On May 11, 2018, Public Service Company of Colorado (“Public Service” or “the Company”) issued a 60-Day Notice to modify its existing Lighting Efficiency and Small Business Lighting products to allow shelf stocking for lamps, reduce rebates, incremental costs, add Networked Lighting Controls, modify the structure and costs of stand-alone control rebates, and eliminate fluorescent fixtures and lamps as eligible measures. The new measure will be implemented as proposed on July 12, 2018. The original Notice and accompanying documentation can be found on the Company’s website, here: http://www.xcelenergy.com/Company/Rates_and_Regulations/Filings/Colorado_Demand-Side_Management.

The Company received written comments on the Notice from one Roundtable participant: the Office of Consumer Counsel. After careful consideration of the comments, the Company determined that no change to the Notice was warranted. The Company provides the following formal response:

1. **Comment Submitted by OCC**

   **PSCo shows in Table 1 that it intends to increase the combined budget for Lighting Efficiency and Small Business Lighting from the filed budget of $10.3 million to $17.5 million. This is a 69% and $7 million increase in the business lighting budget. The OCC acknowledges that PSCo has the discretion to adjust its budget within the terms of its DSM Plan. However, the OCC is concerned that this increase in Business Lighting Budget could result in a decrease in the budget for residential and low income programs. There is no indication in this 60-day notice that the proposed increase will be offset by reductions in the budgets for other programs. The OCC requests that PSCo show which programs and products will have their budgets reduced, if any, to accommodate this increase in the Business Lighting budget and confirm that it is not seeking to reduce the budgets for residential and low income programs.**

   **Response:**

   The forecast of increased spend for business lighting products has not required a reduction in spending on residential or low income programs. Increased spending has primarily come
from the reallocation of budget from other business products. The Company forecasts its year-end spend for residential and low income programs to be consistent with its full year forecast.

2. **Comment Submitted by OCC**

   The OCC agrees with allowing LED lamps that are not immediately installed to receive a rebate. However, LED lamps that are not immediately installed should not be shown as representing energy and peak demand savings in the first year of the year of sale. Rather, PSCo should use the evaluation, measurement, and verification (EM&V) process to determine when the shelf-stocked LED lamps are actually installed on average to determine when the energy and peak demand savings can be claimed. The EM&V process can be used to assess when the energy and peak demand savings actually occur and to determine if the program is generating the expected level of savings. PSCo’s DSM savings are part of its resource plans. PSCo’s resource plans must reflect actual savings, and conservative assumptions should be used for DSM in order to provide savings that are reliable.

   **Response:**

   The Company proposes to adopt a 99% installation rate consistent with the current installation rate used for the home lighting program. The installation rate for the home lighting program was determined through a program evaluation conducted in 2015 and several lamp measures offered through the home lighting program are also offered through the business LED Instant Rebate program. The Company will plan to further evaluate the installation rate for lamps offered through the business lighting programs in a lighting evaluation that will be conducted in 2019.

3. **Comment Submitted by OCC**

   PSCo states, “As LEDs have grown in popularity, the costs for troffer lighting technologies have decreased.” PSCo proposes “to align the incremental costs with the market prices starting on projects claimed from January 1, 2018 forward.” These lower costs suggest that the net-to-gross for troffer lighting should also decrease.

   **Response:**

   As part of the Stipulation and Settlement Agreement entered into by OCC and others in Proceeding No 08A-366E pertaining to the Company’s 2009-2010 Gas and Electric DSM Plan
(“2008 Settlement”), the Company agreed to perform two to three comprehensive program evaluations each year for the purpose of assessing “changes to be made to technical assumptions, net-to gross (“NTG”) ratios and program processes based on the evaluators own research, as well as a thorough review of industry-wide and the Company’s current processes, technical assumptions, and NTG ratios.” This agreement was reaffirmed in Decision No. C11-0442 in Proceeding No. 10A-554EG where the Commission ordered that:

Consistent with current practices, Public Service shall implement, on a prospective basis, changes to technical assumptions, net-to-gross ratios, or program processes that result from a comprehensive program evaluation, where such evaluation is identified in an approved DSM plan. Non-confidential portions of all program evaluations shall also be filed with the Commission and made available to participants in the DSM Roundtable.

