

### Executive Summary Table-2023

2023	Electric Participants	Electric Budget	Generator kW	Generator kWh	Participant Test Ratio	Utility Test Ratio	Ratepayer Impact Measure Test Ratio	TRC Ratio
<b>Business Segment</b>								
Lighting Efficiency	477	\$393,373	784	6,482,533	4.03	5.87	0.35	1.45
Business Saver's Switch	20	\$25,250	57	78	INF	1.33	0.38	1.33
Peak and Energy Control	1	\$10,000	174	448	INF	4.39	2.82	4.39
<b>Business Segment Total</b>	<b>498</b>	<b>\$428,623</b>	<b>1,014</b>	<b>6,483,059</b>	<b>4.07</b>	<b>5.57</b>	<b>0.35</b>	<b>1.46</b>
<b>Residential Segment</b>								
Home Lighting	8,066	\$131,615	714	5,281,610	49.51	13.44	0.28	7.19
Heat Pump Water Heaters	25	\$10,900	8	61,901	4.72	1.92	0.24	1.02
Residential Demand Response	1,400	\$230,000	835	59,022	5.38	1.86	0.56	1.79
Consumer Education	52,579	\$21,165	N/A	N/A	N/A	N/A	N/A	N/A
<b>Residential Segment Total</b>	<b>62,070</b>	<b>\$393,680</b>	<b>1,556</b>	<b>5,402,533</b>	<b>24.88</b>	<b>5.64</b>	<b>0.30</b>	<b>3.75</b>
<b>Planning Segment</b>								
Regulatory Affairs	N/A	\$10,000	N/A	N/A	N/A	N/A	N/A	N/A
<b>Planning Segment Total</b>	<b>N/A</b>	<b>\$10,000</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>PORTFOLIO TOTAL</b>	<b>62,568</b>	<b>\$832,303</b>	<b>2,571</b>	<b>11,885,592</b>	<b>7.04</b>	<b>5.53</b>	<b>0.33</b>	<b>2.00</b>

<b>LIGHTING EFFICIENCY</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$429,464	\$429,464	\$429,464	\$429,464
T & D	N/A	\$76,556	\$76,556	\$76,556	\$76,556
Marginal Energy	N/A	\$1,802,627	\$1,802,627	\$1,802,627	\$1,802,627
Environmental Externality	N/A	N/A	N/A	N/A	\$1,419
Subtotal	N/A	\$2,308,647	\$2,308,647	\$2,308,647	\$2,310,065
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$6,270,168	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$363,097	N/A	N/A	\$363,097	\$363,097
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$434,831	N/A	N/A	\$434,831	\$434,831
Subtotal	\$7,068,096	N/A	N/A	\$797,928	\$797,928
<b>Total Benefits</b>	<b>\$7,068,096</b>	<b>\$2,308,647</b>	<b>\$2,308,647</b>	<b>\$3,106,575</b>	<b>\$3,107,993</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$11,353	\$11,353	\$11,353	\$11,353
Advertising & Promotion	N/A	\$18,922	\$18,922	\$18,922	\$18,922
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$363,097	\$363,097	\$363,097	\$363,097
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$393,373	\$393,373	\$393,373	\$393,373
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$6,270,168	N/A	N/A
Subtotal	N/A	N/A	\$6,270,168	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$1,753,143	N/A	N/A	\$1,753,143	\$1,753,143
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$1,753,143	N/A	N/A	\$1,753,143	\$1,753,143
<b>Total Costs</b>	<b>\$1,753,143</b>	<b>\$393,373</b>	<b>\$6,663,541</b>	<b>\$2,146,517</b>	<b>\$2,146,517</b>
<b>Net Benefit (Cost)</b>	<b>\$5,314,953</b>	<b>\$1,915,274</b>	<b>(\$4,354,895)</b>	<b>\$960,058</b>	<b>\$961,477</b>
<b>Benefit/Cost Ratio</b>	<b>4.03</b>	<b>5.87</b>	<b>0.35</b>	<b>1.45</b>	<b>1.45</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	14.4 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	58.01%
Gross Load Factor at Customer	E	55.17%
Transmission Loss Factor (Energy)	F	4.550%
Transmission Loss Factor (Demand)	G	5.318%
Societal Net Benefit (Cost)	H	\$751
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	2.68 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	1.64 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	12,972 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	13,590 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	477
<b>Total Budget</b>	<b>K</b>	<b>\$393,373</b>
Gross kW Saved at Customer	$(J \times I)$	1,280.25 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>784 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	6,187,578 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>6,482,533 kWh</b>
<b>Societal Net Benefits</b>	<b><math>(J \times I \times H)</math></b>	<b>\$961,477</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0042</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$502</b>

