

PEAK TIME REBATES		DSM TOTAL					2027	GOAL
2027 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)								
	Participant Test (\$Total)	Utility Test (\$Total)	Electric Rate Impact Test (\$Total)	Gas Rate Impact Test (\$Total)	Societal Test (\$Total)	Minnesota Test (\$Total)		
Electric System Impacts								
Generation Capacity	N/A	918,785	918,785	N/A	918,785	918,785		
Transmission and Distribution Capacity	N/A	0	0	N/A	0	0		
Energy Generation	N/A	9,835	9,835	N/A	9,835	9,835		
Market Effects and Ancillary Services	N/A	18,572	18,572	N/A	18,572	18,572		
Subtotal	N/A	947,192	947,192	N/A	947,192	947,192		
Gas System Impacts								
Commodity Cost	N/A	0	N/A	0	0	0		
Variable O&M	N/A	0	N/A	0	0	0		
Demand	N/A	0	N/A	0	0	0		
Environmental Compliance	N/A	0	N/A	0	0	0		
Subtotal	N/A	0	N/A	0	0	0		
Environmental Externalities and Non-Energy Impacts								
Electric Environmental Externalities	N/A	N/A	N/A	N/A	1,852	1,852		
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Electric Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Gas Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Other Fuels Benefits	0	N/A	N/A	N/A	0	0		
Utility Performance Incentives	N/A	0	0	0	0	0		
Utility Non-Energy Benefits	N/A	0	0	0	0	0		
Subtotal	0	0	0	0	1,852	1,852		
Participant Impacts								
Electric Bill	26,166	N/A	(26,166)	N/A	N/A	N/A		
Gas Bill	0	N/A	N/A	0	N/A	N/A		
Participant Rebates and Incentives	0	N/A	N/A	N/A	152,000	N/A		
Incremental Capital	0	N/A	N/A	N/A	0	N/A		
Incremental O&M	0	N/A	N/A	N/A	0	N/A		
Subtotal	26,166	N/A	(26,166)	0	152,000	N/A		
Utility Impacts								
Utility Project Costs								
Customer Services	N/A	0	0	0	0	0		
Utility Administration	N/A	(490,000)	(490,000)	0	(490,000)	(490,000)		
Advertising & Promotion	N/A	(150,000)	(150,000)	0	(150,000)	(150,000)		
Measurement & Verification	N/A	0	0	0	0	0		
Rebates	N/A	(152,000)	(152,000)	0	(152,000)	(152,000)		
Other	N/A	0	0	0	0	0		
Subtotal	N/A	(792,000)	(792,000)	0	(792,000)	(792,000)		
Benefits	26,166	947,192	947,192	0	1,101,044	949,044		
Costs	0	(792,000)	(818,166)	0	(792,000)	(792,000)		
Net Benefit (Cost)	26,166	155,192	129,026	0	309,044	157,044		
Benefit/Cost Ratio	INF	1.20	1.16	INF	1.39	1.20		

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

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	8.70%
T & D Loss Factor (Demand)	10.56%
System Coincident kW Saved at Generator	8,403 kW
Annual kWh Saved at Customer	152,000 kWh
Annual kWh Saved at Generator	165,224 kWh
Annual Dth Saved	0 Dth
Electric Participants	40,000
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.00 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	33 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	33 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	33 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	33 tons CO2

