➢ Lighting Efficiency – Summary of 60-Day Notice

Public Service Company of Colorado (PSCo) proposes to make the following changes to its Lighting Efficiency Product to expand upon its current rebate offerings and update technical assumptions. PSCo anticipates these changes will lead to an additional 3.5 GWh in Lighting Efficiency net energy savings during 2013. We are also forecasting that these changes will increase our spend by $295,000 over the approved 2013 budget. The increase in the forecasted spend will be accommodated through our budget flexibility allowed by the Colorado Public Utilities Commission.

In the approved Colorado 2012/2013 Plan, the company originally planned to discontinue the rebates for the T12 retrofit due to updated baselines set by the Department of Energy (DOE). On October 22, 2012, a 60 day notice was posted to update our Lighting Efficiency Product. From this notice, Energy Outreach Colorado (EOC) requested that PSCo continue offering fluorescent T12 retrofit rebates until 2014. We agreed to evaluate reducing instead of eliminating the T12 rebates. We would use the updated DOE baselines in our technical assumptions for the T12 retrofits. The updated DOE baselines already require approximately one third savings compared to the previous baselines. Therefore, energy savings from T12 retrofits beginning in 2013 will be significantly less than 2012, when the old baselines were in place. After evaluation, PSCo has decided to make the following changes to our product.

Below is a summary of the product modifications:

1. Beginning in 2013, PSCo proposes reduced rebates for fluorescent T12 to T8 Lighting Optimization. Based on updated lighting equipment baselines directed by Department of Energy (DOE) Rulemaking the 2012-level prescriptive rebates are no longer cost-effective. Reducing the rebate to the proposed levels will allow the prescriptive rebate to remain in place.

   Fluorescent T12 to T8 Optimization rebates

Lamp removal in T8 systems. Must include high efficiency (HE) electronic ballasts	**Prescriptive Rebate until 12/31/12**	**Proposed Prescriptive Rebate after 1/1/13**
T12 to T8 1- to 2-lamp installation	$20 per fixture	$10 per fixture
T12 to T8 3-lamp installation	$26 per fixture	$12 per fixture

2. Beginning in 2013, rebates for one-for-one replacement of fluorescent T12 fixtures with T8 fixtures will be replaced with high-efficiency ballast-only rebates. This is based on updated baselines directed by DOE Rulemaking. Fluorescent T8 8-foot and Fluorescent T5 fixture rebates will be eliminated as they are no longer cost-effective.

Fluorescent T12 to T8, Fluorescent T12 to T5 Retrofit rebates, one-for-one replacement

Fluorescent T8 fixtures with high efficiency (HE) electronic ballasts	**Prescriptive Rebate until 12/31/12**	**Proposed Prescriptive Rebate after 1/1/13**
T12 to T8, 4 foot or less, 1- to 2-lamp	$9-13 per fixture	$1.50 per HE ballast
T12 to T8, 4 foot or less, 3- to 4-lamp	$15-22 per fixture	
T12 to T8, 5- to 8-foot, 1- to 2-lamp	$9-22 per fixture	No rebate. Not cost-effective assuming updated DOE baselines
T12 to T5, 4 foot or less, 1- to 4-lamp	$13-16 per fixture	

Following this summary, is a red-lined version of the current write-up for the Lighting Efficiency Product for reference purposes. Also posted are the Deemed Savings Sheets for these updated rebates. The Deemed Savings Sheets reflect only the proposed changes in this 60-Day Notice. These 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 rebates to business customers of Public Service Company of Colorado ("Public Service" or the "Company") who purchase and install qualifying energy efficient lighting products in existing or new construction buildings. Rebates are offered to encourage customers to purchase energy efficient lighting by lowering the upfront premium costs associated with this equipment. This product is available to business electric customers in the Company's service area.

The product incorporates several features designed to influence decision-makers to choose the higher efficiency options. These features include application forms with full instructions to make it easy for the customer and/or vendor to apply for the rebates, and additional resources such as feature sheets, brochures, and web pages to help explain the advantages of efficient lighting sources.

For businesses, the cost of lighting is one of the main components of energy bills. Installing energy efficient lighting, or reducing the number of lights needed, can significantly lower energy bills. The main goals of energy efficient lighting is to ensure good visibility for the task required, increase productivity and safety for employees, provide an attractive and comfortable work environment, and reduce operating and maintenance costs.

There are four ways customers can lower their lighting costs and earn rebates:

<u>Lighting Retrofit Rebates (prescriptive)</u>
Rebates are available for existing facilities of any size to help offset the cost of installing new equipment that is more energy efficient than the current lighting systems. Rebates are based on a one-for-one replacement of existing fixtures. Situations where a lighting retrofit can be beneficial are when employees are complaining of comfort issues, such as eyestrain from under- or over-lit conditions, or where high energy bills are a concern.

