PUBL	IC
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Full Executive Summary Table - 2017 Actual Achievements																		
		GOAL ACTUAL					TEST RESULTS											
2017	Participants	Electric Budget	Generator kW	Generator kWh	Participants	% of Goal	Electric Spend	% of Goal	Generator kW	% of Goal	Generator kWh	Lifetime years	Lifetime kWh	% of Goal	Part Ratio	Utility Ratio	RIM Ratio	TRC Ratio
Business Segment																		
Lighting Efficiency	2,140 ¹	\$ 389,520	552	4,192,955	11,700	547%	\$ 417,589	107%	484	88%	3,291,040	18.80	61,861,196	78%	1.78	4.55	0.63	1.09
Business Saver's Switch	12	\$ 30,950	34	84	16	133%	\$ 33,120	107%	92	269%	217	15.00	3,258	259%	INF	2.63	0.60	2.63
Peak and Energy Control	1	\$ 10,000	102	3,707	4	400%	\$ 3,911	39%	326	320%	11,825	5.00	59,125	319%	INF	36.60	2.29	36.60
Business Segment Total	2,153	\$ 430,470	689	4,196,747	11,720	544%	\$ 454,620	106%	902	131%	3,303,082	18.75	61,923,579	79%	1.89	4.68	0.66	1.18
Residential Segment																		
Ground Source Heat Pump	0	\$ -	0	0	1	NA	\$ 3,000	NA	4	NA	2,889	20.00	57,779	NA	0.35	1.81	0.86	0.40
Residential Home Lighting	3,772	\$ 97,340	112	1,065,912	4,660	124%	\$ 111,733	115%	288	257%	2,738,397	5.95	16,285,806	257%	14.87	7.47	0.42	3.79
Residential Saver's Switch	770	\$ 181,650	565	1,486	1,406	183%	\$ 196,635	108%	1,089	193%	3,136	15.00	47,039	211%	INF	5.27	0.87	5.27
Consumer Education	68,000	\$ 27,165	0	0	73,472	108%	\$ 32,233	119%	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-
Residential Segment Total	72,542	\$ 306,155	677	1,067,398	79,539	110%	\$ 343,600	112%	1,381	204%	2,744,422	5.97	16,390,624	257%	19.69	5.46	0.58	3.99
Planning Segment																		
Regulatory Affairs	0	\$ 14,000	0	0	N/A	N/A	\$ 11,374	81%	N/A	N/A	N/A	N/A	N/A	N/A	-	-	_	-
Planning Segment Total	0	\$ 14,000	0	0	N/A	N/A	\$ 11,374	81%	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-
PORTFOLIO TOTAL	74,695	\$ 750,625	1,366	5,264,145	91,259	122%	\$ 809,595	108%	2,282	167%	6,047,504	12.95	78,314,203	115%	3.37	4.95	0.62	1.71

¹This goal was filed at 2,140 as the number "units", not the number of participants. We have adjusted the 2017 to reflect units as well. The actual participants can be found in Table 1 of our filing at 151. Cost Benefit Analysis is done at the participant level - which has been addressed in the Executive Summary's for the 2018 and 2019 DSM Plans to adjust for future consistency.

LIGHTING EFFICIENCY

T & D N/A \$190,250 \$1,393,420 \$1,30 \$1,50 \$1,20,71,	2017 Net Present Cost Benefit Summ	nary Analysis For All	l Participants			
Benefits Avoided Revenue Requirements Generation N/A \$315,094 \$317,095 \$3172,205 \$372 \$372,265 \$372,265 \$372,265 \$372,065		Test	Test	Impact Test	Resource Test	Test
Generation N/A \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,094 \$315,0926 \$190,250 \$1,393,420 \$1,392,325 \$131 \$1,489,8,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,292,71,029 \$2,271,029 \$2,271,029 \$2,271,029	Benefits			. ,		. ,
T & D N/A \$190,250 \$1,393,420 \$1,392,265	Avoided Revenue Requirements					
Maginal Energy N/A $\$1,393,420$ $\$1,398,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$1,898,764$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$ $\$2,271,029$	Generation	N/A	\$315,094	\$315,094	\$315,094	\$315,09
Marginal Energy N/A \$1,393,420 \$1,392,4265 \$1,372,265 \$3,72,265 \$3,72,265 \$3,72,265 \$3,72,265 \$3,72,265 \$3,72,265 \$3,72,265 \$3,72,265	Т&D	N/A	\$190,250	\$190,250	\$190,250	\$190,25
Environmental Externality N/A Stapset, 764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$372,265 \$372 Incremental Capital Savings \$0 N/A N/A N/A \$0	Marginal Energy	,				\$1,393,42
Subtotal N/A \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,898,764 \$1,298,7265 \$372 Incremental Capital Savings \$0 N/A N/A \$0 \$0 \$1,698,764 \$1,898,764 \$1,898,764 \$0 \$0 Subtotal \$2,960,211 N/A N/A \$372,265 \$372 \$372 Cotal Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs Customer Services N/A \$40 \$0 \$0 \$0 Measurement & Verification N/A \$40 \$0 \$0 \$0 \$0 Measurement & Verification N/A \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265	0 0,	,				÷-,070,1-
Bill Reduction - Electric \$2,587,946 N/A N/A N/A N/A Rebates from Xcel Energy \$372,265 N/A N/A N/A \$372,265 \$372 Incremental Capital Savings \$0 N/A N/A \$0 N/A \$0 Subtotal \$2,960,211 N/A N/A \$372,265 \$372 Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$0 \$0 \$0 \$0 Utility Project Costs \$45,324			\$1,898,764			\$1,898,70
Bill Reduction - Electric \$2,587,946 N/A N/A N/A N/A Rebates from Xcel Energy \$372,265 N/A N/A N/A \$372,265 \$372 Incremental Capital Savings \$0 N/A N/A \$0 N/A \$0 Subtotal \$2,960,211 N/A N/A \$372,265 \$372 Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$0 \$0 \$0 \$0 Utility Project Costs \$45,324	Participant Benefits					
Incremental Capital Savings \$0 N/A N/A N/A \$0 Incremental O&M Savings \$0 N/A N/A \$0 \$0 Subtotal \$2,960,211 N/A N/A \$372,265 \$372 Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,652,496 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271,029 Costs \$1,62,245 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,372,265 \$372,265 <t< td=""><td></td><td>\$2,587,946</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N,</td></t<>		\$2,587,946	N/A	N/A	N/A	N,
Incremental O&M Savings \$0 N/A N/A \$0 Subtotal \$2,960,211 N/A N/A \$372,265 \$372 Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs \$0 \$0 \$0 \$0 Utility Project Costs \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$45,324 \$46,324 \$45,322,265 \$372,265 \$372,	Rebates from Xcel Energy		N/A	N/A	\$372,265	\$372,2
Subtotal \$2,960,211 N/A N/A \$372,265 \$372 Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs Utility Project Costs \$0 \$0 \$0 \$0 Customer Services N/A \$45,324	Incremental Capital Savings		N/A	N/A		\$
Total Benefits \$2,960,211 \$1,898,764 \$1,898,764 \$2,271,029 \$2,271, Costs Utility Project Costs Customer Services N/A \$0 \$0 \$0 Utility Administration N/A \$45,324 \$41,7589 \$31,7,589 \$417,589 \$417,589 \$417,589 \$417,589 \$417,589 \$1,661,415 \$	Incremental O&M Savings	\$0	N/A	N/A	\$0	4
Costs Utility Project Costs Customer Services N/A \$0 \$0 \$0 Measurement & Verification N/A \$45,324 \$45,326 \$3,322,265 \$372,265	Subtotal	\$2,960,211	N/A	N/A	\$372,265	\$372,2
Utility Project Costs Customer Services N/A \$0 \$0 \$0 Utility Administration N/A \$45,324 \$45,374 \$417,589 \$3,17,	Total Benefits	\$2,960,211	\$1,898,764	\$1,898,764	\$2,271,029	\$2,271,02
Customer Services N/A \$0 \$0 \$0 Utility Administration N/A \$45,324 \$4	Costs					
Utility Administration N/A \$45,324 \$41,75,589 \$3,17,589	Utility Project Costs					
Advertising & Promotion N/A \$0 \$0 \$0 Measurement & Verification N/A \$0 \$0 \$0 Rebates N/A \$372,265 \$\$372,265 \$\$3,005,535 \$\$2,079,004						\$
Measurement & Verification N/A \$0 \$0 \$0 Rebates N/A \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$\$\$372,265 \$\$\$372,265 \$\$\$372,265 \$\$\$\$372,265 \$\$\$\$372,265 \$						\$45,32
Rebates N/A \$372,265 \$\$372,265 \$\$3					1.1	-
Other N/A \$0 \$0 \$0 \$0 Subtotal N/A \$417,589 \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental Capital Costs \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 \$108 \$108 \$1,661,415 \$1,661						0070.0
Subtotal N/A \$417,589 \$1,562,496 N/A ? Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 N/A N/A \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 N/A N/A \$1,661,415 \$1,661 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175						
Revenue Reduction - Electric N/A N/A N/A \$2,587,946 N/A Subtotal N/A N/A \$2,587,946 N/A Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,						\$417,5
Revenue Reduction - Electric N/A N/A N/A \$2,587,946 N/A Subtotal N/A N/A \$2,587,946 N/A Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,	Utility Revenue Reduction					
Subtotal N/A N/A \$2,587,946 N/A Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental Capital Costs \$198,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,		N/A	N/A	\$2.587.946	N/A	N
Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079,						N,
Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,	Participant Costs					
Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,	-	\$1,562,496	N/A	N/A	\$1,562,496	\$1,562,4
Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661 Total Costs \$1,661,415 \$417,589 \$3,005,535 \$2,079,004 \$2,079, Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,	-		N/A	N/A		\$98,91
Net Benefit (Cost) \$1,298,796 \$1,481,175 (\$1,106,771) \$192,025 \$192,						\$1,661,4
	Total Costs	\$1,661,415	\$417,589	\$3,005,535	\$2,079,004	\$2,079,00
	Net Benefit (Cost)	\$1,298,796	\$1,481,175	(\$1,106,771)	\$192,025	\$192,02
	Benefit/Cost Ratio	1.78	4.55	0.63	1.09	1.0

2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	18.8 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	55.94%
Gross Load Factor at Customer	E	44.68%
Transmission Loss Factor (Energy)	F	4.710%
Transmission Loss Factor (Demand)	G	7.380%
Societal Net Benefit (Cost)	Н	\$240

Program Summary per Participant		
Gross kW Saved at Customer	I	5.31 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	3.20 kW
Gross Annual kWh Saved at Customer	(B x E x I)	20,768 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	21,795 kWh

Total Participants	J	151
Total Budget	К	\$417,589
Gross kW Saved at Customer	(J x I)	801.31 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	484 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	3,136,032 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,291,040 kWh
Societal Net Benefits	(J x I x H)	\$192,025

Utility Program Cost per kWh Lifetime	\$0.0068
Utility Program Cost per kW at Gen	\$863

BUSINESS SAVER'S SWITCH

	5 5	Participants		T 4	
	Participant	Utility	Rate Impact	Total Resource	Societal
	Test	Test	Test	Test	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits	(¢10tal)	(\$1010)	(\$10111)	(*10111)	(01000)
Avoided Revenue Requirements					
Generation	N/A	\$54,258	\$54,258	\$54,258	\$54,258
Т&D	N/A	\$32,760	\$32,760	\$32,760	\$32,760
Marginal Energy	N/A	\$131	\$131	\$131	\$131
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$87,150	\$87,150	\$87,150	\$87,150
Participant Benefits					
Bill Reduction - Electric	\$113,302	N/A	N/A	N/A	N//
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	\$113,302	N/A	N/A	\$0	\$ 0
Total Benefits	\$113,302	\$ 87 , 150	\$87,150	\$87,150	\$ 87 , 150
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$33,120	\$33,120	\$33,120	\$33,120
Advertising & Promotion	N/A	\$0	\$0	\$0	\$(
Measurement & Verification	N/A	\$ 0	\$0	\$0	\$(
Rebates	N/A	\$ 0	\$ 0	\$ 0	\$0
Other	N/A	\$0	\$0	\$0	\$(
Subtotal	N/A	\$33,120	\$33,120	\$33,120	\$33,120
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A	\$113,302	N/A	NZ
Subtotal	N/A	N/A	\$113,302	N/A	N/A
Participant Costs					
Incremental Capital Costs	\$ 0	N/A	N/A	\$0	\$(
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$(
Subtotal	\$0	N/A	N/A	\$0	\$0
Total Costs	\$ 0	\$33,120	\$146,422	\$33,120	\$33,120
Net Benefit (Cost)	\$113,302	\$54,030	(\$59,273)	\$54,030	\$54,030

2017 EL	ECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	15.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	19.75%
Gross Load Factor at Customer	E	0.01%
Transmission Loss Factor (Energy)	F	4.710%
Transmission Loss Factor (Demand)	G	7.380%
Societal Net Benefit (Cost)	Н	\$126

i logram Summary per l'articipant		
Gross kW Saved at Customer	Ι	26.83 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	5.72 kW
Gross Annual kWh Saved at Customer	(B x E x I)	13 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	14 kWh

Total Participants	J	16
Total Budget	K	\$33,120
Gross kW Saved at Customer	(J x I)	429.31 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	92 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	207 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	217 kWh
Societal Net Benefits	(J x I x H)	\$54,030

