					Executi	ve Sumn	nary Tabl	le - 2021	Actual	Achieve	ments							
			GOAL							ACTUA						TEST I	RESULTS	
2021	Participants	Budget	Generator kW	Generator kWh	Participants	% of Goal	Spend	% of Goal	Generator kW	% of Goal	Generator kWh	Lifetime Years	Lifetime Generator kWh	% of Goal	Participant Ratio	Utility Ratio	RIM Ratio	TRC Ratio
Business Segment	·																	
Lighting Efficiency	591	\$414,226	591	5,181,197	110	19%	\$562,736	136%	995	169%	6,097,503	17	103,893,418	118%	2.31	5.41	0.49	1.12
Business Saver's Switch	10	\$25,250	28	39	32	320%	\$33,055	131%	48	169%	66	15	993	171%	INF	1.67	1.19	1.67
Peak and Energy Control	1	\$10,000	174	345	2	200%	\$1,651	17%	260	149%	515	5	2,575	149%	INF	75.62	9.70	75.62
Total	602	\$449,476	793	5,181,582	144	24%	\$597,442	133%	1,303	164%	6,098,084	17	103,896,987	118%	2.32	5.40	0.52	1.16
Residential Segment																		
Home Lighting	4,999	\$99,655	413	3,011,712	6,196	124%	\$97,442	98%	603	146%	4,455,965	13	55,895,396	148%	47.71	16.29	0.32	8.32
Heat Pump Water Heaters	21	\$12,900	9	71,574	1	5%	\$300	2%	1	7%	3,820	10	38,203	5%	7.16	4.16	0.28	1.70
Residential Demand Response	1,400	\$235,500	817	99,889	1,020	73%	\$190,672	81%	889	109%	42,531	10	424,110	43%	18.67	3.81	0.99	3.45
Consumer Education	68,000	\$21,165	N/A	N/A	5,524	8%	\$2,397	11%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Segment Total	74,420	\$369,220	1,239	3,183,176	12,741	17%	\$290,810	79%	1,493	120%	4,502,316	13	56,357,709	141%	40.77	7.96	0.41	5.72
Planning Segment																		
Regulatory Affairs	N/A	\$10,000	N/A	N/A	N/A	N/A	\$10,434	104%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	\$10,000	N/A	N/A	N/A	N/A	\$10,434	104%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PORTFOLIO TOTAL	75,022	\$828,696	2,032	8,364,757	12,885	17%	\$898,686	108%	2,796	138%	10,600,400	15	160,254,696	127%	4.17	6.17	0.47	1.68

LIGHTING EFFICIENC	Y					2021 ELE	CTRIC	Actual
2021 Net Present Cost Benefit Sumr	nary Analysis For All	Participants				Input Summary and Totals		
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)	Program "Inputs" per Customer kW Lifetime (Weighted on Generator kWh) Annual Hours Gross Customer kW	A B C	17.0 years 8760 1 kW
Benefits						Generator Peak Coincidence Factor	D	71.14%
Avoided Revenue Requirements						Gross Load Factor at Customer Transmission Loss Factor (Energy)	E F	50.15% 4.873%
Generation	N/A	\$742,054	\$742,054	\$742,054	\$742,054	Transmission Loss Factor (Demand)	G	5.640%
T & D	N/A	\$453,451	\$453,451	\$453,451	\$453,451	Societal Net Benefit (Cost)	Н	\$287
Marginal Energy	N/A	\$1,850,096	\$1,850,096	\$1,850,096	\$1,850,096			
Environmental Externality Subtotal	N/A N/A	N/A \$3,045,601	N/A \$3,045,601	N/A \$3,045,601	\$0 \$3,045,601	Program Summary per Participant		
Subtotal	N/A	\$3,043,001	\$3,045,601	\$3,045,001	\$3,045,001	Gross kW Saved at Customer	T	12.00 kW
D						Net coincident kW Saved at Generator	(I x D) / (1 - G)	9.05 kW
Participant Benefits Bill Reduction - Electric	\$5,590,994	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(1 x D) / (1 - G) (B x E x I)	9.05 kW 52,731 kWh
Rebates from Xcel Energy	\$5,590,994 \$552,231	N/A N/A	N/A N/A	\$552,231	\$552,231	Net Annual kWh Saved at Customer	(BxExI) (BxExI)/(1-F)	55,432 kWh
Incremental Capital Savings	\$0	N/A	N/A	\$552,251	\$0	TVCt /Hillian k wil Saved at Generator	(BXEXI) / (1-1)	55,452 KWII
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$6,143,226	N/A	N/A	\$552,231	\$552,231	Program Summary All Participants		
						Total Participants	J	110
Total Benefits	\$6,143,226	\$3,045,601	\$3,045,601	\$3,597,832	\$3,597,832	Total Spend	K	\$562,736
Costs						Gross kW Saved at Customer	(J x I)	1,320 kW
Utility Project Costs Customer Services Utility Administration	N/A N/A	\$0 \$10,504	\$0 \$10,504	\$0 \$10,504	\$0 \$10,504	Net coincident kW Saved at Generator Gross Annual kWh Saved at Customer Net Annual kWh Saved at Generator Societal Net Benefits	(IxD)/(1-G)xJ (BxExI)xJ ((BxExI)/(1-F))xJ (xIxH)	995 kW 5,800,402 kWh 6,097,503 kWh \$378,715
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0			
Measurement & Verification	N/A	\$ 0	\$0	\$0	\$0			
Rebates	N/A	\$552,231	\$552,231	\$552,231	\$552,231	Utility Program Cost per kWh Lifetime		\$0.0054
Other Subtotal	N/A	\$0 \$562,736	\$0 \$562,736	\$0 \$562,736	\$0 \$562,736	Utility Program Cost per kW at Gen		\$565
Subtotal	N/A	\$562,/36	\$562,/36	\$562,/36	\$502,/30			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$5,590,994	N/A	N/A			
Subtotal	N/A	N/A	\$5,590,994	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$2,414,411	N/A	N/A	\$2,414,411	\$2,414,411			
Incremental O&M Costs	\$241,971	N/A	N/A	\$241,971	\$241,971			
2.11.		/ -	**/*					

