

# The Minnesota Utility Data Book

A reference guide to Minnesota  
electric and natural-gas utilities  
1965 through 1998



MINNESOTA  
DEPARTMENT OF  
COMMERCE

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## INTRODUCTION

The Minnesota Department of Commerce regulates the financial services industries and promotes and implements policies regarding energy and telecommunications. We work with other state agencies to provide education, information and programs to the public and work to enhance Minnesota's environment and quality of life. This report is one tool in that process.

The Minnesota Utility Data Book compiles information reported by electric and natural-gas providers serving Minnesota. Most of Minnesota's energy use occurs through service provided by various investor-owned, cooperative and municipal utilities. To track energy trends, the Minnesota Department of Commerce uses data in its Regional Energy Information System (REIS), which contains information collected through Minnesota Rules parts 7610.0100 to 7610.1130.

*The 1998 Minnesota Utility Data Book* provides aggregate information reported by Minnesota utilities through 1998. It also provides data reported by individual companies for 1998.

The tables in this report may use certain assumptions that are not obvious to the reader. Where feasible, this report lists assumptions either at the bottom of relevant pages or in the General Notes on Data section.

Staff who prepared this report include Nancy Campbell, Susan Medhaug, Judy Schmidt, Judy Lewandowski and Sandra Maki. If you have any questions about the report, please contact Susan Medhaug at 651/297-2103.

We hope *The 1998 Minnesota Utility Data Book* will promote discussion, inquiries and interest about energy consumed through Minnesota's natural-gas and electric utilities. To obtain additional copies of this report, please see our website at <http://www.commerce.state.mn.us> or call our Energy Information Center at 651/296-5175. If you are outside the Twin Cities area, please dial 1-800-657-3710. The Information Center may also be contacted through e-mail at: [energy.info@state.mn.us](mailto:energy.info@state.mn.us).

**SECTION I**

**ELECTRIC UTILITIES**

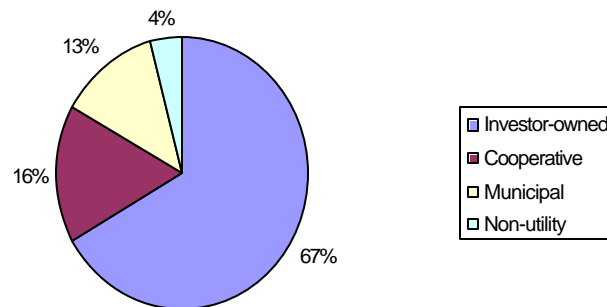
## SECTION I: ELECTRIC UTILITIES

### *Overview*

Electric companies in Minnesota are owned and operated by investor-owned utilities (IOUs), cooperative utilities (co-ops), municipal utilities (munis) and/or non-utility companies. The Minnesota Public Utilities Commission regulates the rates of all IOUs. Co-ops' and munis' rates are not regulated unless they choose such regulation. (Dakota Electric Association is the only utility that has chosen such regulation.) Non-utility generation is not subject to rate regulation; however, all significant electric power plants and equipment must meet regulatory requirements regarding safety, environmental impacts and siting issues.

As shown below, most of Minnesota's electric consumers buy their electricity from IOUs. Remaining customers buy almost equally from co-ops and munis. A small amount of consumption occurs through customers' self-generation.

**Figure 1: Minnesota Electric Consumption by Type of Utility/Company**



There are five investor-owned electric utilities serving customers in Minnesota. One of the five, Northwestern Wisconsin Electric Company, serves so few Minnesota customers that it is not included in this document. In 1998 there were seven generation and transmission cooperatives, 47 distribution cooperatives and 126 municipal electric utilities serving customers in Minnesota.

## Introduction to Electric Tables

The tables in this section provide both aggregate and individual company information reported by electric companies serving Minnesota. Tables 1 through 3 provide overall electric consumption, numbers of electric customers and electric revenues in Minnesota. These tables also show this information for the general types of companies: investor-owned utilities, cooperative utilities, municipal utilities and non-utility generators.

According to Table 1, 1998 electric consumption in the residential sector was higher than 1997 consumption. As Figure 2 indicates, when adjusted for weather, electric consumption per residential customer, though fairly steady in recent years, is showing a distinct upward trend.

**Figure 2: Weather-Normalized Electric Use Per Residential Customer**

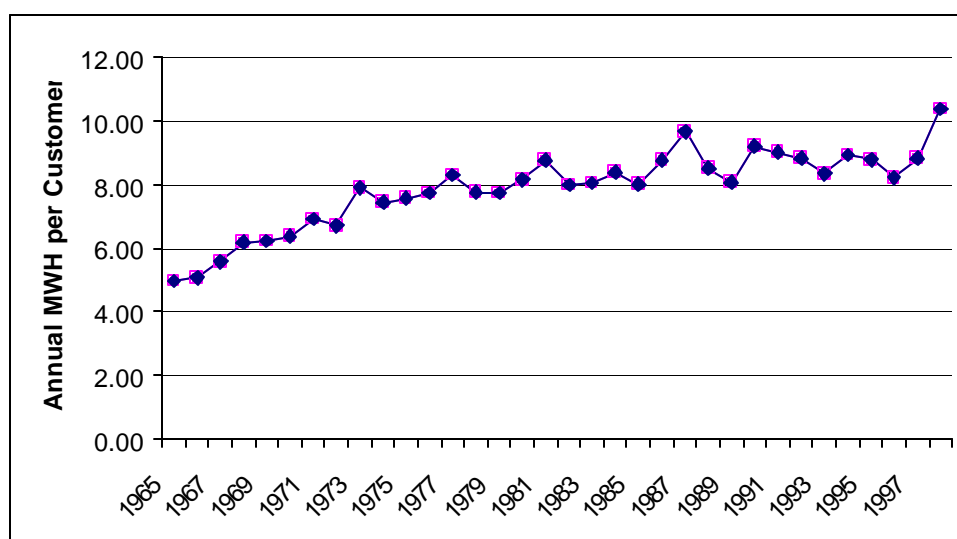


Table 4 through Table 7 provide 1998 electric consumption, numbers of electric customers, electric revenues, and data on residential space heating reported by each electric company serving Minnesota. For companies that did not report data in 1998, the most recent data available was used.

Utility names used in these tables are as indicated by each utility that reported data for 1998. Some utilities have changed their names subsequent to the 1998 reporting cycle or may sometimes be referred to by different names. Some examples include:

- NSP is now known as Xcel Energy (merger completed August 2000)
- Interstate Power Company is a subsidiary of Alliant Energy
- Minnesota Power, Inc. began doing business under the name Allete in September 2000, though its regulated electric business continues to be called Minnesota Power
- United Power Association and Cooperative Power Association consolidated operations to form Great River Energy (January 1999)

Table 8 lists electric consumption by county and provides each county's consumption and population rank (1 represents the highest total consumption/population and 87 represents the lowest).

Tables 9 and 10 provide information regarding the generating plants serving Minnesota customers. Table 9 includes general descriptions of those generating plants and Table 10 includes specific net generation and fuel consumption data.

The following utilities are included in Tables 9 and 10:

Aitkin Public Utilities Commission	Madelia Municipal Light & Power
Alexandria Board of Public Works	Madison Municipal Utilities
Arlington, City of	Melrose Public Utilities
Austin Utilities	Minnesota Power Company
Baudette, City of	Minnkota Power Cooperative, Inc.
Benson Municipal Utilities	Missouri River Energy Services
Blue Earth Light & Water	Moorhead, City of
Cooperative Power Association	Moose Lake Water & Light Comm.
Dairyland Power Cooperative	New Ulm Public Utilities
Delano Municipal Utilities	Northern States Power Company
Detroit Lakes Public Utilities	Otter Tail Power Company
Elk River Municipal Utilities	Princeton Public Utilities
Adrian Public Utilities	Redwood Falls Public Utilities Comm.
Fairfax Public Utilities	Rochester Public Utilities
Faimont Public Utilities	Rock Rapids, City of
Glencoe Light and Power Comm.	Roseau Municipal Water & Light
Grand Marais Utilities	Sleepy Eye Public Utilities
Granite Falls Municipal Utilities	Southern MN Municipal Power Agency
Halstad Municipal Utilities	Springfield Public Utilities Commission
Hastings Public Utilities Commission	Steele Waseca Cooperative Electric
Hawley Public Utilities	Thief River Falls Municipal Utility
Hibbing Public Utilities	Truman Public Utilities
Hutchinson Utilities Commission	Two Harbors Water & Light
Interstate Power Company	United Power Association
Janesville Municipal Utilities	Virginia Dept. of Public Utilities
Kenyon Municipal Utilities	Warren, City of
Lake Crystal Municipal Utilities	Wells Public Utilities
Lakefield Public Utilities	Willmar Municipal Utilities
Lanesboro Public Utilities	Windom Municipal Utilities
Luverne Public Utilities	

TABLE 1

## MINNESOTA HISTORICAL ELECTRIC CONSUMPTION (GIGAWATT-HOURS)

Total Electric Consumption for Minnesota

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total*
1965	1,526	4,036	2,552	7,090	15,203
1966	1,608	4,383	2,787	7,868	16,646
1967	1,710	4,632	3,006	8,686	18,034
1968	1,799	5,118	3,303	9,794	20,013
1969	1,949	5,588	3,619	10,650	21,806
1970	2,126	6,105	3,940	11,355	23,527
1971	2,250	6,381	4,217	11,749	24,597
1972	2,434	6,903	4,580	12,620	26,537
1973	2,472	7,029	4,820	13,989	28,308
1974	2,691	7,121	4,806	13,859	28,477
1975	2,891	7,651	5,064	13,998	29,605
1976	3,107	7,997	5,510	14,936	31,551
1977	3,452	7,855	5,557	14,153	31,017
1978	3,375	8,538	5,805	17,189	34,908
1979	3,527	8,777	6,041	18,510	36,854
1980	3,351	8,988	6,090	17,432	35,860
1981	3,294	8,910	6,127	18,269	36,599
1982	3,509	9,320	6,444	15,715	34,989
1983	3,447	9,676	6,633	16,910	36,666
1984	3,517	9,682	7,098	18,965	39,262
1985	3,502	9,908	7,322	18,929	39,661
1986	3,517	10,169	7,519	18,331	39,536
1987	3,397	10,490	7,889	19,622	41,398
1988	3,609	11,657	8,432	22,896	46,594
1989	3,689	11,265	9,327	23,566	47,847
1990	3,560	11,475	9,660	24,660	49,355
1991	3,380	12,436	9,082	25,372	50,270
1992	2,910	11,761	9,289	24,575	48,536
1993	2,962	12,583	9,372	25,777	50,694
1994	2,753	13,296	9,667	26,969	52,685
1995 <sup>^</sup>	2,979	14,101	10,270	28,387	55,757
1996	3,148	14,152	11,003	28,770	57,073
1997	3,033	14,169	10,952	30,048	58,202
1998	2,911	14,584	11,104	30,675	59,274

\* Includes self-generation. (Note that Table 4 does not include self-generation.)

<sup>^</sup> Note: For 1995, Barnesville Municipal Electric reported only total consumption, not consumption by class.

