

<b>WHOLE HOME EFFICIENCY</b>				
<b>2021 Net Present Cost Benefit Summary Analysis For All Participants</b>				
	<b>Participant Test (\$Total)</b>	<b>Utility Test (\$Total)</b>	<b>Rate Impact Test (\$Total)</b>	<b>Modified Total Resource Test (\$Total)</b>
<b>Benefits</b>				
<b>Avoided Revenue Requirements</b>				
Generation Capacity	N/A	\$161,330	\$161,330	\$161,330
Trans. & Dist. Capacity	N/A	\$20,204	\$20,204	\$20,204
Marginal Energy	N/A	\$109,930	\$109,930	\$109,930
Avoided Emissions (CO2)	N/A	N/A	N/A	\$88,582
Subtotal				\$380,047
<b>Non-Energy Benefits Adder (20.0%)</b>				
Subtotal	N/A	\$291,465	\$291,465	\$438,340
<b>Participant Benefits</b>				
Bill Reduction - Electric	\$601,921	N/A	N/A	N/A
Participant Rebates and Incentives	\$87,346	N/A	N/A	\$87,346
Incremental Capital Savings	\$6,584	N/A	N/A	\$7,638
Incremental O&M Savings	\$2,657	N/A	N/A	\$3,082
Subtotal	\$698,508	N/A	N/A	\$98,066
<b>Total Benefits</b>	<b>\$698,508</b>	<b>\$291,465</b>	<b>\$291,465</b>	<b>\$536,406</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$93,112	\$93,112	\$93,112
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$87,346	\$87,346	\$87,346
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$20,000	\$20,000	\$20,000
Subtotal	N/A	\$200,458	\$200,458	\$200,458
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Electric	N/A	N/A	\$591,106	N/A
Subtotal	N/A	N/A	\$591,106	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$350,216	N/A	N/A	\$368,331
Incremental O&M Costs	\$4,397	N/A	N/A	\$5,101
Subtotal	\$354,613	N/A	N/A	\$373,432
<b>Total Costs</b>	<b>\$354,613</b>	<b>\$200,458</b>	<b>\$791,564</b>	<b>\$573,890</b>
<b>Net Benefit (Cost)</b>	<b>\$343,895</b>	<b>\$91,007</b>	<b>(\$500,099)</b>	<b>(\$37,484)</b>
<b>Benefit/Cost Ratio</b>	<b>1.97</b>	<b>1.45</b>	<b>0.37</b>	<b>0.93</b>

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

<b>2021 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW and per Participant</b>		
Lifetime (Weighted on Generator kWh)	A	14.2 years
T & D Loss Factor (Energy)	B	6.38%
T & D Loss Factor (Demand)	C	9.13%
Net-to-Gross (Energy)	D	114.58%
Net-to-Gross (Demand)	E	112.54%
<b>Installation Rate (Energy)</b>	<b>F</b>	<b>100.00%</b>
<b>Installation Rate (Demand)</b>	<b>G</b>	<b>100.00%</b>
Net coincident kW Saved at Generator	H	0.28 kW
Gross Annual kWh Saved at Customer	I	730.07 kWh
Net Annual kWh Saved at Generator	J	893.54 kWh
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	<b>K</b>	<b>\$200,458</b>
<b>Net coincident kW Saved at Generator</b>	<b>L</b>	<b>153 kW</b>
Gross Annual kWh Saved at Customer	M	399,346 kWh
<b>Net Annual kWh Saved at Generator</b>	<b>N</b>	<b>488,764 kWh</b>
<b>Total MTRC Net Benefits with Adder</b>	<b>O</b>	<b>(\$37,484)</b>
<b>Total MTRC Net Benefits without Adder</b>	<b>P</b>	<b>(\$95,777)</b>
<b>Utility Program Cost per kWh Lifetime</b>		
	K/(A x N)	<b>\$0.0288</b>
<b>Utility Program Cost per kW at Gen</b>		
	K/ L	<b>\$1,314</b>
<b>Avoided Lifetime CO2 Emissions, Total Program (tons CO2)</b>		
		<b>2,260</b>

