

Executive Summary Table - 2020

2020	Electric Participants	Electric Budget	Generator kW	Generator kWh	Participant Test Ratio	Utility Test Ratio	Ratepayer Impact Measure Test Ratio	TRC Ratio
Business Segment								
Lighting Efficiency	341	\$389,320	453	3,960,428	2.67	5.74	0.47	1.20
Business Saver's Switch	10	\$25,250	28	39	INF	1.23	0.50	1.23
Peak and Energy Control	1	\$10,000	101	3,713	INF	4.60	1.03	4.60
Business Segment Total	352	\$424,570	582	3,964,179	2.71	5.44	0.48	1.21
Residential Segment								
Home Lighting	5,245	\$96,756	408	3,009,728	36.68	6.34	0.17	3.57
Residential Demand Response	1,410	\$235,500	817	99,889	6.78	2.74	0.83	2.82
Consumer Education	68,000	\$21,165	N/A	N/A				
Water Heating	21	\$12,900	12	82,115	4.23	2.70	0.44	1.37
Residential Segment Total	74,676	\$366,321	1,237	3,191,731	18.17	3.53	0.29	2.90
Planning Segment								
Regulatory Affairs	0	\$14,000	N/A	N/A				
Planning Segment Total	0	\$0	N/A	N/A				
PORTFOLIO TOTAL								
	75,028	\$804,891	1,819	7,155,910	4.89	4.48	0.39	1.61

WATER HEATING					
2020 Net Present Cost Benefit Summary Analysis For All Participants					
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$6,042	\$6,042	\$6,042	\$6,042
T & D	N/A	\$3,675	\$3,675	\$3,675	\$3,675
Marginal Energy	N/A	\$25,136	\$25,136	\$25,136	\$25,136
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$34,853	\$34,853	\$34,853	\$34,853
Participant Benefits					
Bill Reduction - Electric	\$66,021	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$6,300	N/A	N/A	\$6,300	\$6,300
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$72,321	N/A	N/A	\$6,300	\$6,300
Total Benefits	\$72,321	\$34,853	\$34,853	\$41,153	\$41,153
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$6,600	\$6,600	\$6,600	\$6,600
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$6,300	\$6,300	\$6,300	\$6,300
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$12,900	\$12,900	\$12,900	\$12,900
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A	N/A	\$66,021	N/A	N/A
Subtotal	N/A	N/A	\$66,021	N/A	N/A
Participant Costs					
Incremental Capital Costs	\$12,841	N/A	N/A	\$12,841	\$12,841
Incremental O&M Costs	\$4,255	N/A	N/A	\$4,255	\$4,255
Subtotal	\$17,096	N/A	N/A	\$17,096	\$17,096
Total Costs	\$17,096	\$12,900	\$78,921	\$29,996	\$29,996
Net Benefit (Cost)	\$55,225	\$21,953	(\$44,068)	\$11,157	\$11,157
Benefit/Cost Ratio	4.23	2.70	0.44	1.37	1.37

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

2020 ELECTRIC		GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	A	10.0 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	100.00%
Gross Load Factor at Customer	E	79.10%
Transmission Loss Factor (Energy)	F	5.950%
Transmission Loss Factor (Demand)	G	7.220%
Societal Net Benefit (Cost)	H	\$1,001
Program Summary per Participant		
Gross kW Saved at Customer	I	0.53 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.57 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	3,678 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	3,910 kWh
Program Summary All Participants		
Total Participants	J	21
Total Budget	K	\$12,900
Gross kW Saved at Customer	$(J \times I)$	11.14 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$	12 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	77,229 kWh
Net Annual kWh Saved at Generator	$((B \times E \times I) / (1 - F)) \times J$	82,115 kWh
Societal Net Benefits	$(J \times I \times H)$	\$11,157
Utility Program Cost per kWh Lifetime		\$0.0157
Utility Program Cost per kW at Gen		\$1,074