TABLE 1 (Continued)

## MINNESOTA HISTORICAL ELECTRIC CONSUMPTION (GIGAWATT-HOURS)

Electric Consumption for Investor-Owned Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	207	3,076	1,734	4,360	9,378
1966	213	3,335	1,924	4,973	10,445
1967	224	3,521	2,049	5,660	11,455
1968	229	3,879	2,227	6,674	13,008
1969	238	4,236	2,469	7,392	14,335
1970	248	4,606	2,679	7,896	15,429
1971	257	4,760	2,842	8,378	16,237
1972	272	5,123	3,041	9,184	17,620
1973	267	5,156	3,178	10,318	18,920
1974	276	5,176	3,168	10,170	18,789
1975	286	5,527	3,280	10,199	19,291
1976	294	5,709	3,548	11,046	20,597
1977	301	5,662	3,570	11,227	20,760
1978	298	5,881	3,726	13,487	23,391
1979	314	5,985	3,867	14,697	24,862
1980	317	6,085	3,961	14,120	24,482
1981	345	5,960	3,980	14,473	24,758
1982	361	6,208	4,244	12,915	23,728
1983	354	6,497	4,298	14,198	25,347
1984	358	6,464	4,550	16,053	27,425
1985	352	6,593	4,697	15,909	27,551
1986	350	6,777	4,804	15,298	27,229
1987	334	6,989	5,025	16,710	29,058
1988	347	7,786	5,365	19,664	33,162
1989	339	7,401	6,117	20,067	33,925
1990	344	7,445	6,257	20,818	34,864
1991	359	7,842	5,592	21,089	34,882
1992	116	7,442	5,712	20,425	33,695
1993	119	7,817	5,687	21,061	34,684
1994	77	8,065	5,952	21,886	35,981
1995	78	8,615	6,218	23,099	38,009
1996	78	8,520	6,811	23,231	38,640
1997	76	8,511	6,634	23,768	38,989
1998	74	8,764	6,699	23,993	39,531

TABLE 1 (Continued)

MINNESOTA HISTORICAL ELECTRIC CONSUMPTION (GIGAWATT-HOURS)

Electric Consumption for Cooperative Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	1,306	201	150	57	1,714
1966	1,381	235	164	65	1,846
1967	1,473	259	177	74	1,983
1968	1,557	316	195	91	2,158
1969	1,696	363	210	149	2,417
1970	1,862	418	237	171	2,688
1971	1,976	490	264	200	2,930
1972	2,148	568	301	232	3,250
1973	2,191	635	325	293	3,443
1974	2,400	670	331	287	3,689
1975	2,590	759	363	338	4,049
1976	2,796	851	395	378	4,421
1977	3,134	722	402	437	4,694
1978	3,059	1,101	389	500	5,049
1979	3,193	1,203	400	563	5,359
1980	3,013	1,317	376	586	5,292
1981	2,927	1,384	392	629	5,332
1982	3,125	1,455	410	657	5,647
1983	3,070	1,474	498	625	5,667
1984	3,136	1,514	672	546	5,868
1985	3,129	1,588	713	556	5,986
1986	3,143	1,672	777	551	6,144
1987	3,040	1,723	844	588	6,196
1988	3,237	1,951	1,091	557	6,836
1989	3,326	1,951	1,173	587	7,036
1990	3,193	2,124	1,226	633	7,177
1991	3,002	2,577	1,298	712	7,590
1992	2,773	2,469	1,328	761	7,331
1993	2,807	2,810	1,419	823	7,859
1994	2,656	3,218	1,460	843	8,178
1995	2,879	3,350	1,609	898	8,736
1996	3,047	3,466	1,740	981	9,235
1997	2,936	3,502	1,821	1,062	9,320
1998	2,814	3,654	2,049	1,125	9,642

TABLE 1 (Continued)

## MINNESOTA HISTORICAL ELECTRIC CONSUMPTION (GIGAWATT-HOURS)

Electric Consumption for Municipal Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	13	759	668	386	1,825
1966	13	812	700	423	1,948
1967	13	852	778	423	2,065
1968	14	923	870	430	2,236
1969	14	989	925	486	2,414
1970	15	1,081	1,003	586	2,685
1971	17	1,130	1,080	623	2,849
1972	14	1,212	1,201	670	3,097
1973	14	1,238	1,278	699	3,228
1974	15	1,275	1,271	719	3,280
1975	16	1,366	1,386	745	3,512
1976	17	1,437	1,530	812	3,796
1977	17	1,471	1,552	898	3,938
1978	19	1,556	1,652	930	4,157
1979	20	1,589	1,737	957	4,303
1980	21	1,586	1,719	998	4,324
1981	22	1,566	1,722	1,040	4,350
1982	23	1,658	1,754	1,113	4,547
1983	23	1,705	1,803	1,224	4,755
1984	23	1,704	1,845	1,361	4,932
1985	22	1,727	1,880	1,421	5,049
1986	23	1,719	1,907	1,593	5,243
1987	23	1,778	1,993	1,621	5,415
1988	24	1,920	1,941	1,869	5,755
1989	23	1,914	2,003	1,965	5,905
1990	23	1,906	2,143	1,984	6,056
1991	20	2,016	2,158	2,150	6,344
1992	21	1,850	2,148	2,244	6,263
1993	37	1,956	2,164	2,404	6,561
1994	20	2,013	2,254	2,606	6,893
1995	23	2,136	2,336	2,705	7,219
1996	22	2,166	2,331	2,834	7,353
1997	22	2,157	2,376	2,995	7,550
1998	22	2,165	2,349	3,265	7,802

^ Note: For 1995, Barnesville Municipal Electric reported only total consumption, not consumption by class.

TABLE 1 (Continued)

## MINNESOTA HISTORICAL ELECTRIC CONSUMPTION (GIGAWATT-HOURS)

Electric Consumption for Private Self-Generation

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	0	0	0	2,286	2,286
1966	0	0	0	2,407	2,407
1967	0	0	2	2,529	2,531
1968	0	0	11	2,600	2,611
1969	0	0	16	2,624	2,640
1970	0	0	22	2,702	2,723
1971	0	0	32	2,548	2,580
1972	0	0	37	2,534	2,571
1973	0	0	39	2,679	2,718
1974	0	0	36	2,683	2,718
1975	0	0	36	2,717	2,753
1976	0	0	37	2,700	2,737
1977	0	0	33	1,591	1,624
1978	0	0	38	2,273	2,312
1979	0	0	37	2,293	2,330
1980	0	0	34	1,728	1,762
1981	0	0	33	2,127	2,159
1982	0	0	36	1,032	1,068
1983	0	0	34	863	897
1984	0	0	31	1,005	1,036
1985	0	0	32	1,043	1,075
1986	0	0	32	889	921
1987	0	0	27	702	729
1988	0	0	35	806	841
1989	0	0	34	946	981
1990	0	0	34	1,224	1,258
1991	0	0	34	1,421	1,455
1992	0	0	101	1,146	1,246
1993	0	0	102	1,488	1,591
1994	0	0	0	1,634	1,634
1995	0	0	107	1,686	1,793
1996	0	0	120	1,724	1,845
1997	0	0	120	2,223	2,343
1998	0	0	6	2,293	2,299

TABLE 2

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS</b>
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Total Number of Electric Customers for All Minnesota Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	182,634	907,946	126,583	6,296	1,223,459
1966	182,419	926,968	126,883	6,175	1,242,445
1967	183,968	945,521	128,114	6,295	1,263,898
1968	186,328	970,320	130,414	6,079	1,293,141
1969	188,194	994,230	128,791	6,390	1,317,605
1970	190,269	1,017,938	130,185	6,593	1,344,985
1971	193,405	1,041,982	132,487	6,592	1,374,466
1972	195,623	1,068,694	135,636	6,811	1,406,763
1973	199,334	1,100,014	137,467	6,711	1,443,526
1974	206,248	1,119,078	138,906	6,825	1,471,057
1975	210,508	1,143,377	140,298	7,050	1,501,234
1976	214,495	1,168,812	143,221	7,153	1,533,769
1977	245,769	1,165,178	152,962	7,286	1,571,195
1978	227,972	1,223,595	154,089	7,720	1,613,365
1979	223,361	1,265,978	157,247	7,630	1,654,216
1980	213,669	1,300,534	159,499	7,938	1,681,640
1981	214,173	1,323,682	162,882	8,280	1,709,017
1982	216,228	1,336,314	164,789	8,509	1,725,840
1983	217,479	1,361,892	168,586	8,316	1,756,273
1984	218,519	1,385,883	173,001	8,171	1,785,574
1985	217,688	1,402,671	175,653	8,243	1,804,255
1986	219,261	1,429,570	182,959	9,773	1,841,563
1987	220,058	1,469,279	183,175	8,778	1,881,290
1988	221,326	1,505,857	185,693	8,956	1,921,832
1989	227,254	1,520,556	186,773	9,337	1,943,922
1990	226,962	1,546,818	190,508	9,973	1,974,261
1991	192,976	1,591,515	197,845	9,400	1,991,736
1992	177,054	1,616,882	196,290	14,235	2,004,462
1993	170,848	1,650,291	198,256	14,073	2,033,464
1994	154,529	1,701,134	203,786	13,680	2,073,129
1995	165,961	1,732,544	210,695	10,016	2,119,216
1996	174,090	1,747,628	217,803	10,125	2,149,646
1997	173,001	1,788,247	217,731	10,949	2,189,927
1998	173,891	1,814,547	221,844	11,875	2,222,159

TABLE 2 (Continued)

NUMBER OF MINNESOTA ELECTRIC CUSTOMERS

Number of Electric Customers for Investor-Owned Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	20,362	673,394	85,140	3,492	782,388
1966	20,079	686,063	84,618	3,571	794,331
1967	19,682	699,106	84,826	3,650	807,264
1968	19,234	715,238	86,150	3,780	824,402
1969	18,592	731,149	86,287	3,804	839,832
1970	17,976	746,802	87,137	3,953	855,868
1971	17,678	759,814	88,277	3,921	869,690
1972	17,432	774,108	89,236	3,999	884,775
1973	17,055	792,467	90,449	4,147	904,118
1974	16,814	806,962	91,462	4,112	919,350
1975	16,532	818,759	92,216	4,301	931,808
1976	16,226	832,472	93,619	4,213	946,530
1977	17,108	840,143	102,756	4,475	964,482
1978	16,287	860,957	104,535	4,619	986,398
1979	16,240	882,200	106,274	4,899	1,009,613
1980	16,283	897,461	108,124	5,074	1,026,942
1981	17,388	908,504	110,114	5,123	1,041,129
1982	17,318	915,153	111,468	5,219	1,049,158
1983	17,431	930,135	114,321	5,213	1,067,100
1984	17,223	946,476	116,833	5,347	1,085,879
1985	16,204	953,019	118,113	5,427	1,092,763
1986	16,169	972,878	120,116	5,799	1,114,962
1987	15,867	993,950	123,638	5,970	1,139,425
1988	15,928	1,018,232	125,431	6,239	1,165,830
1989	15,844	1,024,483	125,126	6,496	1,171,949
1990	15,793	1,037,478	128,479	6,911	1,188,661
1991	7,466	1,049,354	131,660	6,776	1,195,256
1992	5,749	1,068,031	128,506	10,701	1,212,987
1993	5,699	1,074,498	129,250	10,928	1,220,375
1994	5,943	1,089,167	132,515	11,034	1,238,659
1995	6,047	1,104,346	137,574	7,322	1,255,289
1996	6,021	1,112,703	141,579	7,353	1,267,656
1997	5,992	1,139,620	140,953	8,073	1,294,638
1998	6,058	1,151,585	143,660	8,529	1,309,832

TABLE 2 (Continued)

NUMBER OF MINNESOTA ELECTRIC CUSTOMERS

Number of Electric Customers for Cooperative Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	159,424	73,667	14,403	497	247,991
1966	159,455	78,647	14,555	560	253,217
1967	161,400	80,886	15,138	594	258,018
1968	164,300	86,807	15,641	680	267,428
1969	166,741	91,890	14,218	704	273,553
1970	169,477	98,638	14,760	804	283,679
1971	172,487	106,291	15,319	861	294,958
1972	175,512	115,250	15,985	946	307,693
1973	179,475	123,780	16,516	1,011	320,782
1974	186,683	126,086	16,323	1,132	330,224
1975	191,235	132,547	17,274	1,239	342,295
1976	197,093	138,870	17,616	1,725	355,304
1977	227,390	122,558	17,846	1,427	369,221
1978	210,382	155,397	15,684	1,808	383,270
1979	205,797	170,926	16,793	1,566	395,082
1980	196,289	189,164	17,628	1,747	404,828
1981	195,677	198,501	18,147	1,988	414,313
1982	197,569	203,107	18,549	1,982	421,207
1983	198,731	210,087	19,367	1,690	429,875
1984	199,924	215,399	20,463	1,272	437,058
1985	200,170	223,644	21,607	1,256	446,677
1986	201,664	233,389	22,282	1,435	458,770
1987	202,725	244,405	23,306	1,219	471,655
1988	203,806	253,648	23,591	996	482,041
1989	209,822	259,124	24,233	1,046	494,225
1990	209,533	270,282	24,590	1,105	505,510
1991	184,694	299,541	28,816	951	514,002
1992	169,765	308,760	29,613	1,390	509,528
1993	161,521	335,390	30,426	1,247	528,584
1994	147,083	358,789	31,204	699	537,775
1995	158,373	371,121	33,094	723	563,311
1996	166,538	374,086	34,234	724	575,582
1997	165,478	385,524	36,117	774	587,893
1998	166,291	397,550	37,329	771	601,943