PEAK TIME REBATES		DSM TOTAL					2028	GOAL
2028 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)								
	Participant Test (\$Total)	Utility Test (\$Total)	Electric Rate Impact Test (\$Total)	Gas Rate Impact Test (\$Total)	Societal Test (\$Total)	Minnesota Test (\$Total)		
Electric System Impacts								
Generation Capacity	N/A	1,050,688	1,050,688	N/A	1,050,688	1,050,688		
Transmission and Distribution Capacity	N/A	0	0	N/A	0	0		
Energy Generation	N/A	10,259	10,259	N/A	10,259	10,259		
Market Effects and Ancillary Services	N/A	21,219	21,219	N/A	21,219	21,219		
Subtotal	N/A	1,082,166	1,082,166	N/A	1,082,166	1,082,166		
Gas System Impacts								
Commodity Cost	N/A	0	N/A	0	0	0		
Variable O&M	N/A	0	N/A	0	0	0		
Demand	N/A	0	N/A	0	0	0		
Environmental Compliance	N/A	0	N/A	0	0	0		
Subtotal	N/A	0	N/A	0	0	0		
Environmental Externalities and Non-Energy Impacts								
Electric Environmental Externalities	N/A	N/A	N/A	N/A	1,683	1,683		
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Electric Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Gas Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Other Fuels Benefits	0	N/A	N/A	N/A	0	0		
Utility Performance Incentives	N/A	0	0	0	0	0		
Utility Non-Energy Benefits	N/A	0	0	0	0	0		
Subtotal	0	0	0	0	1,683	1,683		
Participant Impacts								
Electric Bill	29,920	N/A	(29,920)	N/A	N/A	N/A		
Gas Bill	0	N/A	N/A	0	N/A	N/A		
Participant Rebates and Incentives	0	N/A	N/A	N/A	171,000	N/A		
Incremental Capital	0	N/A	N/A	N/A	0	N/A		
Incremental O&M	0	N/A	N/A	N/A	0	N/A		
Subtotal	29,920	N/A	(29,920)	0	171,000	N/A		
Utility Impacts								
Utility Project Costs								
Customer Services	N/A	0	0	0	0	0		
Utility Administration	N/A	(490,000)	(490,000)	0	(490,000)	(490,000)		
Advertising & Promotion	N/A	(150,000)	(150,000)	0	(150,000)	(150,000)		
Measurement & Verification	N/A	0	0	0	0	0		
Rebates	N/A	(171,000)	(171,000)	0	(171,000)	(171,000)		
Other	N/A	0	0	0	0	0		
Subtotal	N/A	(811,000)	(811,000)	0	(811,000)	(811,000)		
Benefits	29,920	1,082,166	1,082,166	0	1,254,849	1,083,849		
Costs	0	(811,000)	(840,920)	0	(811,000)	(811,000)		
Net Benefit (Cost)	29,920	271,166	241,246	0	443,849	272,849		
Benefit/Cost Ratio	INF	1.33	1.29	INF	1.55	1.34		

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

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	8.70%
T & D Loss Factor (Demand)	10.56%
System Coincident kW Saved at Generator	9,453 kW
Annual kWh Saved at Customer	171,000 kWh
Annual kWh Saved at Generator	185,877 kWh
Annual Dth Saved	0 Dth
Electric Participants	45,000
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.00 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	29 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	29 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	29 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	29 tons CO2

PEAK TIME REBATES		DSM TOTAL					2029	GOAL
2029 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)								
	Participant Test (\$Total)	Utility Test (\$Total)	Electric Rate Impact Test (\$Total)	Gas Rate Impact Test (\$Total)	Societal Test (\$Total)	Minnesota Test (\$Total)		
Electric System Impacts								
Generation Capacity	N/A	1,186,693	1,186,693	N/A	1,186,693	1,186,693		
Transmission and Distribution Capacity	N/A	0	0	N/A	0	0		
Energy Generation	N/A	11,110	11,110	N/A	11,110	11,110		
Market Effects and Ancillary Services	N/A	23,956	23,956	N/A	23,956	23,956		
Subtotal	N/A	1,221,760	1,221,760	N/A	1,221,760	1,221,760		
Gas System Impacts								
Commodity Cost	N/A	0	N/A	0	0	0		
Variable O&M	N/A	0	N/A	0	0	0		
Demand	N/A	0	N/A	0	0	0		
Environmental Compliance	N/A	0	N/A	0	0	0		
Subtotal	N/A	0	N/A	0	0	0		
Environmental Externalities and Non-Energy Impacts								
Electric Environmental Externalities	N/A	N/A	N/A	N/A	1,650	1,650		
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Electric Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Gas Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Other Fuels Benefits	0	N/A	N/A	N/A	0	0		
Utility Performance Incentives	N/A	0	0	0	0	0		
Utility Non-Energy Benefits	N/A	0	0	0	0	0		
Subtotal	0	0	0	0	1,650	1,650		
Participant Impacts								
Electric Bill	33,605	N/A	(33,605)	N/A	N/A	N/A		
Gas Bill	0	N/A	N/A	0	N/A	N/A		
Participant Rebates and Incentives	0	N/A	N/A	N/A	190,000	N/A		
Incremental Capital	0	N/A	N/A	N/A	0	N/A		
Incremental O&M	0	N/A	N/A	N/A	0	N/A		
Subtotal	33,605	N/A	(33,605)	0	190,000	N/A		
Utility Impacts								
Utility Project Costs								
Customer Services	N/A	0	0	0	0	0		
Utility Administration	N/A	(490,000)	(490,000)	0	(490,000)	(490,000)		
Advertising & Promotion	N/A	(150,000)	(150,000)	0	(150,000)	(150,000)		
Measurement & Verification	N/A	0	0	0	0	0		
Rebates	N/A	(190,000)	(190,000)	0	(190,000)	(190,000)		
Other	N/A	0	0	0	0	0		
Subtotal	N/A	(830,000)	(830,000)	0	(830,000)	(830,000)		
Benefits	33,605	1,221,760	1,221,760	0	1,413,409	1,223,409		
Costs	0	(830,000)	(863,605)	0	(830,000)	(830,000)		
Net Benefit (Cost)	33,605	391,760	358,155	0	583,409	393,409		
Benefit/Cost Ratio	INF	1.47	1.41	INF	1.70	1.47		