Recommendations for the CO Lighting Efficiency net-to-gross will be included in the 2018 program evaluation which is currently underway.

4. **Comment Submitted by OCC**

   Occupancy sensors provide most of the savings in controls – see Tables 10, 11 and 12. The OCC recommends that PSCo consider increasing the rebate for occupancy sensors from 5 cents to 10 cents because occupancy sensors provide most of the savings in controls and will provide an additional incentive for small business to invest in these sensors.

   **Response:**

   Year to date the ceiling and wall mounted occupancy sensors have had the most participation for controls in the Lighting Efficiency and Small Business Lighting products which is why the occupancy sensor measure appears to provide the most energy savings in tables 11 and 12 however occupancy sensors do not necessarily provide the highest amount of energy savings relative to other controls measures such as daylighting (photocell sensors) and combo occupancy and photo cell sensors. Rebates were structured relative to the amount of savings provided by the individual control measures. In addition, the connected load will dictate the rebate amount and the new rebate structure encourages customers to control more wattage with each control.

   The table below which is also referenced in the deemed savings, table 4, shows the percentage of savings for each control measure with occupancy sensors having the least amount of savings on a per sensor basis.
<table>
<thead>
<tr>
<th>Control Type</th>
<th>% Savings</th>
<th>Full Cost Per Watt</th>
<th>Rebate Per Watt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standalone - Occupancy Sensor</td>
<td>24%</td>
<td>$0.61</td>
<td>$0.05</td>
</tr>
<tr>
<td>Standalone - Daylighting (Photocell) Sensor</td>
<td>28%</td>
<td>$0.61</td>
<td>$0.10</td>
</tr>
<tr>
<td>Standalone - Occupancy and Daylighting (Photocell) Sensor</td>
<td>38%</td>
<td>$0.61</td>
<td>$0.15</td>
</tr>
<tr>
<td>Networked Lighting Controls</td>
<td>47%</td>
<td>$0.63</td>
<td>$0.40</td>
</tr>
</tbody>
</table>

5. **Comment Submitted by OCC**

PSCo asserts that the costs of LED fixtures have decreased significantly over the last four years while the selection of available products has increased and that many LED products are more durable, longer lasting, and provide more energy savings than fluorescent options. The OCC agrees that a goal of the DSM lighting programs is to influence the market to broadly adopt more efficient equipment, and specifically to influence individual customers to install more efficient equipment as we just proposed by increasing the rebate for the purchase of occupancy sensors. We recommend that PSCo phase out fluorescents more quickly over 2018, rather than starting a phase out on January 1, 2019. Further, these decreasing costs and PSCo’s phase out of the measures also suggests that the Net-to-Gross for fluorescent fixtures is approaching zero and that the overall Net-to-Gross values should be lower.

**Response:**

The Company disagrees with the OCC’s recommendation to phase out fluorescent more quickly because of the impact that decision would have on Small Business customers specifically. These customers already face numerous barriers to upgrade their lighting system and in an effort to not impose additional constraints on small business customers the Company believes phasing fluorescents out at the end of the year is the most appropriate approach.

In regard to comments made on net-to-gross, please see the Company’s response to comment No.3.

6. **Comment Submitted by OCC**

The OCC recommends that PSCo reduce the Net-to-Gross of 99.2% for Business Lighting Efficiency and Net-to-Gross of 80% for Small Business Lighting as a result of the Company-cited decreasing costs of LEDs. PSCo uses a Net-to-Gross
of 99.2% for Lighting Efficiency product from 2015 study. PSCo states in their
60-day notice that LED costs have come down significantly in the last few years.
As discussed it its 60-day notice and as discussed above, PSCo proposes to
change a number of factors in the Business Lighting product because of the
significant reduction in the cost of LEDs. Given the decrease in the cost of
LEDs, a Net-to-Gross in the 40% to 60% range appears appropriate for the
Lighting Efficiency and Small Business Lighting.

Response:

Please see the Company’s response to comment No.3.