Utility Program Cost per kWh Lifetime	\$10.1643
Utility Program Cost per kW at Gen	\$362

PEAK AND ENERGY CONTROL

2017 Teet Present Gost Denent Buin	nary Analysis For All	rancipants			
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$87,239	\$87,239	\$87,239	\$87,23
Т&D	N/A	\$52,665	\$52,665	\$52,665	\$52,66
Marginal Energy	N/A	\$3,245	\$3,245	\$3,245	\$3,24
Environmental Externality	N/A	N/A	N/A	N/A	S
Subtotal	N/A	\$143,149	\$143,149	\$143,149	\$143,14
Participant Benefits					
Bill Reduction - Electric	\$58,510	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	ş
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	4
Subtotal	\$58,510	N/A	N/A	\$0	ş
Total Benefits	\$58,510	\$143,149	\$143,149	\$143,149	\$143,14
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$3,911	\$3,911	\$3,911	\$3,91
Advertising & Promotion	N/A	\$0	\$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	1
Rebates	N/A	\$0	\$0	\$0	ş
Other	N/A	\$0	\$0	\$0	\$
Subtotal	N/A	\$3,911	\$3,911	\$3,911	\$3,91
Utility Revenue Reduction					
	N/A	NI/A	\$58.510	N/A	N
Revenue Reduction - Electric	N/A N/A	N/A N/A	\$58,510 \$58,510	N/A N/A	N/ N/
Revenue Reduction - Electric Subtotal	N/A N/A	N/A N/A		N/A N/A	N/ N/
Revenue Reduction - Electric Subtotal	<u>N/A</u> N/A \$0	N/A N/A N/A		<u>N/A</u> N/A \$0	<u>N</u> / N/
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	\$ 0	N/A N/A	\$58,510 N/A	N/A \$0	
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs		N/A	\$58,510	N/A	4
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs Subtotal	\$0 \$0	N/A N/A N/A	\$58,510 N/A N/A	N/A \$0 \$0	4
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	\$0 \$0 \$0	N/A N/A N/A	\$58,510 N/A N/A N/A	N/A \$0 \$0 \$0	N/ N/ \$ \$3,91 \$139,23

2017		
2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)) А	5.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	47.46%
Gross Load Factor at Customer	Е	0.20%
Transmission Loss Factor (Energy)	F	4.710%
Transmission Loss Factor (Demand)	G	7.380%
Societal Net Benefit (Cost)	Н	\$219

Program Summary per Participant		
Gross kW Saved at Customer	I	159.15 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	81.55 kW
Gross Annual kWh Saved at Customer	(BxExI)	2,817 kWh
Net Annual kWh Saved at Generator	(BxExI)/(1-F)	2,956 kWh

Total Participants	J	4
Total Budget	K	\$3,911
Gross kW Saved at Customer	(J x I)	636.60 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	326 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	11,268 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	11,825 kWh
Societal Net Benefits	(J x I x H)	\$139,238

Utility Program Cost per kWh Lifetime	\$0.0661
Utility Program Cost per kW at Gen	\$12

BUSINESS SEGMENT TOTAL

Avoided Revenue Requirements Generation N/A \$456,592 <t< th=""><th></th><th></th><th>Participants</th><th></th><th></th><th></th></t<>			Participants			
Avoided Revenue Requirements Generation N/A \$456,592 <t< th=""><th></th><th>Test</th><th>Test</th><th>Impact Test</th><th>Resource Test</th><th>Test</th></t<>		Test	Test	Impact Test	Resource Test	Test
Generation N/A \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$456,592 \$275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,676 \$2275,075 \$1,396,796 \$1,396,796 \$1,396,796 \$1,396,796 \$2,129,063 \$2,2501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,	Benefits					
T & D N/A \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$1,396,792 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 <td>Avoided Revenue Requirements</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Avoided Revenue Requirements					
T & D N/A \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$275,676 \$1,396,792 \$2,129,063 \$2,129,063 \$2,19,013 \$2,19,013 \$2,19,013 \$2,101,328 \$2,501,328 <th< td=""><td>Generation</td><td>N/A</td><td>\$456,592</td><td>\$456,592</td><td>\$456,592</td><td>\$456,59</td></th<>	Generation	N/A	\$456,592	\$456,592	\$456,592	\$456,59
Marginal Energy N/A \$1,396,796 \$1,290,063 \$2,129,0063 \$2,129,0063 \$2,129,005 \$372,265	T & D					
Environmental Externality N/A N/A N/A N/A N/A N/A Subtotal N/A \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$2,129,063 \$372,265 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Subtotal N/A \$2,129,063 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,328 \$2,501,332	0 0,					ç1,570,79 \$
Bil Reduction - Electric \$2,759,758 N/A						\$2,129,00
Bil Reduction - Electric \$2,759,758 N/A	Participant Benefits					
Rebates from Xcel Energy Incremental Capital Savings \$372,265 N/A N/A N/A \$372,265 \$372,2 Incremental O&M Savings \$0 N/A N/A \$0 N/A N/A \$0 Subtotal \$3,132,023 \$0 N/A N/A \$372,265 \$372,2 Total Benefits \$3,132,023 \$2,129,063 \$2,129,063 \$2,501,328 \$2,501,328 Costs Customer Services N/A \$0 \$0 \$0 Utility Project Costs Customer Services N/A \$0 \$0 \$0 Measurement & Verification N/A \$0 \$0 \$0 \$0 Measurement & Verification N/A \$0 \$0 \$0 \$0 Rebates N/A \$0 \$0 \$0 \$0 \$0 Subtotal N/A \$10 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 </td <td></td> <td>\$2,759,758</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/</td>		\$2,759,758	N/A	N/A	N/A	N/
Incremental O&M Savings \$0 N/Λ N/Λ \$0 Subtotal \$3,132,023 N/Λ N/Λ \$372,265 \$372,2 Total Benefits \$3,132,023 \$2,129,063 \$2,501,328 \$2,501,32 Costs Castomer Services N/Λ \$0 \$0 \$0 Utility Project Costs Castomer Services N/Λ \$82,355 \$82,355 \$82,355 Measurement & Verification N/Λ \$0 \$0 \$0 \$0 Measurement & Verification N/Λ \$372,265	Rebates from Xcel Energy	\$372,265	N/A	N/A	\$372,265	\$372,20
Subtotal \$3,132,023 N/A N/A \$372,265 \$372,2 Total Benefits \$3,132,023 \$2,129,063 \$2,501,328 \$3,72,25 \$3,72,25 \$3,72,25 \$3,72,25 \$3,72,25 \$3,72,25	Incremental Capital Savings	\$ 0	N/A	N/A	\$0	ş
Total Benefits \$3,132,023 \$2,129,063 \$2,129,063 \$2,501,328 \$2,501,328 Costs Costs Customer Services N/A \$0 \$0 \$0 Utility Project Costs N/A \$82,355 \$82,355 \$82,355 \$82,355 \$82,355 Advertising & Promotion N/A \$0 \$0 \$0 \$0 Measurement & Verification N/A \$0 \$0 \$0 \$0 Rebates N/A \$372,265 \$382,355 </td <td>Incremental O&M Savings</td> <td>\$0</td> <td>N/A</td> <td>N/A</td> <td>\$0</td> <td>\$</td>	Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$
Costs Costs Costs Utility Project Costs N/A \$0 \$0 \$0 Customer Services N/A \$82,355 \$82,355 \$82,355 \$82,355 Advertising & Promotion N/A \$0 \$0 \$0 \$0 Measurement & Verification N/A \$372,265	Subtotal	\$3,132,023	N/A	N/A	\$372,265	\$372,20
Utility Project Costs Customer Services N/A \$0 \$0 \$0 Utility Administration N/A \$82,355 \$92,357 \$81,45,620 \$454,620 \$454,620 \$1,562,496 \$1,562,496 \$1,661,415 \$1,661,415 \$1,661,415 \$1,661,415 </td <td>Total Benefits</td> <td>\$3,132,023</td> <td>\$2,129,063</td> <td>\$2,129,063</td> <td>\$2,501,328</td> <td>\$2,501,32</td>	Total Benefits	\$3,132,023	\$2,129,063	\$2,129,063	\$2,501,328	\$2,501,32
Customer Services N/A \$0 \$0 \$0 Utility Administration N/A \$82,355 \$83,552,55 \$83,52,55 <	Costs					
Utility Administration N/A \$82,355	Utility Project Costs					
Advertising & Promotion N/A \$0 \$0 \$0 Measurement & Verification N/A \$0 \$0 \$0 Rebates N/A \$0 \$0 \$0 Other N/A \$072,265 \$372,265 \$372,265 Subtotal N/A \$0 \$0 \$0 Subtotal N/A \$454,620 \$454,620 \$454,620 Utility Revenue Reduction Revenue Reduction - Electric N/A N/A \$2,759,758 N/A N Subtotal N/A N/A \$2,759,758 N/A N Participant Costs Incremental Capital Costs \$1,562,496 N/A \$1,562,496 \$1,562,496 Incremental Oce Costs \$98,919 N/A N/A \$98,919 \$98,9 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,415 Total Costs \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Wet Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,0						9
Measurement & Verification N/A \$0 \$0 \$0 Rebates N/A \$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$\$372,265 \$\$\$372,265 \$\$\$\$372,265 \$	5					\$82,3
Rebates N/A \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$372,265 \$\$\$372,265 \$						
Other N/A \$0 \$0 \$0 \$0 Subtotal N/A \$0 \$1 \$562,60 \$1/A N/A \$1,562,496 \$1,562,49		,				0070.0
Subtotal N/A \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$454,620 \$\$1,750,758 N/A N Butter and Costs N/A N/A \$\$1,562,496 N/A N/A \$\$1,562,496 \$\$1,56						\$372,20
Revenue Reduction - Electric N/A N/A N/A \$2,759,758 N/A N Subtotal N/A N/A N/A \$2,759,758 N/A N Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562,496 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98,9 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,415 Subtotal \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Met Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293			1.			\$454,62
Revenue Reduction - Electric N/A N/A N/A \$2,759,758 N/A N Subtotal N/A N/A N/A \$2,759,758 N/A N Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562,496 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98,9 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,415 Subtotal \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Met Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293	Utility Revenue Reduction					
Subtotal N/A N/A \$2,759,758 N/A N Participant Costs Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,661,415 \$1,661,415 \$1,661,415 \$1,661,415 \$1,661,415 \$1,661,415 \$1,661,415 \$2,116,035 \$2,116,035 \$2,116,035 \$2,116,035 \$2,116,035 \$2,116,035 \$2,116,035 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 \$3,85,293 <t< td=""><td></td><td>N/A</td><td>N/A</td><td>\$2,759,758</td><td>N/A</td><td>N</td></t<>		N/A	N/A	\$2,759,758	N/A	N
Incremental Capital Costs \$1,562,496 N/A N/A \$1,562,496 \$1,562,496 Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$98,9 Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,415 Total Costs \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Net Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293	Subtotal	N/A	N/A		N/A	N,
Incremental O&M Costs \$98,919 N/A N/A \$98,919 \$908,919 \$908,919 \$908,919 \$908,919 \$918,910 \$918,910 \$\$1,661,415 \$\$1,661,415 \$\$1,661,415 \$\$1,661,415 \$\$1,661,415 \$\$1,61,415 \$\$1,61,4035 \$\$2,116,035 \$\$2,116,035 \$\$2,116,035 \$\$2,116,035 \$\$2,116,035 \$\$2,116,035 \$\$2,116,035 \$\$385,293 \$385,293	Participant Costs					
Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,4 Total Costs \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Net Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293	Incremental Capital Costs	\$1,562,496	N/A	N/A	\$1,562,496	\$1,562,49
Subtotal \$1,661,415 N/A N/A \$1,661,415 \$1,661,4 Total Costs \$1,661,415 \$454,620 \$3,214,379 \$2,116,035 \$2,116,035 Net Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293	Incremental O&M Costs	\$98,919	N/A	N/A	\$98,919	\$98,93
Net Benefit (Cost) \$1,470,609 \$1,674,443 (\$1,085,315) \$385,293 \$385,293						\$1,661,4
			* 15 1 (20)	\$3 214 370	\$2,116,035	\$2 116 0 ²
	Total Costs	\$1,661,415	\$454,620	\$5,214,579	\$2,110,055	<i>\</i> ,,,
		~ * *				- / /

2045	DI DOMBIO	
2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	18.7 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	44.73%
Gross Load Factor at Customer	Е	19.24%
Transmission Loss Factor (Energy)	F	4.710%
Transmission Loss Factor (Demand)	G	7.380%
Societal Net Benefit (Cost)	Н	\$206

Program Summary per Participant		
Gross kW Saved at Customer	I	10.92 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	5.27 kW
Gross Annual kWh Saved at Customer	(BxExI)	18,406 kWh
Net Annual kWh Saved at Generator	(BxExI)/(1-F)	19,316 kWh

Total Participants	J	171
Total Budget	К	\$454,620
Gross kW Saved at Customer	(J x I)	1,867.22 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	902 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	3,147,507 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,303,082 kWh
Societal Net Benefits	(J x I x H)	\$385,293

Utility Program Cost per kWh Lifetime	\$0.0073
Utility Program Cost per kW at Gen	\$504

