

2007 – 2008 MINNESOTA  
CONSERVATION IMPROVEMENT PROGRAM  
ENERGY AND CARBON DIOXIDE SAVINGS REPORT

Prepared by Minnesota Office of Energy Security  
Pursuant to Minnesota Statutes §216B.241, subd. 1c(g)



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## **I. INTRODUCTION**

The Office of Energy Security (OES) submits this report in fulfillment of Minn. Statutes § 216B.241, subd. 1c(g), which requires the Commissioner of Commerce to produce and make publicly available a report on the annual energy savings and estimated carbon dioxide reductions achieved by energy conservation improvement programs for the two most recent years for which data are available. This report contains the energy and carbon dioxide savings estimates for program years 2007 and 2008.

The Minnesota Energy Conservation Improvement Program (CIP) is a utility-administered program with regulatory oversight by the OES. By state law, Minnesota natural gas and electric utilities are required to invest a portion of their revenues in conservation improvement programs that are intended to assist their customers in adopting energy efficient technologies and practices. The OES reviews and approves utility CIP plans and reported savings.

Utility conservation programs help to defer investments in energy infrastructure and are a critical part of Minnesota's efforts to reduce greenhouse gases. In 2007 and 2008, Minnesota's utilities invested approximately \$230 million in conservation programs, achieving over 1 million MWh in electricity savings and 3.5 million MCF in natural gas savings, for a total of approximately 1.1 million tons of avoided carbon dioxide emissions. Investor-owned electric and natural gas utilities saved a total of 1.0 percent and 0.5 percent savings, respectively, of 2007-2008 retail sales.

In 2010, the statutory energy savings goals established by the Next Generation Energy Act of 2007 (NGEA) take effect. Utilities were required to develop plans to meet at least the 1.0 percent minimum savings goal specified, measured as a percent of average retail electricity or natural gas sales.<sup>1</sup> As described in more detail below, Minnesota's utilities, with the support of OES, have expanded their programs and are piloting a number of novel approaches to capture untapped savings opportunities.

## **II. ESTIMATED ENERGY AND CARBON DIOXIDE SAVINGS**

### **A. METHODOLOGY**

The carbon dioxide savings reported herein are based on the total annual electricity or natural gas savings reported by each utility. These savings figures were verified by the OES as part of the annual status report review process.<sup>2</sup> Total annual carbon dioxide savings were calculated by multiplying the kWh or MCF savings by an average carbon dioxide emissions factor for the fuel type (average pounds of CO<sub>2</sub> emitted per MWh of electricity or MCF of natural gas).

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<sup>1</sup> Legislation passed in 2009 established in interim average annual savings goal of 0.75 percent over 2010-2012 for natural gas utilities (see Minnesota Session Laws 2009, Ch. 110, Sec. 32).

<sup>2</sup> Since cooperative and municipal utilities now report on a triennial basis, their 2008 savings achievements were not available at the time of this report. Thus, their 2008 planned savings were used as an estimate.

An exact estimate of CO<sub>2</sub> savings from avoided electricity generation is difficult to compute since CO<sub>2</sub> emissions depend on the load shape of each end use measure and the mix of generating sources dispatched to meet demand throughout the year. Moreover, Minnesota’s electrical customers are served by a variety of generating sources, both inside and outside the state. Therefore, to estimate avoided carbon dioxide emissions from conservation programs, we believe it is most appropriate to use the Midwest Reliability Organization (MRO) average carbon emissions factor for the region, reported annually by the Minnesota Pollution Control Agency (MPCA). This figure was equal to 1,823 lbs of carbon dioxide per MWh consumed.<sup>3</sup> For natural gas, the standard CO<sub>2</sub> emissions factor of 121 lbs of CO<sub>2</sub> per MCF was used.

It is important to note that all energy and CO<sub>2</sub> savings reported herein represent *incremental* savings only – that is, the first-year savings that result from new program participants. OES does not track *cumulative* savings due to the complexities of doing so.

