

➤ **Summary of 60-Day Notice: LED Nightlights**

The following 60-Day Notice summarizes Public Service Company of Colorado’s (the “Company”) action to update the tech assumptions and deemed savings in the School Education Kits and Income Qualified Energy Savings Kits products.

The Company is including with this Notice:

- Redlined product write-up;
- Redlined Deemed Savings worksheets;
- Redlined 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

The Company is adding a measure to claim savings for LED nightlights included in both School Education Kits and Energy Savings Kits.

LED Nightlight Measure

The Company is adding a measure for a LED nightlight within the products. The nightlight has been included within the School Education Kits and Energy Saving Kits since 2021; however, the Company has not been claiming savings associated with the item. The Company utilized data from the product’s third-party implementer to analyze and create the filed energy savings calculations. Remaining in alignment with the other kit measures, the Company is funding the full cost of the nightlight and there will be no rebate provided to customers.

Table 1: Summary of Forecasted Impacts: School Education Kits

| | 2022 | |
|--------------------------------|-----------------|---------------------------|
| | <i>As Filed</i> | <i>Revised per 60-day</i> |
| Electric Savings (kWh) | 10,360,093 | 12,248,246 |
| Electric Demand Reduction (kW) | 1,967 | 1,967 |
| Budget* | \$1,430,820 | \$1,430,820 |
| MTRC Test Ratio | 2.66 | 2.64 |

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

Table 2: Summary of Forecasted Impacts: Income Qualified Energy Savings Kits

| | 2022 | |
|--------------------------------|-----------------|---------------------------|
| | <i>As Filed</i> | <i>Revised per 60-day</i> |
| Electric Savings (kWh) | 1,024,253 | 1,178,333 |
| Electric Demand Reduction (kW) | 169 | 169 |
| Budget* | \$117,119 | \$129,107 |
| MTRC Test Ratio | 2.36 | 2.31 |

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

➤ Energy Savings Kits

A. Description

The Energy Savings Kit provides home energy efficiency measures bundled and distributed to income-qualified customers through email and direct mail campaigns, community outreach and partnerships. The kits offer electricity and natural gas saving measures and customer education materials to help lower customer bills and improve the comfort and safety of their dwellings.

Income-qualified customers will receive an offer through email, mail, or community partners informing them of their eligibility to receive a free Energy Savings Kit. The offer details the contents of the kit and how much money they could save on their energy bill if they install all the measures provided. If the customer chooses to receive a kit, they will send their response to the third-party implementer. Customers will receive a kit within six to eight weeks.

The Energy Savings Kits will include the following electric and natural gas efficiency measures:

- Eight (8) LED bulbs
- One (1) 1.5 gpm High Efficiency Showerhead
- One (1) 1.5 gpm Kitchen Faucet Aerator
- One (1) 1.0 gpm Bathroom Faucet Aerator
- One (1) LED nightlight

The Company will test the offering of a secondary kit in 2021 to better serve the customers' needs. Customers will have the option of ordering a certain number of additional items including specialty lightbulbs and secondary showerheads.

B. Targets, Participants & Budgets

Targets and Participants

The Company set the participation target (number of kits to be sent out) based on historical product performance and participation projections for 2021 and 2022. Energy savings targets were developed based on the installation rate of the kit measures in 2019.

Budgets

The budget is based on the number of forecasted kits. The budget includes the costs of kit contents, and production, distribution, and fees from the third-party implementer. The budget also includes costs for labor, marketing materials and M&V.

C. Application Process

Customers who have received Low Income Home Energy Assistance Program ("LIHEAP") funding, any energy assistance funding (including county assistance and fuel fund assistance), Low-Income Energy Assistance Program ("LEAP") funding, or other state assistance programs

and live in the Public Service electric and/or natural gas service territory will be sent an offer to receive the kit. The third-party implementer will track customer participation so that customers do not receive more than one kit. This tracking information will also be provided to the Company on a regular basis.