RESIDENTIAL HOME LIGHTING

	nary 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	\$110,619	\$110,619	\$110,619	\$110,61
Т&D	N/A	\$66,785	\$66,785	\$66,785	\$66,78
Marginal Energy	N/A	\$656,707	\$656,707	\$656,707	\$656,70
Environmental Externality	N/A	N/A	N/A	N/A	ş
Subtotal	N/A	\$834,112	\$834,112	\$834,112	\$834,11
Participant Benefits					
Bill Reduction - Electric	\$1,885,023	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$92,997	N/A	N/A	\$92,997	\$92,9
Incremental Capital Savings	\$ 0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$
Subtotal	\$1,978,020	N/A	N/A	\$92,997	\$92,99
Total Benefits	\$1,978,020	\$834,112	\$834,112	\$927,109	\$927,10
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	1
Utility Administration	N/A	\$18,736	\$18,736	\$18,736	\$18,7
Advertising & Promotion	N/A	\$0 20	\$0 20	\$0 20	-
				\$0	
Measurement & Verification	N/A	\$0 \$00.007	\$0		
Rebates	N/A	\$92,997	\$92,997	\$92,997	\$92,9
	,				\$92,99 \$92,99 \$111,73
Rebates Other Subtotal	N/A N/A	\$92,997 \$0	\$92,997 \$0	\$92,997 \$0	\$92,9
Rebates Other	N/A N/A N/A	\$92,997 \$0	\$92,997 \$0	\$92,997 \$0 \$111,733	\$92,9
Rebates Other Subtotal Utility Revenue Reduction	N/A N/A	\$92,997 \$0	\$92,997 \$0 \$111,733	\$92,997 \$0	\$92,9
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs	N/A N/A N/A N/A N/A	\$92,997 \$0 \$111,733 N/A N/A	\$92,997 \$0 \$111,733 \$1,885,023 \$1,885,023	\$92,997 \$0 \$111,733 N/A N/A	\$92,9 5111,7 N N
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal	N/A N/A N/A	\$92,997 \$0 \$111,733 N/A	\$92,997 <u>\$0</u> \$111,733 \$1,885,023	\$92,997 <u>\$0</u> \$111,733 N/A	\$92,9
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs	N/A N/A N/A N/A N/A	\$92,997 \$0 \$111,733 N/A N/A	\$92,997 \$0 \$111,733 \$1,885,023 \$1,885,023	\$92,997 \$0 \$111,733 N/A N/A	\$92,9 \$111,7 N \$132,9
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs	N/A N/A N/A N/A \$132,997	\$92,997 \$0 \$111,733 N/A N/A	\$92,997 \$0 \$1111,733 \$1,885,023 \$1,885,023 N/A	\$92,997 \$0 \$111,733 N/A N/A \$132,997	\$92,9 \$111,7 N \$132,9
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs Subtotal	N/A N/A N/A N/A \$132,997 \$0	\$92,997 \$0 \$111,733 N/A N/A N/A	\$92,997 \$0 \$1111,733 \$1,885,023 \$1,885,023 N/A N/A	\$92,997 \$0 \$111,733 N/A N/A \$132,997 \$0	\$92,9 \$111,7 N \$112,9 \$132,9
Rebates Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	N/A N/A N/A N/A \$132,997 \$0 \$132,997	\$92,997 \$0 \$111,733 N/A N/A N/A N/A N/A	\$92,997 \$0 \$1111,733 \$1,885,023 \$1,885,023 N/A N/A N/A	\$92,997 \$0 \$111,733 N/A N/A \$132,997 \$0 \$132,997	\$92,99 5 \$111,72 N N

2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	5.9 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	11.83%
Gross Load Factor at Customer	Е	13.32%
Transmission Loss Factor (Energy)	F	5.088%
Transmission Loss Factor (Demand)	G	8.509%
Societal Net Benefit (Cost)	Н	\$306

Program Summary per Participant		
Gross kW Saved at Customer	Ι	0.48 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.06 kW
Gross Annual kWh Saved at Customer	(BxExI)	558 kWh
Net Annual kWh Saved at Generator	(BxExÍ)/(1-F)	588 kWh

Total Participants	J	4,660
Total Budget	К	\$111,733
Gross kW Saved at Customer	(J x I)	2,227.09 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	288 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	2,599,072 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	2,738,397 kWh
Societal Net Benefits	(J x I x H)	\$682,379

Utility Program Cost per kWh Lifetime	\$0.0069
Utility Program Cost per kW at Gen	\$388

GROUND SOURCE HEAT PUMP

	nary Analysis For All	Farticipants			
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$2,517	\$2,517	\$2,517	\$2,51
T & D	N/A	\$1,520	\$1,520	\$1,520	\$1,52
Marginal Energy	N/A	\$1,393	\$1,393	\$1,393	\$1,39
Environmental Externality	N/A	N/A	N/A	N/A	\$
Subtotal	N/A	\$5,430	\$5,430	\$5,430	\$5,43
Participant Benefits					
Bill Reduction - Electric	\$3,341	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$3,000	N/A	N/A	\$3,000	\$3,00
Incremental Capital Savings	\$ 0	N/A	N/A	\$0	4
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	ş
Subtotal	\$6,341	N/A	N/A	\$3,000	\$3,00
Total Benefits	\$6,341	\$5,430	\$5,430	\$8,430	\$8,43
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	9
Utility Administration	N/A	\$0	\$0 80	\$ 0	5
Advertising & Promotion	N/A	\$0 20	\$0 20	\$0 20	\$
Measurement & Verification	N/A	\$0	\$0	\$0	9
D 1	NT / A	62 000	¢2,000	#2.000	
Rebates	N/A	\$3,000	\$3,000	\$3,000	\$3,00
Rebates Other Subtotal	N/A N/A N/A	\$3,000 \$0 \$3,000	\$3,000 \$0 \$3,000	\$3,000 \$0 \$3,000	\$3,00 \$
Other Subtotal	N/A	\$0	\$0	\$0	\$3,00 \$
Other Subtotal Utility Revenue Reduction	N/A N/A	\$0 \$3,000	\$0 \$3,000	\$0 \$3,000	\$3,00 \$ \$3,00
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric	N/A	\$0	\$0	\$0	\$3,00 \$ \$3,00
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal	N/A N/A N/A	\$0 \$3,000 N/A	\$0 \$3,000 \$3,341	\$0 \$3,000 N/A	\$3,00 \$ \$3,00
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal	N/A N/A N/A	\$0 \$3,000 N/A	\$0 \$3,000 \$3,341	\$0 \$3,000 N/A	\$3,00 \$ \$3,00 N/ N/
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs	N/A N/A N/A N/A	\$0 \$3,000 N/A N/A	\$0 \$3,000 \$3,341 \$3,341	\$0 \$3,000 N/A N/A	\$3,00 \$ \$3,00 N, N, \$18,29
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs	N/A N/A N/A \$18,290	\$0 \$3,000 N/A N/A	\$0 \$3,000 \$3,341 \$3,341 N/A	\$0 \$3,000 N/A N/A \$18,290	\$3,00 \$3,00 \$3,00 N/ N/ \$18,29 \$
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs Subtotal	N/A N/A N/A \$18,290 \$0	\$0 \$3,000 N/A N/A N/A	\$0 \$3,000 \$3,341 \$3,341 N/A N/A	\$0 \$3,000 N/A N/A \$18,290 \$0	\$3,00 \$ \$3,00 N/ N/ \$18,29 \$ \$18,29 \$ \$18,29
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	N/A N/A N/A \$18,290 \$0 \$18,290	\$0 \$3,000 N/A N/A N/A N/A N/A	\$0 \$3,000 \$3,341 \$3,341 N/A N/A N/A	\$0 \$3,000 N/A N/A \$18,290 \$0 \$18,290	\$3,00 \$ \$3,00 N/ N/ \$18,22 \$ \$18,25 \$ \$18,25 \$ \$18,25 \$ \$18,25 \$ \$ \$18,25 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

2017 H	ELECTRIC	ACTUAI
nput Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	Α	20.0 years
Annual Hours	В	876
Gross Customer kW	С	1 kV
Generator Peak Coincidence Factor	D	89.99
Gross Load Factor at Customer	Е	8.41
Transmission Loss Factor (Energy)	F	5.260%
Transmission Loss Factor (Demand)	G	8.580%
Societal Net Benefit (Cost)	Н	(\$3,46)
Net coincident kW Saved at Generator Gross Annual kWh Saved at Customer	$(I \times D) / (1 - G)$ (B x E x I)	3.66 k 2,737 kW
Net Annual kWh Saved at Generator	(B x E x Í) / (1 - F)	2,889 kW
Program Summary All Participants		
Total Participants	J	
Total Participants Total Budget	J K	\$3,000
1	•	
Total Budget	К (ЈхІ)	3.72 kV
Total Budget Gross kW Saved at Customer	K (J x I) r (I x D)/(1-G) x J (B x E x I) x J	\$3,000 3.72 kV 4 kV 2,737 kW
Total Budget Gross kW Saved at Customer Net coincident kW Saved at Generato	K (J x I) r (I x D)/(1-G) x J	\$3,000 3.72 kV 4 kV

Utility Program Cost per kWh Lifetime	\$0.0519
Utility Program Cost per kW at Gen	\$820

RESIDENTIAL SAVER'S SWITCH

	nary Analysis For All			A	
	Participant	Test Test	Rate Impact	Total Resource Test	Societal Test
			Test		
D C	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$645,476	\$645,476	\$645,476	\$645,470
T & D	N/A	\$389,726	\$389,726	\$389,726	\$389,720
Marginal Energy	N/A	\$1,467	\$1,467	\$1,467	\$1,46
Environmental Externality	N/A	N/A	N/A	N/A	\$(
Subtotal	N/A	\$1,036,669	\$1,036,669	\$1,036,669	\$1,036,669
Participant Benefits					
Bill Reduction - Electric	\$994,081	N/A	N/A	N/A	N/.
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	\$(
Subtotal	\$994,081	N/A	N/A	\$0	\$(
Total Benefits	\$994,081	\$1,036,669	\$1,036,669	\$1,036,669	\$1,036,669
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$196,635	\$196,635	\$196,635	\$196,63
Advertising & Promotion	N/A	\$0	\$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	Ş
Rebates	N/A	\$0	\$ 0	\$0	\$
Other	N/A	\$0	\$0	\$0	\$
Subtotal	N/A	\$196,635	\$196,635	\$196,635	\$196,63
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A	\$994,081	N/A	N/
Subtotal	N/A	N/A	\$994,081	N/A	N/. N/.
Participant Costs					
Incremental Capital Costs	\$ 0	N/A	N/A	\$0	\$0
Incremental O&M Costs	\$0 \$0	N/A	N/A	\$0 \$0	ş(
Subtotal	\$0 \$0	N/A	N/A	\$0	\$(\$(
Total Costs	\$0	\$196,635	\$1,190,715	\$196,635	\$196,63
	\$004.004	\$0.40.025	(@4 F 4 0 4 4)	8040.025	60.40.00
Net Benefit (Cost)	\$994,081	\$840,035	(\$154,046)	\$840,035	\$840,03
Benefit/Cost Ratio	INF	5.27	0.87	5.27	5.2

2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	15.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	27.74%
Gross Load Factor at Customer	Е	0.01%
Transmission Loss Factor (Energy)	F	5.260%
Transmission Loss Factor (Demand)	G	8.580%
Societal Net Benefit (Cost)	Н	\$234

Program Summary per Participant		
Gross kW Saved at Customer	Ι	2.55 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.77 kW
Gross Annual kWh Saved at Customer	(B x E x I)	2 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	2 kWh

Total Participants	J	1,406
Total Budget	K	\$196,635
Gross kW Saved at Customer	(J x I)	3,588.80 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	1,089 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	2,971 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,136 kWh
Societal Net Benefits	(] x I x H)	\$840,035

Utility Program Cost per kWh Lifetime	\$4.1802
Utility Program Cost per kW at Gen	\$181

RESIDENTIAL SEGMENT TOTAL

				m .	
	Dentisia and	T	Rate	Total	Societal
	-	Participant Utility Test Test	Impact Test	Resource Test	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$758,613	\$758,613	\$758,613	\$758,61
T & D	N/A	\$458,032	\$458,032	\$458,032	\$458,03
Marginal Energy	N/A	\$659,567	\$659,567	\$659,567	\$659,56
Environmental Externality	N/A	N/A	N/A	N/A	\$
Subtotal	N/A	\$1,876,212	\$1,876,212	\$1,876,212	\$1,876,21
Participant Benefits					
Bill Reduction - Electric	\$2,882,444	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$95,997	N/A	N/A	\$95,997	\$95,99
Incremental Capital Savings	\$0 20	N/A	N/A	\$0 20	\$
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$
Subtotal	\$2,978,441	N/A	N/A	\$95,997	\$95,99
Total Benefits	\$2,978,441	\$1,876,212	\$1,876,212	\$1,972,209	\$1,972,20
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$247,603	\$247,603	\$247,603	\$247,60
Advertising & Promotion	N/A	\$0 \$0	\$0 \$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0 \$05 007	\$0	\$05.00
Rebates Other	N/A N/A	\$95,997 \$0	\$95,997 \$0	\$95,997 \$0	\$95,99 \$
Subtotal	N/A N/A	\$343,600	\$343,600	\$343,600	\$343,60
Utility Revenue Reduction					
	N/A	N/A	\$2.882.444	N/A	N
Revenue Reduction - Electric	N/A N/A	N/A N/A	\$2,882,444 \$2,882,444	N/A N/A	N/ N/
Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs	N/A N/A	N/A N/A			N/ N/
Revenue Reduction - Electric Subtotal	N/A N/A \$151,287	N/A N/A N/A			N/ N/ \$151,28
Revenue Reduction - Electric Subtotal Participant Costs	N/A		\$2,882,444 N/A	N/A	
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs	N/A \$151,287	N/A	\$2,882,444	N/A \$151,287	ş
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs Subtotal	N/A \$151,287 \$0	N/A N/A	\$2,882,444 N/A N/A	N/A \$151,287 \$0	\$151,28
Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	N/A \$151,287 \$0 \$151,287	N/A N/A N/A	\$2,882,444 N/A N/A N/A	N/A \$151,287 \$0 \$151,287	N/ N/ \$151,28 \$151,28 \$494,88 \$1,477,32