<b>WHOLE HOME EFFICIENCY</b>				
<b>2022 Net Present Cost Benefit Summary Analysis For All Participants</b>				
	<b>Participant Test (\$Total)</b>	<b>Utility Test (\$Total)</b>	<b>Rate Impact Test (\$Total)</b>	<b>Modified Total Resource Test (\$Total)</b>
<b>Benefits</b>				
<b>Avoided Revenue Requirements</b>				
Generation Capacity	N/A	\$226,096	\$226,096	\$226,096
Trans. & Dist. Capacity	N/A	\$28,316	\$28,316	\$28,316
Marginal Energy	N/A	\$165,375	\$165,375	\$165,375
Avoided Emissions (CO2)	N/A	N/A	N/A	\$123,847
Subtotal				\$543,633
Non-Energy Benefits Adder (20.0%)				\$83,957
Subtotal	N/A	\$419,786	\$419,786	\$627,591
<b>Participant Benefits</b>				
Bill Reduction - Electric	\$894,715	N/A	N/A	N/A
Participant Rebates and Incentives	\$122,532	N/A	N/A	\$122,532
Incremental Capital Savings	\$12,077	N/A	N/A	\$14,009
Incremental O&M Savings	\$4,201	N/A	N/A	\$4,873
Subtotal	\$1,033,525	N/A	N/A	\$141,414
<b>Total Benefits</b>	<b>\$1,033,525</b>	<b>\$419,786</b>	<b>\$419,786</b>	<b>\$769,004</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$109,926	\$109,926	\$109,926
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$122,532	\$122,532	\$122,532
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$30,000	\$30,000	\$30,000
Subtotal	N/A	\$262,458	\$262,458	\$262,458
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Electric	N/A	N/A	\$877,576	N/A
Subtotal	N/A	N/A	\$877,576	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$453,171	N/A	N/A	\$478,263
Incremental O&M Costs	\$6,761	N/A	N/A	\$7,843
Subtotal	\$459,932	N/A	N/A	\$486,106
<b>Total Costs</b>	<b>\$459,932</b>	<b>\$262,458</b>	<b>\$1,140,034</b>	<b>\$748,564</b>
<b>Net Benefit (Cost)</b>	<b>\$573,593</b>	<b>\$157,329</b>	<b>(\$720,248)</b>	<b>\$20,441</b>
<b>Benefit/Cost Ratio</b>	<b>2.25</b>	<b>1.60</b>	<b>0.37</b>	<b>1.03</b>

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

<b>2022 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW and per Participant</b>		
Lifetime (Weighted on Generator kWh)	A	14.5 years
T & D Loss Factor (Energy)	B	6.38%
T & D Loss Factor (Demand)	C	9.13%
Net-to-Gross (Energy)	D	114.85%
Net-to-Gross (Demand)	E	112.80%
<b>Installation Rate (Energy)</b>	<b>F</b>	<b>100.00%</b>
<b>Installation Rate (Demand)</b>	<b>G</b>	<b>100.00%</b>
Net coincident kW Saved at Generator	H	0.28 kW
Gross Annual kWh Saved at Customer	I	759.59 kWh
Net Annual kWh Saved at Generator	J	931.81 kWh
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	<b>K</b>	<b>\$262,458</b>
<b>Net coincident kW Saved at Generator</b>	<b>L</b>	<b>210 kW</b>
Gross Annual kWh Saved at Customer	M	569,694 kWh
<b>Net Annual kWh Saved at Generator</b>	<b>N</b>	<b>698,861 kWh</b>
<b>Total MTRC Net Benefits with Adder</b>	<b>O</b>	<b>\$20,441</b>
<b>Total MTRC Net Benefits without Adder</b>	<b>P</b>	<b>(\$63,517)</b>
<b>Utility Program Cost per kWh Lifetime</b>	<b>K/(A x N)</b>	<b>\$0.0258</b>
<b>Utility Program Cost per kW at Gen</b>	<b>K/ L</b>	<b>\$1,248</b>
<b>Avoided Lifetime CO2 Emissions, Total Program (tons CO2)</b>		<b>3,045</b>