**B. TOTAL ENERGY AND CARBON DIOXIDE SAVINGS**

Total estimated electric energy, gas and carbon dioxide savings achieved by utility CIPs in 2007 and 2008 are shown below in Table 1. As can be seen, while total electric savings are estimated to have increased in 2008 over 2007, gas savings decreased in 2008. Total carbon dioxide savings increased by approximately 10 percent in 2008.

Supplemental tables showing savings by utility and market sector are included in the Appendix.

**Table 1: Electric and Gas Incremental Energy and Carbon Dioxide Savings, 2007-2008**

	Electric Savings (kWh)	CO <sub>2</sub> Savings (tons)	Gas Savings (MCF)	CO <sub>2</sub> Savings (tons)	Total CO <sub>2</sub> Savings (tons)
<b>2007</b>	468,069,698	426,646	1,917,144	115,987	542,633
<b>2008<sup>4</sup></b>	548,467,007	499,928	1,571,593	95,081	595,009
<b>% Change</b>	+17%	+17%	-18%	-18%	+10%

**III. UTILITY CONSERVATION PLAN APPROVALS**

**A. INVESTOR-OWNED UTILITIES**

Under the NGEA, electric and natural gas utilities were required to develop CIP plans to achieve energy savings equal to 1.5 percent of average retail sales, excluding CIP-exempt customers, starting in program year 2010. The law allows the commissioner flexibility to lower a utility’s savings goal to a minimum of 1.0 percent based on a conservation potential study or other factors

<sup>3</sup> The MRO average emissions factor was increased slightly in 2009 from the figure used in last year’s Carbon Dioxide Report, equal to 1,810 lbs/MWh. The MPCA reports updated regional average emissions factors annually to the Minnesota Department of Commerce and Public Utilities Commission in docket no. E,G999/CI-00-1343.

<sup>4</sup> The 2008 reported electric savings are based on actual achievements reported by investor-owned utilities and planned savings reported by electric cooperative and municipal utilities.

that the commissioner believes are warranted. The law was modified in 2009 to allow the commissioner to approve an interim annual average savings goal for 0.75 percent over 2010-2012 for gas utilities based on a gas conservation potential study.<sup>5</sup>

The OES reviewed and approved a number of utility plans in 2008 and 2009. In 2008, Minnesota Power and Otter Tail Power filed 2009-2010 biennial plans, the first investor-owned utility plans to be affected by the statutory savings goals in 2010. In 2009, the state's remaining investor-owned utilities filed triennial plans covering 2010-2012.

Overall, the 2010 plans were characterized by enhanced marketing and promotions, higher incentive offerings, and additional incentive offerings to trade partners and dealers intended to increase awareness of utility programs and drive market transformation. Several innovative and new programs were proposed for the 2010 program year, including the Quick Fix program operated jointly by Xcel Energy and CenterPoint Energy that will employ "home energy squads" to provide packaged audits, education, and installation services; Xcel Energy's Annex 49 program focused on optimizing the use of recycled waste heat energy in buildings; several pilot programs investigating the effectiveness of direct and indirect feedback on energy use in residential and commercial settings; and secondary appliance recycling programs designed to encourage customers to give up their old and inefficient refrigerators and freezers.

Overall CIP spending by investor-owned utilities is projected to increase from \$77 million in 2008 to \$127 million in 2010, an increase of 65 percent, resulting in 15 percent greater carbon dioxide savings.

## *B. COOPERATIVE AND MUNICIPAL UTILITIES*

The state's cooperative and municipal utilities also filed conservation plans in 2008. A total of six distribution cooperatives and associations, five municipal power agencies or aggregated filers, and 27 municipal electric utilities filed plans with the OES in 2008 covering 2008-2010. The state's three non-CIP exempt municipal gas utilities or aggregated filers submitted one year plans in 2008 and three years plans in 2009.