\$2,656,382

\$3,219,117

\$378,715

1.12

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

\$2,656,382

\$2,656,382

\$3,486,844

2.31

N/A

\$562,736

\$2,482,865

5.41

N/A

\$6,153,730

(\$3,108,129)

\$2,656,382

\$3,219,117 \$378,715

1.12

Subtotal

Total Costs

Net Benefit (Cost)

Actual

15.0 years 8760 1.0 kW 17.56% 0.00% 4.873% 5.640% \$87

> 8.01 kW 1.49 kW 2 kWh 2 kWh

32 \$33,055 256 kW 48 kW 63 kWh 66 kWh \$22,276

\$33.2749 \$693

BUSINESS SAVER'S SWI	ICH					2021 ELE	CTRIC
2021 Net Present Cost Benefit Sumr	nary Analysis For Al	l Participants				Input Summary and Totals	
			Rate	Total		Program "Inputs" per Customer kW	
	Participant	Utility	Impact	Resource	Societal	Lifetime (Weighted on Generator kWh)	A
	Test	Test	Test	Test	Test	Annual Hours	В
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	С
Benefits						Generator Peak Coincidence Factor	D
						Gross Load Factor at Customer	E
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F
Generation	N/A	\$34,343	\$34,343	\$34,343	\$34,343	Transmission Loss Factor (Demand)	G
T & D	N/A	\$20,966	\$20,966	\$20,966	\$20,966	Societal Net Benefit (Cost)	Н
Marginal Energy	N/A	\$22	\$22	\$22	\$22		
Environmental Externality	N/A	N/A	N/A	N/A	\$0		
Subtotal	N/A	\$55,331	\$55,331	\$55,331	\$55,331	Program Summary per Participant	
	11/11	400,001	400,001	¥55,551	400,001	Gross kW Saved at Customer	Ĭ
Participant Benefits						Net coincident kW Saved at Generator	(I x D) / (1 - G)
Bill Reduction - Electric	\$13,253	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(BxExI)
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	\$0	Net Annual kWh Saved at Generator	(BxExI) (BxExI)/(1-F)
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0	1vet minuai kwii baved at Generator	(DAEAT) / (1 1)
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0		
Subtotal	\$13,253	N/A	N/A	\$0	\$0	Program Summary All Participants	
	,	,	,			Total Participants	Ţ
Total Benefits	\$13,253	\$55,331	\$55,331	\$55,331	\$55,331	Total Spend	K
Costs						Gross kW Saved at Customer	(J x I)
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$
Utility Project Costs						Gross Annual kWh Saved at Customer	(BxExI)xI
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I)/(1-F)) \times J$
Utility Administration	N/A	\$33,055	\$33,055	\$33,055	\$33,055	Societal Net Benefits	$((\mathbf{z} \mathbf{x} \mathbf{z} \mathbf{x} \mathbf{H}))$
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0		(J)
Measurement & Verification	N/A	\$0	\$0	\$0	\$0		
Rebates	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kWh Lifetime	
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen	
Subtotal	N/A	\$33,055	\$33,055	\$33,055	\$33,055		
Utility Revenue Reduction							
Revenue Reduction - Electric	N/A	N/A	\$13,253	N/A	N/A		
Subtotal	N/A	N/A	\$13,253	N/A	N/A		
Participant Costs							
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		
Total Costs			\$46,308				

