

➤ **Summary of 60-Day Notice: Lighting Efficiency**

The following 60-Day Notice summarizes Public Service Company of Colorado's (the "Company") action to update the deemed savings, technical assumptions, and measure rebates in the Lighting Efficiency product.

The Company is including with this Notice:

- Redlined product write-up;
- Redlined Deemed Savings worksheets;
- Updated Technical Assumptions worksheets; and
- Updated cost-benefit analyses.

A copy of this notice is available on our website at:

https://www.xcelenergy.com/company/rates_and_regulations/filings/colorado_demand-side_management

Indoor horticultural grow lighting measure

The horticultural lighting market has grown over the past few years with multiple manufacturers, products and models now available. Grow customers have focused on production related issues such as crop scheduling, nutrition and pest control rather than energy efficient lighting. The Company proposes to include a new indoor horticultural grow lighting rebate within the Lighting Efficiency product to motivate customers to make the switch to LED energy efficient lighting that will reduce upfront investment costs and decrease operating expenses over time.

The Company will offer commercial customers a prescriptive rebate for retrofit and new construction horticultural grow lighting projects. Rebates will be available for vegetable, microgreen and cannabis grow lighting projects. New proposed grow lighting equipment must be LED and equipment must be classified for grow lighting with the photon flux efficacy rating for the equipment noted on the equipment specification sheets.

The Company utilized data from numerous indoor horticultural lighting projects submitted through the Colorado Custom Efficiency product offering to create the proposed energy savings and cost assumptions.

A technical qualified products list created by the DesignLights Consortium ("DLC") for horticultural lighting provides a tool for utilities to validate products and energy savings. There is added value in the testing and certification required for a product to be listed by the DLC. Thus, rebates will be a tiered rebate structure with non-DLC measures receiving a rebate equal to 75% of the comparable DLC listed measure. To foster adoption the Company designed the measure to be easy to use, with rebates based on a dollar per proposed watt basis, at \$0.25 per watt. This rebate amount is comparable to what was provided to customers through the Custom Efficiency offering while making it easier for customers to participate through the prescriptive rebate channel.

The Company will utilize a 92% Net-to-Gross Ratio ("NTGR") for this rebate measure specifically. The 92% NTGR will be consistent with the prospective NTGR recommended for prescriptive lighting installed via the Small Business Energy Solutions program in the 2020

program evaluation. The 2020 Small Business evaluation findings noted that while the lighting market is moving exclusively to LEDs, small businesses have been slower to install new lighting measures with low free-ridership ratio driven by over two thirds of participating customers in the small business lighting program reporting that they would not have installed the equipment without the product. While some of the facilities that are participating in the proposed measure will meet the definition of a small business, the Company finds two compelling reasons for special treatment of this segment.

First, similar to the small business market, reaching customers within the indoor horticultural lighting segment and influencing customers to make the switch to energy efficient LED lighting will require additional resources, efforts, and spend from the Company. The Company will provide horticulture customers with case studies, marketing collateral, educational tools, and continuous training for both customers and trade partners to encourage adoption and highlight the value proposition of converting to energy efficient lighting.

Second, the customized approach to working with trade partners to help them better understand and convey the benefits of efficient agricultural lighting is expected to create greater influence in the marketplace. The Company will retain a separate NTG for this segment-specific offering until the first evaluation of Lighting Efficiency after full implementation, i.e. the current evaluation of the Lighting Efficiency product will not assess the NTG of this offering because the customer sample used for the 2022 Comprehensive Evaluation research will primarily be 2021 participants.

Improvements to Lighting Controls

The Company is improving and expanding the lighting controls rebates to motivate the market and position the product for future success. This includes adding standalone and networked rebates for integrated luminaire level lighting controls (“LLLC”), reducing the cost of existing controls and differentiating the lifetime between LLLCs and external lighting controls.

Networked Lighting Controls

The Company is expanding the Networked Lighting Controls to include integrated LLLC using the same parameters as the existing offering. In addition, the Company will add a tiered rebate structure with non-DLC measures receiving a rebate equal to 75% of the comparable DLC listed measure.

High End Trim

The DLC defines high-end trim as “The capability to set the maximum light output to a less-than maximum state of an individual or group of luminaires at the time of installation or commissioning.” The addition of this measure will offer customers who do not qualify for networked lighting controls additional opportunities to save energy by reducing their fixture power from 100% to a minimum of 80% of the original wattage. The high-end trim rebate will mirror the current control rebate offerings and will be based on a dollar per controlled basis at \$0.15 per controlled watt.

Reduced incremental capital costs

The Company is updating the incremental costs of all existing controls rebates. The Company analyzed the equipment costs of products submitted for rebates in 2021 and utilized the Northwest

Energy Efficiency Alliance report on declining luminaire-level lighting control costs to determine that the costs for controls have declined since the 2021-22 DSM Plan was approved. The Company proposes to revise the incremental costs based on this new information.

Lifetime differentiation between standalone and luminaire level lighting controls

The company proposes to add rebates for standalone integrated LLLC. Integrated control equipment provides a longer lifetime as it is part of the fixture. Thus, standalone integrated LLLC will adopt a 15-year measure life and standalone wall or ceiling mounted controls would continue to use a 8-year measure life.

Medium Base (E26) HID Replacement Lamps accepted through the midstream mogul base category

DLC defines mogul-base lamps as E39 and E40 base types. Distributors have seen an increase in sales of E26 base lamps and expressed that adding rebates could motivate additional sales of this product. Distributors have expressed interest in allowing E26 base HID replacement lamps to receive rebates through the mogul base rebate category. The product team collected equipment costs, baseline and proposed savings information from multiple distributors on E26 base lamps and determined that the savings and cost information for these products align with the assumptions used for mogul base lamps. As a result, E26 base lamps will be able to receive prescriptive/midstream rebates through the current mogul base category at non-DLC rebate level.

Table 1: Summary of Forecasted Impacts: Lighting Efficiency

	2022	
	<i>As Filed</i>	<i>Revised per 60-day</i>
Electric Savings (kWh)	93,847,489	102,299,183
Electric Demand Reduction (kW)	14,585	16,350
Budget*	\$8,201,981	\$8,931,996
MTRC Test Ratio	1.74	1.81

*Rebates only. While the anticipated expenditure impacts are forecasted, the Company acknowledges that this Notice does not change the filed budget.