TABLE 2 (Continued)

NUMBER OF MINNESOTA ELECTRIC CUSTOMERS

Number of Electric Customers for Municipal Utilities

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	2,848	160,885	27,040	2,300	193,073
1966	2,885	162,258	27,710	2,037	194,890
1967	2,886	165,529	28,149	2,044	198,608
1968	2,794	168,275	28,622	1,612	201,303
1969	2,861	171,191	28,285	1,875	204,212
1970	2,816	172,498	28,287	1,829	205,430
1971	3,240	175,877	28,890	1,803	209,810
1972	2,679	179,336	30,414	1,859	214,287
1973	2,804	183,767	30,501	1,546	218,618
1974	2,751	186,030	31,120	1,574	221,475
1975	2,741	192,071	30,807	1,503	227,123
1976	1,176	197,470	31,985	1,208	231,927
1977	1,271	202,477	32,359	1,377	237,484
1978	1,303	207,241	33,869	1,286	243,689
1979	1,324	212,852	34,179	1,158	249,513
1980	1,097	213,909	33,746	1,111	249,863
1981	1,108	216,677	34,620	1,163	253,568
1982	1,341	218,054	34,771	1,301	255,467
1983	1,317	221,670	34,897	1,404	259,288
1984	1,372	224,008	35,704	1,543	262,627
1985	1,314	226,008	35,932	1,551	264,805
1986	1,428	223,303	40,560	2,530	267,821
1987	1,466	230,924	36,230	1,580	270,200
1988	1,592	233,977	36,670	1,712	273,951
1989	1,588	236,949	37,413	1,786	277,738
1990	1,636	239,058	37,438	1,948	280,080
1991	816	242,620	37,368	1,664	282,468
1992	1,540	240,091	38,168	2,137	281,937
1993	3,628	240,403	38,578	1,894	284,499
1994	1,503	253,178	40,067	1,943	296,691
1995	1,541	257,077	40,026	1,968	300,612
1996	1,531	260,839	41,990	2,048	306,408
1997	1,531	263,103	40,657	2,093	307,383
1998	1,542	265,412	40,853	2,567	310,374

TABLE 2 (Continued)

NUMBER OF MINNESOTA ELECTRIC CUSTOMERS

Number of Electric Customers for Private Self-Generation

Year	Farm	Non-Farm Residential	Commercial	Industrial	Total
1965	0	0	0	7	7
1966	0	0	0	7	7
1967	0	0	1	7	8
1968	0	0	1	7	8
1969	0	0	1	7	8
1970	0	0	1	7	8
1971	0	0	1	7	8
1972	0	0	1	7	8
1973	0	0	1	7	8
1974	0	0	1	7	8
1975	0	0	1	7	8
1976	0	0	1	7	8
1977	0	0	1	7	8
1978	0	0	1	7	8
1979	0	0	1	7	8
1980	0	0	1	6	7
1981	0	0	1	6	7
1982	0	0	1	7	8
1983	0	0	1	9	10
1984	0	0	1	9	10
1985	0	0	1	9	10
1986	0	0	1	9	10
1987	0	0	1	9	10
1988	0	0	1	9	10
1989	0	0	1	9	10
1990	0	0	1	9	10
1991	0	0	1	9	10
1992	0	0	3	7	10
1993	0	0	2	4	6
1994	0	0	0	4	4
1995	0	0	1	3	4
1996	0	0	5	8	13
1997	0	0	4	9	13
1998	0	0	2	8	10

**TABLE 3**

**MINNESOTA ELECTRIC SALES REVENUE (\$1,000)**

**Total Electric Sales Revenue for Minnesota (Excluding Private Self-Generation)**

<b>Year</b>	<b>Farm</b>	<b>Non-Farm Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Total</b>
1984	232,027	611,797	390,742	786,113	2,020,679
1985	236,127	631,401	409,851	791,767	2,069,146
1986	237,084	650,794	460,137	779,793	2,127,808
1987	235,338	683,285	454,258	846,161	2,219,041
1988	244,458	785,261	500,716	924,932	2,455,367
1989	246,765	754,543	533,586	926,797	2,461,692
1990	243,489	805,504	572,487	1,005,617	2,627,096
1991	229,340	860,661	548,827	1,019,014	2,657,842
1992	196,865	791,726	536,962	994,308	2,519,861
1993	190,991	892,646	566,233	1,069,229	2,719,098
1994	185,170	955,753	601,097	1,105,409	2,848,923
1995	197,573	1,030,079	634,946	1,153,268	3,015,867
1996	204,889	1,031,011	668,436	1,156,750	3,061,085
1997	199,101	1,046,107	676,971	1,207,639	3,129,818
1998	195,014	1,083,805	698,625	1,266,957	3,244,402

**Electric Sales Revenue for Investor-Owned Utilities**

<b>Year</b>	<b>Farm</b>	<b>Non-Farm Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Total</b>
1984	20,009	398,105	250,782	687,480	1,356,377
1985	20,727	407,556	257,782	690,248	1,376,313
1986	20,825	423,028	304,285	673,289	1,421,426
1987	19,660	442,578	286,873	740,501	1,489,613
1988	20,878	514,687	315,582	808,983	1,660,130
1989	19,912	480,220	337,250	801,167	1,638,549
1990	22,370	518,143	367,859	874,366	1,782,738
1991	23,072	533,082	337,806	874,923	1,768,884
1992	7,082	504,114	340,177	855,644	1,707,017
1993	7,311	558,342	353,902	915,252	1,834,806
1994	5,073	583,344	371,386	938,232	1,898,036
1995	5,200	641,934	393,842	982,290	2,023,264
1996	5,489	638,779	422,022	977,195	2,043,486
1997	5,645	653,611	423,229	1,022,192	2,104,678
1998	5,600	677,718	431,912	1,064,415	2,179,645

**TABLE 3 (Continued)**

**MINNESOTA ELECTRIC SALES REVENUE (\$1,000)**

**Electric Sales Revenue for Cooperative Utilities**

<b>Year</b>	<b>Farm</b>	<b>Non-Farm Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Total</b>
1984	210,781	128,567	48,928	35,715	423,991
1985	213,724	131,323	52,551	34,480	432,078
1986	214,988	137,223	56,345	33,589	442,145
1987	214,416	144,954	62,458	33,937	455,765
1988	222,219	162,697	77,217	32,587	494,720
1989	225,500	164,166	81,842	33,791	505,299
1990	219,750	174,661	83,194	35,912	513,518
1991	205,144	208,957	88,184	40,079	542,364
1992	188,393	187,884	86,127	41,610	504,014
1993	181,233	221,491	90,721	44,875	538,320
1994	178,644	245,366	93,880	42,452	560,342
1995	190,740	253,351	100,634	43,430	588,154
1996	197,823	256,263	106,434	44,613	605,133
1997	191,918	255,834	110,557	46,797	605,106
1998	187,887	266,397	122,436	50,759	627,479

**Electric Sales Revenue for Municipal Utilities**

<b>Year</b>	<b>Farm</b>	<b>Non-Farm Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Total</b>
1984	1,236	85,125	91,032	62,918	240,311
1985	1,676	92,521	99,519	67,039	260,755
1986	1,271	90,542	99,508	72,915	264,236
1987	1,262	95,752	104,928	71,722	273,664
1988	1,360	107,877	107,917	83,363	300,518
1989	1,353	110,158	114,493	91,839	317,843
1990	1,369	112,699	121,433	95,338	330,840
1991	1,123	118,622	122,838	104,012	346,594
1992	1,390	99,728	110,658	97,054	308,830
1993	2,448	112,813	121,610	109,101	345,972
1994	1,453	127,043	135,832	124,726	390,545
1995	1,633	134,795	140,471	127,549	404,448
1996	1,577	135,969	139,980	134,942	412,467
1997	1,538	136,662	143,185	138,650	420,035
1998	1,527	139,690	144,278	151,783	437,277

TABLE 4

<b>MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)</b>
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Minnesota Electric Consumption for Investor-Owned Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Investor-Owned Utilities</b>					
Interstate Power Co	40,130	241,226	182,877	267,524	731,756
Minnesota Power Company	33,731	809,541	1,072,334	6,954,195	8,869,801
Northern States Power-Elec	0	7,281,178	4,826,102	15,941,944	28,049,224
Otter Tail Power Co	0	432,526	617,987	829,210	1,879,723
<b>Total: Investor-Owned Utilities</b>	<b>73,861</b>	<b>8,764,471</b>	<b>6,699,300</b>	<b>23,992,873</b>	<b>39,530,504</b>

TABLE 4 (Continued)

## MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)

Minnesota Electric Consumption for Cooperative Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Cooperative Power Association</b>					
Agralite Cooperative	66,890	5,860	17,208	30,933	86,982
BENCO Elec Coop	81,403	58,947	73,446	0	173,990
Brown Co Rural Elec Assn	65,093	1,428	12,820	21,783	84,495
Dakota Electric Assn	4,202	658,967	259,318	391,060	1,008,949
Federated Rural Elec Assn	*	4,115	27,935	*	100,222
Goodhue Co Coop Elec Assn	49,315	18,537	2,309	740	67,285
Lake Region Coop Elec Assc	128,335	104,222	16,115	23,937	245,024
McLeod Coop Power Assn	89,609	0	8,278	38,090	104,618
Meeker Coop Light&Power Assn	59,523	40,576	17,082	0	106,943
Minnesota Valley Elec Coop	0	218,319	134,608	0	235,955
Nobles Coop Electric	80,449	839	15,560	0	88,333
Redwood Elec Coop	47,037	0	3,770	0	50,708
Runestone Elec Assn	66,806	58,615	15,730	13,674	141,855
South Central Elec Assn	66,297	0	8,384	27,479	82,022
Stearns Coop Elec Assn	*	126,163	39,996	*	266,662
Steele Waseca Coop Elec	93,290	1,660	28,185	33,657	117,226
Todd Wadena Coop	95,930	1,493	19,716	4,051	111,355
<b>Total: Cooperative Power Assoc.</b>	<b>1,196,660</b>	<b>1,299,741</b>	<b>700,460</b>	<b>598,625</b>	<b>3,795,486</b>
<b>Dairyland Power Cooperative</b>					
Heartland Power Cooperative^	867	0	0	0	867
Freeborn Mower Elec Coop	98,968	0	16,182	16,772	131,922
Peoples Coop Power Assoc., Inc.	51,254	124,641	23,455	0	199,350
Tri-Co Elec Coop	150,151	12,431	11,941	17,874	192,397
<b>Total: Dairyland Power Coop</b>	<b>301,240</b>	<b>137,072</b>	<b>51,578</b>	<b>34,646</b>	<b>524,536</b>
<b>East River Electric Cooperative</b>					
Lyon-Lincoln Elec Coop	*	8,292	13,046	*	73,276
Renville Sibley Coop Power	41,371	3,261	2,461	44,589	91,682
Traverse Elec Coop	*	0	5,331	*	40,875
<b>Total: East River Electric Coop</b>	<b>116,994</b>	<b>11,553</b>	<b>20,838</b>	<b>56,448</b>	<b>205,833</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

^ Formerly Cedar Valley Rural Electric and Winnebago Rural Elec Coop

TABLE 4 (Continued)

## MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)

## Minnesota Electric Consumption for Cooperative Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Cooperative</b>					
Beltrami Elec Coop	203,454	4,028	50,595	0	258,077
Clearwater-Polk Elec Coop	52,251	0	8,535	0	60,786
North Star Elec Coop	60,955	2,129	27,668	0	90,753
PKM Electric Cooperative	63,578	0	28,059	0	91,637
Red Lake Elec Coop	83,002	0	5,793	8,571	97,366
Red River Valley Coop Power	87,638	0	20,544	0	108,182
Roseau Electric Coop	98,259	*	14,617	*	135,480
Wild Rice Elec Coop	150,454	*	24,428	*	177,950
<b>Total: MPC - Cooperative</b>	<b>799,591</b>	<b>12,049</b>	<b>180,239</b>	<b>28,351</b>	<b>1,020,231</b>
<b>Other Cooperatives</b>					
Minnesota Valley Coop Lt&Pwr	90,847	10,123	3,984	26,232	131,186
Sioux Valley Southwestern Electric	50,664	7,651	5,181	15,445	78,941
<b>Total: Other Cooperatives</b>	<b>141,511</b>	<b>17,774</b>	<b>9,165</b>	<b>41,677</b>	<b>210,127</b>
<b>United Power Association</b>					
Anoka Electric Coop	7,849	803,653	497,892	75,722	1,385,116
Arrowhead Electric Coop	0	20,664	24,164	0	44,828
Coop Lt&Pwr Assoc of Lake Co	*	14,610	*	0	68,537
Crow Wing Coop Pwr&Light	46,713	213,382	65,349	0	325,444
East Central Elec Assn	8,946	355,889	193,377	62,901	621,113
Head Of The Lakes Elec Coop	4,892	0	344	0	5,236
Itasca-Mantrap Coop Elec	*	48,410	33,376	*	138,161
Kandiyohi Coop Elec Power	37,287	48,874	*	*	117,777
Lake Country Power	0	350,255	85,629	58,392	494,276
Mille Lacs Elec Coop	57,203	20,960	23,435	29,259	130,857
North Itasca Elec Coop	3,528	20,795	8,137	2,157	34,617
Wright Hennepin Coop Elec	46,609	278,624	105,750	89,112	520,095
<b>Total: United Power Association</b>	<b>258,341</b>	<b>2,176,116</b>	<b>1,086,786</b>	<b>364,814</b>	<b>3,886,057</b>
<b>Total: Cooperatives</b>	<b>2,814,337</b>	<b>3,654,305</b>	<b>2,049,066</b>	<b>1,124,561</b>	<b>9,642,270</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 4 (Continued)

<b>MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)</b>
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Minnesota Electric Consumption for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Municipality</b>					
Bagley Pub Utility	0	6,013	5,273	10,428	21,714
Baudette City Of	0	4,475	16,551	0	21,026
Fosston Municipal Utility	0	10,260	12,121	4,843	27,225
Halstad Mun Utilities	0	4,551	3,513	0	8,064
Hawley Pub Utilities	0	8,825	6,953	0	15,778
Roseau Mun Water&Light	506	15,749	22,445	0	38,700
Stephen Electric Dept	0	3,963	4,597	0	8,560
Thief River Falls Mun Util	0	44,419	36,535	35,937	116,891
Warren City Of	0	7,543	8,618	0	16,161
Warroad Mun Light & Power	0	7,487	12,001	31,946	51,434
<b>Total: MPC-Municipal</b>	<b>506</b>	<b>113,285</b>	<b>128,607</b>	<b>83,154</b>	<b>325,553</b>
<b>Other Municipals (Non-SMMPA)</b>					
Ada Water & Light Dept	0	9,690	8,070	140	17,900
Adrian Public Utilities	*	*	1,373	3,923	11,508
Aitkin Pub Utilities	0	10,775	6,735	11,553	29,063
Alexandria Pub Works	0	56,830	54,864	97,247	208,941
Alpha City of	0	623	300	200	1,123
Alvarado Electric Dept	0	2,113	1,265	0	3,378
Anoka City Of	0	69,060	74,382	101,404	244,846
Arlington City Of	0	7,039	8,765	0	15,804
Barnesville Mun Elec	0	10,897	6,955	0	17,852
Benson Municipal Utilities	*	*	5,620	11,700	30,070
Bigelow City of**	102	740	511	0	1,353
Biwabik Water Light&Power	0	4,032	3,439	0	7,471
Blue Earth Light&Water	0	13,020	5,789	31,290	50,099
Brainerd Public Utilities	0	39,315	71,282	47,589	158,186
Breckenridge Pub Utilities	0	15,206	8,610	9,820	33,636
Brewster Elec Light&Power	41	1,952	681	448	3,122
Brownnton Mun Light&Power	0	3,265	1,169	216	4,650
Buffalo City Of	31	23,358	39,937	11,563	74,889
Buhl Pub Utilities	0	2,535	1,650	0	4,185
Caledonia Mun Light&Power	86	9,326	3,670	6,869	19,951
Ceylon Public Utilities	0	1,556	801	0	2,357
City of Chaska-Utility Dept.	0	44,514	10,951	157,577	213,042
Darwin Electric Dept	0	1,676	184	0	1,860
Delano Mun Utilities	0	11,031	3,612	17,369	32,012
Detroit Lakes Pub Utilities	0	43,170	29,108	49,228	121,506

\* Withheld to avoid disclosure of individual company data. Data included in totals.

\*\* 1998 data not submitted. Data is from 1997.

TABLE 4 (Continued)

## MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)

Minnesota Electric Consumption for Municipal Utilities

	Non-Farm				Total
	Farm	Residential	Commercial	Industrial	
<b>Other Municipals (Non-SMMPA, continued)</b>					
Dundee City of	*	449	*	0	733
Dunnell Electric Department	0	694	680	0	1,374
East Grand Forks Water&Light	0	31,348	28,302	59,564	119,214
Eitzen Public Utilities	0	1,170	739	268	2,177
Elbow Lake Mun Elec	0	4,950	8,756	0	13,706
Elk River Mun Utilities	0	41,022	16,588	56,480	114,090
Ely Water & Light Dept	0	10,848	14,118	0	24,966
Fairfax Public Utilities	59	5,934	3,815	1,882	11,690
Gilbert Water&Light	0	4,891	4,085	0	8,976
Glencoe Mun Utilities	0	19,448	26,288	28,975	74,711
Grand Rapids Pub Utilities	0	37,298	*	*	135,907
Granite Falls Municipal Utilities	25	11,722	12,910	5,377	30,034
Grove City Electric Dept	1,028	2,870	3,060	395	7,353
Harmony Electric Dept	0	3,412	4,219	109	7,740
Henning Electric Dept	0	3,902	3,894	0	7,796
Hibbing Public Utilities	0	45,142	64,622	5,981	115,746
Hutchinson Utilities	0	43,598	83,292	159,112	286,002
Jackson Elec Light&Power	0	12,254	4,469	24,744	41,467
Janesville Mun Utilities	0	6,512	3,247	0	9,759
Kandiyohi Municipal Utilities**	0	2,500	1,500	0	4,000
Kasota Elec Light**	0	3,200	0	0	3,200
Kasson City Of	*	12,149	*	0	20,982
Keewatin Public Utilities	0	4,777	294	0	5,071
Kenyon Mun Utilities	0	5,476	2,525	6,032	14,033
Lake Crystal Mun	189	7,132	5,494	0	12,815
Lake Park Pub Utilities	0	3,224	3,636	0	6,860
Lakefield Pub Utilities	0	6,831	5,279	0	12,110
Lanesboro Pub Utilities	0	2,387	4,302	0	6,689
Le Sueur Mun Utilities	2,080	11,134	4,614	71,030	88,858
Luverne Mun Utilities	0	21,577	8,266	23,036	52,879
Mabel City of	0	2,275	2,408	0	4,684
Madelia Municipal Light & Power	0	7,210	8,598	13,567	29,375
Madison Mun Utilities	0	7,998	8,173	2,047	18,219
Marshall Municipal Utilities	0	49,541	28,823	425,956	504,320
Melrose Mun Utilities	2,087	13,880	16,543	66,951	99,461
Moorhead Pub Service	0	127,370	37,658	173,875	338,903
Moose Lake Water&Light	0	4,308	10,682	8,926	23,916
Mountain Iron Water&Light	0	5,622	5,883	1,752	13,257
Mountain Lake Mun Utilities	1,000	7,400	4,230	4,100	16,730
Nashwauk Pub Utilities	0	3,809	2,881	0	6,690
New Ulm Pub Utilities	0	43,672	73,047	69,071	185,790
Newfolden Electric	0	1,661	2,322	0	3,983
Nielsville Vlg Light System	0	492	112	0	604

\* Withheld to avoid disclosure of individual company data. Data included in totals.

\*\* 1998 data not submitted. Data is from 1997.

TABLE 4 (Continued)

<b>MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)</b>
--

Minnesota Electric Consumption for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Other Municipals (Non-SMMPA, Continued)</b>					
North St Paul City Of	0	39,764	34,481	0	74,245
Olivia City Of	0	11,613	4,216	11,746	27,575
Ortonville City Of	99	11,395	11,788	0	23,282
Peterson Public Utilities	0	1,213	0	0	1,213
Pierz Utilities	0	3,573	4,956	0	8,529
Proctor Pub Utilities	0	9,663	*	*	21,581
Randall Electric	0	2,472	1,585	0	4,057
Round Lake Electric Dept	22	1,817	967	6,191	8,997
Rushford City of	0	5,593	3,140	5,211	13,944
Rushmore City of	0	1,349	702	0	2,051
Sauk Centre Water Light&Power	222	15,232	10,779	17,971	44,204
Shakopee Public Util	1,215	55,808	7,689	123,409	188,121
Shelly Municipal Light Dept.	0	1,400	623	0	2,023
Sleepy Eye Pub Utilities	0	12,070	11,194	16,158	39,422
Spring Grove Municipal Electric	230	3,862	3,943	7,497	15,532
Springfield Pub Utilities	0	8,924	6,420	8,030	23,374
St Charles Light&Water	0	9,345	4,326	9,457	23,128
St. James-City of	*	16,792	23,875	*	57,887
Staples City of	0	8,867	5,908	5,659	20,434
Truman Municipal Utility	867	5,570	6,061	0	12,498
Two Harbors Water&Light	0	8,873	16,666	0	25,539
Tyler Mun Light&Power	542	5,998	4,278	0	10,818
Virginia Pub Utilities	0	30,709	67,365	0	98,074
Wadena Light & Water	0	19,349	16,234	22,058	57,641
Westbrook Mun Light&Power	239	4,169	2,478	384	7,270
Whalan City of	0	203	173	0	376
Willmar Mun Utilities	0	58,530	102,576	79,691	240,797
Windom Municipal Utilities	0	18,325	14,868	23,923	57,116
Winthrop City Of	161	5,319	2,512	6,111	14,103
Worthington Mun Power	0	31,261	54,787	66,350	152,398
<b>Total: Non-SMMPA Mun.</b>	<b>11,091</b>	<b>1,452,134</b>	<b>1,387,411</b>	<b>2,221,264</b>	<b>5,071,903</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 4 (Continued)

<b>MINNESOTA ELECTRIC CONSUMPTION IN 1998 (MEGAWATT-HOURS)</b>
--

Minnesota Electric Consumption for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Southern Minnesota Municipal Power Agency</b>					
Austin Utilities	6,238	64,582	*	*	281,338
Blooming Prairie Utilities	0	6,059	14,685	0	20,744
Fairmont Pub Utilities	3,601	34,652	43,685	65,397	147,335
Grand Marais Utilities	0	6,415	12,092	0	18,507
Lake City Utility Board	61	16,051	15,108	68,223	99,443
Litchfield Pub Utilities	351	28,354	28,111	40,338	97,154
Mora Mun Elec Utility	388	8,974	18,781	37,014	65,157
New Prague Mun Utilities	0	12,118	*	*	59,639
North Branch Mun Water&Light	0	6,858	7,482	5,182	19,522
Owatonna Public Utilities	0	64,695	48,710	209,894	323,299
Preston Public Utilities	95	4,882	3,698	3,167	11,842
Princeton Pub Utilities	0	12,199	10,013	21,573	43,785
Redwood Falls Pub Utilities	0	28,684	40,821	0	69,505
Rochester Pub Utilities	0	245,630	371,928	366,085	983,644
Spring Valley Pub Utility	0	7,666	8,555	0	16,221
St Peter Mun Utilities	0	20,189	26,311	21,575	68,075
Waseca Water & Light Dept	0	24,343	33,466	0	57,809
Wells Public Utilities	0	7,659	13,754	0	21,413
<b>Total: SMMPA</b>	<b>10,734</b>	<b>600,010</b>	<b>833,472</b>	<b>960,212</b>	<b>2,404,432</b>
<b>Total: Municipal Utilities</b>	<b>22,331</b>	<b>2,165,429</b>	<b>2,349,490</b>	<b>3,264,630</b>	<b>7,801,888</b>
<b>Total: Minnesota</b>	<b>2,910,529</b>	<b>14,584,205</b>	<b>11,097,856</b>	<b>28,382,064</b>	<b>56,974,662</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 5

