

**RESIDENTIAL DEMAND RESPONSE**

2020 Net Present Cost Benefit Summary Analysis For All Participants

	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Modified TRC Test (\$Total)
<b>Benefits</b>				
<b>Avoided Revenue Requirements</b>				
Generation Capacity	N/A	\$9,713,618	\$9,713,618	\$9,713,618
Trans. & Dist. Capacity	N/A	\$1,216,475	\$1,216,475	\$1,216,475
Marginal Energy	N/A	\$11,407	\$11,407	\$11,407
Avoided Emissions (CO2)	N/A	N/A	N/A	\$350
Subtotal				\$10,941,851
Non-Energy Benefits Adder (20%)				\$2,188,370
Subtotal	N/A	\$10,941,501	\$10,941,501	\$13,130,221
<b>Other Benefits</b>				
Bill Reduction - Electric	\$51,443	N/A	N/A	N/A
Participant Rebates and Incentives	\$8,893,253	N/A	N/A	\$8,893,253
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0
Subtotal	\$8,944,696	N/A	N/A	\$8,893,253
<b>Total Benefits</b>	<b>\$8,944,696</b>	<b>\$10,941,501</b>	<b>\$10,941,501</b>	<b>\$22,023,474</b>
<b>Utility Project Costs</b>				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$4,095,940	\$4,095,940	\$4,095,940
Advertising/Promotion/Customer Ed	N/A	\$900,000	\$900,000	\$900,000
Participant Rebates and Incentives	N/A	\$8,893,253	\$8,893,253	\$8,893,253
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$100,000	\$100,000	\$100,000
Subtotal	N/A	\$13,989,193	\$13,989,193	\$13,989,193
<b>Utility Revenue Reduction</b>				
Revenue Reduction - Electric	N/A	N/A	\$51,443	N/A
Subtotal	N/A	N/A	\$51,443	N/A
<b>Participant Costs</b>				
Incremental Capital Costs	\$418,791	N/A	N/A	\$418,791
Incremental O&M Costs	\$0	N/A	N/A	\$0
Subtotal	\$418,791	N/A	N/A	\$418,791
<b>Total Costs</b>	<b>\$418,791</b>	<b>\$13,989,193</b>	<b>\$14,040,636</b>	<b>\$14,407,984</b>
<b>Net Benefit (Cost)</b>	<b>\$8,525,905</b>	<b>(\$3,047,692)</b>	<b>(\$3,099,135)</b>	<b>\$7,615,490</b>
<b>Benefit/Cost Ratio</b>	<b>21.36</b>	<b>0.78</b>	<b>0.78</b>	<b>1.53</b>

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

**2020 ELECTRIC**

**GOAL**

94.00

<b>Input Summary and Totals</b>		
<b>Program Inputs per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	10 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	38.73%
Gross Load Factor at Customer	E	0.02%
Net-to-Gross (Energy)	F	100.0%
Net-to-Gross (Demand)	G	100.0%
Transmission Loss Factor (Energy)	H	6.380%
Transmission Loss Factor (Demand)	I	9.129%
<b>Installation Rate (Energy)</b>	<b>J</b>	<b>100.0%</b>
<b>Installation Rate (Demand)</b>	<b>K</b>	<b>100.0%</b>
MTRC Net Benefit (Cost)	L	\$214
MTRC Non-Energy Benefit Adder	M	\$62
Gross Annual kWh Saved at Customer	( B x E x C )	1 kWh
Net Annual kWh Saved at Customer	( F x ( B x E x C x J ) )	1 kWh
Net Annual kWh Saved at Generator	( F x ( B x E x C x J ) ) / ( 1 - H )	2 kWh
<b>Program Summary All Participants</b>		
<b>Total Budget</b>	N	<b>\$13,989,193</b>
Gross kW Saved at Customer	O	35,546 kW
<b>Net coincident kW Saved at Generator</b>	<b>( G x O x K ) x D / ( 1 - I )</b>	<b>15,148 kW</b>
Net Annual kWh Saved at Customer	( F x ( B x E x O x J ) )	52,370 kWh
<b>Net Annual kWh Saved at Generator</b>	<b>( F x ( B x E x O x J ) ) / ( 1 - H )</b>	<b>55,938 kWh</b>
<b>TRC Net Benefits with Adder</b>	( O x L )	<b>\$7,615,490</b>
<b>TRC Net Benefits without Adder</b>	( O x ( L - M ) )	<b>\$5,427,120</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$25.4876</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$923</b>