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	8.70%
T & D Loss Factor (Demand)	10.56%
System Coincident kW Saved at Generator	10,503 kW
Annual kWh Saved at Customer	190,000 kWh
Annual kWh Saved at Generator	206,530 kWh
Annual Dth Saved	0 Dth
Electric Participants	50,000
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.00 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	28 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	28 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	28 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	28 tons CO2

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

PEAK TIME REBATES		DSM TOTAL					2030	GOAL
2030 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)								
	Participant Test (\$Total)	Utility Test (\$Total)	Electric Rate Impact Test (\$Total)	Gas Rate Impact Test (\$Total)	Societal Test (\$Total)	Minnesota Test (\$Total)		
Electric System Impacts								
Generation Capacity	N/A	1,326,901	1,326,901	N/A	1,326,901	1,326,901		
Transmission and Distribution Capacity	N/A	0	0	N/A	0	0		
Energy Generation	N/A	11,436	11,436	N/A	11,436	11,436		
Market Effects and Ancillary Services	N/A	26,767	26,767	N/A	26,767	26,767		
Subtotal	N/A	1,365,104	1,365,104	N/A	1,365,104	1,365,104		
Gas System Impacts								
Commodity Cost	N/A	0	N/A	0	0	0		
Variable O&M	N/A	0	N/A	0	0	0		
Demand	N/A	0	N/A	0	0	0		
Environmental Compliance	N/A	0	N/A	0	0	0		
Subtotal	N/A	0	N/A	0	0	0		
Environmental Externalities and Non-Energy Impacts								
Electric Environmental Externalities	N/A	N/A	N/A	N/A	999	999		
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Electric Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Gas Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Other Fuels Benefits	0	N/A	N/A	N/A	0	0		
Utility Performance Incentives	N/A	0	0	0	0	0		
Utility Non-Energy Benefits	N/A	0	0	0	0	0		
Subtotal	0	0	0	0	999	999		
Participant Impacts								
Electric Bill	37,373	N/A	(37,373)	N/A	N/A	N/A		
Gas Bill	0	N/A	N/A	0	N/A	N/A		
Participant Rebates and Incentives	0	N/A	N/A	N/A	209,000	N/A		
Incremental Capital	0	N/A	N/A	N/A	0	N/A		
Incremental O&M	0	N/A	N/A	N/A	0	N/A		
Subtotal	37,373	N/A	(37,373)	0	209,000	N/A		
Utility Impacts								
Utility Project Costs								
Customer Services	N/A	0	0	0	0	0		
Utility Administration	N/A	(490,000)	(490,000)	0	(490,000)	(490,000)		
Advertising & Promotion	N/A	(150,000)	(150,000)	0	(150,000)	(150,000)		
Measurement & Verification	N/A	0	0	0	0	0		
Rebates	N/A	(209,000)	(209,000)	0	(209,000)	(209,000)		
Other	N/A	0	0	0	0	0		
Subtotal	N/A	(849,000)	(849,000)	0	(849,000)	(849,000)		
Benefits	37,373	1,365,104	1,365,104	0	1,575,103	1,366,103		
Costs	0	(849,000)	(886,373)	0	(849,000)	(849,000)		
Net Benefit (Cost)	37,373	516,104	478,730	0	726,103	517,103		
Benefit/Cost Ratio	INF	1.61	1.54	INF	1.86	1.61		