A common lighting retrofit application is replacing an existing fluorescent T12 system in a typical office space with more efficient T8 fluorescent lamps and a high efficiency electronic ballast. In some instances, the number of lamps installed per fixture can be reduced, while still providing ample light levels. This yields significant energy savings. In warehouse buildings, or spaces with high ceilings, replacing a High Intensity Discharge lighting (HID) system with a more efficient fluorescent option is a typical retrofit project. Replacing HID lamps such as mercury vapor, high-pressure sodium, and metal halide fixtures with high bay fluorescent options can reduce energy costs and improve light levels. In addition, by installing fluorescent T5 systems, T8 with electronic high efficiency ballast, compact fluorescent fixtures, and several other technologies, customers can receive a rebate when replacing less efficient systems.

<u>New Construction Rebates (prescriptive)</u>
Rebates are available for new facilities of any size as well as existing facilities that are going through a major renovation. There are several lighting options available to building owners,

architects, professional engineers and lighting designers. Influencing better, energy efficient lighting options during a building's design, planning and installation is the goal of the new construction path. Fluorescent high bay fixtures, compact fluorescent fixtures, and low-wattage lamps are a few of the technologies rebated for new construction facilities.

Custom Efficiency

Energy saving lighting projects that are not on the prescriptive Lighting Retrofit Rebates menu can be reviewed through the Custom Efficiency path using the Custom Efficiency Application and the accompanying Lighting Evaluation Worksheet. Project analysis and preapproval is required prior to equipment purchase and installation. Examples of lighting projects that would be reviewed through the Custom Efficiency path include installation of certain LED lighting sources, other emerging or uncommon technologies such as induction lighting, retrofit projects where it is not a one-for-one replacement of existing fixtures, and "re-lamping" fixtures with a wattage reduction.

Lighting Redesign

Lighting Redesign offers rebates for pre-project studies comparing energy saving technologies, and implementation of energy saving opportunities. Studies must be performed by a lighting professional of the customer's choice with one of the following credentials: Lighting Certified professional (LC), Certified Lighting Efficiency Professional (CLEP), or membership with International Association of Lighting Designers (IALD). Customers who wish to locate a lighting professional may visit our Website to review a list of qualified lighting professionals who have agreed to participate in the Lighting Redesign path.

The Colorado Lighting Efficiency product was patterned after the Lighting Efficiency product in the Minnesota service area, which has operated since the mid 1980's. The Minnesota product received Exemplary Honors for best practices from the American Council for an Energy-Efficient Economy (ACEE) in 2008 for using proven approaches and providing consistent, reliable and cost-effective savings. In 2003, the Minnesota product received Honorable Mention for best practices from ACEE. Best practices were identified on four major product components: 1) product theory and design, 2) product management, including project management, reporting and tracking, quality control and verification, 3) product implementation such as the participation process, marketing and outreach strategies, and 4) product evaluation.

B. Goals, Participants & Budgets

Goals and Participants

In support of the business program's growing goals for energy savings and demand reduction, Lighting Efficiency's primary objective is to cost effectively remove less efficient lighting from the commercial and industrial markets with rebates and other incentives for installing energy efficient lighting systems.

The Lighting Efficiency Product goals are rolled-up into the total goal for the business portfolio. Initially, the management team reviews the entire portfolio's goal and allocates individual product goals with input from the product portfolio manager. Individual product goals, including the Lighting Efficiency goals, are based on the achievements of past years and the extensive

experience from the Minnesota Lighting Efficiency Product. Lighting Efficiency is historically one of the largest contributors to the Company's DSM portfolio savings and therefore is allocated a large percentage of the annual goal.

Participation goals are derived from prior years' goals, participation, achievements and product trends, trade participation, average project size and a comparison of participation in the Minnesota product. Colorado market and economic trends and regulatory outlook – including upcoming changes to lighting efficiency standards – are other important factors in setting product participation goals.

Increasing federal efficiency standards will impact Lighting Efficiency during the 2012-13 filing period. Beginning January 1, 2012 – the effective date of the Energy Independence and Security Act (EISA) of 2007, which regulates standard incandescent bulbs – screw-in CFL rebates will no longer be available because Public Service believes CFLs have become standard practice for business customers. Beginning in 2013 – as guided by Department of Energy (DOE) Rulemaking – changing the present T12 technology baseline to a stricter T8 baseline will significantly reduce fluorescent fixture reportable savings – a substantial proportion of total savings since the Lighting Efficiency Product was launched.

Based on the new DOE guidelines, it was the Company's intention to discontinue the T12 retrofit rebates beginning on January 1, 2013. However, based on further evaluation and the persistence of existing T12 systems, the Company agreed to evaluate reducing T12 rebates and energy savings. Based on this evaluation, the Company decided to continue these rebates but at a reduced level.

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.

For the Lighting Efficiency Product, rebates, labor and promotional expenses drive the majority of the budget.