\$22,276

1.67

\$22,276

1.67

\$9,023

1.19

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

\$13,253

INF

Net Benefit (Cost)

Benefit/Cost Ratio

\$22,276

1.67

PEAK AND ENERGY CO	NTROL					2021 ELE	ECTRIC	Actual
2021 Net Present Cost Benefit Sumn	nary Analysis For All	Participants				Input Summary and Totals		
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)	Program "Inputs" per Customer kW Lifetime (Weighted on Generator kWh) Annual Hours Gross Customer kW	A B C	5.0 years 8760 1.0 kW
DCit-	(\$10tai)	(\$1 otal)	(\$10tai)	(\$1 otai)	(\$1 otal)			
Benefits						Generator Peak Coincidence Factor Gross Load Factor at Customer	D E	100.00% 0.02%
Avoided Revenue Requirements	/ .					Transmission Loss Factor (Energy)	F	4.873%
Generation	N/A	\$77,613	\$77,613	\$77,613	\$77,613	Transmission Loss Factor (Demand)	G	5.640%
T & D	N/A	\$47,142	\$47,142	\$47,142	\$47,142	Societal Net Benefit (Cost)	Н	\$503
Marginal Energy	N/A	\$59	\$59	\$59	\$59			
Environmental Externality	N/A	N/A	N/A	N/A	\$0			
Subtotal	N/A	\$124,814	\$124,814	\$124,814	\$124,814	Program Summary per Participant		
						Gross kW Saved at Customer	I	122.50 kW
Participant Benefits						Net coincident kW Saved at Generator	(IxD)/(1-G)	129.82 kW
Bill Reduction - Electric	\$11,217	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(BxExI)	245 kWh
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	\$0	Net Annual kWh Saved at Generator	(BxExI)/(1-F)	258 kWh
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0			
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$11,217	N/A	N/A	\$0	\$0	Program Summary All Participants		
	. ,	,	,			Total Participants	Ţ	2
Total Benefits	\$11,217	\$124,814	\$124,814	\$124,814	\$124,814	Total Spend	K	\$1,651
Costs						Gross kW Saved at Customer	(J x I)	245 kW
Utility Project Costs Customer Services Utility Administration	N/A N/A	\$0 \$1,651	\$0 \$1,651	\$0 \$1,651	\$0 \$1,651	Net coincident kW Saved at Generator Gross Annual kWh Saved at Customer Net Annual kWh Saved at Generator Societal Net Benefits	(IxD)/(1-G)xJ (BxExI)xJ ((BxExI)/(1-F))xJ ([xlxH)	260 kW 490 kWh 515 kWh \$123,163
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0		(.)	
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kWh Lifetime		\$0.6409
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen		\$6
Subtotal	N/A	\$1,651	\$1,651	\$1,651	\$1,651			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$11,217	N/A	N/A			
Subtotal	N/A	N/A	\$11,217	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$0	N/A	N/A	\$0	\$0			
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0			
		.,	.,	8.5				

\$1,651

\$123,163

75.62

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

\$0

\$11,217

INF

N/A

\$1,651

\$123,163

N/A

\$1,651

\$123,163

75.62

\$12,868

\$111,946

Subtotal

Total Costs

Net Benefit (Cost)

