> Summary of 60-Day Notice: Lighting Efficiency

Public Service Company of Colorado ("PSCo" or "the Company") is adding a new measure, LED troffer fixtures, to the Lighting Efficiency, Small Business Lighting and New Construction products in the 2014 DSM Plan. This measure has been evaluated and identified as being cost-effective, with significant market potential and was added via 60-Day Notice to the 2013 DSM Plan in early 2014. This 60-Day Notice includes use of the Designlights Consortium's (DLC's) Qualified Product List (QPL) for LED prescriptive measures that are not ENERGY STAR qualified. The Company is also seeking to transition screw-in LED measures to a midstream distributor instant rebate approach from the current downstream rebate offering. The midstream approach requires ramp-up time before savings can be realized, therefore, the Company seeks to launch this new model by January 1, 2015, or shortly thereafter, within both the Lighting Efficiency and Small Business Lighting products.

The Company proposes this 60-Day Notice to make the following changes:

1. LED Troffer Fixtures

The addition of this measure will align with the changes filed in the Lighting Efficiency 60-Day Notice on Jan 21, 2014 (prior to 2014 DSM Plan approval, during continuation of the 2013 DSM Plan). The Company proposes that LED troffer fixtures continue be available for prescriptive rebates throughout the 2014 calendar year. This measure is for a one-for-one replacement of fluorescent technology in interior spaces of commercial buildings and new construction buildings. The newly installed systems must be on the DLC's QPL. Only qualified new fixtures and retrofit kits that are replacing fluorescent systems will be eligible for rebate. The Company is forecasting these changes will lead to an additional 1.1 GWh and 198 kW in Lighting Efficiency net energy savings during the 2014 calendar year—these assumptions are based on use of an 84 percent net-to-gross (NTG) ratio consistent with the overall Lighting Efficiency product.

	Fixture Type / Size	Replacing	Applicable DSM Products	Prescriptive Rebate Amount
New LED Troffer Fixture	1x4, 2x2, 2x4 Existing buildings, interior only	T12, T8 Fluorescent Fixtures	Retrofit measure within Lighting Efficiency and Small Business Lighting product	\$50 per fixture
Retrofit Kit for LED Troffer fixtures	1x4, 2x2, 2x4 Existing buildings, interior only	T12, T8 Fluorescent Fixtures	Retrofit measure within Lighting Efficiency and Small Business Lighting product	\$30 per fixture
New LED Troffer Fixture	1x4, 2x2, 2x4 New Construction, interior only	N/A	Measure within New Construction product	\$30 per fixture

2. Designlights Consortium Qualified Product List

The Company has partnered with the DLC to provide customers and vendors with a qualified LED product list, indicating eligibility for the following new and existing product measures:

- LED Parking Garage Fixtures
- LED Troffer Fixtures
- LED Exit Signs
- LED Wall Packs
- LED Canopy & Soffit Fixtures
- LED Refrigerated Case Lighting

The Company will be joining more than 60 commercial utility programs in utilizing DLC's QPL to ensure that rebated lighting products have high quality and market-ready commercial LED luminaries. The Company will continue to use the ENERGY STAR® qualified product list as well for interior LED lamps and downlights. ENERGY STAR® has chosen not to expand their product list into advanced LED commercial product categories; therefore, DLC is the qualified product list for these categories.

Additional information about DLC and the QPL can be found at www.designlights.org. This list ENERGY STAR qualified products list can be found here: https://www.energystar.gov/index.cfm?c=product_specs.pt_product_prod_list.

3. Screw-in LED Midstream Instant Rebate Approach

The Company is transitioning screw-in LED measures to a midstream distributor instant rebate to more effectively transform the market and benefit customers by giving them greater access to more energy efficient lighting options. Use of a midstream instant rebate changes the distributor's approach to product stocking, thus increasing energy-efficient product availability.