With the encouragement of OES, much progress was made by municipal power agencies in developing and administering programs on behalf of their members. Such program aggregation reduces administrative and regulatory costs and removes the burden of program development from small utilities with limited staff and experience. In 2008, Central Minnesota Municipal Power Agency (CMMPA), Missouri River Energy Services (MRES), and Northern Municipal Power Agency (NMPA) took steps toward developing aggregated programs, joining the two municipal agencies, Southern Minnesota Municipal Power Agency (SMMPA) and Minnesota Municipal Power Agency (MMPA), that were already operating aggregated programs. The Minnesota Municipal Utilities Association has also been helping its members that lack a municipal power agency with program development. OES staff continue to provide engineering and program assistance to cooperative and municipal utilities through development of the Deemed Savings Database and other on-line resources, in addition to providing personalized assistance as needed.

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<sup>5</sup> See Minnesota Session Laws 2009, Ch. 110, Sec. 32.

Based on current figures, overall CIP spending by electric cooperative and municipal utilities in 2008 was approximately \$44 million. Although some cooperative and municipal associations are still in the process of developing their 2010 and 2011 plans, overall spending in 2010 will likely show an increase given the higher savings achievements required under the NGEA.

**C. SAVINGS GOALS**

The NGEA established an across-the-board savings goal of 1.5 percent for all utility types in Minnesota, adjustable to a minimum of 1.0 percent by the Commissioner. Legislation passed in 2009 allowed the Commissioner to approve an interim average savings goal of 0.75 percent over 2010-2012 for gas utilities based on the findings of a gas conservation potential study. This new provision was reflected in the Commissioner’s plan approvals for CenterPoint Energy, Great Plains Natural Gas, Minnesota Energy Resources-NMU and Minnesota Energy Resources-PNG.

As shown in Table 2 below, utility CIP performance has varied greatly in recent years. While some utilities such as Alliant Energy-electric and Minnesota Power have exceeded the 1.5 percent savings goal prior to passage of the NGEA, other utilities are far below the minimum 1.0 percent goal, reflecting the varied capacity of utilities with regard to CIP, as well as the unique characteristics of each service territory.

In establishing the 1.5 percent nominal savings goal for utilities, the NGEA allowed for the inclusion of savings realized from electric utility infrastructure (EUI) projects. EUI projects include efficiency improvements to a utility’s generation, transmission, or distribution infrastructure, or waste heat to electricity generation projects. The energy savings that result from EUI projects are counted towards the 1.5 percent goal once the utility achieves at least 1.0 percent savings through traditional demand side projects. Although no formal plans for EUI projects have been submitted, several utilities are evaluating different options. The savings from EUI projects are expected to be significant, and if approved, may enable utilities to achieve the 1.5 percent savings level.

**Table 2: Recent Achievements and Approved 2010 Savings Goals**

<b>Utility/Agency</b>	<b>Average Annual Sales<sup>3</sup></b>	<b>Sales Units</b>	<b>2004-2008 Avg. Annual % Savings</b>	<b>2010 % Savings, Planned</b>
<i>Electric IOUs</i>				
Alliant Energy	852,534	MWh	1.9	1.5
Minnesota Power	3,298,723	MWh	1.8	1.5
Otter Tail Power	2,077,284	MWh	0.7	1.0
Xcel Energy	30,815,330	MWh	0.9	1.1
<i>Gas IOUs</i>				
Alliant Energy	1,830,000	MCF	1.1	1.0
CenterPoint Energy	148,502,961	MCF	0.6	0.7
Great Plains Natural Gas	5,886,496	MCF	0.3	0.6
Minn. Energy Resources-NMU	13,137,121	MCF	0.2	0.8
Minn. Energy Resources-PNG	41,725,154	MCF	0.2	0.8
Xcel Energy	70,669,742	MCF	1.1	1.1

#### **IV. CONCLUSION**

Total carbon dioxide savings from utility conservation programs increased in 2008 over 2007. Although large differences in individual utility CIP performance persist, significant progress was seen in the development of the 2010 plans falling under the minimum 1.0 percent or 0.75 percent savings requirements. Whether utilities will be able to realize their approved savings goals in 2010 and beyond will depend on a number of factors, including the effectiveness of their marketing and incentive offerings, the availability of large industrial conservation projects, the extent of economic recovery and credit availability, the price of input fuels such as coal and natural gas, natural gas prices at retail, and continued federal funding for energy efficiency programs and incentives.

