

MULTIFAMILY BUILDINGS

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)
Benefits				
Avoided Revenue Requirements				
Generation Capacity	N/A	\$1,651,768	\$1,651,768	\$1,651,768
Trans. & Dist. Capacity	N/A	\$206,862	\$206,862	\$206,862
Marginal Energy	N/A	\$2,746,573	\$2,746,573	\$2,746,573
Avoided Emissions (CO2)	N/A	N/A	N/A	\$2,202,538
Subtotal				\$6,807,741
Non-Energy Benefits Adder (20.0%)				
Subtotal	N/A	\$4,605,203	\$4,605,203	\$7,728,781
Participant Benefits				
Bill Reduction - Electric	\$12,934,843	N/A	N/A	N/A
Participant Rebates and Incentives	\$1,799,735	N/A	N/A	\$1,799,735
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$68,552	N/A	N/A	\$68,552
Subtotal	\$14,803,130	N/A	N/A	\$1,868,287
Total Benefits	\$14,803,130	\$4,605,203	\$4,605,203	\$9,597,069
Costs				
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$1,046,977	\$1,046,977	\$1,046,977
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$1,799,735	\$1,799,735	\$1,799,735
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$0	\$0	\$0
Subtotal	N/A	\$2,846,712	\$2,846,712	\$2,846,712
Utility Revenue Reduction				
Revenue Reduction - Electric	N/A	N/A	\$12,934,421	N/A
Subtotal	N/A	N/A	\$12,934,421	N/A
Participant Costs				
Incremental Capital Costs	\$2,725,120	N/A	N/A	\$2,522,030
Incremental O&M Costs	\$225	N/A	N/A	\$225
Subtotal	\$2,725,345	N/A	N/A	\$2,522,255
Total Costs	\$2,725,345	\$2,846,712	\$15,781,133	\$5,368,967
Net Benefit (Cost)	\$12,077,786	\$1,758,491	(\$11,175,930)	\$4,228,102
Benefit/Cost Ratio	5.43	1.62	0.29	1.79

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

2021

ELECTRIC

GOAL

Input Summary and Totals

Program "Inputs" per Customer kW and per Participant

Lifetime (Weighted on Generator kWh)	A	14.2 years
T & D Loss Factor (Energy)	B	5.78%
T & D Loss Factor (Demand)	C	8.34%
Net-to-Gross (Energy)	D	100.00%
Net-to-Gross (Demand)	E	100.00%
Installation Rate (Energy)	F	100.00%
Installation Rate (Demand)	G	100.00%
Net coincident kW Saved at Generator	H	0.01 kW
Gross Annual kWh Saved at Customer	I	60.07 kWh
Net Annual kWh Saved at Generator	J	63.76 kWh

Program Summary All Participants

Total Budget	K	\$2,846,712
Net coincident kW Saved at Generator	L	1,728 kW
Gross Annual kWh Saved at Customer	M	12,237,118 kWh
Net Annual kWh Saved at Generator	N	12,988,002 kWh
Total MTRC Net Benefits with Adder	O	\$4,228,102
Total MTRC Net Benefits without Adder	P	\$3,307,061

Utility Program Cost per kWh Lifetime	K/(A x N)	\$0.0154
Utility Program Cost per kW at Gen	K/ L	\$1,647

Avoided Lifetime CO2 Emissions, Total Program (tons CO2)		56,211
---	--	---------------