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

Number of Minnesota Electric Customers for Investor-Owned Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Investor-Owned Utilities</b>					
Interstate Power Company	1,843	31,269	6,363	200	39,675
Minnesota Power Company	4,215	101,154	18,212	481	124,062
Northern States Power-Elec	0	973,400	107,831	7,406	1,088,637
Otter Tail Power Co	0	45,762	11,254	442	57,458
<b>Total: Investor-Owned Utilities</b>	<b>6,058</b>	<b>1,151,585</b>	<b>143,660</b>	<b>8,529</b>	<b>1,309,832</b>

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Cooperative Utilities**

	Non-Farm				Total
	Farm	Residential	Commercial	Industrial	
<b>Cooperative Power Association</b>					
Agralite Cooperative	4,273	353	248	3	4,877
BENCO Elec Coop	5,542	4,874	450	0	10,866
Brown Co Rural Elec Assn	3,054	113	330	36	3,533
Dakota Electric Assn	315	75,862	4,659	274	81,110
Federated Rural Elec Assn	3,813	661	297	1	4,772
Goodhue Co Coop Elec Assn	2,308	1,635	123	4	4,070
Lake Region Coop Elec Assc	7,047	13,624	1,128	94	21,893
McLeod Coop Power Assn	5,472	0	229	4	5,706
Meeker Coop Light&Power Assn	2,852	4,061	357	0	7,270
Minnesota Valley Elec Coop	0	19,640	1,930	0	21,570
Nobles Coop Electric	4,226	458	224	0	4,908
Redwood Elec Coop	2,392	0	43	0	2,435
Runestone Elec Assn	3,806	6,805	454	3	11,068
South Central Elec Assn	3,514	0	188	61	3,763
Stearns Coop Elec Assn	4,552	12,448	895	1	17,896
Steele Waseca Coop Elec	6,543	622	397	3	7,565
Todd Wadena Coop	5,922	794	247	2	6,965
<b>Total: CPA</b>	<b>65,631</b>	<b>141,950</b>	<b>12,199</b>	<b>486</b>	<b>220,267</b>
<b>Dairyland Power Cooperative</b>					
Heartland Power Cooperative^	41	0	0	0	41
Freeborn Mower Elec Coop	5,573	0	32	2	5,607
Peoples Coop Power Assoc., Inc.	3,501	9,694	199	0	13,394
Tri-Co Elec Coop	9,753	1,682	257	84	11,776
<b>Total: DPC</b>	<b>18,868</b>	<b>11,376</b>	<b>488</b>	<b>86</b>	<b>30,818</b>
<b>East River Electric Cooperative</b>					
Lyon-Lincoln Elec Coop	3,046	524	230	1	3,801
Renville Sibley Coop Power	1,706	190	62	8	1,966
Traverse Elec Coop	1,327	0	338	1	1,666
<b>Total: East River Electric Coop</b>	<b>6,079</b>	<b>714</b>	<b>630</b>	<b>10</b>	<b>7,433</b>

^ Formerly Cedar Valley Rural Electric and Winnebago Rural Elec Coop

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Cooperative Utilities**

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Cooperative</b>					
Beltrami Elec Coop	12,969	1,989	850	0	15,808
Clearwater-Polk Elec Coop	3,561	0	149	0	3,710
North Star Elec Coop	3,903	1,395	474	0	5,772
PKM Electric Cooperative	3,413	0	235	0	3,648
Red Lake Elec Coop	4,533	0	251	40	4,824
Red River Valley Coop Power	4,009	0	419	0	4,428
Roseau Electric Coop	5,183	268	250	1	5,702
Wild Rice Elec Coop	9,849	1,379	608	1	11,837
<b>Total: MPC - Cooperative</b>	<b>47,420</b>	<b>5,031</b>	<b>3,236</b>	<b>42</b>	<b>55,729</b>
<b>Other Cooperatives</b>					
Minnesota Valley Coop Lt&Pwr	4,283	703	173	40	5,199
Sioux Valley Southwestern Electric	2,241	395	94	36	2,766
<b>Total: Other Cooperatives</b>	<b>6,524</b>	<b>1,098</b>	<b>267</b>	<b>76</b>	<b>7,965</b>
<b>Great River Energy</b>					
Anoka Electric Coop	292	85,424	5,816	11	91,543
Arrowhead Electric Coop	0	2,652	681	0	3,333
Coop Lt&Pwr Assoc of Lake Co	4,291	462	1	0	4,754
Crow Wing Coop Pwr&Light	1,410	30,000	1,138	0	32,548
East Central Elec Assn	3,352	34,828	2,552	7	40,739
Head Of The Lakes Elec Coop	674	0	18	0	692
Itasca-Mantrap Coop Elec	923	4,316	3,802	1	9,042
Kandiyohi Coop Elec Power	1,849	4,603	777	1	7,230
Lake Country Power	0	39,871	2,320	2	42,193
Mille Lacs Elec Coop	5,558	6,341	827	38	12,764
North Itasca Elec Coop	147	4,127	305	2	4,581
Wright Hennepin Coop Elec	3,273	24,757	2,272	10	30,312
<b>Total: United Power Association</b>	<b>21,769</b>	<b>237,381</b>	<b>20,509</b>	<b>72</b>	<b>279,731</b>
<b>Total: Cooperatives</b>	<b>166,291</b>	<b>397,550</b>	<b>37,329</b>	<b>772</b>	<b>601,943</b>

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Municipal Utilities**

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Municipality</b>					
Bagley Pub Utility	0	515	139	56	710
Baudette City Of	0	464	167	0	631
Fosston Municipal Utility	0	721	177	6	904
Halstad Mun Utilities	0	247	57	0	304
Hawley Pub Utilities	0	768	135	0	903
Roseau Mun Water&Light	20	1,131	273	0	1,424
Stephen Electric Dept	0	308	98	0	406
Thief River Falls Mun Util	0	3,605	591	25	4,221
Warren City Of	0	700	190	0	890
Warroad Mun Light & Power	0	795	123	4	922
<b>Total: MPC-Municipal</b>	<b>20</b>	<b>9,254</b>	<b>1,950</b>	<b>91</b>	<b>11,315</b>
<b>Other Municipals (Non-SMMPA)</b>					
Ada Water & Light Dept	0	835	193	2	1,030
Adrian Public Utilities	1	515	56	35	607
Aitkin Pub Utilities	0	1,437	274	53	1,764
Alexandria Pub Works	0	6,508	1,402	56	7,966
Alpha City of	0	65	13	2	80
Alvarado Electric Dept	0	210	35	0	245
Anoka City Of	0	9,850	1,140	16	11,006
Arlington City Of	0	835	146	0	981
Barnesville Mun Elec	0	961	162	0	1,123
Benson Municipal Utilities	1	1,451	216	48	1,716
Bigelow City of*	6	105	30	0	141
Biwabik Water Light&Power	0	510	44	0	554
Blue Earth Light&Water	0	1,675	322	54	2,051
Brainerd Public Utilities	0	6,047	1,421	23	7,490
Breckenridge Pub Utilities	0	1,501	271	21	1,793
Brewster Elec Light&Power	4	220	34	2	260
Brownton Mun Light&Power	0	328	43	5	376
Buffalo City Of	4	3,044	411	11	3,470
Buhl Pub Utilities	0	412	38	0	450
Caledonia Mun Light&Power	8	1,264	165	62	1,499
Ceylon Public Utilities	0	203	53	0	256
City of Chaska-Utility Dept.	0	5,225	369	267	5,861
Darwin Electric Dept	0	132	16	0	148
Delano Mun Utilities	0	1,392	211	51	1,654
Detroit Lakes Pub Utilities	0	4,580	918	74	5,572

\*1998 data not submitted. Data is from 1997.

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Municipal Utilities**

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Other Municipals (Non-SMMPA, continued)</b>					
Dundee City of	1	50	14	0	65
Dunnell Electric Department	0	96	29	0	125
East Grand Forks Water&Light	0	3,112	477	10	3,599
Eitzen Public Utilities	0	119	23	3	145
Elbow Lake Mun Elec	0	654	96	0	750
Elk River Mun Utilities	0	5,093	777	105	5,975
Ely Water & Light Dept	0	1,900	301	0	2,201
Fairfax Public Utilities	6	567	106	8	687
Gilbert Water&Light	0	885	77	0	962
Glencoe Mun Utilities	0	2,221	418	4	2,643
Grand Rapids Pub Utilities	0	4,888	1,015	1	5,904
Granite Falls Municipal Utilities	2	1,333	287	5	1,627
Grove City Electric Dept	30	303	42	2	377
Harmony Electric Dept	0	435	93	0	529
Henning Electric Dept	0	357	103	0	460
Hibbing Public Utilities	0	6,162	846	9	7,017
Hutchinson Utilities	0	5,353	843	2	6,198
Jackson Elec Light&Power	0	1,547	188	209	1,944
Janesville Mun Utilities	0	933	148	0	1,081
Kandiyohi Municipal Utilities	0	217	23	0	240
Kasota Elec Light	0	65	13	2	80
Kasson City Of	1	1,606	208	0	1,815
Keewatin Public Utilities	0	552	12	0	564
Kenyon Mun Utilities	0	722	107	22	851
Lake Crystal Mun	18	967	157	0	1,142
Lake Park Pub Utilities	0	333	61	0	394
Lakefield Pub Utilities	0	811	139	0	950
Lanesboro Pub Utilities	0	473	166	0	639
Le Sueur Mun Utilities	201	2,202	290	72	2,765
Luverne Mun Utilities	0	2,023	364	70	2,457
Mabel City of	0	369	97	0	466
Madelia Municipal Light & Power	0	1,018	194	6	1,218
Madison Mun Utilities	0	849	180	19	1,048
Marshall Municipal Utilities	0	5,116	813	99	6,028
Melrose Mun Utilities	52	1,117	231	2	1,402
Moorhead Pub Service	0	11,558	1,511	178	13,247
Moose Lake Water&Light	0	676	215	2	893
Mountain Iron Water&Light	0	694	84	7	785
Mountain Lake Mun Utilities	41	857	145	10	1,053
Nashwauk Pub Utilities	0	431	63	0	494
New Ulm Pub Utilities	0	5,868	989	6	6,863
Newfolden Electric	0	150	30	0	180
Nielsville Vlg Light System	0	57	5	0	62

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Municipal Utilities**

	Non-Farm				Total
	Farm	Residential	Commercial	Industrial	
<b>Other Municipals (Non-SMMPA, Continued)</b>					
North St Paul City Of	0	5,556	497	0	6,053
Olivia City Of	2	1,125	156	85	1,368
Ortonville City Of	5	1,063	974	0	2,042
Peterson Public Utilities	0	115	0	0	115
Pierz Utilities	0	506	108	0	614
Proctor Pub Utilities	0	1,165	60	1	1,226
Randall Electric	0	231	52	0	283
Round Lake Electric Dept	2	224	36	2	264
Rushford City Of	0	697	100	17	814
Rushmore City of	0	184	34	0	218
Sauk Centre Water Light&Power	6	1,760	297	44	2,107
Shakopee Public Util	41	7,139	566	330	8,076
Shelly Municipal Light Dept.	0	122	22	0	144
Sleepy Eye Pub Utilities	0	1,462	339	17	1,818
Spring Grove Municipal Electric	14	616	109	5	744
Springfield Pub Utilities	0	945	184	45	1,174
St Charles Light&Water	0	1,275	169	12	1,456
St. James-City of	3	1,853	401	1	2,258
Staples City of	0	1,179	173	8	1,360
Truman Municipal Utility	17	547	95	0	659
Two Harbors Water&Light	0	1,506	216	0	1,722
Tyler Mun Light&Power	11	511	119	0	641
Virginia Pub Utilities	0	4,747	1,068	0	5,815
Wadena Light & Water	0	2,008	450	24	2,482
Westbrook Mun Light&Power	20	373	88	2	483
Whalan City of	0	50	6	0	56
Willmar Mun Utilities	0	7,438	1,049	33	8,520
Windom Municipal Utilities*	0	2,016	255	22	2,293
Winthrop City Of	12	644	110	12	778
Worthington Mun Power	0	4,331	729	4	5,064
<b>Total: Non-SMMPA Municipalities</b>	<b>509</b>	<b>175,432</b>	<b>28,425</b>	<b>2,299</b>	<b>206,665</b>

\* 1998 data not submitted. Data is from 1997.