**WHOLE HOME EFFICIENCY**

2021 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>				
Commodity Cost Reduction	N/A	\$234,334	\$234,334	\$234,334
Variable O&M Savings	N/A	\$3,821	\$3,821	\$3,821
Demand Savings	N/A	\$26,764	\$26,764	\$26,764
Subtotal				\$264,918
Non-Energy Benefits Adder (20.0%)				\$52,984
Subtotal	N/A	\$264,918	\$264,918	\$317,902
<b>Participant Benefits</b>				
Bill Reduction - Gas	\$444,790	N/A	N/A	N/A
Participant Rebates and Incentives	\$69,881	N/A	N/A	\$69,881
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$5,500	N/A	N/A	\$6,380
Subtotal	\$520,171	N/A	N/A	\$76,261
<b>Total Benefits</b>	<b>\$520,171</b>	<b>\$264,918</b>	<b>\$264,918</b>	<b>\$394,163</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$58,811	\$58,811	\$58,811
Advertising/Promotion/ Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$69,881	\$69,881	\$69,881
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$20,000	\$20,000	\$20,000
Subtotal	N/A	\$148,692	\$148,692	\$148,692
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Gas	N/A	N/A	\$417,686	N/A
Subtotal	N/A	N/A	\$417,686	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$433,180	N/A	N/A	\$455,163
Incremental O&M Costs	\$0	N/A	N/A	\$0
Subtotal	\$433,180	N/A	N/A	\$455,163
<b>Total Costs</b>	<b>\$433,180</b>	<b>\$148,692</b>	<b>\$566,379</b>	<b>\$603,855</b>
<b>Net Benefit (Cost)</b>	<b>\$86,991</b>	<b>\$116,226</b>	<b>(\$301,460)</b>	<b>(\$209,692)</b>
<b>Benefit/Cost Ratio</b>	<b>1.20</b>	<b>1.78</b>	<b>0.47</b>	<b>0.65</b>

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

**2021 GAS**

**GOAL**

Input Summary and Totals

<b>Program "Inputs" per Dth</b>		
Lifetime (Weighted on Dth)	A	16.8 years
Net-to-Gross (Weighted on Dth)	B	111.07%
Install Rate (Weighted on Dth)	C	100.00%

**Program Summary per Participant**

Gross Annual Dth Saved	D	12.1
Net Annual Dth Saved	E	13.5

**Program Summary All Participants**

<b>Total Budget</b>	F	<b>\$148,692</b>
Gross Annual Dth Saved	G	6,552 Dth
Net Annual Dth Saved	H	7,277 Dth
<b>Total MTRC Net Benefits with Adder</b>	I	<b>(\$209,692)</b>
<b>Total MTRC Net Benefits without Adder</b>	J	<b>(\$262,676)</b>

<b>Utility Program Cost per Dth Lifetime</b>	F / (A x H)	<b>\$1.2198</b>
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**WHOLE HOME EFFICIENCY**

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>				
Commodity Cost Reduction	N/A	\$318,886	\$318,886	\$318,886
Variable O&M Savings	N/A	\$4,993	\$4,993	\$4,993
Demand Savings	N/A	\$34,972	\$34,972	\$34,972
Subtotal				\$358,850
Non-Energy Benefits Adder (20.0%)				\$71,770
Subtotal	N/A	\$358,850	\$358,850	\$430,620
<b>Participant Benefits</b>				
Bill Reduction - Gas	\$603,966	N/A	N/A	N/A
Participant Rebates and Incentives	\$94,340	N/A	N/A	\$94,340
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$8,669	N/A	N/A	\$10,056
Subtotal	\$706,976	N/A	N/A	\$104,396
<b>Total Benefits</b>	<b>\$706,976</b>	<b>\$358,850</b>	<b>\$358,850</b>	<b>\$535,016</b>
<b>Costs</b>				
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$72,360	\$72,360	\$72,360
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$94,340	\$94,340	\$94,340
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$30,000	\$30,000	\$30,000
Subtotal	N/A	\$196,700	\$196,700	\$196,700
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Gas	N/A	N/A	\$568,396	N/A
Subtotal	N/A	N/A	\$568,396	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$561,344	N/A	N/A	\$588,723
Incremental O&M Costs	\$0	N/A	N/A	\$0
Subtotal	\$561,344	N/A	N/A	\$588,723
<b>Total Costs</b>	<b>\$561,344</b>	<b>\$196,700</b>	<b>\$765,096</b>	<b>\$785,423</b>
<b>Net Benefit (Cost)</b>	<b>\$145,632</b>	<b>\$162,150</b>	<b>(\$406,245)</b>	<b>(\$250,406)</b>
<b>Benefit/Cost Ratio</b>	<b>1.26</b>	<b>1.82</b>	<b>0.47</b>	<b>0.68</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	16.7 years
Net-to-Gross (Weighted on Dth)	B	111.23%
Install Rate (Weighted on Dth)	C	100.00%
<b>Program Summary per Participant</b>		
Gross Annual Dth Saved	D	11.7
Net Annual Dth Saved	E	13.1
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	F	<b>\$196,700</b>
Gross Annual Dth Saved	G	<b>8,561 Dth</b>
Net Annual Dth Saved	H	<b>9,522 Dth</b>
<b>Total MTRC Net Benefits with Adder</b>	I	<b>(\$250,406)</b>
<b>Total MTRC Net Benefits without Adder</b>	J	<b>(\$322,176)</b>
<b>Utility Program Cost per Dth Lifetime</b>	F / (A x H)	<b>\$1.2369</b>