BUSINESS SEGMENT TO	OTAL					2021 ELF	ECTRIC	Actual
2021 Net Present Cost Benefit Sumn	nary Analysis For All	Participants				Input Summary and Totals		
			Rate	Total		Program "Inputs" per Customer kW		
	Participant	Utility	Impact	Resource	Societal	Lifetime (Weighted on Generator kWh)	A	17.0 years
	Test	Test	Test	Test	Test	Annual Hours	В	8760
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	С	1.0 kW
Benefits						Generator Peak Coincidence Factor	D	67.48%
Belletito						Gross Load Factor at Customer	E	36.35%
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F	4.873%
Generation	N/A	\$854,009	\$854,009	\$854,009	\$854,009	Transmission Loss Factor (Energy) Transmission Loss Factor (Demand)	G	5.640%
T & D	N/A N/A				\$521,558	Societal Net Benefit (Cost)	Н	
	,	\$521,558	\$521,558	\$521,558	. ,	Societal Net Benefit (Cost)	H	\$288
Marginal Energy	N/A	\$1,850,178	\$1,850,178	\$1,850,178	\$1,850,178			
Environmental Externality	N/A	N/A	N/A	N/A	\$0			
Subtotal	N/A	\$3,225,746	\$3,225,746	\$3,225,746	\$3,225,746	Program Summary per Participant		
						Gross kW Saved at Customer	1	12.65 kW
Participant Benefits						Net coincident kW Saved at Generator	(I xD)/(1-G)	9.05 kW
Bill Reduction - Electric	\$5,615,464	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(BxExI)	40,284 kWh
Rebates from Xcel Energy	\$552,231	N/A	N/A	\$552,231	\$552,231	Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	42,348 kWh
Incremental Capital Savings Incremental O&M Savings	\$0 \$0	N/A N/A	N/A N/A	\$0 \$0	\$0 \$0			
Subtotal Savings	\$6,167,696	N/A N/A	N/A N/A	\$552,231	\$552,231	D		
Subtotai	\$0,107,090	IN/ A	IN/ A	\$332,231	\$332,231	Program Summary All Participants Total Participants	7	144
H 1D C						1	J	
Total Benefits	\$6,167,696	\$3,225,746	\$3,225,746	\$3,777,977	\$3,777,977	Total Spend	K	\$597,442
Costs						Gross kW Saved at Customer	(J x I)	1,822 kW
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$	1,303 kW
Utility Project Costs						Gross Annual kWh Saved at Customer	(BxExI)xI	5,800,955 kWh
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I)/(1-F))\times I$	6,098,084 kWh
Utility Administration	N/A	\$45,210	\$45,210	\$45,210	\$45,210	Societal Net Benefits	([x I x H)	\$524,154
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0		())	70-1,-01
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$552,231	\$552,231	\$552,231	\$552,231	Utility Program Cost per kWh Lifetime		\$0.0058
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen		\$459
Subtotal	N/A	\$597,442	\$597,442	\$597,442	\$597,442			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$5,615,464	N/A	N/A			
Subtotal	N/A	N/A	\$5,615,464	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$2,414,411	N/A	N/A	\$2,414,411	\$2,414,411			
Incremental O&M Costs	\$2,414,411 \$241,971	N/A	N/A N/A	\$2,414,411	\$2,414,411			
incremental Oxivi Costs	\$241,7/I	IN/A	IN/A	\$241,771	\$241,7/1			

\$2,656,382

\$3,253,823

\$524,154

1.16

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

\$2,656,382

\$2,656,382

\$3,511,314

N/A

\$597,442

\$2,628,304

5.40

N/A

\$6,212,906

(\$2,987,160)

\$2,656,382

\$3,253,823

\$524,154

1.16

Subtotal

Total Costs

Net Benefit (Cost)