MULTIFAMILY BUILDINGS

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)
Benefits				
Avoided Revenue Requirements				
Generation Capacity	N/A	\$1,464,382	\$1,464,382	\$1,464,382
Trans. & Dist. Capacity	N/A	\$183,395	\$183,395	\$183,395
Marginal Energy	N/A	\$2,418,981	\$2,418,981	\$2,418,981
Avoided Emissions (CO2)	N/A	N/A	N/A	\$1,811,498
Subtotal				\$5,878,255
Non-Energy Benefits Adder (20.0%)				\$813,352
Subtotal	N/A	\$4,066,758	\$4,066,758	\$6,691,607
Participant Benefits				
Bill Reduction - Electric	\$11,108,847	N/A	N/A	N/A
Participant Rebates and Incentives	\$1,586,191	N/A	N/A	\$1,586,191
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$79,635	N/A	N/A	\$79,635
Subtotal	\$12,774,672	N/A	N/A	\$1,665,826
Total Benefits	\$12,774,672	\$4,066,758	\$4,066,758	\$8,357,433
Costs				
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$903,836	\$903,836	\$903,836
Advertising/Promotion/Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$1,586,191	\$1,586,191	\$1,586,191
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$0	\$0	\$0
Subtotal	N/A	\$2,490,027	\$2,490,027	\$2,490,027
Utility Revenue Reduction				
Revenue Reduction - Electric	N/A	N/A	\$11,108,414	N/A
Subtotal	N/A	N/A	\$11,108,414	N/A
Participant Costs				
Incremental Capital Costs	\$2,492,489	N/A	N/A	\$2,264,542
Incremental O&M Costs	\$337	N/A	N/A	\$337
Subtotal	\$2,492,826	N/A	N/A	\$2,264,880
Total Costs	\$2,492,826	\$2,490,027	\$13,598,441	\$4,754,907
Net Benefit (Cost)	\$10,281,846	\$1,576,731	(\$9,531,684)	\$3,602,526
Benefit/Cost Ratio	5.12	1.63	0.30	1.76

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

2022

ELECTRIC

GOAL

Input Summary and Totals

Program "Inputs" per Customer kW and per Participant

Lifetime (Weighted on Generator kWh)	A	14.6 years
T & D Loss Factor (Energy)	B	5.69%
T & D Loss Factor (Demand)	C	8.23%
Net-to-Gross (Energy)	D	100.00%
Net-to-Gross (Demand)	E	100.00%
Installation Rate (Energy)	F	100.00%
Installation Rate (Demand)	G	100.00%
Net coincident kW Saved at Generator	H	0.01 kW
Gross Annual kWh Saved at Customer	I	65.71 kWh
Net Annual kWh Saved at Generator	J	69.67 kWh

Program Summary All Participants

Total Budget	K	\$2,490,027
Net coincident kW Saved at Generator	L	1,472 kW
Gross Annual kWh Saved at Customer	M	10,277,303 kWh
Net Annual kWh Saved at Generator	N	10,897,633 kWh
Total MTRC Net Benefits with Adder	O	\$3,602,526
Total MTRC Net Benefits without Adder	P	\$2,789,174

Utility Program Cost per kWh Lifetime	K/(A x N)	\$0.0157
Utility Program Cost per kW at Gen	K/ L	\$1,691

Avoided Lifetime CO2 Emissions, Total Program (tons CO2)		44,467
---	--	---------------

MULTIFAMILY BUILDINGS

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)
Benefits				
Avoided Revenue Requirements				
Commodity Cost Reduction	N/A	\$740,348	\$740,348	\$740,348
Variable O&M Savings	N/A	\$13,901	\$13,901	\$13,901
Demand Savings	N/A	\$97,371	\$97,371	\$97,371
Subtotal				\$851,620
Non-Energy Benefits Adder (20.0%)				\$170,324
Subtotal	N/A	\$851,620	\$851,620	\$1,021,944
Participant Benefits				
Bill Reduction - Gas	\$1,323,875	N/A	N/A	N/A
Participant Rebates and Incentives	\$519,884	N/A	N/A	\$519,884
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$4,202,850	N/A	N/A	\$4,202,850
Subtotal	\$6,046,608	N/A	N/A	\$4,722,733
Total Benefits	\$6,046,608	\$851,620	\$851,620	\$5,744,678
Costs				
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$341,674	\$341,674	\$341,674
Advertising/Promotion/ Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$519,884	\$519,884	\$519,884
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$0	\$0	\$0
Subtotal	N/A	\$861,558	\$861,558	\$861,558
Utility Revenue Reduction				
Revenue Reduction - Gas	N/A	N/A	\$1,323,875	N/A
Subtotal	N/A	N/A	\$1,323,875	N/A
Participant Costs				
Incremental Capital Costs	\$577,255	N/A	N/A	\$576,120
Incremental O&M Costs	\$142	N/A	N/A	\$142
Subtotal	\$577,398	N/A	N/A	\$576,262
Total Costs	\$577,398	\$861,558	\$2,185,433	\$1,437,819
Net Benefit (Cost)	\$5,469,211	(\$9,937)	(\$1,333,813)	\$4,306,858
Benefit/Cost Ratio	10.47	0.99	0.39	4.00