- **Rebates**: The majority of the Lighting Efficiency budget is dedicated to rebates, so the energy savings goal is the main contributor to the overall Lighting Efficiency budget. The rebate budget is planned using the average lighting project rebate cost from detailed technical assumptions and multiplying by anticipated participation.
- **Labor Charges**: determined by estimating the number of full-time employees needed to manage the product and execute the marketing strategy and rebate process.
- **Marketing and Advertising**: promotional vehicles used to reach business customers including print, Web, direct mail, email, radio and television marketing efforts as well as trade outreach and promotions.

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.

Lighting Efficiency Retrofit and New Construction Applications

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.

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.

(Lighting Retrofit Rebates are capped at 60% of the installed cost of equipment plus labor)

Equipment Type	**Retrofit Rebate Amount**
Fluorescent T8 systems – 4 foot or less - with high efficiency (HE) ballasts	~~$9 $22 per fixture~~ Beginning in 2013, $1.50 per high efficiency ballast
Low-wattage 4-Foot fluorescent T8 lamp (28W or less)	$.50 per lamp
Lighting Optimization (permanent removal of the equivalent of at least one 4 foot lamp as a result of a retrofit): T12 or T8 systems to more-efficient T8 systems, including high-efficiency ballasts.	~~$12 26 per fixture~~ Beginning in 2013, $10-12 per fixture
Fluorescent T5 systems with electronic ballasts	~~$13-16 per fixture~~ Beginning in 2013, no rebate (no longer cost effective assuming new baselines set by the DOE)
High-bay fluorescent fixtures with high-efficiency electronic ballasts	$85-175 per fixture
Hardwired compact fluorescent fixtures	$25-35 per fixture
Energy Star qualified LED lamps and fixtures	$7 – 15 per lamp, $35 – 50 per fixture
ENERGY STAR Qualified Interior Commercial LED Retrofit Fixture (screw-in) Downlights, 25 Watts or less	$15 per fixture
LED canopy and soffit fixtures, LED exterior and parking garage Wall Packs; LED refrigerated and freezer case lighting	$150 – 200 per LED canopy or soffit fixture; $35 – 100 per LED Wall Pack; $100 per LED refrigerated or freezer case door
Pulse start metal halide fixtures	$60 – 120 per fixture
Ceramic metal halide lamps and fixtures	$25 – 100 per unit
Wall, ceiling or fixture mount occupancy sensors, photocells	Wall Mount Sensors: $15 per sensor with 50-300W connected load; $25 per sensor with over 300W connected load Ceiling Mount Sensors: $30 per sensor with 50-300W connected load; $40 per sensor with over 300W connected load Photocell: $25 per fixture
Bi-Level Stairwell Fixtures with Integrated Sensors	$25 per stairwell fixture.
LED or LEC exit signs	$25 per unit
Parking garage fluorescent fixtures	$85 per fixture; $.50 per low-watt fluorescent lamp
Custom Efficiency rebates using the Lighting Evaluation Worksheet	Based on energy savings. See Custom Efficiency section for details.
Lighting Redesign studies and implementation rebates	Up to 75% of study cost, not to exceed $25,000; implementation rebates up to $400/kW saved.
Allow closely-related fixture combinations to be added to the DSTA and qualify for a prescriptive rebate if the technology pairings are in a range deemed viable by PSCo energy efficiency engineering or product management.	Base rebates remain the same
Allow a higher level of wattage, or a higher number of fixtures, to be removed during a lighting retrofit.	Base rebates remain the same

(Lighting New Construction Rebates are capped at 60% of the installed cost of equipment plus labor)

Equipment Type	**New Construction Rebate Amount**
Low-wattage 4-Foot fluorescent T8 lamp (28W or less)	$.50 per lamp
High-bay fluorescent T8, T5HO and T8VHO systems	$40-65 per fixture
Hardwired compact fluorescent fixtures (CFL)	$10-20 per fixture
Pulse start metal halide fixtures	$12-$28 per fixture
Ceramic metal halide lamps and fixtures	$20-$55 per fixture, $15 per lamp
Energy Star qualified LED lamps and fixtures	$7 – 15 per lamp, $25 – 40 per fixture
ENERGY STAR Qualified Interior Commercial LED Screw-In Fixture, 25 Watts or less	$15 per fixture
LED Wall Pack Fixtures – Exterior and Parking Garage	$15-50 per fixture
LED canopy and soffit fixtures, rated for exterior use LED refrigerated and freezer case lighting	$50-100 per LED canopy or soffit fixture $70 per LED refrigerated or freezer case per door
Custom Efficiency rebates using the Lighting Evaluation Worksheet	See Custom Efficiency section for details
Allow closely-related fixture combinations to be added to the DSTA and qualify for a prescriptive rebate if the technology pairings are in a range deemed viable by PSCo energy efficiency engineering or product management.	Base rebates remain the same