

COMMERCIAL REFRIGERATION EFFICIENCY					2020	ELECTRIC	GOAL
2020 Net Present Cost Benefit Summary Analysis For All Participants							
	Participant	Utility	Rate	Modified			
	Test	Test	Impact	TRC			
	(\$Total)	(\$Total)	(\$Total)	(\$Total)			
Benefits							
Avoided Revenue Requirements							
	Generation Capacity	N/A	\$492,994	\$492,994	\$492,994		
	Trans. & Dist. Capacity	N/A	\$61,864	\$61,864	\$61,864		
	Marginal Energy	N/A	\$794,858	\$794,858	\$794,858		
	Avoided Emissions (CO2)	N/A	N/A	N/A	\$0		
	Subtotal				\$1,349,715		
	Non-Energy Benefits Adder (20%)				\$269,943		
Subtotal	N/A	\$1,349,715	\$1,349,715	\$1,619,658			
Other Benefits							
	Bill Reduction - Electric	\$2,078,412	N/A	N/A	N/A		
	Participant Rebates and Incentives	\$210,409	N/A	N/A	\$210,409		
	Incremental Capital Savings	\$0	N/A	N/A	\$0		
	Incremental O&M Savings	\$45,170	N/A	N/A	\$45,170		
Subtotal	\$2,333,991	N/A	N/A	N/A	\$255,578		
Total Benefits	\$2,333,991	\$1,349,715	\$1,349,715	\$1,875,237			
Utility Project Costs							
	Program Planning & Design	N/A	\$0	\$0	\$0		
	Administration & Program Delivery	N/A	\$427,207	\$427,207	\$427,207		
	Advertising/Promotion/Customer Ed	N/A	\$9,100	\$9,100	\$9,100		
	Participant Rebates and Incentives	N/A	\$210,409	\$210,409	\$210,409		
	Equipment & Installation	N/A	\$0	\$0	\$0		
	Measurement and Verification	N/A	\$27,000	\$27,000	\$27,000		
Subtotal	N/A	\$673,716	\$673,716	\$673,716			
Utility Revenue Reduction							
	Revenue Reduction - Electric	N/A	N/A	\$2,078,412	N/A		
Subtotal	N/A	N/A	\$2,078,412	N/A			
Participant Costs							
	Incremental Capital Costs	\$618,506	N/A	N/A	\$618,506		
	Incremental O&M Costs	\$0	N/A	N/A	\$0		
Subtotal	\$618,506	N/A	N/A	N/A	\$618,506		
Total Costs	\$618,506	\$673,716	\$2,752,128	\$1,292,221			
Net Benefit (Cost)	\$1,715,485	\$676,000	(\$1,402,413)	\$583,015			
Benefit/Cost Ratio	3.77	2.00	0.49	1.45			

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

Input Summary and Totals		
Program Inputs per Customer kW		
Lifetime (Weighted on Generator kWh)	A	15 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	82.84%
Gross Load Factor at Customer	E	55.46%
Net-to-Gross (Energy)	F	100.0%
Net-to-Gross (Demand)	G	100.0%
Transmission Loss Factor (Energy)	H	5.332%
Transmission Loss Factor (Demand)	I	7.711%
Installation Rate (Energy)	J	100.0%
Installation Rate (Demand)	K	100.0%
MTRC Net Benefit (Cost)	L	\$1,018
MTRC Non-Energy Benefit Adder	M	\$471
Gross Annual kWh Saved at Customer	(B x E x C)	4,858 kWh
Net Annual kWh Saved at Customer	(F x (B x E x C x J))	4,858 kWh
Net Annual kWh Saved at Generator	(F x (B x E x C x J)) / (1 - H)	5,132 kWh
Program Summary All Participants		
Total Budget	N	\$673,716
Gross kW Saved at Customer	O	573 kW
Net coincident kW Saved at Generator	(G x O x K) x D / (1 - I)	514 kW
Net Annual kWh Saved at Customer	(F x (B x E x O x J))	2,783,442 kWh
Net Annual kWh Saved at Generator	(F x (B x E x O x J)) / (1 - H)	2,940,220 kWh
TRC Net Benefits with Adder	(O x L)	\$583,015
TRC Net Benefits without Adder	(O x (L - M))	\$313,072
Utility Program Cost per kWh Lifetime		\$0.0151
Utility Program Cost per kW at Gen		\$1,310