## APPENDIX

**Table 3a: 2007 CIP Savings and Expenditures by Utility,  
Electric IOUs**

<b>Utility</b>	<b>kWh Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
<b>Electric IOUs</b>			
Alliant Energy	16,990,441	\$2,562,634	15,487
Minnesota Power	44,168,014	\$3,908,222	40,259
Otter Tail Power	11,617,820	\$1,862,501	10,590
Xcel Energy	259,207,821	\$47,382,643	236,268
<b>Totals - IOU Electrics</b>	<b>331,984,096</b>	<b>\$55,716,000</b>	<b>302,604</b>

**Table 3b: 2007 CIP Savings and Expenditures by Utility,  
Electric Cooperatives and Municipals**

<b>Electric Coops</b>	<b>kWh Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
Dairyland Power Coop	3,318,591	\$2,053,709	3,025
East River Electric Power Coop, Inc.	295,529	\$284,979	269
Great River Energy	58,060,845	\$20,872,525	52,922
Minnesota Valley Coop L&P	554,550	\$246,184	505
Minnkota Power Coop	5,088,664	\$2,284,562	4,638
Sioux Valley Southwestern Electric	2,164,796	\$73,086	1,973
<b>Totals - Electric Coops</b>	<b>69,482,975</b>	<b>\$25,815,045</b>	<b>63,334</b>
<b>Electric Municipals<sup>1</sup></b>			
Alexandria Light & Power	1,266,653	\$280,627	1,155
Benson Municipal Utilities	271,042	\$128,009	247
Brainerd Public Utilities	1,956,427	\$199,998	1,783
City of Anoka	804,650	\$350,447	733
City of Jackson	760,172	\$57,312	693
City of Luverne	558,482	\$114,785	509
Detroit Lakes Public Utility	606,008	\$127,047	552
East Grand Forks Water & Light Dept.	593,362	\$342,030	541
Glencoe Light & Power Commission	703,549	\$93,836	641
Grand Rapids Public Utilities Commission	1,683,822	\$110,238	1,535
Hibbing Public Utilities Commission	178,637	\$99,758	163
Hutchinson Utilities Commission	10,124,104	\$251,862	9,228
Marshall Municipal Utilities	3,628,227	\$343,660	3,307
Melrose Public Utilities	181,599	\$37,420	166
Minnesota Municipal Power Agency	2,045,632	\$681,336	1,865
Moorhead Public Service	1,257,909	\$407,689	1,147
New Ulm Public Utilities	2,129,389	\$335,831	1,941
Shakopee Public Utilities	7,653,643	\$727,792	6,976
Southern MN Municipal Power Agency	6,112,231	\$1,629,377	5,571
St. James Municipal Light & Power	329,668	\$49,039	300
Thief River Falls Municipal Utility	722,322	\$223,860	658
Triad (Austin, Owatonna, Rochester)	19,895,990	\$2,516,333	18,135
Wadena Light & Water	13,532	\$54,392	12
Willmar Municipal Utilities	1,186,110	\$305,235	1,081
Windom Municipal Utilities	1,480,922	\$74,856	1,350
Worthington Public Utilities	458,545	\$165,612	418
<b>Totals - Electric Municipals</b>	<b>66,602,627</b>	<b>\$9,708,381</b>	<b>60,708</b>
<b>TOTALS - ELEC. COOPS AND MUNICIPALS</b>	<b>136,085,602</b>	<b>\$35,523,426</b>	<b>124,042</b>

**Table 3c: 2007 CIP Savings by Market Sector, Electric IOUs  
(kilowatt-hours)**

<b>Electric IOUs</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Alliant Energy	769,616	16,220,825	0	16,990,441
Minnesota Power	9,479,950	34,688,064	0	44,168,014
Otter Tail Power	2,721,259	8,896,561	0	11,617,820
Xcel Energy	13,838,906	245,368,915	0	259,207,821
<b>Totals - IOU Electrics</b>	<b>26,809,731</b>	<b>305,174,365</b>	<b>0</b>	<b>331,984,096</b>