<b>BUSINESS SAVER'S SWITCH</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$33,460	\$33,460	\$33,460	\$33,460
T & D	N/A	\$0	\$0	\$0	\$0
Marginal Energy	N/A	\$14	\$14	\$14	\$14
Environmental Externality	N/A	N/A	N/A	N/A	\$3
Subtotal	N/A	\$33,473	\$33,473	\$33,473	\$33,476
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$62,261	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	\$0
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$62,261	N/A	N/A	\$0	\$0
<b>Total Benefits</b>	<b>\$62,261</b>	<b>\$33,473</b>	<b>\$33,473</b>	<b>\$33,473</b>	<b>\$33,476</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$15,750	\$15,750	\$15,750	\$15,750
Utility Administration	N/A	\$7,000	\$7,000	\$7,000	\$7,000
Advertising & Promotion	N/A	\$2,500	\$2,500	\$2,500	\$2,500
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$0	\$0	\$0	\$0
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$25,250	\$25,250	\$25,250	\$25,250
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$62,261	N/A	N/A
Subtotal	N/A	N/A	\$62,261	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$0	N/A	N/A	\$0	\$0
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$0	N/A	N/A	\$0	\$0
<b>Total Costs</b>	<b>\$0</b>	<b>\$25,250</b>	<b>\$87,511</b>	<b>\$25,250</b>	<b>\$25,250</b>
<b>Net Benefit (Cost)</b>	<b>\$62,261</b>	<b>\$8,223</b>	<b>(\$54,037)</b>	<b>\$8,223</b>	<b>\$8,226</b>
<b>Benefit/Cost Ratio</b>	<b>INF</b>	<b>1.33</b>	<b>0.38</b>	<b>1.33</b>	<b>1.33</b>

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

<b>2023 ELECTRIC</b>			<b>GOAL</b>
<b>Input Summary and Totals</b>			
<b>Program "Inputs" per Customer kW</b>			
Lifetime (Weighted on Generator kWh)	A		15.0 years
Annual Hours	B		8760
Gross Customer kW	C		1 kW
Generator Peak Coincidence Factor	D		16.67%
Gross Load Factor at Customer	E		0.00%
Transmission Loss Factor (Energy)	F		4.550%
Transmission Loss Factor (Demand)	G		5.317%
Societal Net Benefit (Cost)	H		\$26
<b>Program Summary per Participant</b>			
Gross kW Saved at Customer	I		16.05 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$		2.83 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$		4 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$		4 kWh
<b>Program Summary All Participants</b>			
Total Participants	J		20
<b>Total Budget</b>	<b>K</b>		<b>\$25,250</b>
Gross kW Saved at Customer	$(J \times I)$		321.07 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>		<b>57 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$		75 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>		<b>78 kWh</b>
<b>Societal Net Benefits</b>	$(J \times I \times H)$		<b>\$8,226</b>
<b>Utility Program Cost per kWh Lifetime</b>			<b>\$21.5430</b>
<b>Utility Program Cost per kW at Gen</b>			<b>\$447</b>