D. Marketing Objectives & Strategies

The overall objective of the product is to increase and expand education among the income-qualified customers on the importance of energy efficiency and the value of acting to improve efficiency in their homes. The Company will work with local and state agencies to obtain customer mailing lists to reach more customers annually.

E. Product-Specific Policies

In order to participate, customers must receive LIHEAP, LEAP, energy assistance funding (including county assistance and fuel fund assistance), other state assistance programs, or be identified as eligible using other reliable data sources.

F. Stakeholder Involvement

The Company will continue to work with local and state agencies to identify eligible customers and determine additional kit content needs.

G. Rebates & Incentives

The Company will fund 100% of the cost of the Energy Savings Kits. There will be no rebate provided to customers.

DEEMED SAVINGS TECHNICAL ASSUMPTIONS

11.1 Home Lighting

Algorithms

$$kW \text{ Savings per Bulb} = (Wattage_{Baseline} - Wattage_{LED}) / 1000$$

$$Customer \text{ kW} = \text{Number of Bulbs} \times kW \text{ Savings per Bulb}$$

$$Customer \text{ kWh} = Customer \text{ kW} \times \text{Hours}$$

$$Customer \text{ kWhNightlight} = Customer \text{ kWh} \times WHFe$$

$$Peak \text{ Coincident kW} = Customer \text{ kW} \times \text{Coincident Factor}$$

Variables

| | | |
|-----------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Bulbs | Vendor Input | Number of bulbs sold. |
| Wattage _{Baseline} | Tables 11.1.1-11.1.5 | Baseline wattages are determined using an adjusted ENERGYSTAR lumen equivalency rating, adjusted for EISA requirements based on lumen output. Direct install measures use removed wattage. Linear lamps based on past participation. ^{1,2} |
| Wattage _{LED} | Manufacturer | Wattage of the LED bulb, provided by each manufacturer. |
| Lifetime Hours | Table 11.1.6 | Lifetime Hours for LEDs. ⁵ |
| Hours | Table 11.1.7 | Annual hours of operation for the bulbs for both residential and non-residential segments. ^{3,4,8,9} |
| Coincident Factor | Table 11.1.7 | Probability that peak demand of the bulb will coincide with peak utility system demand. ^{3,4,8} |
| Measure Life | Table 11.1.7 | Measure life of the average bulb sold, determined by lifetime hours divided by hours of use by segment. |
| Incremental Cost of Bulbs | Table 11.1.8 | Cost difference between baseline and efficient bulb options. ^{6,7} |
| Labor Costs | Table 11.1.9 | Cost of labor to install fixtures, Type B, and Type C lamps. ¹⁵ |
| NTG | Table 11.1.10 | Net-to-gross factor. ^{9,10,17} |
| Installation Rate | 99% | Future savings for bulbs purchased and put in storage and installed in later years. The net present value of the saving for all bulbs purchased is 100% if all bulbs are installed when purchased. ⁸ |
| Non-Energy O&M savings | \$0.00 | Non-Energy operation and maintenance savings are assumed to be zero. |
| WHFe | 1.06 | Waste heat factor for energy to account for cooling savings from efficient lighting (listed here for a Single Family Home) ¹⁸ |

Provided by Product Vendor

M&V Verified

| | |
|------------------------------------|-----|
| Number and type of bulbs purchased | Yes |
|------------------------------------|-----|

Assumptions

The baseline bulb cost and LED bulb cost will be tracked and updated at the end of the year in the status report to account for the rapid evolving market and cost for LED bulbs. The baseline will be reviewed and updated at least semi-annually and the LED bulb cost will be reviewed and updated monthly.
Specialty bulbs on the forecast include Specialty, R, BR, and ER Bulbs, 3-way Bulbs as well as PAR, MR, and MRX Bulbs.
Assume all sales made through the pro-desk will be to small business customers.
If the formula below for the PAR, MR and MRX Lamp baseline equivalent results in a negative or undefined value, the manufacturer recommendation is used.