2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh) A	6.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	21.70%
Gross Load Factor at Customer	E	5.11%
Transmission Loss Factor (Energy)	F	5.088%
Transmission Loss Factor (Demand)	G	8.553%
Societal Net Benefit (Cost)	Н	\$254

Program Summary per Participant		
Gross kW Saved at Customer	Ι	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)	33 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	35 kWh

Total Participants	J	79,539
Total Budget	К	\$343,600
Gross kW Saved at Customer	(J x I)	5,819.61 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	1,381 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	2,604,780 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	2,744,422 kWh
Societal Net Benefits	(J x I x H)	\$1,477,322

Utility Program Cost per kWh Lifetime	\$0.0210
Utility Program Cost per kW at Gen	\$249

PORTFOLIO TOTAL

2017 Net Present Cost Benefit Summ			Rate	Total	
	Participant	Utility	Impact	Resource	Societal
	Test	Test	Test	Test	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits	````	× ,	· · ·		
Avoided Revenue Requirements					
Generation	N/A	\$1,215,205	\$1,215,205	\$1,215,205	\$1,215,205
T & D	N/A	\$733,707	\$733,707	\$733,707	\$733,707
Marginal Energy	N/A	\$2,056,363	\$2,056,363	\$2,056,363	\$2,056,363
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$4,005,275	\$4,005,275	\$4,005,275	\$4,005,275
Participant Benefits					
Bill Reduction - Electric	\$5,642,202	N/A	N/A	N/A	N//
Rebates from Xcel Energy	\$468,262	N/A	N/A	\$468,262	\$468,262
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$0
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$0
Subtotal	\$6,110,465	N/A	N/A	\$468,262	\$468,262
Total Benefits	\$6,110,465	\$4,005,275	\$4,005,275	\$4,473,537	\$4,473,537
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$341,333	\$341,333	\$341,333	\$341,333
Advertising & Promotion	N/A	\$ 0	\$0 80	\$0	\$(
Measurement & Verification	N/A	\$0	\$0	\$0	\$(
Rebates Other	N/A	\$468,262	\$468,262	\$468,262	\$468,262
Subtotal	N/A N/A	\$0 \$809,595	\$0 \$809,595	\$0 \$809,595	\$0 \$809,59
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A	N/A	\$5,642,202	N/A	N/
Subtotal	N/A	N/A	\$5,642,202	N/A	N/.
Participant Costs					
Incremental Capital Costs	\$1,713,782	N/A	N/A	\$1,713,782	\$1,713,78
Incremental O&M Costs	\$98,919	N/A	N/A	\$98,919	\$98,919
Subtotal	\$1,812,702	N/A	N/A	\$1,812,702	\$1,812,70
Total Costs	\$1,812,702	\$809,595	\$6,451,797	\$2,622,296	\$2,622,290
Net Benefit (Cost)	\$4,297,763	\$3,195,680	(\$2,446,522)	\$1,851,241	\$1,851,241
Benefit/Cost Ratio	3.37	4.95	0.62	1.71	1.71
Denenti, Cost Ratio	5.57	4.90	0.02	1./1	1./

2017	ELECTRIC	ACTUAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	12.9 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	27.24%
Gross Load Factor at Customer	E	8.54%
Transmission Loss Factor (Energy)	F	4.882%
Transmission Loss Factor (Demand)	G	8.271%
Societal Net Benefit (Cost)	Н	\$241

Program Summary per Participant		
Gross kW Saved at Customer	I	0.10 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.03 kW
Gross Annual kWh Saved at Customer	(BxExI)	72 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	76 kWh

Total Participants	J	79,710
Total Budget	К	\$809,595
Gross kW Saved at Customer	(J x I)	7,686.83 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	2,282 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	5,752,287 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	6,047,504 kWh
Societal Net Benefits	(J x I x H)	\$1,851,241

Utility Program Cost per kWh Lifetime \$0.0	1102
	105
Utility Program Cost per kW at Gen \$	\$355