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

2021 GAS

GOAL

Input Summary and Totals		
Program "Inputs" per Dth		
Lifetime (Weighted on Dth)	A	10.1 years
Net-to-Gross (Weighted on Dth)	B	100.00%
Install Rate (Weighted on Dth)	C	100.00%
Program Summary per Participant		
Gross Annual Dth Saved	D	1.3
Net Annual Dth Saved	E	1.3
Program Summary All Participants		
Total Budget	F	\$861,558
Gross Annual Dth Saved	G	35,889 Dth
Net Annual Dth Saved	H	35,889 Dth
Total MTRC Net Benefits with Adder	I	\$4,306,858
Total MTRC Net Benefits without Adder	J	\$4,136,534
Utility Program Cost per Dth Lifetime	F / (A x H)	\$2.3714

MULTIFAMILY BUILDINGS

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)
Benefits				
Avoided Revenue Requirements				
Commodity Cost Reduction	N/A	\$772,649	\$772,649	\$772,649
Variable O&M Savings	N/A	\$13,901	\$13,901	\$13,901
Demand Savings	N/A	\$97,371	\$97,371	\$97,371
Subtotal				\$883,921
Non-Energy Benefits Adder (20.0%)				\$176,784
Subtotal	N/A	\$883,921	\$883,921	\$1,060,705
Participant Benefits				
Bill Reduction - Gas	\$1,381,615	N/A	N/A	N/A
Participant Rebates and Incentives	\$539,182	N/A	N/A	\$539,182
Incremental Capital Savings	\$0	N/A	N/A	\$0
Incremental O&M Savings	\$4,199,443	N/A	N/A	\$4,199,443
Subtotal	\$6,120,240	N/A	N/A	\$4,738,626
Total Benefits	\$6,120,240	\$883,921	\$883,921	\$5,799,331
Costs				
Utility Project Costs				
Program Planning & Design	N/A	\$0	\$0	\$0
Administration & Program Delivery	N/A	\$342,774	\$342,774	\$342,774
Advertising/Promotion/ Customer Ed	N/A	\$0	\$0	\$0
Participant Rebates and Incentives	N/A	\$539,182	\$539,182	\$539,182
Equipment & Installation	N/A	\$0	\$0	\$0
Measurement and Verification	N/A	\$0	\$0	\$0
Subtotal	N/A	\$881,956	\$881,956	\$881,956
Utility Revenue Reduction				
Revenue Reduction - Gas	N/A	N/A	\$1,381,615	N/A
Subtotal	N/A	N/A	\$1,381,615	N/A
Participant Costs				
Incremental Capital Costs	\$594,412	N/A	N/A	\$596,869
Incremental O&M Costs	\$142	N/A	N/A	\$142
Subtotal	\$594,554	N/A	N/A	\$597,011
Total Costs	\$594,554	\$881,956	\$2,263,571	\$1,478,967
Net Benefit (Cost)	\$5,525,686	\$1,965	(\$1,379,650)	\$4,320,364
Benefit/Cost Ratio	10.29	1.00	0.39	3.92

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

2022 GAS

GOAL

Input Summary and Totals		
Program "Inputs" per Dth		
Lifetime (Weighted on Dth)	A	10.1 years
Net-to-Gross (Weighted on Dth)	B	100.00%
Install Rate (Weighted on Dth)	C	100.00%
Program Summary per Participant		
Gross Annual Dth Saved	D	1.3
Net Annual Dth Saved	E	1.3
Program Summary All Participants		
Total Budget	F	\$881,956
Gross Annual Dth Saved	G	35,889 Dth
Net Annual Dth Saved	H	35,889 Dth
Total MTRC Net Benefits with Adder	I	\$4,320,364
Total MTRC Net Benefits without Adder	J	\$4,143,580
Utility Program Cost per Dth Lifetime	F / (A x H)	\$2.4275