Table 11.1.1: GSL Bulbs¹

| Minimum Lumens | Maximum Lumens | Incandescent Equivalent Wattage | |
|----------------|----------------|---------------------------------|----------------------|
| | | Baseline (Exempt Bulbs) | Baseline (Post-EISA) |
| 2,000 | 2,600 | 150 | 72 |
| 1,600 | 1,999 | 100 | 72 |
| 1,100 | 1,599 | 75 | 53 |
| 800 | 1,099 | 60 | 43 |
| 450 | 799 | 40 | 29 |
| 310 | 449 | 25 | 25 |

¹GSL bulbs are medium screw-base bulbs that are not globe, bullet, candle, flood, reflector, or decorative shaped

Table 11.1.2: Specialty Bulbs¹

| Decorative Shape | Lumen Bins | Globe Shape | | Incandescent Equivalent Wattage | |
|------------------|------------|-------------|----------|---------------------------------|----------|
| | | Baseline | Baseline | Baseline | Baseline |
| | | 1100 | 1300 | 150 | 72 |
| | | 650 | 1099 | 100 | 72 |
| | | 575 | 649 | 75 | 53 |
| 500 | 699 | 500 | 574 | 60 | 43 |
| 300 | 499 | 350 | 499 | 40 | 29 |
| 150 | 299 | 250 | 349 | 25 | 25 |
| 90 | 149 | | | 15 | 15 |
| 70 | 89 | | | 10 | 10 |

¹Specialty bulbs are medium screw-base bulbs that are globe, bullet, candle or decorative shaped

DEEMED SAVINGS TECHNICAL ASSUMPTIONS

Table 11.1.3: R, BR, and ER Bulbs^{1,2}
EISA Impacted^{1,2,14}

| Bulb Type | Lower Lumen Range | Upper Lumen Range | Watts _{Base} |
|-----------------------------------------------------------------------------------|-------------------|-------------------|-----------------------|
| R, ER, BR with medium screw bases w/diameter >2.25" (*see exceptions below) | 420 | 472 | 40 |
| | 473 | 524 | 45 |
| | 525 | 714 | 50 |
| | 715 | 937 | 65 |
| | 938 | 1,259 | 75 |
| | 1,260 | 1,399 | 90 |
| | 1,400 | 1,739 | 100 |
| | 1,740 | 2,174 | 120 |
| | 2,175 | 2,624 | 150 |
| | 2,625 | 2,999 | 175 |
| | 3,000 | 4,500 | 200 |
| | 400 | 449 | 40 |
| *R, BR, and ER with medium screw bases w/diameter <=2.25" | 450 | 499 | 45 |
| | 500 | 649 | 50 |
| | 650 | 1,199 | 65 |
| | 400 | 449 | 40 |
| *ER30, BR30, BR40, or ER40 | 450 | 499 | 45 |
| | 500 | 649 | 50 |
| | 650 | 1,419 | 65 |
| *BR30, BR40, or ER40 | 400 | 449 | 40 |
| *R20 | 450 | 719 | 45 |
| | 420 | 560 | 45 |
| *LED Fixtures | 561 | 837 | 60 |
| | 838 | 1,203 | 75 |
| | 1,204 | 1,681 | 100 |
| | 1,682 | 2,339 | 120 |
| | 2,340 | 3,075 | 150 |
| | 200 | 299 | 20 |
| *All reflector lamps below lumen ranges specified above | 300 | 399 | 30 |

PAR, MR, MRX Bulbs

The following equation is used to determine the baseline wattage for these bulbs, result should be rounded down to the nearest wattage in Table 4.

$$Watts_{base} = 375.1 - 4.355(D) - \sqrt{227,800 - 937.9(D) - 0.9903(D^2) - 1479(BA) - 12.02(D * BA) + 14.69(BA^2) - 16,720 * \ln(CBCP)}$$

- D = Bulb Diameter
- BA = Beam Angle
- CBCP = Center Beam Candle Power

Table 11.1.4: PAR, MR, MRX Bulbs - Energy Star Permitted Wattages^{1,2}

| Diameter | Permitted Wattages |
|----------|--------------------------------------------------------|
| 16 | 20, 35, 40, 45, 50, 60, 75 |
| 20 | 50 |
| 30S | 40, 45, 50, 60, 75 |
| 30L | 50, 75 |
| 38 | 40, 45, 50, 55, 60, 65, 75, 85, 90, 100, 120, 150, 250 |