<b>PEAK AND ENERGY CONTROL</b>					
2023 Net Present Cost Benefit Summary Analysis For All Participants					
	Participant	Utility	Rate	Total	Societal
	Test	Test	Impact	Resource	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$43,882	\$43,882	\$43,882	\$43,882
T & D	N/A	\$0	\$0	\$0	\$0
Marginal Energy	N/A	\$61	\$61	\$61	\$61
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$43,943	\$43,943	\$43,943	\$43,943
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$5,587	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	\$0
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$5,587	N/A	N/A	\$0	\$0
<b>Total Benefits</b>	<b>\$5,587</b>	<b>\$43,943</b>	<b>\$43,943</b>	<b>\$43,943</b>	<b>\$43,943</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$10,000	\$10,000	\$10,000	\$10,000
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$0	\$0	\$0	\$0
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$10,000	\$10,000	\$10,000	\$10,000
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$5,587	N/A	N/A
Subtotal	N/A	N/A	\$5,587	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$0	N/A	N/A	\$0	\$0
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$0	N/A	N/A	\$0	\$0
<b>Total Costs</b>	<b>\$0</b>	<b>\$10,000</b>	<b>\$15,587</b>	<b>\$10,000</b>	<b>\$10,000</b>
<b>Net Benefit (Cost)</b>	<b>\$5,587</b>	<b>\$33,943</b>	<b>\$28,356</b>	<b>\$33,943</b>	<b>\$33,943</b>
<b>Benefit/Cost Ratio</b>	<b>INF</b>	<b>4.39</b>	<b>2.82</b>	<b>4.39</b>	<b>4.39</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	5.0 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	100.00%
Gross Load Factor at Customer	E	0.03%
Transmission Loss Factor (Energy)	F	4.550%
Transmission Loss Factor (Demand)	G	5.318%
Societal Net Benefit (Cost)	H	\$207
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	164.29 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	173.52 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	427 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	448 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	1
<b>Total Budget</b>	<b>K</b>	<b>\$10,000</b>
Gross kW Saved at Customer	$(J \times I)$	164.29 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>174 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	427 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>448 kWh</b>
<b>Societal Net Benefits</b>	$(J \times I \times H)$	<b>\$33,943</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$4.4691</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$58</b>

<b>BUSINESS SEGMENT TOTAL</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$506,806	\$506,806	\$506,806	\$506,806
T & D	N/A	\$76,556	\$76,556	\$76,556	\$76,556
Marginal Energy	N/A	\$1,802,701	\$1,802,701	\$1,802,701	\$1,802,701
Environmental Externality	N/A	N/A	N/A	N/A	\$1,422
Subtotal	N/A	\$2,386,063	\$2,386,063	\$2,386,063	\$2,387,485
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$6,338,015	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$363,097	N/A	N/A	\$363,097	\$363,097
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$434,831	N/A	N/A	\$434,831	\$434,831
Subtotal	\$7,135,943	N/A	N/A	\$797,928	\$797,928
<b>Total Benefits</b>	<b>\$7,135,943</b>	<b>\$2,386,063</b>	<b>\$2,386,063</b>	<b>\$3,183,991</b>	<b>\$3,185,413</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$15,750	\$15,750	\$15,750	\$15,750
Utility Administration	N/A	\$28,353	\$28,353	\$28,353	\$28,353
Advertising & Promotion	N/A	\$21,422	\$21,422	\$21,422	\$21,422
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$363,097	\$363,097	\$363,097	\$363,097
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$428,623	\$428,623	\$428,623	\$428,623
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$6,338,015	N/A	N/A
Subtotal	N/A	N/A	\$6,338,015	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$1,753,143	N/A	N/A	\$1,753,143	\$1,753,143
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$1,753,143	N/A	N/A	\$1,753,143	\$1,753,143
<b>Total Costs</b>	<b>\$1,753,143</b>	<b>\$428,623</b>	<b>\$6,766,638</b>	<b>\$2,181,767</b>	<b>\$2,181,767</b>
<b>Net Benefit (Cost)</b>	<b>\$5,382,800</b>	<b>\$1,957,440</b>	<b>(\$4,380,575)</b>	<b>\$1,002,224</b>	<b>\$1,003,646</b>
<b>Benefit/Cost Ratio</b>	<b>4.07</b>	<b>5.57</b>	<b>0.35</b>	<b>1.46</b>	<b>1.46</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	14.4 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	54.40%
Gross Load Factor at Customer	E	40.01%
Transmission Loss Factor (Energy)	F	4.550%
Transmission Loss Factor (Demand)	G	5.317%
Societal Net Benefit (Cost)	H	\$568
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	3.55 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	2.04 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	12,426 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	13,018 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	498
<b>Total Budget</b>	<b>K</b>	<b>\$428,623</b>
Gross kW Saved at Customer	$(J \times I)$	1,765.61 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>1,014 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	6,188,080 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>6,483,059 kWh</b>
<b>Societal Net Benefits</b>	$(J \times I \times H)$	<b>\$1,003,646</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0046</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$423</b>