Validation that the end-use customer is within Xcel Energy electric service territory is completed at the point of sale. The distributor will apply an instant rebate to the retail price to decrease the qualified product cost. The distributor will be required to pass through a percentage of the instant rebate to the customer and display the instant rebate value information on the invoice. The Company is not requiring that a specific percentage of the instant rebate be passed through the distributor to the end use customer, so as to not predetermine the fair market amount (the Company anticipates that this topic may be further discussed during the 2015/2016 DSM Plan proceeding). Furthermore, Xcel Energy is prepared to allocate the instant rebate costs as administration costs pending further discussion of appropriate budget category allocation of midstream incentives during the 2015/2016 DSM Plan proceeding. Based on forecasted expenditures and participation the product will remain cost-effective if approval is not granted to classify instant rebate costs as incentives for purposes of the MTRC. Within the Plan, the Company has proposed that a fraction of the rebate may be treated as a Vendor Incentive (administration cost) and the remainder as a participant incentive, if the fraction of Net Participant costs are greater than the sum of the incremental capital and baseline capital costs, and there is evidence that a portion of the rebate is passed on to program participants. If there is no evidence that a portion of the rebate is passed on to program participants, then the full rebate cost will be captured as an administrative cost. Distributors will provide Xcel Energy with

detailed transaction data enabling quality control and strict oversight of the incentive and equipment tracking. With this data, Xcel Energy will conduct installation site inspections as described below.

Within the Lighting Efficiency and Small Business Lighting products, LED lamp instant rebates will be offered to distributors as a *Business LED Instant Rebate*. Customers will continue to receive the benefit of reduced up-front costs of LEDs, however, they will no longer need to file rebate paperwork or wait to be reimbursed, to receive this benefit. The NTG used for this approach will be deemed and verified through periodic product evaluations.

Midstream Instant Rebate Tiers

Initial midstream instant rebate levels will be targeted at 30% of incremental cost as shown in the table below. As product costs for LED technology are changing rapidly, the Company will make adjustments to the incentive level for each measure to keep pace with the market and maintain the targeted 30 percent of incremental cost for rebate levels. Since this product delivery model enables high visibility into the costs that distributors are charging for various technologies, the Company will be able to dynamically adjust its incentive levels to keep pace with the market. This is essential for keeping up with fast-paced technologies like LEDs, to mitigate the potential of delivering disproportionately high rebates. The initial incentive amounts are shown in the table below.

Screw-in LED Midstream Instant Rebates

Bulb type	Incremental cost (\$)	Target Initial Rebate (\$)	Rebate as % of Incremental Cost
LED Interior Lamp - A Lamps	\$16.17	\$5.00	31%
LED Interior Lamp - PAR20, R20	\$18.83	\$4.00	33%
LED Interior Lamp - PAR30	\$28.17	\$8.00	28%
LED Interior Lamp - BR30	\$20.74	\$8.00	27%
LED Interior Lamp - PAR38	\$29.86	\$4.00	31%
LED Interior Lamp - BR40	\$29.62	\$4.00	30%
LED Interior Lamp - PAR16	\$12.82	\$5.00	30%
LED Interior Lamp - MR16	\$19.30	\$4.00	29%
LED Interior Lamp - GU10	\$16.53	\$5.00	25%
LED Interior Lamp - Decorative (B, BA, Candle)	\$13.94	\$5.00	31%
LED Interior Screw In Fixture Retrofit	\$20.00	\$5.00	27%

M&V Process Midstream Lighting

The M&V process for the midstream component of the Lighting Efficiency/Small Business Lighting products is as follows:

- 1. Participating distributors provide sales reports listing the model, wattage, type, and number of bulbs sold.
- 2. The distributor enters the information into a tracking system and submits monthly reports to the third-party implementer containing the data and the third-party implementer calculates the demand and energy savings using technical assumptions provided by PSCo.

3. The third-party implementer audits the database output by examining and comparing against retailer sales reports. The verification contractor (VC) conducts a field verification of 10% of completed projects; and subsequently the third-party implementer adjusts the wattage and number of bulbs if errors are found and provides the final verified savings for all bulbs for year-end.

Summary of Midstream Instant Rebate Impacts on DSM Lighting Products
Initially, the midstream lighting rebates are anticipated to deliver more than 1 GWh of energy savings in Q1-2015 between the Lighting Efficiency and Small Business Lighting products. The measure's performance is anticipated to improve after ramp-up, at or around three months following launch. The assumptions below are based on an 84 percent NTG ratio for the measure, consistent with the overall Lighting Efficiency product.

Forecasted Q1-2015 Midstream Instant Rebate Achievements	Lighting Efficiency	Small Business Lighting	Total for both Products Combined
Net Gen kW	155	67	222
Net Gen kWh	699,776	300,316	1,000,092
MTRC	1.94	1.63	1.80*
Instant Rebate	\$ 53,482	\$ 22,952	\$76,434
Administration costs	\$ 23,093	\$ 9,910	\$33,003

^{*}Midstream measure MTRC on its own.