Docket No. EL18-___ 2019 Lighting Measures Attachment B: 1 of 1

Lighting Measures

		2017	2018	2019		
Туре	Lighting Efficiency	2017 Rebate Amount (\$)	2018 Rebate Amount (\$)	2019 Rebate Amount (\$)	Rebate Adjustment	Justification
letrofit	Wall mount occupancy sensor - 50 Watts to 300 Watts Controlled Load	\$15	\$ 15.00	\$ 15.00	NA	
letione	Wall mount occupancy sensor - Greater than 300	\$25	\$ 25.00	\$ 25.00	NA	
letrofit	Watts Controlled Load Ceiling mount occupancy sensor - 50 Watts to 300					
letrofit	Watts Controlled Load	\$30	\$ 30.00	\$ 30.00	NA	
etrofit	Ceiling mount occupancy sensor - Greater than 300 Watts Controlled Load	\$40	\$ 40.00	\$ 40.00	NA	
letrofit	Occupancy Sensor - Photocell	\$25 \$75	\$ 25.00 \$ 25.00	\$ 25.00 \$ 25.00	NA Yes - \$75 in 2017	Change in incremental cost
Retrofit	Stairwell Fixture with Integral Occupancy Sensor					Change in incremental cost
letrofit	LED/LEC Exit Sign	\$25	-		NA	
letrofit	LED Interior Screw In Fixture Retrofit	\$15	\$ 15.00	\$ 15.00	NA	
letrofit	LED Interior Fixture <= 25W	\$35	\$ 35.00	\$ 20.00	Yes - \$35 in 2017	Change in incremental cost
etrofit	LED Interior Fixture 26W - 50W	\$50	\$ 50.00	\$ 40.00	Yes - \$50 in 2017	Change in incremental cost Increase in rebate to promote
letrofit	LED Ref and Frz Cases 5' or 6' doors	\$55	\$ 100.00	\$ 100.00	Yes - \$55 in 2017 Yes- \$135 in 2017;	technology
Retrofit	LED Parking Garage Lighting 25W-60W	\$135	\$ 75.00	\$ 75.00	changed in Supplement	Change in incremental cost
Retrofit	LED Area Lighting - 45-65W	\$100	\$ 25.00	\$ 25.00	Yes - \$100 in 2017	Change in incremental cost
Retrofit	LED Area Lighting - 66-89W	\$125	\$ 25.00	\$ 25.00	Yes- \$125 in 2017	Change in incremental cost
letrofit	LED Area Lighting - 90-119W	\$150	\$ 50.00	\$ 50.00	Yes - \$150 in 2017	Change in incremental cost
etrofit	LED Area Lighting - 120-140W	\$175	\$ 50.00	\$ 50.00	Yes - \$175 in 2017	Change in incremental cost
		\$50	\$ 20.00	\$ 20.00	Yes - \$50 in 2017;	Change in incremental cost
letrofit	LED Troffer Fixture 1X4	\$50	\$ 20.00	\$ 20.00	changed in Supplement Yes - \$50 in 2017;	Change in incremental cost
letrofit	LED Troffer Fixture 2X2	\$50	\$ 30.00	\$ 30.00	changed in Supplement Yes - \$50 in 2017;	_
Retrofit	LED Troffer Fixture 2X4				changed in Supplement Yes - \$30 in 2017;	Change in incremental cost
Retrofit	LED Troffer Retrofit Kit 1X4	\$30	\$ 15.00	\$ 15.00	changed in Supplement	Change in incremental cost
letrofit	LED Troffer Retrofit Kit 2X2	\$30	\$ 15.00	\$ 15.00	Yes - \$30 in 2017; changed in Supplement	Change in incremental cost
Retrofit	LED Troffer Retrofit Kit 2X4	\$30	\$ 25.00	\$ 25.00	Yes - \$30 in 2017; changed in Supplement	Change in incremental cost
letrofit	LED Exterior Wall Pack <= 25W	\$35	\$ 35.00	\$ 25.00	Yes - \$35 in 2017	Change in incremental cost
etrofit	LED Exterior Wall Pack 26W - 60W	\$75	\$ 75.00	\$ 50.00	Yes - \$75 in 2017	Change in incremental cost
etrofit	LED Exterior Wall Pack 61W - 150W	\$100	\$ 100.00	\$ 80.00	Yes - \$100 in 2017	Change in incremental cost
						Change in incremental cost
etrofit	LED Parking Garage Wall Pack <= 25W	\$35	\$ 35.00	\$ 35.00	NA	
letrofit	LED Parking Garage Wall Pack 26W - 60W	\$75	\$ 75.00	\$ 75.00	NA	
letrofit	LED Parking Garage Wall Pack 61W - 150W	\$100	\$ 100.00	\$ 100.00	NA	
letrofit	LED Outdoor Canopy or Soffit lighting 25W - 60W	\$150	\$ 75.00	\$ 75.00	Yes- \$150 in 2017; changed in Supplement	Change in incremental cost
Retrofit	LED Outdoor Canopy or Soffit lighting 61W - 150W	\$200	\$ 100.00	\$ 100.00	Yes - \$200 in 2017; changed in Supplement	Change in incremental cost
Retrofit	LED Interior Lamp <= 5W	\$7	\$ 7.00	\$ 4.00	Yes - \$7 in 2017	Change in incremental cost
etrofit	LED Interior Lamp 6W - 10W	\$12	\$ 12.00	\$ 6.00	Yes - \$12 in 2017	Change in incremental cost
letrofit	LED Interior Lamp 11W - 20W	\$15	\$ 15.00	\$ 8.00	Yes - \$15 in 2017 New Rebate in	Change in incremental cost New Technology
Retrofit	LED Tube Type A 2 foot	\$ -	\$ 2.00	\$ 2.00	Supplement New Rebate in	
Retrofit	LED Tube Type C 2 foot	ş -	\$ 5.00	\$ 5.00	Supplement	New Technology
	LED Tube Type C 2 foot LED Tube Type A 4 foot	s - s -	\$ 5.00 \$ 2.00	\$ 5.00 \$ 2.00	Supplement New Rebate in Supplement	New Technology New Technology
letrofit		Ť			Supplement New Rebate in	
letrofit letrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot	ş . ş .	\$ 2.00 \$ 5.00	\$ 2.00 \$ 5.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in	New Technology
Aetrofit Aetrofit Aetrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot	\$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00	\$ 2.00 \$ 5.00 \$ 3.00	Supplement New Rebate in Supplement New Rebate in New Rebate in Supplement	New Technology New Technology New Technology
Retrofit Retrofit Retrofit Retrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W	\$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019	New Technology New Technology New Technology New Technology
letrofit Setrofit Setrofit Setrofit Setrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W	\$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00 \$ 120.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019	New Technology New Technology New Technology New Technology New Technology
letrofit letrofit letrofit letrofit letrofit letrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 201-464W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 150.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019	New Technology New Technology New Technology New Technology New Technology
etrofit etrofit etrofit etrofit etrofit etrofit etrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 291-464W LED High Bay Fixture - 465-625W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 200.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019	New Technology New Technology New Technology New Technology New Technology New Technology
letrofit letrofit letrofit letrofit letrofit letrofit letrofit letrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 201-464W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 150.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017	New Technology New Technology New Technology New Technology New Technology
letrofit letrofit letrofit letrofit letrofit letrofit letrofit letrofit	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95.189W LED High Bay Fixture - 190.290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp <= 5W LED Interior Lamp 6W - 10W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 200.00 \$ 4.00 \$ 6.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019	New Technology New Technology New Technology New Technology New Technology New Technology
etrofit etrofit etrofit etrofit etrofit etrofit etrofit ew Construction	LED Tube Type A 4 foot LED Tube Type A 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 190-290W LED Interior Jamp Fixture - 21-04-04W LED Interior Lamp 6W - 10W LED Interior Lamp 6W - 10W LED Interior Lamp 11W - 20W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 200.00 \$ 4.00 \$ 6.00 \$ 8.00	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$15 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
etrofit etrofit etrofit etrofit etrofit etrofit etrofit eev Construction eew Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95.189W LED High Bay Fixture - 190.290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp <= 5W LED Interior Lamp 6W - 10W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 200.00 \$ 4.00 \$ 6.00	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
etrofit etrofi	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 95-189W LED High Bay Fixture - 291-464W LED High Bay Fixture - 405-623W LED Interior Lamp < 5 W LED Interior Lamp < 5 W LED Interior Lamp S - 10W LED Interior Tamp S - 10W LED Interior Fixture <= 25W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 4.00 \$ 4.00 \$ 6.00 \$ 8.00 \$ 15.00	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$15 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost Change in incremental cost Change in incremental cost
Retrofit Retrof	LED Tube Type A 4 foot LED Tube Type A 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 190-290W LED Interior Jamp Fixture - 21-04-04W LED Interior Lamp 6W - 10W LED Interior Lamp 6W - 10W LED Interior Lamp 11W - 20W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 200.00 \$ 4.00 \$ 4.00 \$ 15.00 \$ 8.800 \$ 15.00 \$ 20.00 \$ 70.00	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$15 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost Change in incremental cost Change in incremental cost
Retrofit Ret	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 90-290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-623W LED Interior Lamp < 1 W LED Interior Fixture < 25W LED Interior Fixture < 25W LED Interior Fixture < 25W LED Interior Fixture 20W LED Interior Fixture 20W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 15.00 \$ 25.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 200.00 \$ 4.00 \$ 6.00 \$ 8.800 \$ 15.00 \$ 20.00	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$15 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction New Construction New Construction New Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95.189W LED High Bay Fixture - 190.290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp <5 W LED Interior Lamp 6W - 10W LED Interior Tamp 11W - 20W LED Interior Fixture 26W - 50W LED Interior Fixture 26W - 50W LED Ref and Frz Cases 5' or 6' doors LED Parking Garage Lighting 25W-60W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 5.00 \$ 15.00 \$ 3.00 \$ 10.00 \$ 3.00 \$ 10.00 \$ 10.00 \$ 10.00 \$ 10.00 \$ 10.00 \$ 120.00 \$ 150.00 \$ 120.00 \$ 150.00 \$ 150.00 \$ 200.00 \$ 3.00 \$ 150.00 \$ 3.00 \$ 3.000 \$ 3.0000 \$ 3.0000 \$ 3.000000 \$ 3.00000 \$ 3.000000000000000000000000000000000000	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$1 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes - \$40 in 2017 Yes , \$25 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental co
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction New Construction New Construction New Construction New Construction New Construction	LED Tube Type A 4 foot LED Tube Type A 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 190-290W LED High Bay Fixture - 190-290W LED High Bay Fixture - 465-625W LED Interior Lamp 6 4 - 10W LED Interior Lamp 6 4 - 10W LED Interior Fixture 2 - 25W LED Interior Fixture 2 - 25W LED Interior Fixture 2 - 50W LED Interior Fixture 2 - 50W LED Interior Fixture 2 - 50W LED Parking Garage Lighting 2 - 50-60W LED Area Lighting - 45-65W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 5.00 \$ 35.00 \$ 15.00 \$ 2.000 \$ 2.000 \$ 2.000 \$ 2.000 \$ 2.000 \$ 15.000 \$ 15.00 \$ 15.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.000 \$ 5.0000 \$ 4.000 \$ 4.000 \$ 5.000 \$ 4.000 \$ 5.0000 \$ 4.000 \$ 5.000 \$ 4.000 \$ 5.000 \$ 5.0000 \$ 5.0000 \$ 5.0000 \$ 5.0000 \$ 5.0000 \$ 5.00000 \$ 5.00000 \$ 5.00000 \$ 5.000000000000000000000000000000000000	Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Ret	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 90-200W LED High Bay Fixture - 405-625W LED Interior Lamp 5 W LED Interior Lamp 5 W LED Interior Fixture - 25W LED Area Lighting - 45-65W LED Area Lighting - 46-65W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ 7.00 \$ 15.00 \$ 40.00 \$ 70.00 \$ 35.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 4.00 \$ 6.00 \$ 4.00 \$ 6.00 \$ 35.00 \$ 70.00 \$ 20.00 \$ 70.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 10.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00 \$ 100.00 \$ 15.00 \$ 100.00 \$ 100.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$1 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$40 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$55 in 2017 Yes, \$65 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost Change in incremental cost Change in incremental cost Change in incremental cost Increase in rebate to promote technology Change in incremental cost Change in incremental cost
etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit etrofit ew Construction iew Construction iew Construction iew Construction iew Construction iew Construction iew Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 920-00W LED High Bay Fixture - 201-664W LED High Bay Fixture - 405-625W LED Interior Lamp <= 5W LED Interior Lamp <= 5W LED Interior Tamp 1W - 20W LED Interior Fixture 2eW - 50W LED Interior Fixture 2eW - 50W LED Ref and Frz Cases 5' or 6' doors LED Area Lighting - 45-65W LED Area Lighting - 66-89W LED Area Lighting - 60-89W LED Area Lighting - 00-119W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ 7.00 \$ 15.00 \$ 40.00 \$ 35.00 \$ 35.00 \$ 15.00 \$ 35.00 \$ 15.00 \$ 30.00 \$	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 3.00 \$ 3.00 \$ 3.00 \$ 15.00 \$ 3.500 \$ 15.00 \$ 3.000 \$ 3.0000 \$ 3.00000 \$ 3.00000 \$ 3.00000 \$ 3.000000 \$ 3.000000 \$ 3.000000000000000000000000000000000000	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$1 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$57 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 90-200W LED High Bay Fixture - 405-625W LED Interior Lamp C = 5W LED Interior Lamp 6W - 10W LED Interior Fixture - 25W LED Interior Fixture - 26W LED Interior Fixture - 26W LED Ref and Frz Cases 5' or 6' doors LED Parking Garage Lighting 25W-60W LED Area Lighting - 00-119W LED Area Lighting - 100-140W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 40.00 \$ 70.00 \$ 40.00 \$ 35.00 \$ 35.00 \$ 30.00 \$ 30.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 200.00 \$ 35.00 \$ 35.00 \$ 15.00 \$ 35.00 \$ 35.00 \$ 30.00 \$ 30.0	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$40 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$53 in 2017	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 920-00W LED High Bay Fixture - 201-664W LED High Bay Fixture - 405-625W LED Interior Lamp <= 5W LED Interior Lamp <= 5W LED Interior Tamp 1W - 20W LED Interior Fixture 2eW - 50W LED Interior Fixture 2eW - 50W LED Ref and Frz Cases 5' or 6' doors LED Area Lighting - 45-65W LED Area Lighting - 66-89W LED Area Lighting - 60-89W LED Area Lighting - 00-119W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 35.00 \$ 40.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 30.	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 200.00 \$ 4.00 \$ 20.00 \$ 35.00 \$ 35.00 \$ 15.00 \$ 35.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 15.00 \$	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$35 in 2017 Yes, \$30 in 2017; Yes, \$30 in Supplement	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction Rew Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 90-200W LED High Bay Fixture - 405-625W LED Interior Lamp C = 5W LED Interior Lamp 6W - 10W LED Interior Fixture - 25W LED Interior Fixture - 26W LED Interior Fixture - 26W LED Ref and Frz Cases 5' or 6' doors LED Parking Garage Lighting 25W-60W LED Area Lighting - 00-119W LED Area Lighting - 100-140W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 40.00 \$ 70.00 \$ 40.00 \$ 35.00 \$ 35.00 \$ 30.00 \$ 30.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 5.000 \$ 150.00 \$ 150.00 \$ 150.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 5 30.00 \$ 30.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$1 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$40 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes - \$30 in 2017; changed in Supplement	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Ret	LED Tube Type A 4 foot LED Tube Type A 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 95-189W LED High Bay Fixture - 201-464W LED High Bay Fixture - 202-00W LED Interior Lamp C = 5W LED Interior Lamp 6W - 10W LED Interior Fixture 2 - 25W LED Area Lighting - 45-65W LED Area Lighting - 46-63W LED Area Lighting - 00-119W LED Area Lighting - 100-100W LED Area Lighting - 100-100W LED Troffer Fixture 1X4 LED Troffer Fixture 2X4	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 7.00 \$ 15.00 \$ 30.00 \$ 35.00 \$ 15.00 \$ 15.00 \$ 30.00 \$	\$ 2.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 20.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 3.000 \$ 3.000 \$ 15.00 \$ 35.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$30 in 2017; changed in Supplement Yes - \$30 in 2017; changed in Supplement Yes - \$30 in 2017;	New Technology New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 99-290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp 5 W LED Interior Lamp 5 W LED Interior Fixture - 20W LED Interior Fixture - 25W LED Interior Fixture - 25W LED Interior Fixture - 25W LED Parking Garage Lighting 25W-60W LED Area Lighting - 45-65W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Troffer Fixture 1X4 LED Troffer Fixture 2X2 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 20.00 \$ 30.00 \$ 20.00 \$ 20.00 \$ 35.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 225.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$36 in 2017 Yes, \$36 in 2017 Yes - \$30 in 2017; changed in Supplement Yes - \$30 in 2017; changed in Supplement NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type A 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 95-189W LED High Bay Fixture - 201-464W LED High Bay Fixture - 202-00W LED Interior Lamp C = 5W LED Interior Lamp 6W - 10W LED Interior Fixture 2 - 25W LED Area Lighting - 45-65W LED Area Lighting - 46-63W LED Area Lighting - 00-119W LED Area Lighting - 100-100W LED Area Lighting - 100-100W LED Troffer Fixture 1X4 LED Troffer Fixture 2X4	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 7.00 \$ 15.00 \$ 30.00 \$ 35.00 \$ 15.00 \$ 15.00 \$ 30.00 \$	\$ 2.00 \$ 3.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 20.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 3.000 \$ 3.000 \$ 15.00 \$ 35.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$30 in 2017; changed in Supplement Yes - \$30 in 2017; changed in Supplement Yes - \$30 in 2017;	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 99-290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp 5 W LED Interior Lamp 5 W LED Interior Fixture - 20W LED Interior Fixture - 25W LED Interior Fixture - 25W LED Interior Fixture - 25W LED Parking Garage Lighting 25W-60W LED Area Lighting - 45-65W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Troffer Fixture 1X4 LED Troffer Fixture 2X2 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 20.00 \$ 30.00 \$ 20.00 \$ 20.00 \$ 35.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 225.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 15.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$36 in 2017 Yes, \$36 in 2017 Yes - \$30 in 2017; changed in Supplement Yes - \$30 in 2017; changed in Supplement NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
New Construction New Construction	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 95-020W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp 6W - 10W LED Interior Fixture 2 - 25W LED Area Lighting - 45-65W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Exterior Wall Pack < 25W LED Exterior Wall Pack 50W LED Fixture 3 LBP 40W LED Fixterior Wall Pack 50W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED Fixterior Wall Pack 50W LED Fixture 3 LBP 40W LED 5 LT 40W LED Fixture 3 LBP 40W LED 5 LT 40W LED	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 3.000 \$ 3.000 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 3.000 \$ 15.00 \$ 3.000 \$ 3.0000 \$ 3.000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.00000 \$ 3.00000 \$ 3.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$21 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$30 in 2017; Changed in Supplement Yes, \$30 in 2017; NA NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construc	LED Tube Type A 4 foot LED Tube Type C 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 99-290W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp A 10W LED Interior Lamp A 10W LED Interior Fixture 2 25W LED Interior Fixture 2 25W LED Ref and Frz Cases 5' or 6' doors LED Parking Garage Lighting 25W-60W LED Area Lighting - 45-65W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Troffer Fixture 1X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Streior Wall Pack <= 25W LED Exterior Wall Pack 61W - 150W LED Exterior Wall Pack 61W - 150W LED Areal Garage Wall Pack <= 25W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 5.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 40.00 \$ 40.00 \$ 40.00 \$ 40.00 \$ 40.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 200.00 \$ 150.00 \$ 20.00 \$ 35.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 15.00 \$ 225.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 25.00 \$ 15.00 \$ 30.00 \$ 30.0	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$15 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$53 in 2017 Yes, \$30 in 2017; changed in Supplement Yes - \$30 in 2017; NA NA NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 95-020W LED High Bay Fixture - 201-464W LED High Bay Fixture - 405-625W LED Interior Lamp 6W - 10W LED Interior Fixture 2 - 25W LED Area Lighting - 45-65W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Area Lighting - 120-140W LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Exterior Wall Pack < 25W LED Exterior Wall Pack 50W LED Fixture 3 LBP 40W LED Fixterior Wall Pack 50W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED Fixterior Wall Pack 50W LED Fixture 3 LBP 40W LED 5 LTERIOR 5 LBP 40W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED Fixture 3 LBP 40W LED 5 LTERIOR 5 LBP	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 150.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 4.00 \$ 3.000 \$ 3.000 \$ 15.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 30.00 \$ 15.00 \$ 30.00 \$ 15.00 \$ 3.000 \$ 15.00 \$ 3.000 \$ 3.0000 \$ 3.000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.00000 \$ 3.00000 \$ 3.00	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$21 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$30 in 2017; Changed in Supplement Yes, \$30 in 2017; NA NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost
Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Retrofit Rew Construction New Construction	LED Tube Type A 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED Tube Type B 4 foot LED High Bay Fixture - 95-189W LED High Bay Fixture - 90-200W LED High Bay Fixture - 201-464W LED Interior Lamp < 5 W LED Interior Tamp < 5 W LED Interior Fixture < 20W LED Interior Fixture < 25W LED Interior Fixture <2 SW LED Interior Fixture <2 SW LED Interior Fixture <2 SW LED Area Lighting - 46-689W LED Area Lighting - 66-89W LED Area Lighting - 10-140W LED Troffer Fixture 1X4 LED Troffer Fixture 2X2 LED Troffer Fixture 2X4 LED Troffer Fixture 2X4 LED Strefor Wall Pack <= 25W LED Strefor Wall Pack <= 25W LED Strefor Wall Pack 60W - 150W LED Parking Garage Wall Pack <= 25W LED Strefor Wall Pack 20W - 60W	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 2.00 \$ 5.00 \$ 3.00 \$ - \$ - \$ - \$ - \$ - \$ 7.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 12.00 \$ 15.00 \$ 40.00 \$ 25.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 15.00 \$ 30.00 \$ 30.00	\$ 2.00 \$ 5.00 \$ 100.00 \$ 120.00 \$ 120.00 \$ 150.00 \$ 4.00 \$ 4.00 \$ 20.00 \$ 4.00 \$ 20.00 \$ 20.00 \$ 4.00 \$ 20.00 \$ 15.00 \$ 3.000 \$ 15.00 \$ 3.000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000 \$ 3.0000	Supplement New Rebate in Supplement New Rebate in Supplement New Rebate in Supplement New in 2019 New in 2019 New in 2019 New in 2019 Yes - \$7 in 2017 Yes - \$12 in 2017 Yes - \$12 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes - \$25 in 2017 Yes, \$25 in 2017 Yes, \$25 in 2017 Yes, \$55 in 2017 Yes, \$50 in 2017; changed in Supplement Yes - \$30 in 2017; changed in Supplement NA NA NA	New Technology New Technology New Technology New Technology New Technology New Technology New Technology Change in incremental cost Change in incremental cost