TABLE 5 (Continued)

<b>NUMBER OF MINNESOTA ELECTRIC CUSTOMERS IN 1998</b>
---

**Number of Minnesota Electric Customers for Municipal Utilities**

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Southern Minnesota Municipal Power Agency</b>					
Austin Utilities	727	9,339	1,455	1	11,522
Blooming Prairie Utilities	0	791	172	0	963
Fairmont Pub Utilities	223	4,866	771	15	5,875
Grand Marais Utilities	0	833	270	0	1,103
Lake City Utility Board	2	2,352	326	6	2,686
Litchfield Pub Utilities	16	2,492	340	15	2,863
Mora Mun Elec Utility	40	1,396	241	4	1,681
New Prague Mun Utilities	0	1,660	255	1	1,916
North Branch Mun Water&Light	0	1,188	144	10	1,342
Owatonna Public Utilities	0	8,782	828	72	9,682
Preston Public Utilities	5	642	142	12	801
Princeton Pub Utilities	0	1,689	286	18	1,993
Redwood Falls Pub Utilities	0	2,372	561	0	2,933
Rochester Pub Utilities	0	33,452	3,496	19	36,967
Spring Valley Pub Utility	0	1,199	188	0	1,387
St Peter Mun Utilities	0	2,998	345	4	3,347
Waseca Water & Light Dept	0	3,545	463	0	4,008
Wells Public Utilities	0	1,130	195	0	1,325
<b>Total: SMMPA</b>	<b>1,013</b>	<b>80,726</b>	<b>10,478</b>	<b>177</b>	<b>92,394</b>
<b>Total: Municipal Utilities</b>	<b>1,542</b>	<b>265,412</b>	<b>40,853</b>	<b>2,567</b>	<b>310,374</b>
<b>Total: Minnesota</b>	<b>173,891</b>	<b>1,814,547</b>	<b>221,842</b>	<b>11,868</b>	<b>2,222,149</b>

TABLE 6

<b>MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)</b>
---

Minnesota Sales Revenue for Investor-Owned Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Investor-Owned Utilities</b>					
Alliant Energy	3,316	20,783	12,176	14,096	50,371
Minnesota Power Company	2,284	54,815	64,363	250,931	372,393
Northern States Power-Elec	0	574,355	320,446	764,890	1,659,692
Otter Tail Power Co	0	27,765	34,927	34,498	97,190
<b>Total: Investor-Owned Utilities</b>	<b>5,600</b>	<b>677,718</b>	<b>431,912</b>	<b>1,064,415</b>	<b>2,179,645</b>

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

Minnesota Sales Revenue for Cooperative Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Cooperative Power Association</b>					
Agralite Cooperative	4,851	532	1,022	1,239	7,644
BENCO Elec Coop	6,343	3,939	3,904	0	14,187
Brown Co Rural Elec Assn	3,914	90	734	1,064	5,801
Dakota Electric Assn	363	49,199	17,636	18,039	85,236
Federated Rural Elec Assn	*	244	1,334	*	5,842
Goodhue Co Coop Elec Assn	3,800	1,501	181	54	5,536
Lake Region Coop Elec Assc	8,070	7,187	1,040	1,367	17,664
McLeod Coop Power Assn	6,619	0	525	1,532	8,676
Meeker Coop Light&Power Assn	4,117	2,982	1,157	0	8,256
Minnesota Valley Elec Coop	0	15,998	6,886	0	22,884
Nobles Coop Electric	5,113	96	854	0	6,064
Redwood Elec Coop	3,293	0	240	0	3,533
Runestone Elec Assn	4,641	4,289	1,003	539	10,473
South Central Elec Assn	4,406	0	447	1,246	6,099
Stearns Coop Elec Assn	*	8,415	2,510	*	19,838
Steele Waseca Coop Elec	7,809	208	1,932	1,417	11,366
Todd Wadena Coop	6,204	184	1,141	171	7,700
<b>Total: CPA</b>	<b>82,179</b>	<b>94,862</b>	<b>42,547</b>	<b>27,209</b>	<b>246,797</b>
<b>Dairyland Power Cooperative</b>					
Heartland Power Coop^	41	0	0	0	41
Freeborn Mower Elec Coop	7,146	0	904	644	8,694
Peoples Coop Power Assoc., Inc.	3,660	8,774	1,576	0	14,009
Tri-Co Elec Coop	11,269	952	725	1,095	14,041
<b>Total: Dairyland Power Coop</b>	<b>22,115</b>	<b>9,726</b>	<b>3,205</b>	<b>1,739</b>	<b>36,785</b>
<b>East River Electric Cooperative</b>					
Lyon-Lincoln Elec Coop	*	584	770	*	5,002
Renville Sibley Coop Power	2,714	231	186	1,695	4,826
Traverse Elec Coop	*	0	358	*	2,545
<b>Total: East River Electric Coop</b>	<b>8,003</b>	<b>815</b>	<b>1,315</b>	<b>2,240</b>	<b>12,373</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

^ Formerly Cedar Valley Rural Electric and Winnebago Rural Elec Coop

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

Minnesota Sales Revenue for Cooperative Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Cooperative</b>					
Beltrami Elec Coop	11,420	479	2,937	0	14,835
Clearwater-Polk Elec Coop	3,172	0	406	0	3,578
North Star Elec Coop	3,930	343	1,623	0	5,897
PKM Electric Cooperative	4,193	0	1,275	0	5,468
Red Lake Elec Coop	4,957	0	345	448	5,750
Red River Valley Coop Power	5,351	0	1,304	0	6,655
Roseau Electric Coop	5,222	*	759	*	6,842
Wild Rice Elec Coop	9,006	*	1,308	*	10,607
<b>Total: MPC - Cooperative</b>	<b>47,252</b>	<b>1,358</b>	<b>9,957</b>	<b>1,066</b>	<b>59,632</b>
<b>Other Cooperatives</b>					
Minnesota Valley Coop Lt&Pwr	6,468	719	279	1,364	8,830
Southern Minnesota Coop Elec	3,499	528	346	859	5,233
<b>Total: Other Cooperatives</b>	<b>9,967</b>	<b>1,247</b>	<b>625</b>	<b>2,223</b>	<b>14,063</b>
<b>United Power Association</b>					
Anoka Electric Coop	498	60,508	28,229	3,381	92,615
Arrowhead Electric Coop	0	1,710	1,699	0	3,409
Coop Lt&Pwr Assoc of Lake Co	*	956	*	0	4,110
Crow Wing Coop Pwr&Light	3,164	15,479	3,942	0	22,585
East Central Elec Assn	1,051	26,292	12,086	2,562	41,991
Head Of The Lakes Elec Coop	446	0	36	0	481
Itasca-Mantrap Coop Elec	*	3,071	2,330	*	7,903
Kandiyohi Coop Elec Power	2,473	3,457	*	*	8,046
Lake Country Power	0	23,093	5,579	2,803	31,475
Mille Lacs Elec Coop	3,977	2,166	1,554	1,446	9,143
North Itasca Elec Coop	329	2,189	618	119	3,255
Wright Hennepin Coop Elec	3,148	19,469	6,018	4,178	32,814
<b>Total: United Power Association</b>	<b>18,370</b>	<b>158,390</b>	<b>64,787</b>	<b>16,282</b>	<b>257,829</b>
<b>Total: Cooperatives</b>	<b>187,887</b>	<b>266,397</b>	<b>122,436</b>	<b>50,759</b>	<b>627,479</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

Minnesota Sales Revenue for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Minnkota Power Cooperative - Municipality</b>					
Bagley Pub Utility	0	297	232	525	1,054
Baudette City Of	0	242	871	0	1,113
Fosston Municipal Utility	0	493	663	243	1,400
Halstad Mun Utilities	0	250	211	0	461
Hawley Pub Utilities	0	554	436	0	990
Roseau Mun Water&Light	21	793	988	0	1,802
Stephen Electric Dept	0	269	225	0	494
Thief River Falls Mun Util	0	2,130	1,654	1,821	5,606
Warren City Of	0	464	482	0	946
Warroad Mun Light & Power	0	429	586	843	1,858
<b>Total: MPC-Municipal</b>	<b>21</b>	<b>5,922</b>	<b>6,348</b>	<b>3,432</b>	<b>15,723</b>
<b>Other Municipals (Non-SMMPA)</b>					
Ada Water & Light Dept	0	512	489	4	1,005
Adrian Public Utilities	*	*	78	227	669
Aitkin Pub Utilities	0	640	426	771	1,837
Alexandria Pub Works	0	2,796	2,702	4,565	10,063
Alpha City of	0	43	14	24	81
Alvarado Electric Dept	0	137	80	0	217
Anoka City Of	0	4,915	4,371	4,522	13,808
Arlington City Of	0	398	622	0	1,020
Barnesville Mun Elec	0	664	292	0	956
Benson Municipal Utilities	*	*	271	576	1,499
Bigelow City of **	6	53	46	0	106
Biwabik Water Light&Power	0	173	245	0	418
Blue Earth Light&Water	0	900	434	2,008	3,343
Brainerd Public Utilities	0	2,355	3,927	2,406	8,688
Breckenridge Pub Utilities	0	753	474	535	1,761
Brewster Elec Light&Power	3	126	44	60	233
Brownton Mun Light&Power	0	197	86	17	300
Buffalo City Of	2	1,546	2,818	418	4,785
Buhl Pub Utilities	0	153	104	0	257
Caledonia Mun Light&Power	6	623	232	405	1,266
Ceylon Public Utilities	0	130	67	0	197
City of Chaska-Utility Dept.	0	2,929	562	7,984	11,475
Darwin Electric Dept	0	109	14	0	123
Delano Mun Utilities	0	807	239	691	1,737
Detroit Lakes Pub Utilities	0	2,189	1,418	2,346	5,953

\* Withheld to avoid disclosure of individual company data. Data included in totals.

\*\* 1998 data not submitted. Data is from 1997.

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

## Minnesota Sales Revenue for Municipal Utilities

	Non-Farm				Total
	Farm	Residential	Commercial	Industrial	
<b>Other Municipals (Non-SMMPA, continued)</b>					
Dundee City of	*	22	*	0	37
Dunnell Electric Department	0	44	32	0	76
East Grand Forks Water&Light	0	1,568	1,436	3,020	6,024
Eitzen Public Utilities	0	85	39	21	145
Elbow Lake Mun Elec	0	342	444	0	786
Elk River Mun Utilities	0	3,113	3,796	1,131	8,040
Ely Water & Light Dept	0	690	899	0	1,589
Fairfax Public Utilities	3	297	161	96	556
Gilbert Water&Light	0	328	271	0	599
Glencoe Mun Utilities	0	1,132	1,465	1,386	3,983
Grand Rapids Pub Utilities	0	2,453	*	*	7,590
Granite Falls Municipal Utilities	1	603	885	161	1,650
Grove City Electric Dept	76	233	182	34	525
Harmony Electric Dept	0	253	245	7	505
Henning Electric Dept	0	186	231	0	417
Hibbing Public Utilities	0	3,252	4,513	405	8,170
Hutchinson Utilities	0	2,380	4,375	6,523	13,278
Jackson Elec Light&Power	0	960	305	1,851	3,116
Janesville Mun Utilities	0	503	242	0	745
Kandiyohi Municipal Utilities	0	138	40	0	178
Kasota Elec Light	0	211	0	0	211
Kasson City Of	*	945	*	0	1,501
Keewatin Public Utilities	0	327	19	0	346
Kenyon Mun Utilities	0	400	187	383	970
Lake Crystal Mun	12	486	325	0	823
Lake Park Pub Utilities	0	196	181	0	377
Lakefield Pub Utilities	0	313	310	0	623
Lanesboro Pub Utilities	0	151	272	0	423
Le Sueur Mun Utilities	159	834	388	3,355	4,737
Luverne Mun Utilities	0	1,241	624	1,177	3,042
Mabel City of	0	143	165	0	308
Madelia Municipal Light & Power	0	532	559	698	1,790
Madison Mun Utilities	0	409	440	77	926
Marshall Municipal Utilities	0	2,420	1,528	14,263	18,211
Melrose Mun Utilities	77	553	667	2,330	3,626
Moorhead Pub Service	0	5,846	1,902	6,755	14,503
Moose Lake Water&Light	0	297	705	544	1,546
Mountain Iron Water&Light	0	342	413	126	881
Mountain Lake Mun Utilities	70	399	238	223	930
Nashwauk Pub Utilities	0	192	165	0	357
New Ulm Pub Utilities	0	3,193	3,758	3,483	10,434
Newfolden Electric	0	95	107	0	202
Nielsenville Vlg Light System	0	35	7	0	42