<b>HOME LIGHTING</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$352,954	\$352,954	\$352,954	\$352,954
T & D	N/A	\$63,001	\$63,001	\$63,001	\$63,001
Marginal Energy	N/A	\$1,353,256	\$1,353,256	\$1,353,256	\$1,353,256
Environmental Externality	N/A	N/A	N/A	N/A	\$6,597
Subtotal	N/A	\$1,769,211	\$1,769,211	\$1,769,211	\$1,775,808
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$6,276,042	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$102,849	N/A	N/A	\$102,849	\$102,849
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$6,378,890	N/A	N/A	\$102,849	\$102,849
<b>Total Benefits</b>	<b>\$6,378,890</b>	<b>\$1,769,211</b>	<b>\$1,769,211</b>	<b>\$1,872,060</b>	<b>\$1,878,657</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$23,966	\$23,966	\$23,966	\$23,966
Advertising & Promotion	N/A	\$4,800	\$4,800	\$4,800	\$4,800
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$102,849	\$102,849	\$102,849	\$102,849
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$131,615	\$131,615	\$131,615	\$131,615
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$6,276,042	N/A	N/A
Subtotal	N/A	N/A	\$6,276,042	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$128,833	N/A	N/A	\$128,833	\$128,833
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$128,833	N/A	N/A	\$128,833	\$128,833
<b>Total Costs</b>	<b>\$128,833</b>	<b>\$131,615</b>	<b>\$6,407,656</b>	<b>\$260,448</b>	<b>\$260,448</b>
<b>Net Benefit (Cost)</b>	<b>\$6,250,057</b>	<b>\$1,637,597</b>	<b>(\$4,638,445)</b>	<b>\$1,611,612</b>	<b>\$1,618,209</b>
<b>Benefit/Cost Ratio</b>	<b>49.51</b>	<b>13.44</b>	<b>0.28</b>	<b>7.19</b>	<b>7.21</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	13.4 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	16.70%
Gross Load Factor at Customer	E	14.33%
Transmission Loss Factor (Energy)	F	5.349%
Transmission Loss Factor (Demand)	G	6.804%
Societal Net Benefit (Cost)	H	\$406
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	0.49 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.09 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	620 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	655 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	8,066
<b>Total Budget</b>	<b>K</b>	<b>\$131,615</b>
Gross kW Saved at Customer	$(J \times I)$	3,983.50 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>714 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	4,999,123 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>5,281,610 kWh</b>
<b>Societal Net Benefits</b>	<b><math>(J \times I \times H)</math></b>	<b>\$1,618,209</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0019</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$184</b>