RESIDENTIAL SEGMENT TOTAL					
2020 Net Present Cost Benefit Summary Analysis For All Participants					
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$492,723	\$492,723	\$492,723	\$492,723
T & D	N/A	\$299,987	\$299,987	\$299,987	\$299,987
Marginal Energy	N/A	\$499,780	\$499,780	\$499,780	\$499,780
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$1,292,491	\$1,292,491	\$1,292,491	\$1,292,491
Participant Benefits					
Bill Reduction - Electric	\$4,017,350	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$126,719	N/A	N/A	\$126,719	\$126,719
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$359,485	N/A	N/A	\$359,485	\$359,485
Subtotal	\$4,503,555	N/A	N/A	\$486,204	\$486,204
Total Benefits	\$4,503,555	\$1,292,491	\$1,292,491	\$1,778,695	\$1,778,695
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$239,602	\$239,602	\$239,602	\$239,602
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$126,719	\$126,719	\$126,719	\$126,719
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$366,321	\$366,321	\$366,321	\$366,321
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A	N/A	\$4,017,350	N/A	N/A
Subtotal	N/A	N/A	\$4,017,350	N/A	N/A
Participant Costs					
Incremental Capital Costs	\$247,870	N/A	N/A	\$247,870	\$247,870
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$247,870	N/A	N/A	\$247,870	\$247,870
Total Costs	\$247,870	\$366,321	\$4,383,671	\$614,191	\$614,191
Net Benefit (Cost)	\$4,255,685	\$926,170	(\$3,091,181)	\$1,164,504	\$1,164,504
Benefit/Cost Ratio	18.17	3.53	0.29	2.90	2.90

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

2020 ELECTRIC GOAL		
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	A	5.5 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	26.42%
Gross Load Factor at Customer	E	7.91%
Transmission Loss Factor (Energy)	F	5.711%
Transmission Loss Factor (Demand)	G	7.170%
Societal Net Benefit (Cost)	H	\$268
Program Summary per Participant		
Gross kW Saved at Customer	I	0.06 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.02 kW
Gross Annual kWh Saved at Customer	(B x E x I)	40 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	43 kWh
Program Summary All Participants		
Total Participants	J	74,676
Total Budget	K	\$366,321
Gross kW Saved at Customer	(J x I)	4,345.66 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	1,237 kW
Gross Annual kWh Saved at Customer	(B x E x I) x J	3,009,460 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,191,731 kWh
Societal Net Benefits	(J x I x H)	\$1,164,504
Utility Program Cost per kWh Lifetime		\$0.0209
Utility Program Cost per kW at Gen		\$296

PORTFOLIO TOTAL					
2020 Net Present Cost Benefit Summary Analysis For All Participants					
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$878,664	\$878,664	\$878,664	\$878,664
T & D	N/A	\$535,417	\$535,417	\$535,417	\$535,417
Marginal Energy	N/A	\$2,188,776	\$2,188,776	\$2,188,776	\$2,188,776
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$3,602,857	\$3,602,857	\$3,602,857	\$3,602,857
Participant Benefits					
Bill Reduction - Electric	\$8,411,884	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$441,929	N/A	N/A	\$441,929	\$441,929
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$231,559	N/A	N/A	\$231,559	\$231,559
Subtotal	\$9,085,372	N/A	N/A	\$673,488	\$673,488
Total Benefits	\$9,085,372	\$3,602,857	\$3,602,857	\$4,276,345	\$4,276,345
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$362,962	\$362,962	\$362,962	\$362,962
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$441,929	\$441,929	\$441,929	\$441,929
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$804,891	\$804,891	\$804,891	\$804,891
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A	N/A	\$8,411,884	N/A	N/A
Subtotal	N/A	N/A	\$8,411,884	N/A	N/A
Participant Costs					
Incremental Capital Costs	\$1,859,133	N/A	N/A	\$1,859,133	\$1,859,133
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$1,859,133	N/A	N/A	\$1,859,133	\$1,859,133
Total Costs	\$1,859,133	\$804,891	\$9,216,775	\$2,664,024	\$2,664,024
Net Benefit (Cost)	\$7,226,239	\$2,797,966	(\$5,613,918)	\$1,612,321	\$1,612,321
Benefit/Cost Ratio	4.89	4.48	0.39	1.61	1.61

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

2020 ELECTRIC GOAL		
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	A	12.5 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	30.34%
Gross Load Factor at Customer	E	13.86%
Transmission Loss Factor (Energy)	F	5.246%
Transmission Loss Factor (Demand)	G	6.835%
Societal Net Benefit (Cost)	H	\$289
Program Summary per Participant		
Gross kW Saved at Customer	I	0.07 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.02 kW
Gross Annual kWh Saved at Customer	(B x E x I)	90 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	95 kWh
Program Summary All Participants		
Total Participants	J	75,028
Total Budget	K	\$804,891
Gross kW Saved at Customer	(J x I)	5,585.56 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	1,819 kW
Gross Annual kWh Saved at Customer	(B x E x I) x J	6,780,485 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	7,155,910 kWh
Societal Net Benefits	(J x I x H)	\$1,612,321
Utility Program Cost per kWh Lifetime		\$0.0090
Utility Program Cost per kW at Gen		\$442