Home Lighting	Rebate Amount (\$)	Rebate Adjustment	Justification	
LED Bulb	\$ 2.10	Yes - \$2.40 m 2018	Change in incremental cost	

Xcel Energy South Dakota Capital Structure Carrying Charge Calculation

State of South Dakota Jurisdiction 2014 Rate Case-Docket EL-14-058 (Order issued 7/22/15) <u>Base Assumptions</u>

Capital Structure:		Percent	<u>Cost</u>	Weighted Cost	
Long-term Debt Short-term Debt Perferred Stock Common Equity	[CONFIDENTIAL DATA BEGINS HERE			7.22%	CONFIDENTIAL DATA ENDS HERE]
				/.22/0	
Weighted Cost of Capital					
Equity	[CONFIDENTIAL DATA BEGINS				
Debt	HERE			CONFIDENTIAL	
Total				DATA ENDS HERE]	
Weighted Cost of Capital			7.22%		
Book Depreciation Rate	30 years		3.33%		
Tax Depreciation Life - MACRS	20 years				
Composite SD Tax Rate =	21.0000%				
Composite Company Tax Rate = Property Tax Exempt =	28.1100%				
Toperty Tax Exempt –	0				
Use these values beginning January (b) Composite SD Tax Rate	1, 2018:	21%			
(c) Carrying Charge Rate =					
[CONFIDENTIAL DAT'A BEGINS H	IERE				
		CONFIDE	NTIAL DAT.	A ENDS HERE]	

Northern States Power Company State of South Dakota- Electric Utility DSM Cost Recovery & Incentive Mechanism - Total 2017 Actual

2017	January	February	March	April	May	June	July	August	September	October	November	December	Total
EXPENSES	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	
[CONFIDENTIAL DATA BEGINS	1												
1. Beg. Balance	1												
2. DSM Program Expenditures													
3. Accrued Incentive													
 Total Expenditures + Incentive (Line 2 + 3) <u>RECOVERY</u> Calendar Month Sales Volume (MWh) 													
6. DSM Adjustment Factor (\$/MWh)													
7. Cost and Incentive Recovery													
8. Sub-Balance (Over)/Under Recovery													
(Sum Lines 1 - 3, minus Line 7)													
9. Accumulated Deferred Income Tax (Line 8 x 35%) 10.Net Investment (Line 8 - 9)													
11. Carrying Charge Rate													
12. Carrying Charge (Line 10 x Line 11)													
13. End of Month Balance (over)/under recovered (Line 8 + 12)											CONFIDEN	FIAL DATA EI	NDS]

[CONFIDENTIAL DATA BEGINS

Supporting Documentation for Updated DSM Cost Adjustment Factor

The following is information specified in South Dakota Administrative Rule 20:10:13:26 regarding the updated DSM Cost Adjustment Factor:

(1) Name and address of the public utility;

Xcel Energy 500 West Russell Street Sioux Falls, South Dakota 57104 (605) 339-8350

(2) Section and sheet number of tariff schedule;

Xcel Energy proposes to update DSM Rate tariff sheet number 73 in Section 5 of the Xcel Energy South Dakota Electric Rate Book. Pages 6-9 of this attachment include the proposed tariff sheets with the updated DSM Rate.

(3) Description of the change;

The proposed updated DSM Rate is designed to true up the cost recovery, which is over our forecasted budget in the time period of 2017-2018 timeframe, as well as recover all forecasted 2019 DSM expenditures and incentives.

(4) Reason for the change;

As proposed in the South Dakota DSM Plan and described in the DSM Cost Adjustment Factor tariff sheet, the Company plans to update the DSM Cost Adjustment Factor on an annual basis in the May 1 Status Report filing. The updated DSM Rate is designed to true up any over-recovery or under-recovery that exists in the tracker as well as recover the forecasted DSM expenditures and incentives for the upcoming year.

(5) Present rate;

Pursuant to the Commission's December 21, 2017Order,¹ Xcel Energy implemented the approved rate of \$0.000510 per kWh effective January 1, 2018.

¹ Docket No. EL 16-018

(6) Proposed rate;

Xcel Energy requests a new DSM Cost Adjustment Factor of \$0.000486 per customer kWh.

(7) Proposed effective date of modified rate;

Xcel Energy requests this new DSM Cost Adjustment Factor of \$0.000486 per customer kWh become effective with the first billing cycle of January 2019. We request this rate remain in effect through December 2019 or until the Commission approves a new DSM Cost Adjustment Factor.

(8) Approximation of annual amount of increase or decrease in revenue;

This new DSM Cost Adjustment Factor of \$0.000486 per customer kWh is an decrease of \$0.000024 per kWh or five percent.

(9) Points affected;

The proposed updated DSM Rate would be applicable to all areas served by Xcel Energy in South Dakota.

(10) Estimation of the number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to those customers;

The proposed electric tariff will apply to all customers throughout all customer classes as described within the filing. Xcel Energy presently serves just over 93,397 electric customers in 36 communities in eastern South Dakota.

(11) Statement of facts, expert opinions, documents, and exhibits to support the proposed changes.

A narrative for the calculation of the updated rate is included in the DSM Cost Adjustment Factor Report section of this filing. The following pages of this attachment include the forecasted 2018 and 2019 DSM Trackers, which are referenced in the narrative, along with the proposed customer bill onsert message and the proposed updated tariff sheets in both redline and clean versions.

	Northern States Power Company State of South Dakota- Electric Utility DSM Cost Recovery & Incentive Mechanism - Total 2018 Forecast														
	2018	January	February	March	April	May	June	July	August	September	October	November	December	Total	
	EXPENSES [CONFIDENTIAL DATA BEGINS Balance	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast		
	DSM Program Expenditures														
	Total Incentive														
	(Line 2 * 30%)														
	Total Expenditures + Incentive (Line 2 + 3)														M HACKEL
	RECOVERY														
	DSM Adjustment Factor (\$/MWh)														1 1 010
	Calendar Month Sales Volume Forecast (MWh)														
	Total Cost Recovery (Line 5*6)														Caol, 11
	Sub-Balance (Over/Under Recovery) (Line 1 + 4 - 7)														#100 CO3
	Accum Deferred Tax														-
	(Line 8 *21%)														INCOV
0.	Net Investment (Line 8 - 9)														cuy
1.	Carrying Charge Rate														
2.	Carrying Charge (Line 10 * carrying charge)														
3.	13. End of Month Balance (over)/under recovered (Line 8 + 12)														

[CONFIDENTIAL DATA BEGINS

CONFIDENTIAL DATA ENDS]

No Sta DS 201	rthern States Power Company te of South Dakota- Electric Utility M Cost Recovery & Incentive Mechanism - Total 9 Forecast														
	2019 EXPENSES	January	<u>February</u>	March	<u>April</u>	May	June	July	August	September	October	November	December	Total]
1.	[CONFIDENTIAL DATA BEGINS Balance														Table
2.	DSM Program Expenditures														22
3.	Total Incentive (Line 2 * 30%)														018 DS
4.	Total Expenditures + Incentive (Line 2 + 3)														M Tra
	<u>RECOVERY</u> DSM Adjustment Factor (\$ /MWh)														cker Fo
	Calendar Month Sales Volume Forecast (MWh)														orecas
7.	Total Cost Recovery														a, Wi
8.	Sub-Balance (Over)/Under Recovery (Line 1 + 4 - 7)														th Cost
9.	Accum Deferred Tax (Line 8 * 21%)														Recov
10.	````														2018 DSM Tracker Forecast, With Cost Recovery in 2018
11.	Carrying Charge Rate														018
12.	Carrying Charge (Line 10 * carrying charge)														
13.	End of Month Balance (Line 8 + 12)														
													CONFIDENTI	AL DATA ENDS	i

CONFIDENTIAL DATA ENDS]

Proposed Customer Bill Onsert Language

DSM Cost Adjustment Factor Increase Effective January 1, 2019

Xcel Energy offers a variety of load management and demand side management (DSM) programs to our South Dakota customers to help them reduce their home's usage. The South Dakota Public Utilities Commission has approved a new Demand Side Management (DSM) Cost Adjustment Factor as a separate line item on your monthly electric bill to recover the cost of our load management and DSM programs. Beginning January 1, 2019, the rate factor will decrease from \$0.000510 per kWh to \$0.000486 per kWh.

Residential Electric Service – Winter Month Bill Example

This chart provides a comparison of customer bills by applying the prior DSM rate versus the new DSM rate.

		Prior Rat	tes			New Rat	tes		Amount of Bill	Percent
Usage	Other	Prior DSM	Prior	Prior	Other	New DSM	New	New	Decrease	Decrease
(kWh)	Rates	Factor	DSM	Bill	Rates	Factor	DSM	Bill		
400	\$53.41	\$0.000510	\$0.20	\$53.61	\$53.41	\$0.000486	\$0.19	\$53.60	(0.01)	-0.02%
500	\$64.71	\$0.000510	\$0.26	\$64.97	\$64.71	\$0.000486	\$0.24	\$64.95	(0.02)	-0.03%
600	\$76.00	\$0.000510	\$0.31	\$76.31	\$76.00	\$0.000486	\$0.29	\$76.29	(0.02)	-0.03%
750	\$92.93	\$0.000510	\$0.38	\$93.31	\$92.93	\$0.000486	\$0.36	\$93.29	(0.02)	-0.02%
1000	\$121.16	\$0.000510	\$0.51	\$121.67	\$121.16	\$0.000486	\$0.49	\$121.65	(0.02)	-0.02%
2000	\$234.07	\$0.000510	\$1.02	\$235.09	\$234.07	\$0.000486	\$0.97	\$235.04	(0.05)	-0.02%

For more information

You may call **800.895.4999** with questions or examine the new rates by visiting our website at **xcelenergy.com/sd rates.**

PUBLIC

Legislative

Northern States Power Company, a Minnesota corporation Minneapolis, MN 55401 SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2

DEMAND SIDE MANAGEMENT COST ADJUSTMENT FACTOR Section No. 5 5th<u>6th</u> Revised Sheet No. 73

Cancelling 4th5th Revised Sheet No. 73

APPLICATION

Applicable to bills for electric service provided under the Company's retail rate schedules.

RIDER

There shall be included on each customer's monthly bill a Demand Side Management Cost Adjustment, which shall be calculated by multiplying the monthly applicable billing kilowatt hours (kWh) by the Demand Side Management Factor (DSM Factor). This Demand Side Management Cost Adjustment shall be calculated before city surcharge and sales tax.

DETERMINATION OF DSM FACTOR

A DSM Factor shall be calculated by dividing the forecasted balance of the DSM Tracker Account (Tracker), including any True Up, by the Forecasted Retail Sales for the Next Recovery Period. The DSM Factor shall be rounded to the nearest \$0.000001 per kWh.

The DSM Factor may be adjusted annually with approval of the South Dakota Public Utilities Commission (Commission). The DSM Factor is:

All Customers

\$0.000510\$0.000486 per kWh

<u>DSM Tracker</u> shall include all annual expenses, costs and incentives associated with demand side management programs and that are approved by the Commission. All revenues recovered pursuant to the Demand Side Management Cost Adjustment shall be credited to the Tracker.

Forecasted Retail Sales shall be the estimated total retail electric sales for the Next Recovery Period.

<u>Next Recovery Period</u> shall be that period that begins January 1 and ends December 31 following the Company's most recent May 1 filing.

TRUE-UP

<u>True Up</u> shall include the difference between the revenues received from customers and actual expenditures for the most recent recovery period ending December 31.

A True Up will be included in each annual May 1 filing beginning with the May 1, 2013 filing. The 2012 DSM Factor calculation will not include a True Up due to no previous cost or revenue activity prior to implementation of the Demand Side Management Cost Adjustment in 2012. Beginning with the Company's request submitted on May 1, 2013, the DSM Factor may include a True Up.