HOME LIGHTING						2021 ELE	CTRIC	Actual
2021 Net Present Cost Benefit Sumn	nary Analysis For All	Participants				Input Summary and Totals		
	Participant	Utility	Rate Impact	Total Resource	Societal	Program "Inputs" per Customer kW Lifetime (Weighted on Generator kWh)	A	12.5 years
	Test	Test	Test	Test	Test	Annual Hours	В	8760
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	C	1 kW
Benefits						Generator Peak Coincidence Factor	D	16.70%
						Gross Load Factor at Customer	E	14.28%
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	E	4.967%
Generation	N/A	\$343,589	\$343,589	\$343,589	\$343,589	Transmission Loss Factor (Demand)	G	6.244%
T & D	N/A	\$209,711	\$209,711	\$209,711	\$209,711	Societal Net Benefit (Cost)	Н	\$432
Marginal Energy	N/A	\$1,034,207	\$1,034,207	\$1,034,207	\$1,034,207	Societai Net Belletit (Cost)	11	9432
Environmental Externality	N/A N/A	\$1,034,207 N/A	\$1,034,207 N/A	\$1,034,207 N/A	\$1,034,207 \$0			
Subtotal	N/A	\$1,587,506	\$1,587,506	\$1,587,506	\$1,587,506	Program Summary per Participant		
Subtotal	IN/ A	\$1,567,500	\$1,567,500	\$1,367,300	\$1,367,300	Gross kW Saved at Customer	T	0.55 kW
D. C.						Net coincident kW Saved at Generator	1 (1 D) //1 (1)	
Participant Benefits Bill Reduction - Electric	£4.005.200	NT/A	N/A	NT/A	NT / A	Gross Annual kWh Saved at Customer	(I x D) / (1 - G) (B x E x I)	0.10 kW 683 kWh
Rebates from Xcel Energy	\$4,805,208 \$75,015	N/A N/A	N/A N/A	N/A \$75,015	N/A \$75,015	Net Annual kWh Saved at Customer	(BxExI) (BxExI)/(1-F)	719 kWh
Incremental Capital Savings	\$75,015	N/A	N/A	\$75,015	\$73,013	Net Aimuai kwii Saved at Generator	(B x E x I) / (I - I ·)	/17 KWII
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$4,880,223	N/A	N/A	\$75,015	\$75,015	Program Summary All Participants		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	11.29.	,	Total Participants	Ţ	6,196
Total Benefits	\$4,880,223	\$1,587,506	\$1,587,506	\$1,662,521	\$1,662,521	Total Spend	K	\$97,442
Costs						Gross kW Saved at Customer	(J x I)	3,386 kW
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$	603 kW
Utility Project Costs						Gross Annual kWh Saved at Customer	(B x E x I) x J	4,234,640 kWh
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I)/(1-F)) \times J$	4,455,965 kWh
Utility Administration	N/A	\$17,720	\$17,720	\$17,720	\$17,720	Societal Net Benefits	(JxIxH)	\$1,462,796
Advertising & Promotion	N/A	\$4,707	\$4,707	\$4,707	\$4,707			
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$75,015	\$75,015	\$75,015	\$75,015	Utility Program Cost per kWh Lifetime		\$0.0017
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen		\$162
Subtotal	N/A	\$97,442	\$97,442	\$97,442	\$97,442			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$4,805,208	N/A	N/A			
Subtotal	N/A	N/A	\$4,805,208	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$102,284	N/A	N/A	\$102,284	\$102,284			
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0			
	T *	- 1/	- 1,	1.0	1.			

\$102,284

\$199,726

\$1,462,796

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

\$102,284

\$102,284

\$4,777,939

47.71

N/A

\$97,442

16.29

\$1,490,065

N/A

\$4,902,649

(\$3,315,143)

\$102,284

\$199,726 \$1,462,796

8.32

Subtotal

Total Costs

Net Benefit (Cost)

HEAT PUMP WATER HI	EATERS					2021 ELE	CCTRIC	Actual
2021 Net Present Cost Benefit Sumn	nary Analysis For All	Participants				Input Summary and Totals		
			Rate	Total		Program "Inputs" per Customer kW		
	Participant	Utility	Impact	Resource	Societal	Lifetime (Weighted on Generator kWh)	A	10.0 years
	Test	Test	Test	Test	Test	Annual Hours	В	8760
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	C	1.0 kW
Benefits						Generator Peak Coincidence Factor	D	100.00%
						Gross Load Factor at Customer	E	70.84%
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F	5,950%
Generation	N/A	\$333	\$333	\$333	\$333	Transmission Loss Factor (Demand)	G	7.220%
T & D	N/A	\$203	\$203	\$203	\$203	Societal Net Benefit (Cost)	Н	\$1,098
Marginal Energy	N/A	\$203 \$711	\$711	\$203 \$711	\$711	Societai ivet Beliefit (Cost)	11	\$1,070
Environmental Externality	N/A	N/A	N/A	N/A	\$0			
Subtotal Subtotal	N/A	\$1,247	\$1,247	\$1,247	\$1,247	Program Summary per Participant		
Subtotai	IN/ A	\$1,247	\$1,24/	\$1,247	\$1,247	Gross kW Saved at Customer	Ť	0.58 kW
Danisia and Danisia						Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.62 kW
Participant Benefits Bill Reduction - Electric	\$4,077	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(B x E x I)	3,593 kWh
Rebates from Xcel Energy	\$4,077 \$300	N/A N/A	N/A N/A	\$300	\$300	Net Annual kWh Saved at Customer	(BxExI) (BxExI)/(1-F)	3,820 kWh
Incremental Capital Savings	\$300 \$0	N/A	N/A	\$300	\$300 \$0	Net Allitual RWII Saved at Generator	(B X E X I) / (I - I ·)	J,020 KWII
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0 \$0			
Subtotal	\$4,377	N/A	N/A	\$300	\$300	Program Summary All Participants		
oubtoui.	#1,5077	11/11	-1,7-1	\$ 300	4300	Total Participants	Ĭ	1
Total Benefits	\$4,377	\$1,247	\$1,247	\$1,547	\$1,547	Total Spend	K	\$300
Costs						Gross kW Saved at Customer	(J x I)	1 kW
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$	1 kW
Utility Project Costs						Gross Annual kWh Saved at Customer	(BxExI)xI	3,593 kWh
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I) \times (1-F)) \times I$	3,820 kWh
Utility Administration	N/A	\$0	\$0	\$0	\$0	Societal Net Benefits	$(I \times I \times H)$	\$636
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0	- Coletta 11ct Benefits	() " 1 " 1 ")	
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$300	\$300	\$300	\$300	Utility Program Cost per kWh Lifetime		\$0.0079
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen		\$481
Subtotal	N/A	\$300	\$300	\$300	\$300			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$4,077	N/A	N/A			
Subtotal	N/A	N/A	\$4,077	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$611	N/A	N/A	\$611	\$611			
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0			
	\$0	21/21	1.7/11	90	V ~_			