<b>HEAT PUMP WATER HEATERS</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$4,285	\$4,285	\$4,285	\$4,285
T & D	N/A	\$762	\$762	\$762	\$762
Marginal Energy	N/A	\$15,859	\$15,859	\$15,859	\$15,859
Environmental Externality	N/A	N/A	N/A	N/A	\$1
Subtotal	N/A	\$20,907	\$20,907	\$20,907	\$20,908
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$76,220	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$8,400	N/A	N/A	\$8,400	\$8,400
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$84,620	N/A	N/A	\$8,400	\$8,400
<b>Total Benefits</b>	<b>\$84,620</b>	<b>\$20,907</b>	<b>\$20,907</b>	<b>\$29,307</b>	<b>\$29,308</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$2,500	\$2,500	\$2,500	\$2,500
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$8,400	\$8,400	\$8,400	\$8,400
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$10,900	\$10,900	\$10,900	\$10,900
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$76,220	N/A	N/A
Subtotal	N/A	N/A	\$76,220	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$16,464	N/A	N/A	\$16,464	\$16,464
Incremental O&M Costs	\$1,474	N/A	N/A	\$1,474	\$1,474
Subtotal	\$17,938	N/A	N/A	\$17,938	\$17,938
<b>Total Costs</b>	<b>\$17,938</b>	<b>\$10,900</b>	<b>\$87,120</b>	<b>\$28,838</b>	<b>\$28,838</b>
<b>Net Benefit (Cost)</b>	<b>\$66,682</b>	<b>\$10,007</b>	<b>(\$66,213)</b>	<b>\$469</b>	<b>\$470</b>
<b>Benefit/Cost Ratio</b>	<b>4.72</b>	<b>1.92</b>	<b>0.24</b>	<b>1.02</b>	<b>1.02</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	13.0 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	100.00%
Gross Load Factor at Customer	E	89.75%
Transmission Loss Factor (Energy)	F	5.630%
Transmission Loss Factor (Demand)	G	6.900%
Societal Net Benefit (Cost)	H	\$63
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	0.30 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.32 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	2,337 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	2,476 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	25
<b>Total Budget</b>	<b>K</b>	<b>\$10,900</b>
Gross kW Saved at Customer	$(J \times I)$	7.43 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>8 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	58,416 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>61,901 kWh</b>
<b>Societal Net Benefits</b>	<b><math>(J \times I \times H)</math></b>	<b>\$470</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0135</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$1,366</b>

<b>RESIDENTIAL DEMAND RESPONSE</b>					
2023 Net Present Cost Benefit Summary Analysis For All Participants					
	Participant	Utility	Rate	Total	Societal
	Test	Test	Impact	Resource	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$392,637	\$392,637	\$392,637	\$392,637
T & D	N/A	\$21,512	\$21,512	\$21,512	\$21,512
Marginal Energy	N/A	\$14,202	\$14,202	\$14,202	\$14,202
Environmental Externality	N/A	N/A	N/A	N/A	\$72
Subtotal	N/A	\$428,351	\$428,351	\$428,351	\$428,423
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$541,413	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$53,000	N/A	N/A	\$53,000	\$53,000
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$190,467	N/A	N/A	\$190,467	\$190,467
Subtotal	\$784,880	N/A	N/A	\$243,467	\$243,467
<b>Total Benefits</b>	<b>\$784,880</b>	<b>\$428,351</b>	<b>\$428,351</b>	<b>\$671,818</b>	<b>\$671,890</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$126,000	\$126,000	\$126,000	\$126,000
Utility Administration	N/A	\$41,000	\$41,000	\$41,000	\$41,000
Advertising & Promotion	N/A	\$10,000	\$10,000	\$10,000	\$10,000
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$53,000	\$53,000	\$53,000	\$53,000
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$230,000	\$230,000	\$230,000	\$230,000
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$541,413	N/A	N/A
Subtotal	N/A	N/A	\$541,413	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$146,000	N/A	N/A	\$146,000	\$146,000
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$146,000	N/A	N/A	\$146,000	\$146,000
<b>Total Costs</b>	<b>\$146,000</b>	<b>\$230,000</b>	<b>\$771,413</b>	<b>\$376,000</b>	<b>\$376,000</b>
<b>Net Benefit (Cost)</b>	<b>\$638,880</b>	<b>\$198,351</b>	<b>(\$343,062)</b>	<b>\$295,818</b>	<b>\$295,890</b>
<b>Benefit/Cost Ratio</b>	<b>5.38</b>	<b>1.86</b>	<b>0.56</b>	<b>1.79</b>	<b>1.79</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	10.0 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	41.01%
Gross Load Factor at Customer	E	0.34%
Transmission Loss Factor (Energy)	F	5.630%
Transmission Loss Factor (Demand)	G	6.900%
Societal Net Benefit (Cost)	H	\$156
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	1.35 kW
Net coincident kW Saved at Generator	( I x D ) / ( 1 - G )	0.60 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 ) )	42 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	1,400
<b>Total Budget</b>	<b>K</b>	<b>\$230,000</b>
Gross kW Saved at Customer	( J x I )	1,894.74 kW
<b>Net coincident kW Saved at Generator</b>	<b>( I x D ) / ( 1 - G ) x J</b>	<b>835 kW</b>
Gross Annual kWh Saved at Customer	( B x E x I ) x J	55,699 kWh
<b>Net Annual kWh Saved at Generator</b>	<b>( ( B x E x I ) / ( 1 - F ) ) x J</b>	<b>59,022 kWh</b>
<b>Societal Net Benefits</b>	<b>( J x I x H )</b>	<b>\$295,890</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.3886</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$276</b>