60-Day Notice and DSM Plan Implementation

This Notice is to change the 2014 DSM Plan until such time that the 2015/2016 DSM Plan is approved. Therefore, the 2014 avoided cost modeling will be applied to savings achieved prior to 2015/2016 DSM Plan approval. If the Company's cost categorization proposal for midstream rebates is not approved as part of the 2015/2016 DSM Plan these costs will be treated as administration expenses. The Company acknowledges that the content of the 2015/2016 DSM Plan, when approved, will supersede any changes implemented through this Notice.

Included with this Notice, are the following documents:

- Redlined 2014 Lighting Efficiency Product Write-Up
- Additional (New) Deemed Savings Sheets
- Electric Q1-2015 Forecast Summary (new measures only)

These documents can be found on our website at the following link: http://www.xcelenergy.com/About_Us/Rates & Regulations/Regulatory Filings/CO DSM

> Lighting Efficiency Product

A. Description

The Lighting Efficiency product offers prescriptive and custom rebates to Xcel Energy electric business customers who install qualifying energy efficient lighting equipment in existing or new buildings. Rebates are offered to encourage customers to purchase energy efficient lighting by lowering the upfront premium costs associated with this equipment. The product is primarily marketed through our account managers for our large customers. We also work closely with our trade partners, manufacturers' representatives, distributors, and contractors to market the product.

The product's main offerings include the following:

- Prescriptive rebates for products from a pre-defined list of lighting measures that save energy. Typical options include:
 - Replacement of high intensity discharge (HID) fixtures with new fluorescent fixtures;
 - o Light emitting diode (LED) and compact fluorescent lamps and fixtures that replace inefficient systems, including incandescent and HID.
 - o Niche LED measures, including refrigerated case lighting, as well as exterior wall pack, canopy and soffit lighting.
- Custom rebates for energy saving lighting projects that do not fall within the requirements of the prescriptive rebates.
- Study funding is available for customers who have facilities that are under or mis-lit.
 Studies will identify and quantify lighting solutions that include energy saving opportunities.
- The Company will be <u>implementing exploring</u> mid and upstream LED <u>screw-in</u> lamp incentive product models internally and with local manufactures and distributors. If we find the results positive, we will file a 60 Day Notice and move forward with implementation.

The main offerings are described below.

Prescriptive Lighting Rebates

The product offers rebates for qualifying lighting equipment that is more efficient than existing equipment in retrofit situations or more efficient than standard equipment in new construction applications. Lighting measures most applicable to a prescriptive rebate format are ones that are commonly installed in the marketplace and have an easily identifiable means to determine energy savings.

Custom Lighting Rebates

Energy saving lighting measures that do not fit into a prescriptive rebate category can be evaluated through the Custom Efficiency analysis, provided the customer obtains pre-approval before proceeding with the project. While this option provides rebates for projects that may not otherwise be rebated, there are a number of barriers to participation, which limit the number of

projects received. These barriers include purchasing equipment before obtaining pre-approval, as well as not having the capability or time to gather and provide all information needed to analyze the energy savings potential of the project.

Lighting Redesign Studies

Funding for lighting redesign studies is available to customers who have facilities where the lighting is not meeting the needs of the employees. This may include situations where the lighting system was installed prior to the prevalence of computers, when more lighting was needed to work on tasks, but is now causing eye strain or glare on computer screens. It may also be appropriate when the use of a facility changes and the current lighting system is no longer sufficient for the application.

Studies must be performed by an individual who holds one of the following credentials: Lighting Certified professional, Certified Lighting Efficiency Professional, or someone who is a member of the International Association of Lighting Designers. Customers may also elect to work with an individual who does not hold one of these designations; in that situation, the individual must provide sufficient documentation to demonstrate his or her lighting design qualifications to Xcel Energy. Implementation rebates are available to customers who proceed with recommendations from the study and install energy efficient lighting equipment.

B. Goals, Participants & Budgets

Goals and Participants

The product's participation, energy savings goals, and budgets were determined by looking at the Company's overall electric goal, past participation levels, as well as the large number of LED products that are expected to become commercially available during the time period of this Plan.