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

Minnesota Sales Revenue for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Other Municipals (Non-SMMPA, Continued)</b>					
North St Paul City Of	0	2,889	2,055	0	4,944
Olivia City Of	0	610	125	524	1,259
Ortonville City Of	5	547	617	0	1,170
Peterson Public Utilities	0	91	0	0	91
Pierz Utilities	0	216	306	0	522
Proctor Pub Utilities	0	572	*	*	1,294
Randall Electric	0	145	104	0	249
Round Lake Electric Dept	1	111	58	397	568
Rushford City of	0	339	182	276	797
Rushmore City of	0	100	51	0	151
Sauk Centre Water Light&Power	12	762	537	847	2,158
Shakopee Public Util	80	3,982	362	6,408	10,831
Shelly Municipal Light Dept.	0	84	35	0	119
Sleepy Eye Pub Utilities	0	706	653	858	2,217
Spring Grove Municipal Electric	16	274	253	337	880
Springfield Pub Utilities	0	505	388	428	1,321
St Charles Light&Water	0	636	255	498	1,389
St. James-City of	*	850	1,188	*	2,718
Staples City of	0	571	407	332	1,310
Truman Municipal Utility	60	376	432	0	868
Two Harbors Water&Light	0	616	1,143	0	1,759
Tyler Mun Light&Power	32	365	253	0	649
Virginia Pub Utilities	0	2,342	4,972	0	7,314
Wadena Light & Water	0	888	722	944	2,555
Westbrook Mun Light&Power	14	237	145	22	418
Whalan City of	0	16	13	0	29
Willmar Mun Utilities	0	3,851	5,940	4,047	13,838
Windom Municipal Utilities	0	822	647	1,012	2,481
Winthrop City Of	10	319	139	238	706
Worthington Mun Power	0	1,918	3,293	2,962	8,173
<b>Total: Non-SMMPA Municipalities</b>	<b>653</b>	<b>88,040</b>	<b>82,956</b>	<b>97,743</b>	<b>269,392</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 6 (Continued)

## MINNESOTA ELECTRIC SALES REVENUE IN 1998 (\$1,000)

Minnesota Sales Revenue for Municipal Utilities

	Farm	Non-Farm Residential	Commercial	Industrial	Total
<b>Southern Minnesota Municipal Power Agency</b>					
Austin Utilities	524	5,191	*	*	18,690
Blooming Prairie Utilities	0	422	894	0	1,316
Fairmont Pub Utilities	267	2,589	2,806	3,427	9,088
Grand Marais Utilities	0	507	844	0	1,350
Lake City Utility Board	5	1,353	1,189	3,336	5,883
Litchfield Pub Utilities	20	1,205	1,186	1,401	3,812
Mora Mun Elec Utility	29	638	1,280	2,141	4,089
New Prague Mun Utilities	0	895	*	*	3,636
North Branch Mun Water&Light	0	572	552	340	1,464
Owatonna Public Utilities	0	5,272	3,346	10,968	19,585
Preston Public Utilities	9	391	331	244	974
Princeton Pub Utilities	0	924	750	1,384	3,058
Redwood Falls Pub Utilities	0	1,211	1,754	0	2,966
Rochester Pub Utilities	0	19,517	24,557	19,925	63,999
Spring Valley Pub Utility	0	631	628	0	1,259
St Peter Mun Utilities	0	1,742	1,814	1,378	4,934
Waseca Water & Light Dept	0	1,989	2,339	0	4,328
Wells Public Utilities	0	679	1,052	0	1,731
<b>Total: SMMPA</b>	<b>854</b>	<b>45,727</b>	<b>54,974</b>	<b>50,607</b>	<b>152,162</b>
<b>Total: Municipal Utilities</b>	<b>1,527</b>	<b>139,690</b>	<b>144,278</b>	<b>151,783</b>	<b>437,277</b>
<b>Total: Minnesota</b>	<b>195,014</b>	<b>1,083,805</b>	<b>698,625</b>	<b>1,266,957</b>	<b>3,244,402</b>

\* Withheld to avoid disclosure of individual company data. Data included in totals.

TABLE 7

<b>MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998</b>
--

Minnesota Space Heating Customers for Investor-Owned Utilities

	<u>Customers</u>	<u>Megawatt-Hours</u>
<b>Investor-Owned Utilities</b>		
Interstate Power Co	1,452	17,281
Minnesota Power Company	5,967	76,277
Northern States Power-Elec	27,780	359,808
Otter Tail Power Co	7,267	116,848
<b>Total: Investor-Owned Utilities</b>	<b>42,466</b>	<b>570,214</b>

TABLE 7 (Continued)

## MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998

<u>Minnesota Space Heating Customers for Cooperative Utilities</u>		
	<u>Customers</u>	<u>Megawatt-Hours</u>
<b>Cooperative Power Association</b>		
Agralite Cooperative	1,394	11,938
BENCO Elec Coop	341	5,115
Brown Co Rural Elec Assn	187	2,003
Dakota Electric Assn	1,419	14,372
Federated Rural Elec Assn	639	10,544
Goodhue Co Coop Elec Assn	197	4,438
Lake Region Coop Elec Assc	3,748	56,086
McLeod Coop Power Assn	345	6,000
Meeker Coop Light&Power Assn	1,420	18,630
Minnesota Valley Elec Coop	2,438	18,420
Nobles Coop Electric	431	10,819
Redwood Elec Coop	219	1,752
Runestone Elec Assn	2,789	42,418
South Central Elec Assn	275	4,800
Stearns Coop Elec Assn	2,348	53,142
Steele Waseca Coop Elec	555	6,704
Todd Wadena Coop	940	20,680
<b>Total: Cooperative Power</b>	<b>19,685</b>	<b>287,861</b>
<b>Dairyland Power Cooperative</b>		
Freeborn Mower Elec Coop	774	6,805
Peoples Coop Power Assoc., Inc.	1,104	18,242
Tri-Co Elec Coop	1,228	35,853
<b>Total: Dairyland Power</b>	<b>3,106</b>	<b>60,900</b>
<b>East River Electric Cooperative</b>		
Lyon-Lincoln Elec Coop	797	22,571
Renville Sibley Coop Power	486	3,173
Traverse Elec Coop	594	12,707
<b>Total: East River Electric</b>	<b>1,877</b>	<b>38,451</b>

TABLE 7 (Continued)

<b>MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998</b>
--

Minnesota Space Heating Customers for Cooperative Utilities

	<u>Customers</u>	<u>Megawatt-Hours</u>
<b>Minnkota Power Cooperative - Cooperative</b>		
Beltrami Elec Coop	6,208	136,015
Clearwater-Polk Elec Coop	1,495	15,388
North Star Elec Coop	1,490	21,010
PKM Electric Cooperative	1,540	26,720
Red Lake Elec Coop	1,104	25,810
Red River Valley Coop Power	1,932	27,341
Roseau Electric Coop	3,547	81,000
Wild Rice Elec Coop	3,035	78,660
<b>Total: MPC - Cooperative</b>	<b>20,351</b>	<b>411,944</b>
<b>Other Cooperatives</b>		
Minnesota Valley Coop Lt&Pwr	1,052	14,250
Sioux Valley Southwestern Electric	629	19,912
<b>Total: Other Cooperatives</b>	<b>1,681</b>	<b>34,162</b>
<b>United Power Association</b>		
Anoka Electric Coop	549	6,214
Arrowhead Electric Coop	400	4,533
Coop Light & Power Assoc of Lake Co	520	6,607
Crow Wing Coop Pwr&Light	4,710	58,400
East Central Elec Assn	3,474	60,109
Head Of The Lakes Elec Coop	64	653
Itasca-Mantrap Coop Elec	1,807	24,335
Kandiyohi Coop Elec Power	955	15,575
Lake Country Power	7500	90000
Mille Lacs Elec Coop	1,340	15,575
North Itasca Elec Coop	206	2,216
Wright Hennepin Coop Elec	2,946	57,533
<b>Total: United Power Association</b>	<b>24,471</b>	<b>341,750</b>
<b>Total: Cooperatives</b>	<b>71,171</b>	<b>1,175,068</b>

TABLE 7 (Continued)

## MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998

<u>Minnesota Space Heating Customers for Municipal Utilities</u>		
	<u>Customers</u>	<u>Megawatt-Hours</u>
<b>Minnkota Power Cooperative - Municipality</b>		
Bagley Pub Utility	180	2,567
Baudette City Of	133	1,928
Fosston Municipal Utility	295	4,923
Halstad Mun Utilities	115	2,013
Hawley Pub Utilities	183	5,569
Roseau Mun Water&Light	362	9,628
Stephen Electric Dept	100	1,450
Thief River Falls Mun Util	622	7,122
Warren City Of	121	1,665
Warroad Mun Light & Power	133	900
<b>Total: MPC-Municipal</b>	<b>2,244</b>	<b>37,765</b>
<b>Other Municipals (Non-SMMPA)</b>		
Ada Water & Light Dept	185	1,780
Adrian Public Utilities	73	2,609
Aitkin Pub Utilities	154	2,071
Alexandria Pub Works	1,054	15,202
Alpha City of	2	260
Alvarado Electric Dept	28	1,130
Anoka City Of	107	1,919
Arlington City Of	23	300
Barnesville Mun Elec	237	5,000
Benson Municipal Utilities	51	727
Biwabik Water Light&Power	49	516
Blue Earth Light&Water	69	659
Brainerd Public Utilities	184	1,986
Breckenridge Pub Utilities	270	6,055
Brewster Elec Light&Power	6	181
Brownton Mun Light&Power	6	220
Buffalo City Of	269	2,817
Buhl Pub Utilities	4	300
Caledonia Mun Light&Power	7	344
Chaska City of	27	3,698
Darwin Electric Dept	10	310
Delano Mun Utilities	84	817
Detroit Lakes Pub Utilities	790	18,674
Dundee City of	3	25

TABLE 7 (Continued)

## MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998

Minnesota Space Heating Customers for Municipal Utilities

	<u>Customers</u>	<u>Megawatt-Hours</u>
<b>Other Municipals (Non-SMMPA, continued)</b>		
East Grand Forks Water&Light	516	8,973
Eitzen Public Utilities	13	142
Elbow Lake Mun Elec	121	2,200
Elk River Mun Utilities	175	3,978
Ely Water & Light Dept	40	70
Fairfax Public Utilities	116	1,733
Gilbert Water&Light	4	65
Glencoe Mun Utilities	67	1,012
Grand Rapids Pub Utilities	466	5,358
Granite Falls Municipal Utilities	75	1,000
Grove City Electric Dept^		
Harmony Electric Dept	8	95
Henning Electric Dept	80	1,476
Hibbing Public Utilities	596	5,824
Hutchinson Utilities	239	2,378
Jackson Elec Light&Power	151	1,809
Janesville Mun Utilities	4	84
Kandiyohi Municipal Utilities*	40	2,500
Kasson City Of	32	351
Keewatin Public Utilities	3	214
Kenyon Mun Utilities	16	170
Lake Crystal Mun	62	696
Lake Park Pub Utilities	54	1,000
Lakefield Pub Utilities	30	750
Lanesboro Pub Utilities	31	99
Le Sueur Mun Utilities	6	95
Luverne Mun Utilities	192	2,783
Mabel City of	3	62
Madelia Municipal Light & Power	4	338
Madison Mun Utilities	117	1,974
Marshall Municipal Utilities	1,232	17,136
Melrose Mun Utilities	361	5,245
Moorhead Pub Service	3,856	80,731
Moose Lake Water&Light	84	759
Mountain Iron Water&Light	266	2,626
Nashwauk Pub Utilities	4	48
New Ulm Pub Utilities	7	325
Newfolden Electric	30	432
North St Paul City Of	4	151
Olivia City Of	138	2,406
Ortonville City Of	166	2,216
Peterson Public Utilities	15	130

^ Unknown

\* 1998 data not reported. Data is from 1997.