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

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	8.70%
T & D Loss Factor (Demand)	10.56%
System Coincident kW Saved at Generator	11,554 kW
Annual kWh Saved at Customer	209,000 kWh
Annual kWh Saved at Generator	227,183 kW
Annual Dth Saved	0 Dth
Electric Participants	55,000
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.00 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	19 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	19 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	19 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	19 tons CO2

PEAK TIME REBATES		DSM TOTAL					2031	GOAL
2031 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)								
	Participant Test (\$Total)	Utility Test (\$Total)	Electric Rate Impact Test (\$Total)	Gas Rate Impact Test (\$Total)	Societal Test (\$Total)	Minnesota Test (\$Total)		
Electric System Impacts								
Generation Capacity	N/A	1,471,413	1,471,413	N/A	1,471,413	1,471,413		
Transmission and Distribution Capacity	N/A	0	0	N/A	0	0		
Energy Generation	N/A	11,748	11,748	N/A	11,748	11,748		
Market Effects and Ancillary Services	N/A	29,663	29,663	N/A	29,663	29,663		
Subtotal	N/A	1,512,824	1,512,824	N/A	1,512,824	1,512,824		
Gas System Impacts								
Commodity Cost	N/A	0	N/A	0	0	0		
Variable O&M	N/A	0	N/A	0	0	0		
Demand	N/A	0	N/A	0	0	0		
Environmental Compliance	N/A	0	N/A	0	0	0		
Subtotal	N/A	0	N/A	0	0	0		
Environmental Externalities and Non-Energy Impacts								
Electric Environmental Externalities	N/A	N/A	N/A	N/A	1,064	1,064		
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0	0		
Electric Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Gas Non-Energy Benefits	0	N/A	N/A	N/A	0	0		
Other Fuels Benefits	0	N/A	N/A	N/A	0	0		
Utility Performance Incentives	N/A	0	0	0	0	0		
Utility Non-Energy Benefits	N/A	0	0	0	0	0		
Subtotal	0	0	0	0	1,064	1,064		
Participant Impacts								
Electric Bill	41,500	N/A	(41,500)	N/A	N/A	N/A		
Gas Bill	0	N/A	N/A	0	N/A	N/A		
Participant Rebates and Incentives	0	N/A	N/A	N/A	228,000	N/A		
Incremental Capital	0	N/A	N/A	N/A	0	N/A		
Incremental O&M	0	N/A	N/A	N/A	0	N/A		
Subtotal	41,500	N/A	(41,500)	0	228,000	N/A		
Utility Impacts								
Utility Project Costs								
Customer Services	N/A	0	0	0	0	0		
Utility Administration	N/A	(490,000)	(490,000)	0	(490,000)	(490,000)		
Advertising & Promotion	N/A	(150,000)	(150,000)	0	(150,000)	(150,000)		
Measurement & Verification	N/A	0	0	0	0	0		
Rebates	N/A	(228,000)	(228,000)	0	(228,000)	(228,000)		
Other	N/A	0	0	0	0	0		
Subtotal	N/A	(868,000)	(868,000)	0	(868,000)	(868,000)		
Benefits	41,500	1,512,824	1,512,824	0	1,741,888	1,513,888		
Costs	0	(868,000)	(909,500)	0	(868,000)	(868,000)		
Net Benefit (Cost)	41,500	644,824	603,324	0	873,888	645,888		
Benefit/Cost Ratio	INF	1.74	1.66	INF	2.01	1.74		

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	8.70%
T & D Loss Factor (Demand)	10.56%
System Coincident kW Saved at Generator	12,604 kW
Annual kWh Saved at Customer	228,000 kWh
Annual kWh Saved at Generator	247,836 kW
Annual Dth Saved	0 Dth
Electric Participants	60,000
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.00 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	20 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	20 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	20 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	20 tons CO2

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