

HOME PERFORMANCE WITH ENERGY STAR	2019	ELECTRIC	GOAL
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2019 Net Present Cost Benefit Summary Analysis For All Participants

	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Modified TRC Test (\$Total)
Benefits				
Avoided Revenue Requirements				
Generation Capacity	N/A	\$398,757	\$398,757	\$398,757
Trans. & Dist. Capacity	N/A	\$49,938	\$49,938	\$49,938
Marginal Energy	N/A	\$68,654	\$68,654	\$68,654
Avoided Emissions (CO2)	N/A	N/A	N/A	\$0
Subtotal				\$517,348
Non-Energy Benefits Adder (20%)				\$103,470
Subtotal	N/A	\$517,348	\$517,348	\$620,818
Other Benefits				
Bill Reduction - Electric	\$252,190	N/A	N/A	N/A
Participant Rebates and Incentives	\$110,811	N/A	N/A	\$110,811
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0
Subtotal	\$363,002	N/A	N/A	\$110,811
Total Benefits	\$363,002	\$517,348	\$517,348	\$731,630
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$516,782	\$516,782	\$516,782
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$110,811	\$110,811	\$110,811
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$30,000	\$30,000	\$30,000
Subtotal	N/A	\$657,593	\$657,593	\$657,593
Utility Revenue Reduction				
Revenue Reduction - Electric	N/A	N/A	\$291,669	N/A
Subtotal	N/A	N/A	\$291,669	N/A
Participant Costs				
Incremental Capital Costs	\$392,482	N/A	N/A	\$454,610
Incremental O&M Costs	\$2,069	N/A	N/A	\$2,400
Subtotal	\$394,551	N/A	N/A	\$457,010
Total Costs	\$394,551	\$657,593	\$949,262	\$1,114,604
Net Benefit (Cost)	(\$31,549)	(\$140,245)	(\$431,914)	(\$382,974)
Benefit/Cost Ratio	0.92	0.79	0.55	0.66

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	16 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	87.96%
Gross Load Factor at Customer	E	5.53%
Net-to-Gross (Energy)	F	115.6%
Net-to-Gross (Demand)	G	115.7%
Transmission Loss Factor (Energy)	H	6.380%
Transmission Loss Factor (Demand)	I	9.129%
Installation Rate (Energy)	J	100.0%
Installation Rate (Demand)	K	100.0%
MTRC Net Benefit (Cost)	L	-\$1,046
MTRC Non-Energy Benefit Adder	M	\$283
Gross Annual kWh Saved at Customer	(B x E x C)	485 kWh
Net Annual kWh Saved at Customer	(F x (B x E x C x J))	560 kWh
Net Annual kWh Saved at Generator	(F x (B x E x C x J)) / (1 - H)	598 kWh
Program Summary All Participants		
Total Budget	N	\$657,593
Net coincident kW Saved at Generator	(G x O x K) x D / (1 - I)	410 kW
Net Annual kWh Saved at Customer	(F x (B x E x O x J))	205,041 kWh
Net Annual kWh Saved at Generator	(F x (B x E x O x J)) / (1 - H)	219,013 kWh
TRC Net Benefits with Adder	(O x L)	(\$382,974)
TRC Net Benefits without Adder	(O x (L - M))	(\$486,444)
Utility Program Cost per kWh Lifetime		
		\$0.1836
Utility Program Cost per kW at Gen		
		\$1,604

HOME PERFORMANCE WITH ENERGY STAR	2020	ELECTRIC	GOAL
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2020 Net Present Cost Benefit Summary Analysis For All Participants

	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Modified TRC Test (\$Total)
Benefits				
Avoided Revenue Requirements				
Generation Capacity	N/A	\$446,831	\$446,831	\$446,831
Trans. & Dist. Capacity	N/A	\$56,990	\$56,990	\$56,990
Marginal Energy	N/A	\$94,498	\$94,498	\$94,498
Avoided Emissions (CO2)	N/A	N/A	N/A	\$0
Subtotal				\$598,320
Non-Energy Benefits Adder (20%)				\$119,664
Subtotal	N/A	\$598,320	\$598,320	\$717,983
Other Benefits				
Bill Reduction - Electric	\$340,548	N/A	N/A	N/A
Participant Rebates and Incentives	\$414,705	N/A	N/A	\$414,705
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0
Subtotal	\$755,253	N/A	N/A	\$414,705
Total Benefits	\$755,253	\$598,320	\$598,320	\$1,132,688
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$216,782	\$216,782	\$216,782
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$414,705	\$414,705	\$414,705
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$30,000	\$30,000	\$30,000
Subtotal	N/A	\$661,487	\$661,487	\$661,487
Utility Revenue Reduction				
Revenue Reduction - Electric	N/A	N/A	\$392,412	N/A
Subtotal	N/A	N/A	\$392,412	N/A
Participant Costs				
Incremental Capital Costs	\$389,214	N/A	N/A	\$449,284
Incremental O&M Costs	\$3,494	N/A	N/A	\$4,053
Subtotal	\$392,708	N/A	N/A	\$453,336
Total Costs	\$392,708	\$661,487	\$1,053,899	\$1,114,823
Net Benefit (Cost)	\$362,546	(\$63,167)	(\$455,579)	\$17,865
Benefit/Cost Ratio	1.92	0.90	0.57	1.02

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	82.86%
Gross Load Factor at Customer	E	6.49%
Net-to-Gross (Energy)	F	115.0%
Net-to-Gross (Demand)	G	115.1%
Transmission Loss Factor (Energy)	H	6.380%
Transmission Loss Factor (Demand)	I	9.129%
Installation Rate (Energy)	J	100.0%
Installation Rate (Demand)	K	100.0%
MTRC Net Benefit (Cost)	L	\$40
MTRC Non-Energy Benefit Adder	M	\$269
Gross Annual kWh Saved at Customer	(B x E x C)	569 kWh
Net Annual kWh Saved at Customer	(F x (B x E x C x J))	654 kWh
Net Annual kWh Saved at Generator	(F x (B x E x C x J)) / (1 - H)	699 kWh
Program Summary All Participant		
Total Budget	N	\$661,487
Net coincident kW Saved at Generator	(G x O x K) x D / (1 - I)	466 kW
Net Annual kWh Saved at Customer	(F x (B x E x O x J))	290,437 kWh
Net Annual kWh Saved at Generator	(F x (B x E x O x J)) / (1 - H)	310,228 kWh
TRC Net Benefits with Adder	(O x L)	\$17,865
TRC Net Benefits without Adder	(O x (L - M))	(\$101,799)
Utility Program Cost per kWh Lifetime		
		\$0.1415
Utility Program Cost per kW at Gen		
		\$1,419