Date Filed:	05-01-17<u>05-01-18</u>	By: Christopher B. Clark	Effective Date:	01-01-18
	President, No	orthern States Power Company, a Minnesota c	orporation	
Docket No.	EL17-019EL18-		Order Date:	12-21-17

PUBLIC

Non-Legislative

Northern States Power Company, a Minnesota corporation Minneapolis, MN 55401

SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2

Section No. 5 6th Revised Sheet No. 73

Cancelling 5th Revised Sheet No. 73

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Docket No. EL18-____ Attachment D: 9 of 9

PROPOSED

PUBLIC

	Exect	utive Su	immary	Table -	2019			
2019	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	334	\$389,320	484	3,985,513	2.47	5.78	0.49	1.16
Business Saver's Switch	12	\$37,213	42	107	INF	1.26	0.65	1.26
Peak and Energy Control	1	\$10,000	99	3,695	INF	4.66	1.15	4.66
Business Segment Total	347	\$436,533	626	3,989,315	2.51	5.37	0.50	1.17
Residential Segment								
Home Lighting	2,635	\$93,412	154	1,508,018	8.02	3.15	0.36	1.91
Residential Saver's Switch	770	\$187,913	546	1,651	INF	3.24	0.86	3.24
Consumer Education	68,000	\$21,165	N/A	N/A				
Residential Segment Total	71,405	\$302,490	700	1,509,669	13.31	2.99	0.58	2.43
Planning Segment								
Regulatory Affairs	0	\$13,000	N/A	N/A				
Planning Segment Total	0	\$13,000	N/A	N/A				
PORTFOLIO TOTAL	71,752	\$752,023	1,326	5,498,983	3.07	4.32	0.52	1.36

LIGHTING EFFICIENCY

2019 Net Present Cost Benefit Summ	nary Analysis For Al	Participants			
	Participant Test	Utility Test	Rate Impact Test	Total Resource Test	Societal Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$364,323	\$364,323	\$364,323	\$364,323
T & D	N/A	\$222,200	\$222,200	\$222,200	\$222,200
Marginal Energy	N/A	\$1,663,806	\$1,663,806	\$1,663,806	\$1,663,800
Environmental Externality	N/A	N/A	N/A	N/A	\$(
Subtotal	N/A	\$2,250,329	\$2,250,329	\$2,250,329	\$2,250,32
Participant Benefits					
Bill Reduction - Electric	\$4,174,756	N/A	N/A	N/A	N/.
Rebates from Xcel Energy	\$284,320	N/A	N/A	\$284,320	\$284,320
Incremental Capital Savings	\$ 0	N/A	N/A	\$0	\$(
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$(
Subtotal	\$4,459,076	N/A	N/A	\$284,320	\$284,320
Total Benefits	\$4,459,076	\$2,250,329	\$2,250,329	\$2,534,649	\$2,534,649
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$105,000	\$105,000	\$105,000	\$105,000
Advertising & Promotion	N/A	\$ 0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$284,320	\$284,320	\$284,320	\$284,320
Other	N/A	\$0	\$0	\$0	\$(
Subtotal	N/A	\$389,320	\$389,320	\$389,320	\$389,320
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A	\$4,174,756	N/A	N/
Subtotal	N/A	N/A	\$4,174,756	N/A N/A	N/.
Participant Costs					
Incremental Capital Costs	\$1,717,744	N/A	N/A	\$1,717,744	\$1,717,74
Incremental O&M Costs	\$85,539	N/A	N/A	\$85,539	\$85,53
Subtotal	\$1,803,283	N/A	N/A	\$1,803,283	\$1,803,28
Total Costs	\$1,803,283	\$389,320	\$4,564,076	\$2,192,603	\$2,192,60
Net Benefit (Cost)	\$2,655,793	\$1,861,009	(\$2,313,747)	\$342,046	\$342,04
Benefit/Cost Ratio	2.47	5.78	0.49	1.16	1.1
benent/Cost Ratio	2.47	5.70	0.49	1.10	1.1

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	18.1 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	54.30%
Gross Load Factor at Customer	E	50.96%
Transmission Loss Factor (Energy)	F	4.420%
Transmission Loss Factor (Demand)	G	4.310%
Societal Net Benefit (Cost)	Н	\$401

Program Summary per Participant		
Gross kW Saved at Customer	I	2.56 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	1.45 kW
Gross Annual kWh Saved at Customer	(BxExI)	11,405 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	11,933 kWh

Total Participants	J	334
Total Budget	Κ	\$389,320
Gross kW Saved at Customer	(J x I)	853.38 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	484 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	3,809,353 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,985,513 kWh
Societal Net Benefits	$(\mathbf{J} \mathbf{x} \mathbf{I} \mathbf{x} \mathbf{H})$	\$342,046

Utility Program Cost per kWh Lifetime	\$0.0054
Utility Program Cost per kW at Gen	\$804

BUSINESS SAVER'S SWITCH

	nary Analysis For All	•	Rate	Total	
	Participant Test	Utility Test	Kate Impact Test	Resource Test	Societal Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$29,168	\$29,168	\$29,168	\$29,168
T & D	N/A	\$17,765	\$17,765	\$17,765	\$17,765
Marginal Energy	N/A	\$60	\$60	\$60	\$60
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$46,992	\$46,992	\$46,992	\$46,992
Participant Benefits					
Bill Reduction - Electric	\$34,908	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	\$34,908	N/A	N/A	\$0	\$0
Total Benefits	\$34,908	\$46,992	\$46,992	\$46,992	\$46,992
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$37,213	\$37,213	\$37,213	\$37,213
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	\$37,213	\$37,213	\$37,213	\$37,213
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A	\$34,908	N/A	N//
Subtotal	N/A	N/A	\$34,908	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 \$0	N/A	N/A	\$0	\$0
Total Costs	\$ 0	\$37,213	\$72,121	\$37,213	\$37,213
Net Benefit (Cost)	\$34,908	\$9,779	(\$25,128)	\$9,779	\$9,779
Benefit/Cost Ratio	INF	1.26	0.65	1.26	1.26

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	15.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	20.00%
Gross Load Factor at Customer	E	0.01%
Transmission Loss Factor (Energy)	F	4.420%
Transmission Loss Factor (Demand)	G	4.310%
Societal Net Benefit (Cost)	Н	\$49

Program Summary per Participant		
Gross kW Saved at Customer	Ι	16.79 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	3.51 kW
Gross Annual kWh Saved at Customer	(BxExI)	8 kWh
Net Annual kWh Saved at Generator	(BxExI)/(1-F)	9 kWh

Total Participants	J	12
Total Budget	K	\$37,213
Gross kW Saved at Customer	(J x I)	201.50 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	42 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	102 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	107 kWh
Societal Net Benefits	(J x I x H)	\$9,779

Utility Program Cost per kWh Lifetime	\$23.2865
Utility Program Cost per kW at Gen	\$884

PEAK AND ENERGY CONTROL

2019 Net Present Cost Benefit Summ	nary Analysis For All	l 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	\$28,419	\$28,419	\$28,419	\$28,41
T & D	N/A	\$17,221	\$17,221	\$17,221	\$17,22
Marginal Energy	N/A	\$961	\$961	\$961	\$96
Environmental Externality	N/A	N/A	N/A	N/A	S
Subtotal	N/A	\$46,601	\$46,601	\$46,601	\$46,60
Participant Benefits					
Bill Reduction - Electric	\$30,671	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$0	N/A	N/A	\$0	\$
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$
Subtotal	\$30,671	N/A	N/A	\$ 0	\$
Total Benefits	\$30,671	\$46,601	\$46,601	\$46,601	\$46,60
Costs					
Utility Project Costs					
Customer Services	N/A	\$ 0	\$0	\$0	8
Utility Administration	N/A	\$10,000	\$10,000	\$10,000	\$10,00
Advertising & Promotion	N/A	\$0	\$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	\$
Rebates	N/A	\$ 0	\$0	\$ 0	\$
Other	N/A	\$0	\$0	\$0	4
Subtotal	N/A	\$10,000	\$10,000	\$10,000	\$10,00
Utility Revenue Reduction	NT / A	21/4	820 (71	NT / A	N
Revenue Reduction - Electric Subtotal	N/A N/A	N/A N/A	\$30,671 \$30,671	N/A N/A	N/
Participant Costs					
Incremental Capital Costs	\$0	N/A	N/A	\$0	S
Incremental O&M Costs	\$0 \$0	N/A	N/A	\$0	\$
Subtotal	\$0	N/A	N/A	\$0 \$0	4
Total Costs	\$ 0	\$10,000	\$40,671	\$10,000	\$10,00
Net Benefit (Cost)	\$30,671	\$36,601	\$5,930	\$36,601	\$36,60
Benefit/Cost Ratio	INF	4.66	1.15	4.66	4.6
Denent/ COSt Natio	11.01.	4.00	1.1.5	4.00	4.0

2019 EL	ECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	5.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	47.46%
Gross Load Factor at Customer	E	0.20%
Transmission Loss Factor (Energy)	F	4.420%
Transmission Loss Factor (Demand)	G	4.310%
Societal Net Benefit (Cost)	Н	\$183

Program Summary per Participant		
Gross kW Saved at Customer	I	200.00 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	99.20 kW
Gross Annual kWh Saved at Customer	(B x E x I)	3,532 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	3,695 kWh

Total Participants	J	1
Total Budget	К	\$10,000
Gross kW Saved at Customer	(J x I)	200.00 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	99 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	3,532 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,695 kWh
Societal Net Benefits	(J x I x H)	\$36,601

Utility Program Cost per kWh Lifetime	\$0.5412
Utility Program Cost per kW at Gen	\$101

BUSINESS SEGMENT TOTAL

	mary Analysis For All	1 articipanto			
	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$421,909	\$421,909	\$421,909	\$421,90
T & D	N/A	\$257,186	\$257,186	\$257,186	\$257,18
Marginal Energy	N/A	\$1,664,828	\$1,664,828	\$1,664,828	\$1,664,82
Environmental Externality	N/A	N/A	N/A	N/A	\$1,000,00
Subtotal	N/A	\$2,343,922	\$2,343,922	\$2,343,922	\$2,343,92
Participant Benefits					
Bill Reduction - Electric	\$4,240,334	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$284,320	N/A	N/A	\$284,320	\$284,32
Incremental Capital Savings	\$ 0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$
Subtotal	\$4,524,654	N/A	N/A	\$284,320	\$284,32
Total Benefits	\$4,524,654	\$2,343,922	\$2,343,922	\$2,628,242	\$2,628,24
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$152,213	\$152,213	\$152,213	\$152,21
Advertising & Promotion	N/A	\$ 0	\$ 0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	\$
Rebates	N/A	\$284,320	\$284,320	\$284,320	\$284,32
Other Subtotal	N/A N/A	\$0 \$436,533	\$0 \$436,533	\$0 \$436,533	\$436,53
	.,	¥150,555	¥ 130,555	¥ 150,555	÷150,05
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A N/A	\$4,240,334	N/A	N/
Subtotal	N/A	N/A	\$4,240,334	N/A	N/
Participant Costs					
Participant Costs Incremental Capital Costs	\$1,717,744	N/A	N/A	\$1,717,744	\$1,717,74
	\$1,717,744 \$85,539	N/A N/A	N/A N/A	\$1,717,744 \$85,539	
Incremental Capital Costs Incremental O&M Costs		,	,		\$85,53
Incremental Capital Costs Incremental O&M Costs Subtotal	\$85,539	N/A	N/A	\$85,539	\$85,53 \$1,803,28
Incremental Capital Costs	\$85,539 \$1,803,283	N/A N/A	N/A N/A	\$85,539 \$1,803,283	\$1,717,74 \$85,53 \$1,803,28 \$2,239,810 \$388,420

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh) А	18.1 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	47.70%
Gross Load Factor at Customer	E	34.69%
Transmission Loss Factor (Energy)	F	4.420%
Transmission Loss Factor (Demand)	G	4.310%
Societal Net Benefit (Cost)	Н	\$310

Program Summary per Participant		
Gross kW Saved at Customer	Ι	3.62 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	1.80 kW
Gross Annual kWh Saved at Customer	(BxExI)	10,988 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	11,497 kWh

Total Participants	J	347
Total Budget	K	\$436,533
Gross kW Saved at Customer	(J x I)	1,254.88 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	626 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	3,812,987 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	3,989,315 kWh
Societal Net Benefits	$(\mathbf{J} \mathbf{x} \mathbf{I} \mathbf{x} \mathbf{H})$	\$388,426

Utility Program Cost per kWh Lifetime	\$0.0060
Utility Program Cost per kW at Gen	\$698