\$611

\$911 \$636

1.70

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

\$611

\$611

\$3,766

N/A

\$300

\$947

4.16

N/A

\$4,377

(\$3,130)

\$611

\$911

\$636

1.70

Subtotal

Total Costs

Net Benefit (Cost)
Benefit/Cost Ratio

Actual

10.0 years 8760 1.0 kW 36.83% 0.20% 5.950% 7.220% \$243

> 2.20 kW 0.87 kW 39 kWh 42 kWh

1,020 \$190,672 2,239 kW 889 kW 40,000 kWh 42,531 kWh \$544,260

> \$0.4496 \$214

RESIDENTIAL DEMAN	ID RESPONSE					2021 ELE	CTRIC	
2021 Net Present Cost Benefit Sum	nmary Analysis For Al	l Participants				Input Summary and Totals		
			Rate	Total		Program "Inputs" per Customer kW		
	Participant	Utility	Impact	Resource	Societal	Lifetime (Weighted on Generator kWh)	A	
	Test	Test	Test	Test	Test	Annual Hours	В	
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	С	
Benefits						Generator Peak Coincidence Factor	D	
						Gross Load Factor at Customer	E	
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F	
Generation	N/A	\$446,054	\$446,054	\$446,054	\$446,054	Transmission Loss Factor (Demand)	G	
T & D	N/A	\$271,867	\$271,867	\$271,867	\$271,867	Societal Net Benefit (Cost)	Н	
Marginal Energy	N/A	\$8,611	\$8,611	\$8,611	\$8,611			
Environmental Externality	N/A	N/A	N/A	N/A	\$0			
Subtotal	N/A	\$726,532	\$726,532	\$726,532	\$726,532	Program Summary per Participant		
						Gross kW Saved at Customer	I	
Participant Benefits						Net coincident kW Saved at Generator	(IxD)/(1-G)	
Bill Reduction - Electric	\$543,027	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(BxExI)	
Rebates from Xcel Energy	\$39,600	N/A	N/A	\$39,600	\$39,600	Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0			
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$582,627	N/A	N/A	\$39,600	\$39,600	Program Summary All Participants		
						Total Participants	J	
Total Benefits	\$582,627	\$726,532	\$726,532	\$766,132	\$766,132	Total Spend	K	
Costs						Gross kW Saved at Customer	(J x I)	
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$	
Utility Project Costs						Gross Annual kWh Saved at Customer	(BxExI)xJ	
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I)/(1-F)) \times J$	
Utility Administration	N/A	\$149,651	\$149,651	\$149,651	\$149,651	Societal Net Benefits	(J x I x H)	
Advertising & Promotion	N/A	\$1,421	\$1,421	\$1,421	\$1,421			
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$39,600	\$39,600	\$39,600	\$39,600	Utility Program Cost per kWh Lifetime		
Other S. harvel	N/A	\$0 \$190,672	\$0	\$0	\$0	Utility Program Cost per kW at Gen		
Subtotal	N/A	\$190,672	\$190,672	\$190,672	\$190,672			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$543,027	N/A	N/A			
Subtotal	N/A	N/A	\$543,027	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$31,200	N/A	N/A	\$31,200	\$31,200			
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$31,200	N/A	N/A	\$31,200	\$31,200			

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

\$31,200

\$551,427

18.67

\$190,672

\$535,860

3.81

\$733,698

(\$7,167)