Table 11.1.5: Linear Lamps¹¹

| | Watts |
|----------|-------|
| Baseline | 30.50 |

Table 11.1.6: Lifetime Hours⁹

| Bulb Category | Lifetime (Hours) |
|--------------------------|------------------|
| A-Line | 16,695 |
| Reflectors | 23,380 |
| Globe/Decorative | 15,068 |
| 3-Way | 15,241 |
| Fixtures (Retrofit kits) | 53,639 |
| Linear Lamps | 49,714 |

Table 11.1.7: Hours, CF, Measure Lifetime^{3,4,8,13,18}

| Bulb Category | Installation Type | Hours | CF | % Breakdown | Measure Lifetime 2021 | Measure Lifetime 2022 | |
|--------------------------|-------------------|-------|-------|-------------|-----------------------|-----------------------|------|
| A-Line | Residential | 986 | 12.6% | 94% | 16.9 | 16.9 | |
| Reflectors | | | | | 3.0 | 2.0 | |
| Globe/Decorative | | | | | 3.0 | 2.0 | |
| 3-Way | | | | | 15.5 | 15.5 | |
| Fixtures (Retrofit kits) | | | | | 20.0 | 20.0 | |
| Linear Lamps | | | | | 24% | 20.0 | 20.0 |
| Nightlights | | | | | 4,380 | 0.0% | 100% |
| A-Line | Non-Residential | 4,897 | 75.3% | 6% | 3.4 | 3.4 | |
| Reflectors | | | | | 3.0 | 2.0 | |
| Globe/Decorative | | | | | 3.0 | 2.0 | |
| 3-Way | | | | | 3.1 | 3.1 | |
| Fixtures (Retrofit kits) | | | | | 11.0 | 11.0 | |
| Linear Lamps | | | | | 76% | 10.2 | 10.2 |

DEEMED SAVINGS TECHNICAL ASSUMPTIONS

Table 11.1.8: Average Costs* 6, 7, 12, 15, 19

| Type | Rebate |
|--------------------------------------|--------|
| A-Line | \$1.24 |
| Fixtures (Retrofit kits) Residential | \$1.47 |
| Fixtures (Retrofit kits) Business | \$2.88 |
| Reflectors Residential | \$1.47 |
| Reflectors Business | \$1.47 |
| Globe/Decorative Residential | \$1.47 |
| Globe/Decorative Business | \$1.47 |
| 3-Way Residential | \$1.47 |
| 3-Way Business | \$1.47 |
| Linear Lamps Residential | \$2.00 |
| Linear Lamps Business | \$2.75 |
| MFBE LED Globe | \$5.00 |
| MFBE LED A19 EnergyStar Rated Lamp | \$5.00 |
| MFBE LED Candelabra | \$5.00 |
| MFBE LED BR30 Flood | \$5.00 |
| MFBE LED MR16 Reflector | \$5.00 |
| MFBE LED PAR30 | \$5.50 |
| School kits 9W LED | \$3.19 |
| School kits 11W LED | \$4.81 |
| School kits 15W LED | \$2.65 |
| School kits 8W Reflector | \$2.65 |
| School kits 6W Globe | \$2.65 |
| School kits 3-Way LED | \$2.65 |
| School kits 5W Candelabra | \$2.65 |
| School kits 0.3W Nightlight | \$1.40 |
| Squad LEDs | \$2.65 |
| Energy Savings Kits 0.5W Nightlight | \$1.89 |

Costs are provided by the vendor and are re-evaluated throughout the year to account for the rapidly evolving market.