**Table 3d: 2007 CIP Savings by Market Sector,  
Electric Cooperatives and Municipals<sup>6</sup>  
(kilowatt-hours)**

<b>Electric Coops</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Dairyland Power Coop	3,252,216	66,372	0	3,318,591
East River Electric Power Coop, Inc.	295,529	0	0	295,529
Great River Energy	23,416,921	34,643,924	0	58,060,845
Minnesota Valley Coop Light & Power Assoc	116,215	438,335	0	554,550
Minnkota Power Coop	3,334,774	1,249,365	504,525	5,088,664
Sioux Valley Southwestern Electric	1,955,346	209,450	0	2,164,796
<b>Totals - Electric Coops</b>	<b>32,371,001</b>	<b>36,607,446</b>	<b>504,525</b>	<b>69,482,975</b>
<b>Electric Municipals</b>				
Alexandria Light & Power	432,392	834,261	0	1,266,653
Benson Municipal Utilities	103,111	167,931	0	271,042
Brainerd Public Utilities	278,550	1,677,877	0	1,956,427
City of Anoka	88,826	715,824	0	804,650
City of Jackson	131,836	628,336	0	760,172
City of Luverne	163,152	395,330	0	558,482
Detroit Lakes Public Utility	155,179	450,829	0	606,008
East Grand Forks Water & Light Dept.	109,728	475,207	8,427	593,362
Glencoe Light & Power Commission	34,172	206,180	463,197	703,549
Grand Rapids Public Utilities Commission	1,102,515	581,307	0	1,683,822
Hibbing Public Utilities Commission	152,939	13,413	12,285	178,637
Hutchinson Utilities Commission	1,441,881	3,618,018	5,064,205	10,124,104
Marshall Municipal Utilities	746,223	2,882,004	0	3,628,227
Melrose Public Utilities	16,655	164,944	0	181,599
Minnesota Municipal Power Agency	207,760	1,025,771	812,101	2,045,632
Moorhead Public Service	140,857	1,117,052	0	1,257,909
New Ulm Public Utilities	250,690	1,541,796	336,903	2,129,389
Shakopee Public Utilities	3,756,712	3,250,479	646,452	7,653,643
Southern MN Municipal Power Agency	4,107,720	1,997,249	7,262	6,112,231
St. James Municipal Light & Power	230,520	86,337	12,811	329,668
Thief River Falls Municipal Utility	581,276	141,046	0	722,322
Triad (Austin, Owatonna, Rochester)	3,465,589	16,363,026	67,375	19,895,990
Wadena Light & Water	13,261	271	0	13,532
Willmar Municipal Utilities	319,668	866,442	0	1,186,110
Windom Municipal Utilities	107,012	1,373,910	0	1,480,922
Worthington Public Utilities	159,971	298,574	0	458,545
<b>Totals - Electric Municipals</b>	<b>18,298,195</b>	<b>40,873,413</b>	<b>7,431,018</b>	<b>66,602,627</b>
<b>TOTALS - ELEC. COOPS AND MUNICIPALS</b>	<b>50,669,196</b>	<b>77,480,859</b>	<b>7,935,543</b>	<b>136,085,602</b>

<sup>6</sup> Savings by market sector are not reported directly by electric cooperative and municipal utilities and thus were estimated by the percent spending in each market sector.

**Table 4a: 2007 CIP Savings and Expenditures by Utility,  
Gas IOUs and Municipals**

<b>Gas IOUs</b>	<b>MCF Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
Alliant Energy	15,096	\$282,637	913
CenterPoint Energy	825,031	\$7,553,362	49,914
Great Plains Natural Gas	17,658	\$244,304	1,068
Minnesota Energy Resources - NMU	22,756	\$373,490	1,377
Minnesota Energy Resources - PNG	118,899	\$1,561,483	7,193
Xcel Energy	888,460	\$5,576,438	53,752
<b>Totals - Gas IOUs</b>	<b>1,887,900</b>	<b>\$15,591,714</b>	<b>114,218</b>
<b>Gas Municipals</b>			
Duluth Dept. of Public Works	4,208	\$473,371	255
Hutchinson Utilities Commission	5,872	\$150,104	355
Triad (Austin & Owatonna)	19,164	\$191,241	1,159
<b>Totals - Gas Municipals</b>	<b>29,244</b>	<b>\$814,716</b>	<b>1,769</b>