<b>RESIDENTIAL SEGMENT TOTAL</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$749,876	\$749,876	\$749,876	\$749,876
T & D	N/A	\$85,275	\$85,275	\$85,275	\$85,275
Marginal Energy	N/A	\$1,383,318	\$1,383,318	\$1,383,318	\$1,383,318
Environmental Externality	N/A	N/A	N/A	N/A	\$6,670
Subtotal	N/A	\$2,218,469	\$2,218,469	\$2,218,469	\$2,225,139
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$6,893,674	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$164,249	N/A	N/A	\$164,249	\$164,249
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$188,993	N/A	N/A	\$188,993	\$188,993
Subtotal	\$7,246,916	N/A	N/A	\$353,241	\$353,241
<b>Total Benefits</b>	<b>\$7,246,916</b>	<b>\$2,218,469</b>	<b>\$2,218,469</b>	<b>\$2,571,710</b>	<b>\$2,578,380</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$147,165	\$147,165	\$147,165	\$147,165
Utility Administration	N/A	\$67,466	\$67,466	\$67,466	\$67,466
Advertising & Promotion	N/A	\$14,800	\$14,800	\$14,800	\$14,800
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$164,249	\$164,249	\$164,249	\$164,249
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$393,680	\$393,680	\$393,680	\$393,680
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$6,893,674	N/A	N/A
Subtotal	N/A	N/A	\$6,893,674	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$291,297	N/A	N/A	\$291,297	\$291,297
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$291,297	N/A	N/A	\$291,297	\$291,297
<b>Total Costs</b>	<b>\$291,297</b>	<b>\$393,680</b>	<b>\$7,287,354</b>	<b>\$684,977</b>	<b>\$684,977</b>
<b>Net Benefit (Cost)</b>	<b>\$6,955,618</b>	<b>\$1,824,789</b>	<b>(\$5,068,885)</b>	<b>\$1,886,733</b>	<b>\$1,893,403</b>
<b>Benefit/Cost Ratio</b>	<b>24.88</b>	<b>5.64</b>	<b>0.30</b>	<b>3.75</b>	<b>3.76</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	13.4 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	24.63%
Gross Load Factor at Customer	E	9.92%
Transmission Loss Factor (Energy)	F	5.355%
Transmission Loss Factor (Demand)	G	6.835%
Societal Net Benefit (Cost)	H	\$322
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	0.09 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.03 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	82 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	87 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	62,070
<b>Total Budget</b>	<b>K</b>	<b>\$393,680</b>
Gross kW Saved at Customer	$(J \times I)$	5,885.67 kW
<b>Net coincident kW Saved at Generator</b>	$(I \times D) / (1 - G) \times J$	<b>1,556 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	5,113,238 kWh
<b>Net Annual kWh Saved at Generator</b>	$((B \times E \times I) / (1 - F)) \times J$	<b>5,402,533 kWh</b>
<b>Societal Net Benefits</b>	$(J \times I \times H)$	<b>\$1,893,403</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0054</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$253</b>