Table 11.1.9: Labor Costs* 15

| Bulb Category | Labor Cost |
|---------------------------------|------------|
| LED Linear Lamps - Type B | \$8.00 |
| LED Linear Lamps - Type C | \$12.00 |
| LED PL Lamp - Type B | \$12.00 |
| LED Mogul Based HID Replacement | \$55.00 |

Table 11.1.10: NTG Values^{9,10,17}

| Bulb Category | Program Year 2021 | Program Year 2022 |
|-------------------------------------|-------------------|-------------------|
| LED Bulb - A-Line | 61.0% | 47.9% |
| LED Bulb - Fixtures (Retrofit kits) | 61.0% | 78.0% |
| LED Bulb - Reflectors | 61.0% | 22.2% |
| LED Bulb - Globe/Decorative | 61.0% | 47.9% |
| LED Bulb 3-Way | 61.0% | 71.8% |
| LED Tubes (Linear Lamps) | 100.0% | 78.0% |

References:

1. The Uniform Methods Project: Residential Lighting Evaluation Protocol, published April 2013. Page 11.
2. State of Illinois Energy Efficiency Technical Reference Manual Final Technical Version as of February 8th, 2017, effective January 1st, 2018. Vol 3, Pages 244-245.
3. Northeast Residential Lighting Hours-of-Use Study, Pages XVI and 37
4. "Lighting - Small Business" participation data from 3/1/2017 through 2018.
5. Lifetime hours from program administrator for bulbs sold in 2019 used to calculate weighted lifetimes.
6. 2018 CO Home Lighting Product Results compiled by WECC (program administrator).
7. Market survey 2018 (homedepot.com, lowes.com, samsclub.com, target.com, walmart.com, etc)
8. 2016 CO Home Lighting and Recycling Evaluation by Cadmus, 2016. Pages 35, 72-73.
9. 2018 CO Home Lighting and Recycling Evaluation by EMI Consulting, Dec 12 2018. Page 5.
10. 2019 Unopposed Comprehensive Settlement Agreement
11. Estimated values based on ranges provided by Slipstream (WECC) and historical participation in "CO Lighting Efficiency" product
12. 2019 CO Home Lighting Product Results compiled by program administrator.
13. DOE 2015 US Lighting Market Characterization.
14. MN Technical Reference Manual Version 3.0 Page 26.
15. "Lighting Efficiency - CO" and "Lighting - Small Business" participation data from 2017 through 2019.
16. Colorado House Bill 2019-1231
17. 2021 CO home Lighting and Recycling Evaluation by TRC and Apex Analytics, Jan 25 2022. Page 5
18. State of Illinois Energy Efficiency Technical Reference Manual Final Technical Version 10.0 as of September 24th, 2021, effective January 1st, 2022. Vol 3, Pages 310-313.
19. Program Implimentor

Changes from Recent Filing:

1. Added in Nightlight Measure into the School Education Kits-CO (SEK-CO) and Energy Savings Kits-CO (ESK-CO) Programs

SCHOOL EDUCATION KITS

2022 Net Present Cost Benefit Summary Analysis For All Participants

| | Participant Test (\$Total) | Utility Test (\$Total) | Rate Impact Test (\$Total) | Modified Total Resource Test (\$Total) |
|-------------------------------------|----------------------------|------------------------|----------------------------|----------------------------------------|
| Benefits | | | | |
| Avoided Revenue Requirements | | | | |
| Generation Capacity | N/A | \$2,123,494 | \$2,123,494 | \$2,123,494 |
| Trans. & Dist. Capacity | N/A | \$265,941 | \$265,941 | \$265,941 |
| Marginal Energy | N/A | \$2,792,068 | \$2,792,068 | \$2,792,068 |
| Avoided Emissions (CO2) | N/A | N/A | N/A | \$2,028,958 |
| Subtotal | | | | \$7,210,461 |
| Non-Energy Benefits Adder (20.0%) | | | | \$1,036,301 |
| Subtotal | N/A | \$5,181,503 | \$5,181,503 | \$8,246,761 |
| Participant Benefits | | | | |
| Bill Reduction - Electric | \$15,291,203 | N/A | N/A | N/A |
| Participant Rebates and Incentives | \$1,430,820 | N/A | N/A | \$1,430,820 |
| Incremental Capital Savings | \$0 | N/A | N/A | \$0 |
| Incremental O&M Savings | \$481,920 | N/A | N/A | \$481,920 |
| Subtotal | \$17,203,942 | N/A | N/A | \$19,12,740 |
| Total Benefits | \$17,203,942 | \$5,181,503 | \$5,181,503 | \$10,159,501 |
| Costs | | | | |
| Utility Project Costs | | | | |
| Program Planning & Design | N/A | \$0 | \$0 | \$0 |
| Administration & Program Delivery | N/A | \$899,802 | \$899,802 | \$899,802 |
| Advertising/Promotion/Customer Ed | N/A | \$5,000 | \$5,000 | \$5,000 |
| Participant Rebates and Incentives | N/A | \$1,430,820 | \$1,430,820 | \$1,430,820 |
| Equipment & Installation | N/A | \$0 | \$0 | \$0 |
| Measurement and Verification | N/A | \$0 | \$0 | \$0 |
| Subtotal | N/A | \$2,335,622 | \$2,335,622 | \$2,335,622 |
| Utility Revenue Reduction | | | | |
| Revenue Reduction - Electric | N/A | N/A | \$15,291,203 | N/A |
| Subtotal | N/A | N/A | \$15,291,203 | N/A |
| Participant Costs | | | | |
| Incremental Capital Costs | \$1,510,753 | N/A | N/A | \$1,510,753 |
| Incremental O&M Costs | \$0 | N/A | N/A | \$0 |
| Subtotal | \$1,510,753 | N/A | N/A | \$1,510,753 |
| Total Costs | \$1,510,753 | \$2,335,622 | \$17,626,825 | \$3,846,375 |
| Net Benefit (Cost) | \$15,693,189 | \$2,845,881 | (\$12,445,322) | \$6,313,126 |
| Benefit/Cost Ratio | 11.39 | 2.22 | 0.29 | 2.64 |

Note: Dollar values represent present value of impacts accumulated over the lifetime of the measures.

2022

ELECTRIC

GOAL

Input Summary and Totals

| Program "Inputs" per Customer kW and per Participant | | |
|-----------------------------------------------------------------|-----------|-----------------------|
| Lifetime (Weighted on Generator kWh) | A | 13.6 years |
| T & D Loss Factor (Energy) | B | 6.38% |
| T & D Loss Factor (Demand) | C | 9.13% |
| Net-to-Gross (Energy) | D | 100.00% |
| Net-to-Gross (Demand) | E | 100.00% |
| Installation Rate (Energy) | F | 70.36% |
| Installation Rate (Demand) | G | 31.61% |
| Net coincident kW Saved at Generator | H | 0.01 kW |
| Gross Annual kWh Saved at Customer | I | 66.12 kWh |
| Net Annual kWh Saved at Generator | J | 49.69 kWh |
| Program Summary All Participants | | |
| Total Budget | K | \$2,335,622 |
| Net coincident kW Saved at Generator | L | 1,967 kW |
| Gross Annual kWh Saved at Customer | M | 16,297,395 kWh |
| Net Annual kWh Saved at Generator | N | 12,248,246 kWh |
| Total MTRC Net Benefits with Adder | O | \$6,313,126 |
| Total MTRC Net Benefits without Adder | P | \$5,276,826 |
| Utility Program Cost per kWh Lifetime | K/(A x N) | \$0.0141 |
| Utility Program Cost per kW at Gen | K/ L | \$1,187 |
| Avoided Lifetime CO2 Emissions, Total Program (tons CO2) | | 51,025 |

