

THERMOSTAT OPTIMIZATION					2020	ELECTRIC	GOAL
2020 Net Present Cost Benefit Summary Analysis For All Participants					Input Summary and Totals		
	Participant	Utility	Rate	Modified	Program Inputs per Customer kW		
	Test	Test	Impact	TRC	Lifetime (Weighted on Generator kWh)	A	5 years
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Annual Hours	B	8760
Benefits					Gross Customer kW	C	1 kW
<b>Avoided Revenue Requirements</b>					Generator Peak Coincidence Factor	D	76.00%
Generation Capacity	N/A	\$738,116	\$738,116	\$738,116	Gross Load Factor at Customer	E	7.99%
Trans. & Dist. Capacity	N/A	\$92,437	\$92,437	\$92,437	Net-to-Gross (Energy)	F	100.0%
Marginal Energy	N/A	\$136,654	\$136,654	\$136,654	Net-to-Gross (Demand)	G	100.0%
Avoided Emissions (CO2)	N/A	N/A	N/A	\$0	Transmission Loss Factor (Energy)	H	6.380%
Subtotal				\$967,206	Transmission Loss Factor (Demand)	I	9.129%
Non-Energy Benefits Adder (20%)				\$193,441	<b>Installation Rate (Energy)</b>	<b>J</b>	<b>100.0%</b>
Subtotal	N/A	\$967,206	\$967,206	\$1,160,648	<b>Installation Rate (Demand)</b>	<b>K</b>	<b>100.0%</b>
<b>Other Benefits</b>					MTRC Net Benefit (Cost)	<b>L</b>	\$251
Bill Reduction - Electric	\$682,904	N/A	N/A	N/A	MTRC Non-Energy Benefit Adder	<b>M</b>	\$92
Participant Rebates and Incentives	\$136,711	N/A	N/A	\$136,711	Gross Annual kWh Saved at Customer	( B x E x C )	700 kWh
Incremental Capital Savings	\$0	N/A	N/A	\$0	Net Annual kWh Saved at Customer	( F x ( B x E x C x J ) )	700 kWh
Incremental O&M Savings	\$0	N/A	N/A	\$0	Net Annual kWh Saved at Generator	( F x ( B x E x C x J ) ) / ( 1 - H )	748 kWh
Subtotal	\$819,615	N/A	N/A	\$136,711	<b>Program Summary All Participants</b>		
<b>Total Benefits</b>	<b>\$819,615</b>	<b>\$967,206</b>	<b>\$967,206</b>	<b>\$1,297,358</b>	<b>Total Budget</b>	<b>N</b>	<b>\$250,759</b>
<b>Utility Project Costs</b>					Gross kW Saved at Customer	O	2,105 kW
Program Planning & Design	N/A	\$0	\$0	\$0	<b>Net coincident kW Saved at Generator</b>	( G x O x K ) x D / ( 1 - I )	<b>1,761 kW</b>
Administration & Program Delivery	N/A	\$107,674	\$107,674	\$107,674	Net Annual kWh Saved at Customer	( F x ( B x E x O x J ) )	1,473,330 kWh
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0	<b>Net Annual kWh Saved at Generator</b>	( F x ( B x E x O x J ) ) / ( 1 - H )	<b>1,573,726 kWh</b>
Participant Rebates and Incentives	N/A	\$136,711	\$136,711	\$136,711	<b>TRC Net Benefits with Adder</b>	( O x L )	<b>\$527,892</b>
Equipment & Installation	N/A	\$0	\$0	\$0	<b>TRC Net Benefits without Adder</b>	( O x ( L - M ) )	<b>\$334,451</b>
Measurement and Verification	N/A	\$6,374	\$6,374	\$6,374	<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0328</b>
Subtotal	N/A	\$250,759	\$250,759	\$250,759	<b>Utility Program Cost per kW at Gen</b>		<b>\$142</b>
<b>Utility Revenue Reduction</b>							
Revenue Reduction - Electric	N/A	N/A	\$682,904	N/A			
Subtotal	N/A	N/A	\$682,904	N/A			
<b>Participant Costs</b>							
Incremental Capital Costs	\$518,708	N/A	N/A	\$518,708			
Incremental O&M Costs	\$0	N/A	N/A	\$0			
Subtotal	\$518,708	N/A	N/A	\$518,708			
<b>Total Costs</b>	<b>\$518,708</b>	<b>\$250,759</b>	<b>\$933,663</b>	<b>\$769,466</b>			
<b>Net Benefit (Cost)</b>	<b>\$300,907</b>	<b>\$716,448</b>	<b>\$33,544</b>	<b>\$527,892</b>			
<b>Benefit/Cost Ratio</b>	<b>1.58</b>	<b>3.86</b>	<b>1.04</b>	<b>1.69</b>			

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