**Table 4b: 2007 CIP Savings by Market Sector,  
Gas IOUs and Municipals<sup>7</sup> (MCF)**

<b>Gas IOUs</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Alliant	7,950	7,146	0	15,096
CenterPoint Energy	164,971	660,060	0	825,031
Great Plains Natural Gas	5,338	12,320	0	17,658
Minnesota Energy Resources - NMU	7,062	15,694	0	22,756
Minnesota Energy Resources - PNG	42,341	76,558	0	118,899
Xcel Energy	147,851	740,609	0	888,460
<b>Totals - Gas IOUs</b>	<b>375,513</b>	<b>1,512,387</b>	<b>0</b>	<b>1,887,900</b>
<b>Gas Municipals</b>				
Duluth Dept. of Public Works	3,933	275	0	4,208
Hutchinson Utilities Commission	1,257	0	4,615	5,872
Triad (Austin & Owatonna)	8,669	9,922	573	19,164
<b>Totals - Gas Municipals</b>	<b>13,859</b>	<b>10,197</b>	<b>5,188</b>	<b>29,244</b>

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<sup>7</sup> Savings by market sector are not reported directly by municipal gas utilities and thus were estimated by the percent spending in each market sector.

**Table 5a: 2008 CIP Savings and Expenditures by Utility,  
Electric IOUs**

<b>Utility</b>	<b>kWh Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
<b>Electric IOUs</b>			
Alliant Energy	9,698,758	\$2,161,420	8,840
Minnesota Power	48,845,282	\$4,764,631	44,522
Otter Tail Power	15,994,719	\$2,345,877	14,579
Xcel Energy	331,024,729	\$50,707,871	301,729
<b>Totals - Electric IOUs</b>	<b>405,563,488</b>	<b>\$59,979,799</b>	<b>369,671</b>

**Table 5b: 2008 CIP Savings and Expenditures by Utility,  
Electric Cooperatives and Municipals<sup>8</sup>**

<b>Electric Coops</b>	<b>kWh Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
Dairyland Power Coop	8,730,146	\$2,347,537	7,958
East River Electric Power Coop, Inc.	535,490	\$342,760	488
Great River Energy	60,126,881	\$26,209,493	54,806
Minnesota Valley Coop L&P	746,400	\$2,335,250	680
Minnkota Power Coop <sup>9</sup>	5,088,664	\$2,284,562	4,638
Sioux Valley Southwestern Electric	2,696,880	\$77,384	2,458
<b>Totals - Electric Coops</b>	<b>77,924,461</b>	<b>\$33,596,986</b>	<b>71,028</b>
<b>Electric Municipals</b>			
Alexandria Light & Power	1,466,520	\$363,200	1,337
Benson Municipal Utilities	191,380	\$119,760	174
Brainerd Public Utilities	192,462	\$83,543	175
City of Anoka	1,511,100	\$398,000	1,377
City of Jackson	822,460	\$87,369	750
City of Luverne	668,717	\$126,600	610
Detroit Lakes Public Utility	130,860	\$120,175	119
East Grand Forks Water & Light Dept.	157,147	\$360,624	143
Glencoe Light & Power Commission	313,304	\$76,340	286
Grand Rapids Public Utilities Commission	4,732,500	\$149,500	4,314
Hibbing Public Utilities Commission	609,129	\$170,323	555
Hutchinson Utilities Commission	10,220,965	\$458,496	9,316
Marshall Municipal Utilities	1,811,996	\$374,230	1,652
Melrose Public Utilities	1,474,772	\$76,500	1,344
Minnesota Municipal Power Agency	2,237,690	\$907,690	2,040
Moorhead Public Service	523,950	\$378,692	478
New Ulm Public Utilities	3,005,272	\$337,710	2,739
Shakopee Public Utilities	6,000,503	\$806,546	5,469
Southern MN Municipal Power Agency	8,173,504	\$1,580,400	7,450
St. James Municipal Light & Power	277,375	\$66,150	253
Thief River Falls Municipal Utility	558,108	\$166,330	509
Triad (Austin, Owatonna, Rochester)	16,053,508	\$2,966,643	14,633
Wadena Light & Water	91,800	\$83,072	84
Willmar Municipal Utilities	1,123,506	\$294,796	1,024
Windom Municipal Utilities	1,607,600	\$101,000	1,465
Worthington Public Utilities	1,022,930	\$177,980	932
<b>Totals - Electric Municipals</b>	<b>64,979,058</b>	<b>\$10,831,669</b>	<b>59,228</b>
<b>TOTALS - ELEC. COOPS AND MUNICIPALS</b>	<b>142,903,519</b>	<b>\$44,428,655</b>	<b>130,257</b>