0.99

\$221,872

\$544,260

3.45

\$221,872

\$544,260

3.45

Total Costs

Net Benefit (Cost)

RESIDENTIAL SEGMEN	NT TOTAL					2021 ELE	CTRIC	Actual
2021 Net Present Cost Benefit Sumn	nary Analysis For All	Participants				Input Summary and Totals		
	Participant Test	Utility Test	Rate Impact Test	Total Resource Test	Societal Test	Program "Inputs" per Customer kW Lifetime (Weighted on Generator kWh) Annual Hours	A B	12.5 years 8760
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	C	1.0 kW
Benefits						Generator Peak Coincidence Factor	D	24.77%
						Gross Load Factor at Customer	E	8.68%
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F	4.977%
Generation	N/A	\$789,976	\$789,976	\$789,976	\$789,976	Transmission Loss Factor (Demand)	G	6.635%
T & D	N/A	\$481,781	\$481,781	\$481,781	\$481,781	Societal Net Benefit (Cost)	Н	\$356
Marginal Energy	N/A	\$1,043,529	\$1,043,529	\$1,043,529	\$1,043,529			-
Environmental Externality	N/A	N/A	N/A	N/A	\$0			
Subtotal	N/A	\$2,315,286	\$2,315,286	\$2,315,286	\$2,315,286	Program Summary per Participant		
	,	. , ,	1. , ,	. , ,	1 , 1	Gross kW Saved at Customer	I	0.44 kW
Participant Benefits						Net coincident kW Saved at Generator	(IxD)/(1-G)	0.12 kW
Bill Reduction - Electric	\$5,352,312	N/A	N/A	N/A	N/A	Gross Annual kWh Saved at Customer	(BxExI)	336 kWh
Rebates from Xcel Energy	\$114,915	N/A	N/A	\$114,915	\$114,915	Net Annual kWh Saved at Generator	(BxExI)/(1-F)	353 kWh
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0			
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$5,467,226	N/A	N/A	\$114,915	\$114,915	Program Summary All Participants		
						Total Participants	J	12,741
Total Benefits	\$5,467,226	\$2,315,286	\$2,315,286	\$2,430,200	\$2,430,200	Total Spend	K	\$290,810
Costs						Gross kW Saved at Customer	(J x I)	5,626 kW
Utility Project Costs Customer Services Utility Administration	N/A N/A	\$0 \$168,735	\$0 \$168,735	\$0 \$168,735	\$0 \$168,735	Net coincident kW Saved at Generator Gross Annual kWh Saved at Customer Net Annual kWh Saved at Generator Societal Net Benefits	(IxD)/(1-G)xJ (BxExI)xJ ((BxExI)/(1-F))xJ (xIxH)	1,493 kW 4,278,233 kWh 4,502,316 kWh \$2,005,295
Advertising & Promotion	N/A N/A	\$108,735 \$7,160	\$108,735 \$7,160	\$108,735 \$7,160	\$108,735 \$7,160	Societai Net Benefits	() x 1 x H)	\$2,005,295
Measurement & Verification	N/A	\$0	\$0	\$0	\$0			
Rebates	N/A	\$114,915	\$114,915	\$114,915	\$114,915	Utility Program Cost per kWh Lifetime		\$0.0052
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen		\$195
Subtotal	N/A	\$290,810	\$290,810	\$290,810	\$290,810			
Utility Revenue Reduction								
Revenue Reduction - Electric	N/A	N/A	\$5,352,312	N/A	N/A			
Subtotal	N/A	N/A	\$5,352,312	N/A	N/A			
Participant Costs								
Incremental Capital Costs	\$134,095	N/A	N/A	\$134,095	\$134,095			
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$0			
Subtotal	\$134,095	N/A	N/A	\$134,095	\$134,095			

\$424,906

\$2,005,295

5.72

\$424,906

\$2,005,295

5.72

0.41

\$5,643,122

(\$3,327,836)

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

Total Costs

Net Benefit (Cost)

