



On October 1, 2015, Public Service Company of Colorado (PSCo) issued a 60-Day Notice to add LED bulbs to the Energy Savings Kits and Single-Family Weatherization products. The changes were proposed in response to a Settlement Agreement in the 2015/16 DSM Plan (Proceeding No. 14A-1057EG). The changes will take effect on January 1, 2016. The original Notice and accompanying documentation can be found on the Company's website, here:

http://www.xcelenergy.com/Company/Rates_&_Regulations/Filings/Colorado_Demand-Side_Management.

The Company received written comments on the Notice from one Roundtable participant: the Energy Efficiency Business Coalition (EEBC). The Company appreciates EEBC's thorough review of the 60-Day Notice and thoughtful comments. After careful consideration of the comments, the Company determined that changes to these products were not necessary at this time, but may be applied in the future. In large part this decision is based on the interrelationship of these two products with the Home Lighting and Recycling product assumptions, which were recently approved in the 2015/16 DSM Plan. The Company provides a detailed response to comments below:

1. Comments Submitted by EEBC

- a. It seems like Xcel is using incorrect numbers for the LED bulb addition. I've bought 40 watt equivalent LEDs that use 7 watts or less, they indicate this bulb uses 10 watts.*

Response: The Company agrees that LED technology continues to improve. However, the aim of the LED technical assumptions proposed in this Notice was to remain consistent with the Home Lighting and Recycling product, as filed in the 2015/16 DSM Plan. The Company will use *Table 1 – EISA Impacted Lighting Wattage for Residential Lights*, shown on page 471 of the 2015/16 DSM Plan, to determine baseline wattages for an efficient wattage LED lamp provided under both Energy Savings Kits and Single-Family Weatherization products. The table was originally developed based on available lumens/watt information available at the time the Plan was filed for the efficient lamps and their halogen lamp equivalents. As Home Lighting & Recycling LED technical assumptions will remain the primary reference for these other two products, any future updates via 60-Day Notice for that product would subsequently be applied to Energy Savings Kits and Single-Family Weatherization. To that

end, an update to this table—using a lumen output reference in lieu of input watts— via 60-Day Notice is anticipated in early 2016.

- b. Xcel seems to be using old information in their wattage calculations. LED chips continue to increase lumens per watt, which makes them more efficient when replacing other bulbs. I would say that we are really talking 15-18% as a more realistic number.*

Response: It is unclear what the 15-18% data point is referencing; however, we agree that lumens-per-watt is likely increasing. Notwithstanding, Home Lighting & Recycling LED technical assumptions will remain the primary reference for these other two products; any future updates via 60-Day Notice for the product will subsequently be applied to Energy Savings Kits and Single-Family Weatherization. To that end, an update to this table—using a lumen output reference in lieu of input watts—is anticipated in early 2016 via 60-Day Notice.

- c. The biggest issue I see with their filing is that LED light bulbs should be based off of efficacy not wattage. I can find you a 6W or 7W LED light bulb that out performs a 10W LED light bulb all day. I also disagree with providing any CFL lamps as they are outdated and do not last. Longevity of lamps should also be considered because if a CFL goes out the customer will typically go to Home Depot and buy the cheapest light which is an incandescent, which in turn reverses the energy savings. If they have an LED that has a 10 year warranty in their fixture and it doesn't go out for 20 years the energy savings will always be there.*

Response: As stated above, the Company does anticipate an update to the Home Lighting & Recycling Table 1 – EISA Impacted Lighting Wattage for Residential Lights, shown on page 471 of the 2015/16 DSM Plan, to use lumen output in the near future. Once that data is available, this update will also impact other DSM products that reference this table. The measure life is different for a CFL lamp and an ENERGY STAR certified LED lamp; this is accounted for in the cost-benefit analysis of each measure, along with appropriate lamp costs. The rated life of a CFL (8,000 hours to 12,000 hours) is also significantly greater than an incandescent or halogen equivalent (1,000 hours to 3,000 hours). At present, CFLs continue to be a cost-effective measure. Since the filing of the 2015/16 DSM Plan, the cost of ENERGY STAR certified LED lamps has continued to decrease. The Company will continue to assess the cost-effectiveness of ENERGY STAR certified LED lamps and non-ENERGY STAR certified lamps as alternatives to CFLs in future filings.

The Home Lighting and Recycling product offers customers reduced cost, high-efficiency lighting options through various retailers, such as Home Depot, to encourage the purchase of high-efficiency lamps.