cross-listed as a "stairwell/passageway luminaire." And get \$40 for the same fixture!











Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group

• Another example that ties several things together: MaxLite's CPL20BUC40 is in DLC under "Fuel Pump Canopy Luminaires." It is 20W, 2375lm, DLC Premium, and receives no rebate because it is < 25W. Its DLC Premium sister, CPL30BUC40, is a 30W model with primary use "Fuel Pump Canopy Luminaires" and would get a meager \$20 rebate. It could work as a parking garage fixture, but is not listed as such, so it can't get the \$115 rebate. Conveniently, there is yet another sister model, CPL30BUP40, that happens to be listed as a "Parking Garage Luminaire," which is essentially the same fixture, and therefore can get the \$115 rebate if installed in an eligible parking structure. Sadly the 20W CPL20BUP40, also listed as a Parking Garage Luminaire, strikes out because it's <25W.</p>











Paige Romero-Freeland, Xcel Energy & Mike Bryant, Lighting Action Group

Paige Romero-Freeland: Also, regarding controls are there any additional tools or information that you can think of that Xcel could create that would help highlight the importance of controls technology to customers and in turn help trade partners sell controls to their customers?

Mike Bryant: On the matter of controls, I'm sure Scot and I could speak at length on how Xcel might engage and entice customers on the advantages to adding them. However, I think the rebates for both standalone and network controls are too small relative to their cost to promote adoption. I can sell some standalones for stairwell fixtures only because they will reduce energy use by 90% with bi-level dimming in rarely used stairwells, which justifies their cost. It's the energy savings that makes the difference in this case, but were the energy savings for an occ or daylight harvesting sensor to only save 10%-20% for a location, getting 5c-15c/watt on a 30W fixture will never pay for the added cost of the controls. The importance for Xcel is the potential for additional energy savings, which could be meaningful in the aggregate, esp. at peak, but not at the micro-level for the customer. From the customer's perspective, the biggest advantage is being able to custom-tune the fixture and light output to the particular needs of a space, adding visual comfort, etc. But the high cost of network controls and the proportionally small amount of rebates available for them is a huge barrier to adoption. Either the product costs would have to come down significantly, or rebates increase significantly to move that needle, unless the customer has deep pockets and money to burn for that extra functionality.