Benefit/Cost Ratio

\$134,095

\$5,333,131

40.77

7.96

\$290,810

\$2,024,475

Actual

15.1 years 8760 1.0 kW 35.14% 15.45% 4.917% 6.394% \$338

1.01 kW 0.38 kW 1,369 kWh 1,440 kWh

7,361 \$898,686 7,447 kW 2,796 kW 10,079,188 kWh 10,600,400 kWh \$2,519,014

> \$0.0056 \$321

PORTFOLIO TOTAL						2021 ELE	CTRIC
2021 Net Present Cost Benefit Sumn	nary Analysis For Al	l Participants				Input Summary and Totals	
			Rate	Total		Program "Inputs" per Customer kW	
	Participant	Utility	Impact	Resource	Societal	Lifetime (Weighted on Generator kWh)	A
	Test	Test	Test	Test	Test	Annual Hours	В
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	Gross Customer kW	С
Benefits						Generator Peak Coincidence Factor	D
						Gross Load Factor at Customer	E
Avoided Revenue Requirements						Transmission Loss Factor (Energy)	F
Generation	N/A	\$1,643,985	\$1,643,985	\$1,643,985	\$1,643,985	Transmission Loss Factor (Demand)	G
T & D	N/A	\$1,003,339	\$1,003,339	\$1,003,339	\$1,003,339	Societal Net Benefit (Cost)	Н
Marginal Energy	N/A	\$2,893,707	\$2,893,707	\$2,893,707	\$2,893,707	Societai Net Bellelit (Cost)	11
Environmental Externality	N/A N/A	\$2,693,707 N/A	\$2,693,707 N/A	\$2,693,707 N/A	\$2,093,707 \$0		
Subtotal	N/A N/A	\$5,541,031	\$5,541,031	\$5,541,031	\$5,541,031	Program Summary per Participant	
Subtotai	N/A	\$5,541,051	\$5,541,051	\$5,541,051	\$5,541,051	<u> </u>	Ť
D D						Gross kW Saved at Customer	I (Y. D.) ((1, C.)
Participant Benefits Bill Reduction - Electric	\$10.007.77 <i>C</i>	N/A	N/A	NT / A	NT / A	Net coincident kW Saved at Generator Gross Annual kWh Saved at Customer	(I x D)/(1 - G)
Rebates from Xcel Energy	\$10,967,776 \$667,146	N/A N/A	N/A N/A	N/A \$667,146	N/A \$667,146	Net Annual kWh Saved at Customer	(BxExI) (BxExI)/(1-F)
Incremental Capital Savings	\$007,140 \$0	N/A N/A	N/A N/A	\$007,140	\$007,140	Net Alfiluai kwii Saved at Generator	(BXEXI) / (I-F)
Incremental O&M Savings	\$0 \$0	N/A	N/A	\$0 \$0	\$0 \$0		
Subtotal	\$11,634,922	N/A	N/A	\$667,146	\$667,146	Program Summary All Participants	
Subtotal	\$11,034,722	14/11	11/11	\$007,140	\$007,140	Total Participants	I
Total Benefits	\$11,634,922	\$5,541,031	\$5,541,031	\$6,208,177	\$6,208,177	Total Spend	K
Costs						Gross kW Saved at Customer	(J x I)
						Net coincident kW Saved at Generator	$(I \times D) / (1 - G) \times J$
Utility Project Costs						Gross Annual kWh Saved at Customer	(BxExI)xJ
Customer Services	N/A	\$0	\$0	\$0	\$0	Net Annual kWh Saved at Generator	$((B \times E \times I)/(1-F)) \times J$
Utility Administration	N/A	\$224,380	\$224,380	\$224,380	\$224,380	Societal Net Benefits	((z i z i i) / (i i) / i j
Advertising & Promotion	N/A	\$7,160	\$7,160	\$7,160	\$7,160		(3)
Measurement & Verification	N/A	\$0	\$0	\$0	\$0		
Rebates	N/A	\$667,146	\$667,146	\$667,146	\$667,146	Utility Program Cost per kWh Lifetime	
Other	N/A	\$0	\$0	\$0	\$0	Utility Program Cost per kW at Gen	
Subtotal	N/A	\$898,686	\$898,686	\$898,686	\$898,686		
Utility Revenue Reduction							
Revenue Reduction - Electric	N/A	N/A	\$10,967,776	N/A	N/A		
Subtotal	N/A	N/A	\$10,967,776	N/A	N/A		
Participant Costs							
Incremental Capital Costs	\$2,548,506	N/A	N/A	\$2,548,506	\$2,548,506		
Incremental O&M Costs	\$241,971	N/A	N/A	\$241,971	\$241,971		
Subtotal	\$2,790,477	N/A	N/A	\$2,790,477	\$2,790,477		

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

Net Benefit (Cost)
Benefit/Cost Ratio

\$8,844,445

4.17

\$4,642,345

6.17

(\$6,325,431)

0.47

\$2,519,014

1.68

\$2,519,014

1.68