ENERGY SAVINGS KIT

2022 Net Present Cost Benefit Summary Analysis For All Participants

| | Participant Test (\$Total) | Utility Test (\$Total) | Rate Impact Test (\$Total) | Modified Total Resource Test (\$Total) |
|-------------------------------------|----------------------------|------------------------|----------------------------|----------------------------------------|
| Benefits | | | | |
| Avoided Revenue Requirements | | | | |
| Generation Capacity | N/A | \$207,371 | \$207,371 | \$207,371 |
| Trans. & Dist. Capacity | N/A | \$25,971 | \$25,971 | \$25,971 |
| Marginal Energy | N/A | \$295,012 | \$295,012 | \$295,012 |
| Avoided Emissions (CO2) | N/A | N/A | N/A | \$209,495 |
| Subtotal | | | | \$737,849 |
| Non-Energy Benefits Adder (50.0%) | | | | \$264,177 |
| Subtotal | N/A | \$528,353 | \$528,353 | \$1,002,025 |
| Participant Benefits | | | | |
| Bill Reduction - Electric | \$1,609,617 | N/A | N/A | N/A |
| Participant Rebates and Incentives | \$129,107 | N/A | N/A | \$129,107 |
| Incremental Capital Savings | \$0 | N/A | N/A | \$0 |
| Incremental O&M Savings | \$81,280 | N/A | N/A | \$81,280 |
| Subtotal | \$1,820,005 | N/A | N/A | \$210,387 |
| Total Benefits | \$1,820,005 | \$528,353 | \$528,353 | \$1,212,413 |
| Costs | | | | |
| Utility Project Costs | | | | |
| Program Planning & Design | N/A | \$0 | \$0 | \$0 |
| Administration & Program Delivery | N/A | \$166,917 | \$166,917 | \$166,917 |
| Advertising/Promotion/Customer Ed | N/A | \$100,000 | \$100,000 | \$100,000 |
| Participant Rebates and Incentives | N/A | \$129,107 | \$129,107 | \$129,107 |
| Equipment & Installation | N/A | \$0 | \$0 | \$0 |
| Measurement and Verification | N/A | \$0 | \$0 | \$0 |
| Subtotal | N/A | \$396,024 | \$396,024 | \$396,024 |
| Utility Revenue Reduction | | | | |
| Revenue Reduction - Electric | N/A | N/A | \$1,609,617 | N/A |
| Subtotal | N/A | N/A | \$1,609,617 | N/A |
| Participant Costs | | | | |
| Incremental Capital Costs | \$129,107 | N/A | N/A | \$129,107 |
| Incremental O&M Costs | \$0 | N/A | N/A | \$0 |
| Subtotal | \$129,107 | N/A | N/A | \$129,107 |
| Total Costs | \$129,107 | \$396,024 | \$2,005,642 | \$525,131 |
| Net Benefit (Cost) | \$1,690,898 | \$132,329 | (\$1,477,288) | \$687,281 |
| Benefit/Cost Ratio | 14.10 | 1.33 | 0.26 | 2.31 |

Note: Dollar values represent present value of impacts accumulated over the lifetime of the measures.

2022

ELECTRIC

GOAL

Input Summary and Totals

| Program "Inputs" per Customer kW and per Participant | | |
|-----------------------------------------------------------------|-----------|----------------------|
| Lifetime (Weighted on Generator kWh) | A | 16.0 years |
| T & D Loss Factor (Energy) | B | 6.38% |
| T & D Loss Factor (Demand) | C | 9.13% |
| Net-to-Gross (Energy) | D | 100.00% |
| Net-to-Gross (Demand) | E | 100.00% |
| Installation Rate (Energy) | F | 76.95% |
| Installation Rate (Demand) | G | 77.40% |
| Net coincident kW Saved at Generator | H | 0.01 kW |
| Gross Annual kWh Saved at Customer | I | 109.98 kWh |
| Net Annual kWh Saved at Generator | J | 90.39 kWh |
| Program Summary All Participants | | |
| Total Budget | K | \$396,024 |
| Net coincident kW Saved at Generator | L | 169 kW |
| Gross Annual kWh Saved at Customer | M | 1,433,666 kWh |
| Net Annual kWh Saved at Generator | N | 1,178,333 kWh |
| Total MTRC Net Benefits with Adder | O | \$687,281 |
| Total MTRC Net Benefits without Adder | P | \$423,105 |
| Utility Program Cost per kWh Lifetime | K/(A x N) | \$0.0210 |
| Utility Program Cost per kW at Gen | K/ L | \$2,344 |
| Avoided Lifetime CO2 Emissions, Total Program (tons CO2) | | 5,315 |