<sup>8</sup> Since 2008 actual spending and savings data were not available for electric cooperatives and municipal utilities, 2008 planning estimates were used as a proxy except where noted.

<sup>9</sup> During 2008, Minnkota Power Cooperative was in the process of developing new CIP programs in partnership with Northern Municipal Power Agency and did not file 2008 plans. Thus, Minnkota's 2007 actual savings and spending were used as a proxy for 2008 savings and spending.

**Table 5c: 2008 CIP Savings by Market Sector, Electric IOUs  
(kilowatt-hours)**

<b>Electric IOUs</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Alliant Energy	1,092,010	8,606,748	0	9,698,758
Minnesota Power	11,477,970	37,367,312	0	48,845,282
Otter Tail Power	3,040,606	12,954,113	0	15,994,719
Xcel Energy	33,484,464	297,540,265	0	331,024,729
<b>Totals - Electric IOUs</b>	<b>49,095,050</b>	<b>356,468,438</b>	<b>0</b>	<b>405,563,488</b>

**Table 5d: 2008 CIP Savings by Market Sector,  
Electric Cooperatives and Municipals<sup>10</sup>  
(kilowatt-hours)**

<b>Electric Coops</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Dairyland Power Coop	8,555,539	174,603	0	8,730,146
East River Electric Power Coop, Inc.	535,490	0	0	535,490
Great River Energy	27,478,199	32,648,682	0	60,126,881
Minnesota Valley Coop Light & Power	100,400	371,600	274,400	746,400
Minnkota Power Coop <sup>11</sup>	3,334,774	1,249,365	504,525	5,088,664
Sioux Valley Southwestern Electric	2,425,530	271,350	0	2,696,880
<b>Totals - Electric Coops</b>	<b>42,429,932</b>	<b>34,715,600</b>	<b>778,925</b>	<b>77,924,461</b>
<b>Electric Municipals</b>				
Alexandria Light & Power	446,142	1,020,379	0	1,466,520
Benson Municipal Utilities	95,424	95,956	0	191,380
Brainerd Public Utilities	190,482	1,980	0	192,462
City of Anoka	120,790	1,390,310	0	1,511,100
City of Jackson	144,650	677,810	0	822,460
City of Luverne	165,117	503,600	0	668,717
Detroit Lakes Public Utility	124,578	6,282	0	130,860
East Grand Forks Water & Light Dept.	116,605	30,542	10,000	157,147
Glencoe Light & Power Commission	40,200	273,104	0	313,304
Grand Rapids Public Utilities Commission	1,583,500	2,849,000	300,000	4,732,500
Hibbing Public Utilities Commission	442,448	148,381	18,300	609,129
Hutchinson Utilities Commission	1,871,544	3,849,421	4,500,000	10,220,965
Marshall Municipal Utilities	848,400	963,596	0	1,811,996
Melrose Public Utilities	30,763	1,444,009	0	1,474,772
Minnesota Municipal Power Agency	244,972	1,642,718	350,000	2,237,690
Moorhead Public Service	153,950	370,000	0	523,950
New Ulm Public Utilities	316,794	2,510,046	178,432	3,005,272
Shakopee Public Utilities	2,057,584	3,563,385	379,534	6,000,503
Southern MN Municipal Power Agency	4,347,776	3,818,084	7,644	8,173,504
St. James Municipal Light & Power	234,330	43,045	0	277,375
Thief River Falls Municipal Utility	446,708	111,400	0	558,108
Triad (Austin, Owatonna, Rochester)	2,559,554	13,457,274	36,680	16,053,508
Wadena Light & Water	22,680	69,120	0	91,800
Willmar Municipal Utilities	246,216	877,291	0	1,123,506
Windom Municipal Utilities	105,600	1,502,000	0	1,607,600
Worthington Public Utilities	145,065	877,865	0	1,022,930
<b>Totals - Electric Municipals</b>	<b>17,101,871</b>	<b>42,096,597</b>	<b>5,780,590</b>	<b>64,979,058</b>
<b>TOTALS - ELEC. COOPS AND MUNICIPALS</b>	<b>59,531,803</b>	<b>76,812,197</b>	<b>6,559,515</b>	<b>142,903,519</b>