We reviewed the equipment and project characteristics of historical projects to develop projected average cents per kWh rebates for each measure. Anticipated energy savings for the product was determined using Xcel Energy's deemed savings database.

Budgets

Once goals are established, the budget process is generally the same for Lighting Efficiency as with the other DSM products. Historical cost and participation information is tracked and analyzed to project budgets two years in advance. With increasing DSM goals in 2012-13 and beyond, additional budget dollars assume product expansion, incorporating rebates for emerging technologies such as LEDs, and offering additional customer and trade incentives to remove less efficient technologies from the Colorado commercial and industrial markets. Experience and trending from the Minnesota Lighting Efficiency products is used as a checkpoint.

The main budget drivers include the following:

Participant Incentives – The vast majority of the budget is allocated for rebates. This
budget reflects the new rebate levels and projected customer participation in each
measure, which was based on 2013 participation across the offerings.

 Administration – These budgets are based on past product performance with a slight increase built in for expanded product offerings, engineering, and account management involvement.

- Advertising and Promotion A small promotional budget was derived using historical data from past activities. Promotions are targeted to customers and trade partners and typically focus around activities such as new or revised product offerings, case studies featuring successful projects, educational opportunities, and bonus rebates.
- Customer Service This budget will be applied to consulting and analytical services for lighting projects that are analyzed through the Custom Efficiency product.

C. Application Process

Customers may hear of the Lighting Efficiency Product through several channels, including the Company's website, advertising, direct mail, email promotions or through the lighting trade. Company account managers work directly with our largest customers to help them identify energy saving opportunities in lighting and our Business Solutions Center is available for all business customers, particularly the small- and mid-sized business customers who need information on our rebate products.

<u>Lighting Efficiency Retrofit and New Construction Applications</u>

The application process for the prescriptive retrofit and new construction products is similar to our other prescriptive products. Customers may apply for rebates by completing the application and providing a detailed invoice for the newly installed equipment. The customers may submit for a rebate after the equipment has been purchased and installed. The replacement of fixtures for retrofit situations must be a one-for-one replacement that will result in energy savings. If the retrofit is not a one-for-one replacement but still results in energy savings, customers may apply for preapproval through the Custom Efficiency Product. The equipment must be new and meet all the qualifications detailed on the application. After the customer has installed the equipment, the application and invoice must be submitted to the Company within twelve months of the invoice date. Once the paperwork is completed and submitted, rebate checks will be mailed to the customer as indicated on the application within six to eight weeks.

For the Business LED Instant Rebate program, customer validation that the end-use customer is within Xcel Energy electric service territory is conducted at the point of sale. Participating distributors will apply an incentive to the retail price to decrease the qualified product cost. Customers will not be required to submit a rebate application as the participating distributor will provide the sales data to the utility.

Custom Efficiency Lighting and Lighting Redesign

Applications for energy saving lighting projects that do not fit into the prescriptive paths may be reviewed using the Custom Efficiency Application and the accompanying Lighting Evaluation Worksheet. Project analysis and preapproval of Custom Efficiency lighting projects is required prior to equipment purchase and installation.

In the Lighting Redesign path, rebates for pre-project studies require preapproval. After the study is completed by a licensed lighting professional, the Lighting Redesign Study Rebate application may be submitted to the Company with a copy of the study proposal for rebating. If the recommended energy saving measures are carried out, the customer (with assistance from the lighting professional and the Company) may apply for a Lighting Redesign implementation rebate, which is based on a dollar amount per kW saved.

D. Marketing Objectives, Goals, & Strategy

The key marketing objective is to raise awareness, interest and participation in the Lighting Efficiency product, contributing to goals for energy savings and demand reduction.

Marketing Strategy

Lighting Efficiency is primarily promoted through Company Account Managers, Energy Efficiency Specialists via inbound and outbound telemarketing, through Colorado's lighting and electrical trade via the Company's Channel Managers, and by traditional marketing vehicles such as advertising, mailings, Web content and tools, email and other sales promotions.

Account Managers and Energy Efficiency Specialists sell the Lighting Efficiency product-especially to mid- and large-sized commercial and industrial customers where the majority of savings are realized--in their planning and day-to-day interactions with business customers.