<b>PORTFOLIO TOTAL</b>					
2023 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)
<b>Benefits</b>					
<b>Avoided Revenue Requirements</b>					
Generation	N/A	\$1,256,682	\$1,256,682	\$1,256,682	\$1,256,682
T & D	N/A	\$161,831	\$161,831	\$161,831	\$161,831
Marginal Energy	N/A	\$3,186,019	\$3,186,019	\$3,186,019	\$3,186,019
Environmental Externality	N/A	N/A	N/A	N/A	\$8,092
Subtotal	N/A	\$4,604,532	\$4,604,532	\$4,604,532	\$4,612,624
<b>Participant Benefits</b>					
Bill Reduction - Electric	\$13,231,690	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$527,346	N/A	N/A	\$527,346	\$527,346
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$623,824	N/A	N/A	\$623,824	\$623,824
Subtotal	\$14,382,859	N/A	N/A	\$1,151,169	\$1,151,169
<b>Total Benefits</b>	<b>\$14,382,859</b>	<b>\$4,604,532</b>	<b>\$4,604,532</b>	<b>\$5,755,701</b>	<b>\$5,763,793</b>
<b>Costs</b>					
<b>Utility Project Costs</b>					
Customer Services	N/A	\$162,915	\$162,915	\$162,915	\$162,915
Utility Administration	N/A	\$105,819	\$105,819	\$105,819	\$105,819
Advertising & Promotion	N/A	\$36,222	\$36,222	\$36,222	\$36,222
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$527,346	\$527,346	\$527,346	\$527,346
Other	N/A	\$0	\$0	\$0	\$0
Subtotal	N/A	\$832,303	\$832,303	\$832,303	\$832,303
<b>Utility Revenue Reduction</b>					
Revenue Reduction - Electric	N/A	N/A	\$13,231,690	N/A	N/A
Subtotal	N/A	N/A	\$13,231,690	N/A	N/A
<b>Participant Costs</b>					
Incremental Capital Costs	\$2,044,441	N/A	N/A	\$2,044,441	\$2,044,441
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0
Subtotal	\$2,044,441	N/A	N/A	\$2,044,441	\$2,044,441
<b>Total Costs</b>	<b>\$2,044,441</b>	<b>\$832,303</b>	<b>\$14,063,992</b>	<b>\$2,876,743</b>	<b>\$2,876,743</b>
<b>Net Benefit (Cost)</b>	<b>\$12,338,418</b>	<b>\$3,772,229</b>	<b>(\$9,459,461)</b>	<b>\$2,878,958</b>	<b>\$2,887,050</b>
<b>Benefit/Cost Ratio</b>	<b>7.04</b>	<b>5.53</b>	<b>0.33</b>	<b>2.00</b>	<b>2.00</b>

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

<b>2023 ELECTRIC</b>		<b>GOAL</b>
<b>Input Summary and Totals</b>		
<b>Program "Inputs" per Customer kW</b>		
Lifetime (Weighted on Generator kWh)	A	14.0 years
Annual Hours	B	8760
Gross Customer kW	C	1 kW
Generator Peak Coincidence Factor	D	31.42%
Gross Load Factor at Customer	E	16.86%
Transmission Loss Factor (Energy)	F	4.916%
Transmission Loss Factor (Demand)	G	6.489%
Societal Net Benefit (Cost)	H	\$377
<b>Program Summary per Participant</b>		
Gross kW Saved at Customer	I	0.12 kW
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.04 kW
Gross Annual kWh Saved at Customer	$(B \times E \times I)$	181 kWh
Net Annual kWh Saved at Generator	$(B \times E \times I) / (1 - F)$	190 kWh
<b>Program Summary All Participants</b>		
Total Participants	J	62,568
<b>Total Budget</b>	<b>K</b>	<b>\$832,303</b>
Gross kW Saved at Customer	$(J \times I)$	7,651.29 kW
<b>Net coincident kW Saved at Generator</b>	<b><math>(I \times D) / (1 - G) \times J</math></b>	<b>2,571 kW</b>
Gross Annual kWh Saved at Customer	$(B \times E \times I) \times J$	11,301,317 kWh
<b>Net Annual kWh Saved at Generator</b>	<b><math>((B \times E \times I) / (1 - F)) \times J</math></b>	<b>11,885,592 kWh</b>
<b>Societal Net Benefits</b>	<b><math>(J \times I \times H)</math></b>	<b>\$2,887,050</b>
<b>Utility Program Cost per kWh Lifetime</b>		<b>\$0.0050</b>
<b>Utility Program Cost per kW at Gen</b>		<b>\$324</b>