

**SINGLE-FAMILY WEATHERIZATION**

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)
<b>Benefits</b>				
<b>Avoided Revenue Requirements</b>				
Generation Capacity	N/A	\$4,074,174	\$4,074,174	\$4,074,174
Trans. & Dist. Capacity	N/A	\$510,239	\$510,239	\$510,239
Marginal Energy	N/A	\$7,140,905	\$7,140,905	\$7,140,905
Avoided Emissions (CO2)	N/A	N/A	N/A	\$4,913,510
Subtotal				\$16,638,828
Non-Energy Benefits Adder (50.0%)				\$5,862,659
Subtotal	N/A	\$11,725,318	\$11,725,318	\$22,501,487
<b>Participant Benefits</b>				
Bill Reduction - Electric	\$38,488,881	N/A	N/A	N/A
Participant Rebates and Incentives	\$2,206,587	N/A	N/A	\$2,206,587
Incremental Capital Savings	\$404,393	N/A	N/A	\$404,393
Incremental O&M Savings	\$6,731	N/A	N/A	\$6,731
Subtotal	\$41,106,592	N/A	N/A	\$2,617,711
<b>Total Benefits</b>	<b>\$41,106,592</b>	<b>\$11,725,318</b>	<b>\$11,725,318</b>	<b>\$25,119,197</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$128,456	\$128,456	\$128,456
Advertising/Promotion/Customer Ed	N/A	\$190,000	\$190,000	\$190,000
Participant Rebates and Incentives	N/A	\$2,206,587	\$2,206,587	\$2,206,587
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$150,000	\$150,000	\$150,000
Subtotal	N/A	\$2,675,043	\$2,675,043	\$2,675,043
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Electric	N/A	N/A	\$38,488,881	N/A
Subtotal	N/A	N/A	\$38,488,881	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$1,926,041	N/A	N/A	\$1,926,041
Incremental O&M Costs	\$18,641	N/A	N/A	\$18,641
Subtotal	\$1,944,682	N/A	N/A	\$1,944,682
<b>Total Costs</b>	<b>\$1,944,682</b>	<b>\$2,675,043</b>	<b>\$41,163,924</b>	<b>\$4,619,725</b>
<b>Net Benefit (Cost)</b>	<b>\$39,161,910</b>	<b>\$9,050,275</b>	<b>(\$29,438,606)</b>	<b>\$20,499,473</b>
<b>Benefit/Cost Ratio</b>	<b>21.14</b>	<b>4.38</b>	<b>0.28</b>	<b>5.44</b>

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

**2022**

**ELECTRIC**

**GOAL**

Input Summary and Totals

<b>Program "Inputs" per Customer kW and per Participant</b>		
Lifetime (Weighted on Generator kWh)	A	19.8 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%
<b>Installation Rate (Energy)</b>	<b>F</b>	<b>99.07%</b>
<b>Installation Rate (Demand)</b>	<b>G</b>	<b>99.11%</b>
Net coincident kW Saved at Generator	H	0.01 kW
Gross Annual kWh Saved at Customer	I	45.25 kWh
Net Annual kWh Saved at Generator	J	47.88 kWh
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	<b>K</b>	<b>\$2,675,043</b>
<b>Net coincident kW Saved at Generator</b>	<b>L</b>	<b>3,233 kW</b>
Gross Annual kWh Saved at Customer	M	22,147,237 kWh
<b>Net Annual kWh Saved at Generator</b>	<b>N</b>	<b>23,436,406 kWh</b>
<b>Total MTRC Net Benefits with Adder</b>	<b>O</b>	<b>\$20,499,473</b>
<b>Total MTRC Net Benefits without Adder</b>	<b>P</b>	<b>\$14,636,814</b>
<b>Utility Program Cost per kWh Lifetime</b>	<b>K/(A x N)</b>	<b>\$0.0058</b>
<b>Utility Program Cost per kW at Gen</b>	<b>K/ L</b>	<b>\$827</b>
<b>Avoided Lifetime CO2 Emissions, Total Program (tons CO2)</b>		<b>126,608</b>

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	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Modified Total Resource Test (\$Total)
<b>Benefits</b>				
<b>Avoided Revenue Requirements</b>				
Commodity Cost Reduction	N/A	\$1,865,587	\$1,865,587	\$1,865,587
Variable O&M Savings	N/A	\$29,823	\$29,823	\$29,823
Demand Savings	N/A	\$208,891	\$208,891	\$208,891
Subtotal				\$2,104,301
Non-Energy Benefits Adder (50.0%)				\$1,052,150
Subtotal	N/A	\$2,104,301	\$2,104,301	\$3,156,451
<b>Participant Benefits</b>				
Bill Reduction - Gas	\$3,325,301	N/A	N/A	N/A
Participant Rebates and Incentives	\$4,239,512	N/A	N/A	\$4,239,512
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$210,052	N/A	N/A	\$210,052
Subtotal	\$7,774,866	N/A	N/A	\$4,449,565
<b>Total Benefits</b>	<b>\$7,774,866</b>	<b>\$2,104,301</b>	<b>\$2,104,301</b>	<b>\$7,606,016</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$180,924	\$180,924	\$180,924
Advertising/Promotion/Customer Ed	N/A	\$60,000	\$60,000	\$60,000
Participant Rebates and Incentives	N/A	\$4,239,512	\$4,239,512	\$4,239,512
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$115,600	\$115,600	\$115,600
Subtotal	N/A	\$4,596,036	\$4,596,036	\$4,596,036
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Gas	N/A	N/A	\$3,325,301	N/A
Subtotal	N/A	N/A	\$3,325,301	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$3,868,874	N/A	N/A	\$3,868,874
Incremental O&M Costs	\$0	N/A	N/A	\$0
Subtotal	\$3,868,874	N/A	N/A	\$3,868,874
<b>Total Costs</b>	<b>\$3,868,874</b>	<b>\$4,596,036</b>	<b>\$7,921,337</b>	<b>\$8,464,910</b>
<b>Net Benefit (Cost)</b>	<b>\$3,905,992</b>	<b>(\$2,491,735)</b>	<b>(\$5,817,037)</b>	<b>(\$858,894)</b>
<b>Benefit/Cost Ratio</b>	<b>2.01</b>	<b>0.46</b>	<b>0.27</b>	<b>0.90</b>

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

**2022**

**GAS**

**GOAL**

<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Dth</b>		
Lifetime (Weighted on Dth)	A	15.3 years
Net-to-Gross (Weighted on Dth)	B	100.00%
Install Rate (Weighted on Dth)	C	100.00%
<b>Program Summary per Participant</b>		
Gross Annual Dth Saved	D	8.0
Net Annual Dth Saved	E	8.0
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	F	<b>\$4,596,036</b>
Gross Annual Dth Saved	G	<b>60,514 Dth</b>
Net Annual Dth Saved	H	<b>60,514 Dth</b>
<b>Total MTRC Net Benefits with Adder</b>	I	<b>(\$858,894)</b>
<b>Total MTRC Net Benefits without Adder</b>	J	<b>(\$1,911,045)</b>
<b>Utility Program Cost per Dth Lifetime</b>	F / (A x H)	<b>\$4.9801</b>