Significant market segments for potential Lighting Efficiency savings include office buildings, manufacturing sites, retail establishments, schools and 24-hour facilities. Marketing campaigns targeted to those segments are executed by one-on-one Account Manager meetings and planning, Energy Efficiency Specialist scripted calls, or mass communications that drive inquiries to the Company's inbound phone center.

Marketing to Trade

The Company's outreach and relationship building with lighting and electrical trade, professional engineers, architects and lighting designers is another key strategy to reach important business segments and indirectly influence the purchase and installation of energy-efficient lighting systems. The Company establishes and maintains contact with this audience by:

- In-person training and presentations by the Channel Managers at industry events and trade shows, such as the Energy Efficiency Expo held in first quarter, for both customers and trade allies;
- The Lighting Advisory board, described in the Stakeholder Involvement Section below;
- Energy Exchange, a quarterly email that is sent to the trade discussing energy efficiency lighting applications, case studies, product changes, and other pertinent topics; and
- Trade website, including applications, specific brochures and informational pieces directed toward the trade, and updates on product offerings.

Marketing to Small Business Customers

We reach out to this harder-to-reach market primarily through direct mail, email and the Business Solutions Center. The Lighting Efficiency product will continue to reach out to small

business customers with direct marketing approaches as well as the Company's Small Business Lighting consultant.

In addition, several printed pieces are available on the Company's websites for viewing or download, and the Lighting Efficiency team will continue to refine and improve them. These pieces are targeted to both large and small business customers as well as the trade. The websites offer information on lighting technologies, case studies of successful lighting upgrades, and external sources highlighting reasons to pursue lighting upgrades or implement efficient lighting sources.

- Prescriptive Rebate Applications Applications detail product requirements, rebate levels and additional information to help customers complete the form and submit it for rebate with accompanying invoices and equipment specifications.
- Lighting Efficiency product summary This brochure is available on the Company's website
 and is used by Account Managers, Energy Efficiency Specialists and trade to describe the
 product, discuss reasons to upgrade to more efficient lighting, and identify potential lighting
 projects.
- Resource Documents The Lighting Efficiency web page links to several documents on energy efficient lighting technologies, written by outside organizations such as E-Source, that further identify lighting efficiency sources and opportunities.
- Managing Costs by Segment Documents Documents identifying specific energy savings ideas for key segments, such as grocery stores, office buildings, schools and universities.

Marketing Messages Driven by Future Regulatory Requirements

In the coming years, Lighting Efficiency energy savings potential will be affected by necessary compliance with several new Federal and State legislative rules (example: Department of Energy Rulemaking on fluorescent lighting technology). An imperative marketing strategy is to keep Account Managers, Energy Efficiency Specialists, trade partners and customers aware of the requirements and timing deadlines for these pending energy efficiency standards. These new rules will also influence Lighting Efficiency product development, such as expansion of LED lighting applications, and the phasing out of obsolete technology.

E. Product-Specific Policies

Lighting Efficiency has a number of product-specific policies:

- All rebated equipment must be new, meet all product rules and requirements, and the application must be submitted within 12 months of the invoice date.
- In cases where the customer is unable to obtain an equipment invoice, the Company will send an Account Manager to complete an onsite field verification to confirm that equipment was installed as stated on the application.
- Preapproval is required for Custom Efficiency lighting projects prior to the purchase and installation of lighting equipment. The customer has up to 24 months after the preapproval date to implement the lighting project. Custom projects that exceed their timeframe, or have significant equipment deviations from the original plan, require reanalysis and approval.
- The parking garage lighting retrofit rebate application is available for prescriptive projects to replace high intensity discharge technologies (high-pressure sodium and metal halide) with more efficient fluorescent options.

• Lighting redesign studies must be submitted no later than three months after the study is completed.

F. Stakeholder Involvement

Stakeholder involvement in the Lighting Efficiency product comes through a Lighting Advisory Board and the quarterly DSM Roundtable meetings. The Lighting Advisory Board was formed as a collaborative effort between several key lighting professionals and the Company's management team. The objectives of the board are to identify gaps in our product offerings, suggest areas of improvement, and to offer a forum for open discussion of lighting topics. Several recommendations from the board have been addressed through the Company's product development process and incorporated into the product. The board will continue to meet on a regular basis or as long as needed.

G. Rebate Levels

Lighting Efficiency offers rebates through the retrofit and new construction prescriptive components, Custom Efficiency and Lighting Redesign paths.