<sup>10</sup> Since 2008 actual spending and savings data were not available for electric cooperatives and municipal utilities, 2008 planning estimates were used as a proxy. In addition, savings by market sector are not reported directly by cooperative and municipal utilities and thus were estimated by the percent spending in each market sector.

<sup>11</sup> During 2008, Minnkota Power Cooperative was in the process of developing new CIP programs in partnership with Northern Municipal Power Agency and did not file 2008 plans. Thus, Minnkota's 2007 actual savings and spending were used as a proxy for 2008 savings and spending.

**Table 6a: 2008 CIP Savings by Utility,  
Gas IOUs and Municipals**

<b>Utility</b>	<b>MCF Savings</b>	<b>Spending</b>	<b>CO2 Savings (tons)</b>
<b>Gas IOUs</b>			
Alliant Energy	18,466	\$360,441	1,117
CenterPoint Energy	827,339	\$8,422,819	50,054
Great Plains Natural Gas	9,524	\$256,468	576
Minnesota Energy Resources - NMU	9,492	\$396,042	574
Minnesota Energy Resources - PNG	55,025	\$1,429,342	3,329
Xcel Energy	613,134	\$6,423,487	37,095
<b>Totals - Gas IOUs</b>	<b>1,532,980</b>	<b>\$17,288,599</b>	<b>92,745</b>
<b>Gas Municipals</b>			
Duluth Dept. of Public Works <sup>12</sup>	9,400	\$774,610	569
Hutchinson Utilities Commission	4,766	\$64,172	288
Triad (Austin & Owatonna)	24,447	\$352,184	1,479
<b>Totals - Gas Municipals</b>	<b>38,613</b>	<b>\$1,190,966</b>	<b>2,336</b>

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<sup>12</sup> As the Duluth Dept. of Public Works' 2008 actual data were not available at the time of this report, 2008 planning estimates were used as a proxy for actual savings and spending.

**Table 6b: 2008 CIP Savings by Market Sector,  
Gas IOUs (MCF)<sup>13</sup>**

<b>Gas IOUs</b>	<b>Residential</b>	<b>C/I/Ag</b>	<b>Other</b>	<b>Total</b>
Alliant	7,376	11,090	0	18,466
CenterPoint Energy	173,695	653,644	0	827,339
Great Plains Natural Gas	9,273	251	0	9,524
Minnesota Energy Resources - NMU	7,656	1,836	0	9,492
Minnesota Energy Resources - PNG	36,308	18,717	0	55,025
Xcel Energy	142,724	470,410	0	613,134
<b>Totals - Gas IOUs</b>	<b>377,032</b>	<b>1,155,948</b>	<b>0</b>	<b>1,532,980</b>

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<sup>13</sup> CIP spending and savings by market sector were not available for municipal gas utilities at the time of this report.