HOME LIGHTING

	Participant Test (\$Total)	Utility Test (\$Total)	Rate Impact Test (\$Total)	Total Resource Test (\$Total)	Societal Test (\$Total)
Benefits	````	````	× ,	`	
Avoided Revenue Requirements					
Generation	N/A	\$39,061	\$39,061	\$39,061	\$39,06
T & D	N/A	\$23,664	\$23,664	\$23,664	\$23,66
Marginal Energy	N/A	\$231,235	\$231,235	\$231,235	\$231,23
Environmental Externality	N/A	N/A	N/A	N/A	\$
Subtotal	N/A	\$293,960	\$293,960	\$293,960	\$293,96
Participant Benefits					
Bill Reduction - Electric	\$722,035	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$74,162	N/A	N/A	\$74,162	\$74,16
Incremental Capital Savings	\$ 0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$
Subtotal	\$796,196	N/A	N/A	\$74,162	\$74,16
Total Benefits	\$796,196	\$293,960	\$293,960	\$368,121	\$368,12
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$19,251	\$19,251	\$19,251	\$19,25
Advertising & Promotion	N/A	\$0	\$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	\$
Rebates	N/A	\$74,162	\$74,162	\$74,162	\$74,16
Other	N/A	\$0	\$0	\$0	\$
Subtotal	N/A	\$93,412	\$93,412	\$93,412	\$93,41
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A N/A	N/A N/A	\$722,035	N/A N/A	N/ N/
Subtotal	N/A	N/A	\$722,035	N/A	N/
Participant Costs					
Incremental Capital Costs	\$99,293	N/A	N/A	\$99,293	\$99,29
Incremental O&M Costs	\$0	N/A	N/A	\$0	\$
Subtotal	\$99,293	N/A	N/A	\$99,293	\$99,29
Total Costs	\$99,293	\$93,412	\$815,447	\$192,705	\$192,7 0
Net Benefit (Cost)	\$696,903	\$200,548	(\$521,487)	\$175,416	\$175,41

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	4.6 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	11.67%
Gross Load Factor at Customer	E	13.08%
Transmission Loss Factor (Energy)	F	5.227%
Transmission Loss Factor (Demand)	G	5.453%
Societal Net Benefit (Cost)	Н	\$141
Program Summary per Participant		
Gross kW Saved at Customer	Ι	0.47 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.06 kW
Gross Annual kWh Saved at Customer	(B x E x I)	542 kWł
Net Annual kWh Saved at Generator	(BxExI)/(1-F)	572 kW

Total Participants	J	2,635
Total Budget	Κ	\$93,412
Gross kW Saved at Customer	(J x I)	1,246.97 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	154 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	1,429,187 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	1,508,018 kWh
Societal Net Benefits	(J x I x H)	\$175,416

Utility Program Cost per kWh Lifetime	\$0.0135
Utility Program Cost per kW at Gen	\$607

2 kWh

RESIDENTIAL SAVER'S SWITCH

2019 Net Present Cost Benefit Summ	nary Analysis For All	l 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	\$378,415	\$378,415	\$378,415	\$378,41
T & D	N/A	\$230,475	\$230,475	\$230,475	\$230,47
Marginal Energy	N/A	\$781	\$781	\$781	\$78
Environmental Externality	N/A	N/A	N/A	N/A	\$
Subtotal	N/A	\$609,671	\$609,671	\$609,671	\$609,67
Participant Benefits					
Bill Reduction - Electric	\$525,107	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$ 0	N/A	N/A	\$0	\$
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$ 0	N/A	N/A	\$0	\$
Subtotal	\$525,107	N/A	N/A	\$0	\$
Total Benefits	\$525,107	\$609,671	\$609,671	\$609,671	\$ 609 , 67
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$187,913	\$187,913	\$187,913	\$187,91
Advertising & Promotion	N/A	\$0	\$0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	\$
Rebates	N/A	\$0	\$0	\$0	\$
Other	N/A	\$0	\$0	\$0	\$
Subtotal	N/A	\$187,913	\$187,913	\$187,913	\$187,91
Utility Revenue Reduction Revenue Reduction - Electric	N/A	N/A	\$525,107	N/A	N
Subtotal	N/A	N/A	\$525,107	N/A	N/
Participant Costs					
Incremental Capital Costs	\$0	N/A	N/A	\$0	\$
Incremental O&M Costs	\$0	N/A	N/A	\$0	S
Subtotal	\$0	N/A	N/A	\$0	ş
Total Costs	\$ 0	\$187,913	\$713,020	\$187,913	\$187,91
Net Benefit (Cost)	\$525,107	\$421,758	(\$103,350)	\$421,758	\$421,75
Benefit/Cost Ratio	INF	3.24	0.86	3.24	3.2
Denemy COSt Ratio	11.11	5.24	0.00	5.24	3.2

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	15.0 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	27.29%
Gross Load Factor at Customer	E	0.01%
Transmission Loss Factor (Energy)	F	5.500%
Transmission Loss Factor (Demand)	G	5.525%
Societal Net Benefit (Cost)	Н	\$223
· · · · ·		
Program Summary per Participant Gross kW Saved at Customer	Ţ	2.46 kV
Net coincident kW Saved at Generator	$(I \times D) / (1 - G)$	0.71 kW
Gross Annual kWh Saved at Customer		2 kWb

Total Participants	J	770
Total Budget	K	\$187,913
Gross kW Saved at Customer	(J x I)	1,891.50 kW
Net coincident kW Saved at Generator	(IxD)/(1-G)xJ	546 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	1,560 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	1,651 kWh
Societal Net Benefits	(J x I x H)	\$421,758

(BxExI)/(1-F)

Gross Annual kWh Saved at Customer Net Annual kWh Saved at Generator

Utility Program Cost per kWh Lifetime	\$7.5888
Utility Program Cost per kW at Gen	\$344

RESIDENTIAL SEGMENT TOTAL

2017 I Wet I Tesent Cost Denent Sum	nary Analysis For Al	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	\$417,475	\$417,475	\$417,475	\$417,47
T & D	N/A	\$254,139	\$254,139	\$254,139	\$254,13
Marginal Energy	N/A	\$232,016	\$232,016	\$232,016	\$232,01
Environmental Externality	N/A	N/A	N/A	N/A	ş,o 1 \$
Subtotal	N/A	\$903,631	\$903,631	\$903,631	\$903,63
Participant Benefits					
Bill Reduction - Electric	\$1,247,142	N/A	N/A	N/A	N/
Rebates from Xcel Energy	\$74,162	N/A	N/A	\$74,162	\$74,16
Incremental Capital Savings	\$0	N/A	N/A	\$0	\$
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$
Subtotal	\$1,321,304	N/A	N/A	\$74,162	\$74,16
Total Benefits	\$1,321,304	\$903,631	\$903,631	\$977,792	\$977,79
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$
Utility Administration	N/A	\$228,329	\$228,329	\$228,329	\$228,32
Advertising & Promotion	N/A	\$0	\$ 0	\$0	\$
Measurement & Verification	N/A	\$0	\$0	\$0	\$
Rebates	N/A			074460	
		\$74,162	\$74,162	\$74,162	\$74,10
Other	N/A	\$0	\$0	\$0	\$
		. ,			ş
Other Subtotal Utility Revenue Reduction	N/A	\$0 \$302,490	\$0 \$302,490	\$0	ş
Other Subtotal	N/A	\$0	\$0	\$0	\$
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric	N/A N/A N/A	\$0 \$302,490	\$0 \$302,490	\$0	\$
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs	N/A N/A N/A	\$0 \$302,490	\$0 \$302,490	\$0	\$302,49 \$307,49 N/
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	<u>N/A</u> N/A N/A \$99,293	\$0 \$302,490 N/A N/A	\$0 \$302,490 \$1,247,142 \$1,247,142 N/A	\$0 \$302,490 N/A N/A \$99,293	\$302,45 \$302,45 N/ \$99,25
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs	N/A N/A N/A N/A	\$0 \$302,490 N/A N/A	\$0 \$302,490 \$1,247,142 \$1,247,142	\$0 \$302,490 N/A N/A	\$302,45 \$302,45 N/ \$99,25 \$
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs	N/A N/A N/A \$99,293 \$0	\$0 \$302,490 N/A N/A N/A	\$0 \$302,490 \$1,247,142 \$1,247,142 N/A N/A	\$0 \$302,490 N/A N/A \$99,293 \$0	\$302,45 \$302,45 N/ \$99,25 \$ \$99,25 \$ \$99,25
Other Subtotal Utility Revenue Reduction Revenue Reduction - Electric Subtotal Participant Costs Incremental Capital Costs Incremental O&M Costs Subtotal	N/A N/A N/A \$99,293 \$0 \$99,293	\$0 \$302,490 N/A N/A N/A N/A	\$0 \$302,490 \$1,247,142 \$1,247,142 \$1,247,142 N/A N/A	\$0 \$302,490 N/A N/A \$99,293 \$0 \$99,293	\$74,16 \$ \$302,49 N/ N/ \$99,29 \$ \$99,29 \$ \$99,29 \$ \$99,29 \$ \$99,29 \$ \$99,29 \$ \$ \$99,29 \$ \$ \$99,29 \$ \$ \$576,00

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh)	А	4.6 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	21.09%
Gross Load Factor at Customer	E	5.20%
Transmission Loss Factor (Energy)	F	5.228%
Transmission Loss Factor (Demand)	G	5.496%
Societal Net Benefit (Cost)	Н	\$184

Program Summary per Participant		
Gross kW Saved at Customer	I	0.04 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G)	0.01 kW
Gross Annual kWh Saved at Customer	(BxExI)	20 kWh
Net Annual kWh Saved at Generator	(BxExI)/(1-F)	21 kWh

Total Participants	J	71,405
Total Budget	K	\$302,490
Gross kW Saved at Customer	(J x I)	3,138.47 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	700 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	1,430,747 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	1,509,669 kWh
Societal Net Benefits	(J x I x H)	\$576,009

Utility Program Cost per kWh Lifetime	\$0.0435
Utility Program Cost per kW at Gen	\$432

PORTFOLIO TOTAL

			Rate	Total	
	Participant	Utility	Impact	Resource	Societal
	Test	Test	Test	Test	Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Benefits					
Avoided Revenue Requirements					
Generation	N/A	\$839,384	\$839,384	\$839,384	\$839,384
T & D	N/A	\$511,325	\$511,325	\$511,325	\$511,325
Marginal Energy	N/A	\$1,896,844	\$1,896,844	\$1,896,844	\$1,896,844
Environmental Externality	N/A	N/A	N/A	N/A	\$0
Subtotal	N/A	\$3,247,553	\$3,247,553	\$3,247,553	\$3,247,553
Participant Benefits					1-
Bill Reduction - Electric	\$5,487,476	N/A	N/A	N/A	N/A
Rebates from Xcel Energy	\$358,482	N/A	N/A	\$358,482	\$358,482
Incremental Capital Savings	\$0 \$0	N/A	N/A	\$0 ©0	\$0 \$0
Incremental O&M Savings	\$0	N/A	N/A	\$0	\$0
Subtotal	\$5,845,958	N/A	N/A	\$358,482	\$358,482
Total Benefits	\$5,845,958	\$3,247,553	\$3,247,553	\$3,606,034	\$3,606,034
Costs					
Utility Project Costs					
Customer Services	N/A	\$0	\$0	\$0	\$0
Utility Administration	N/A	\$393,542	\$393,542	\$393,542	\$393,542
Advertising & Promotion	N/A	\$0	\$0	\$0	\$0
Measurement & Verification	N/A	\$0	\$0	\$0	\$0
Rebates	N/A	\$358,482	\$358,482	\$358,482	\$358,482
Other Subtotal	N/A N/A	\$0 \$752,023	\$0 \$752,023	\$0 \$752,023	\$0 \$752.023
Subtotal	18/11	\$132,023	\$132,023	\$132,023	\$132,023
Utility Revenue Reduction					
Revenue Reduction - Electric	N/A N/A	N/A N/A	\$5,487,476	N/A N/A	N/A
Subtotal	N/A	N/A	\$5,487,476	N/A	N/A
Participant Costs					
Incremental Capital Costs	\$1,817,037	N/A	N/A	\$1,817,037	\$1,817,037
Incremental O&M Costs	\$85,539	N/A	N/A	\$85,539	\$85,539
Subtotal	\$1,902,576	N/A	N/A	\$1,902,576	\$1,902,576
Total Costs	\$1,902,576	\$752,023	\$6,239,499	\$2,654,599	\$2,654,599
Net Benefit (Cost)	\$3,943,382	\$2,495,530	(\$2,991,946)	\$951,435	\$951,435
Net Defient (Cost)	a),745,502	<i>q</i> 2,775,550	(92,771,710)	a)J1,4JJ	a),433

2019	ELECTRIC	GOAL
Input Summary and Totals		
Program "Inputs" per Customer kW		
Lifetime (Weighted on Generator kWh) A	14.4 years
Annual Hours	В	8760
Gross Customer kW	С	1 kW
Generator Peak Coincidence Factor	D	28.62%
Gross Load Factor at Customer	E	13.63%
Transmission Loss Factor (Energy)	F	4.642%
Transmission Loss Factor (Demand)	G	5.161%
Societal Net Benefit (Cost)	Н	\$217

Program Summary per Participant		
Gross kW Saved at Customer	Ι	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)	73 kWh
Net Annual kWh Saved at Generator	(B x E x I) / (1 - F)	77 kWh

Total Participants	J	71,752
Total Budget	K	\$752,023
Gross kW Saved at Customer	(J x I)	4,393.35 kW
Net coincident kW Saved at Generator	(I x D) / (1 - G) x J	1,326 kW
Gross Annual kWh Saved at Customer	(BxExI)xJ	5,243,734 kWh
Net Annual kWh Saved at Generator	((B x E x I) / (1 - F)) x J	5,498,983 kWh
Societal Net Benefits	$(\mathbf{J} \mathbf{x} \mathbf{I} \mathbf{x} \mathbf{H})$	\$951,435

Utility Program Cost per kWh Lifetime	\$0.0095
Utility Program Cost per kW at Gen	\$567