TABLE 7 (Continued)

## MINNESOTA RESIDENTIAL SPACE HEATING CUSTOMERS IN 1998

Minnesota Space Heating Customers for Municipal Utilities

	Customers	Megawatt-Hours
<b>Other Municipals (Non-SMMPA, continued)</b>		
Pierz Utilities	9	164
Proctor Pub Utilities	148	1,616
Randall Electric	6	175
Round Lake Electric Dept	3	348
Rushford City Of	40	1,200
Sauk Centre Water Light&Power	230	2,834
Shakopee Public Util	234	3,059
Shelly Municipal Light Dept.	30	398
Sleepy Eye Pub Utilities	31	2,000
Spring Grove Municipal Electric	10	178
Springfield Pub Utilities	63	816
St Charles Light&Water	129	1,056
St. James-City of	183	2,163
Staples City of	44	186
Truman Municipal Utility*	27	398
Two Harbors Water&Light	6	117
Tyler Mun Light&Power	100	4,400
Virginia Pub Utilities	232	3,456
Wadena Light & Water	293	4,871
Willmar Mun Utilities	272	7,040
Windom Municipal Utilities	45	960
Winthrop City Of	8	275
Worthington Mun Power	209	1,494
<b>Total: Non-SMMPA Municipalities</b>	<b>15,468</b>	<b>266,238</b>
<b>Southern Minnesota Municipal Power Agency</b>		
Austin Utilities	183	1,069
Blooming Prairie Utilities	10	210
Fairmont Pub Utilities	115	2,222
Grand Marais Utilities	133	2,097
Lake City Utility Board	65	458
Litchfield Pub Utilities	380	4,643
Mora Mun Elec Utility	87	792
New Prague Mun Utilities	73	302
North Branch Mun Water&Light	13	58
Owatonna Public Utilities	82	900
Preston Public Utilities	46	455
Princeton Pub Utilities	50	1,139
Redwood Falls Pub Utilities	532	5,655
Rochester Pub Utilities	1,563	14,650
Spring Valley Pub Utility	6	297
St Peter Mun Utilities	74	460
Waseca Water & Light Dept	93	1,300
Wells Public Utilities	50	419
<b>Total: SMMPA</b>	<b>3,555</b>	<b>37,126</b>
<b>Total: Municipal Utilities</b>	<b>21,267</b>	<b>341,129</b>
<b>Total: Minnesota</b>	<b>134,904</b>	<b>2,086,411</b>

\* 1998 data not reported. Data is from 1997.

**TABLE 8**

**MINNESOTA ELECTRIC CONSUMPTION IN 1998 BY COUNTY**

<b>County</b>	<b>MWH</b>	<b>Consumption Rank*</b>	<b>Population Rank*</b>
Aitkin	152,803	60	58
Anoka	2,088,659	5	4
Becker	256,051	39	34
Beltrami	448,275	25	23
Benton	764,798	10	26
Big Stone	37,731	87	81
Blue Earth	741,555	11	15
Brown	278,277	37	36
Carlton	467,001	23	29
Carver	680,618	12	11
Cass	408,294	29	37
Chippewa	137,194	66	62
Chisago	281,767	36	21
Clay	510,223	21	17
Clearwater	223,184	45	75
Cook	63,271	83	84
Cottonwood	173,166	57	63
Crow Wing	613,838	15	16
Dakota	3,941,413	4	3
Dodge	134,213	67	50
Douglas	344,821	34	31
Faribault	205,863	51	54
Fillmore	140,623	63	46
Freeborn	386,000	31	28
Goodhue	466,976	24	20
Grant	63,772	82	80
Hennepin	11,786,351	1	1
Houston	138,923	65	48
Hubbard	221,848	48	52
Isanti	200,619	53	33
Itasca	390,910	30	19
Jackson	115,958	71	65
Kanabec	119,011	70	59
Kandiyohi	440,197	27	22
Kittson	151,888	61	82
Koochiching	642,275	13	56
Lac Qui Parle	106,717	74	76
Lake	81,838	78	69
Lake of the Woods	221,920	47	85
Le Sueur	243,849	43	38
Lincoln	61,514	84	79
Lyon	612,730	16	39
McLeod	486,675	22	25
Mahnomen	61,105	85	83
Marshall	205,306	52	70

\*Ranking is highest to lowest (1 is highest, 87 is lowest).

**TABLE 8 (Continued)**

<b>MINNESOTA ELECTRIC CONSUMPTION IN 1998 BY COUNTY</b>			
<b>County</b>	<b>MWH</b>	<b>Consumption Rank*</b>	<b>Population Rank*</b>
Martin	254,937	40	42
Meeker	272,397	38	43
Mille Lacs	139,594	64	44
Morrison	359,333	33	32
Mower	372,118	32	24
Murray	86,244	76	74
Nicollet	281,944	35	35
Nobles	241,242	44	47
Norman	83,460	77	77
Olmstead	1,215,705	8	8
Otter Tail	635,297	14	13
Pennington	167,283	58	60
Pine	198,659	56	40
Pipestone	68,630	81	71
Polk	445,759	26	32
Pope	108,222	73	68
Ramsey	5,276,991	3	2
Red Lake	119,158	69	87
Redwood	199,055	55	53
Renville	222,144	46	51
Rice	557,377	19	14
Rock	106,588	75	73
Roseau	249,726	41	55
St. Louis	7,131,452	2	6
Scott	845,177	9	10
Sherburne	602,488	17	12
Sibley	156,676	59	57
Stearns	1,383,200	7	7
Steele	437,650	28	27
Stevens	150,028	62	72
Swift	75,175	80	66
Todd	246,161	42	41
Traverse	56,173	86	86
Wabasha	212,337	50	45
Wadena	199,477	54	61
Waseca	213,569	49	49
Washington	1,863,157	6	5
Watonwan	130,786	68	64
Wilkin	77,842	79	78
Winona	519,204	20	18
Wright	598,613	18	9
Yellow Medicine	113,597	72	67

\*Ranking is highest to lowest (1 is highest, 87 is lowest).

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Adrian Public Utilities</b>					
Adrian Power Plant Nobles County, MN					
Unit 3	Int Comb	Oil #2	0.400	0.460	1946
Unit 4	Int Comb	Oil #2	0.600	0.646	1953
<b>Aitkin Public Utilities Commission</b>					
Aitkin Power Plant Aitkin County, MN					
Unit 1	Int Comb	Oil #2	0.104	0.104	1936
Unit 4	Int Comb	Oil #2	0.277	0.277	1939
Unit 5	Int Comb	Oil #2	0.808	0.808	1947
Unit 6	Int Comb	Oil #2	1.192	1.192	1953
<b>Alexandria Board of Public Works</b>					
Alexandria Power Plant Douglas County, MN					
Unit 1	Int Comb	Oil #2	1.000	1.000	1952
Unit 2	Int Comb	Gas/Oil #2	4.000	4.000	1968
Unit 3	Int Comb	Gas/Oil #2	4.000	4.000	1968
<b>Arlington, City of</b>					
Wastewater Lift Station Sibley County, MN					
Unit 1	Int Comb	Oil #2	0.330	0.330	1989
Unit 2	Int Comb	Oil #2	0.090	0.090	1989
<b>Austin Utilities</b>					
DT Plant Mower County, MN					
Unit 2	Steam	Gas	3.500	3.500	1935
Unit 3	Steam	Gas	7.500	7.500	1946
Unit 4	Steam	Gas	10.000	10.000	1955
Unit 5	Gas Turbine	Gas	5.000	5.000	1961
Northeast Plant Mower County, MN					
Unit 1	Steam	Coal/Gas	31.500	31.500	1971

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Baudette, City of</b>					
Baudette Power Plant Lake of the Woods County, MN					
Unit 2	Int Comb	Oil #2	1.100	1.100	1960
Unit 3	Int Comb	Oil #2	0.200	0.200	1936
Unit 4	Int Comb	Oil #2	0.300	0.300	1946
Unit 5	Int Comb	Oil #2	0.300	0.300	1950
<b>Benson Municipal Utilities</b>					
Benson Municipal Utilities Swift County, MN					
Unit 4	Int Comb	Oil #2	0.600	0.600	1938
Unit 5	Int Comb	Oil #2	0.925	0.925	1947
Unit 6	Int Comb	Oil #2	1.250	1.250	1954
<b>Blue Earth Light &amp; Water</b>					
Blue Earth City Plant Faribault County, MN					
Unit 1	Int Comb	Oil #2/Gas	1.500	1.500	1960
Unit 3	Int Comb	Oil #2	1.600	1.600	1993
Unit 4	Int Comb	Oil #2	1.600	1.600	1993
Unit 5	Int Comb	Oil #2	1.600	1.600	1993
Unit 6	Int Comb	Oil #2	1.800	1.800	1995
<b>Cooperative Power Association</b>					
Coal Creek Diesel (56% share) McLean County, ND					
Unit 1	Int Comb	Diesel	1.180	1.180	1979
Coal Creek Station (56% share) McLean County, ND					
Unit 1	Steam	Coal/Oil #6	301.300	301.300	1979
Unit 2	Steam	Coal/Oil #6	303.000	303.000	1980
St. Bonifacius Power Plant Carver County, MN					
Unit 1	Gas Turbine	Oil #2	48.000	50.000	1978

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Dairyland Power Cooperative</b>					
Alma Station Buffalo County, WI					
Unit 1	Steam	Coal/Oil #2	18.000	18.000	1947
Unit 2	Steam	Coal/Oil #2	18.000	18.000	1947
Unit 3	Steam	Coal/Oil #2	18.000	18.000	1950
Unit 4	Steam	Coal/Oil #2	52.000	52.000	1957
Unit 5	Steam	Coal/Oil #2	83.000	83.000	1960
Flambeau Hydroelectric Rusk County, WI					
Unit 1	Hydro	Water	7.000	7.000	1951
Unit 2	Hydro	Water	7.000	7.000	1951
Unit 3	Hydro	Water	7.000	7.000	1951
Genoa 3 Vernon County, WI					
Unit 1	Steam	Coal/Oil #2	320.000	320.000	1969
JP Madgett Buffalo County, WI					
Unit 1	Steam	Coal/Oil #2	358.000	358.000	1979
<b>Delano Municipal Utilities</b>					
Delano Municipal Plant Wright County, MN					
Unit 1	Int Comb	Oil #2	0.840	0.840	1946
Unit 3	Int Comb	Oil #2	1.136	1.136	1951
Unit 4	Int Comb	Gas/Oil #2	1.140	1.140	1972
Unit 5	Int Comb	Gas/Oil #2	1.365	1.365	1973
Unit 6	Int Comb	Oil #2	1.250	1.250	1989
Unit 7	Int Comb	Oil #2	3.000	3.000	1994
Unit 8	Int Comb	Oil #2	3.125	3.125	1998
<b>Detroit Lakes Public Utilities</b>					
Jet Plant Becker County, MN					
Unit 1	Gas Turbine	Diesel	8.500	8.500	1968

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Elk River Municipal Utilities</b>					
Elk River Municipal Utilities Diesel Plant Sherburne County, MN					
Unit 1	Int Comb	Diesel	0.500	0.500	1948
Unit 2	Int Comb	Diesel	0.500	0.500	1948
Unit 3	Int Comb	Diesel/Gas	3.000	3.000	1962
Unit 4	Int Comb	Diesel/Gas	5.400	5.400	1972
<b>Fairfax, City of</b>					
Fairfax Municipal Power Plant Renville County, MN					
Unit 1	Int Comb	Oil #2	0.900	0.900	1948
Unit 2	Int Comb	Oil #2	0.200	0.200	1935
Unit 4	Int Comb	Oil #2	0.600	0.600	1940
<b>Fairmont Public Utilities</b>					
Fairmont Power Plant Martin County, MN					
Unit 3	Steam	Gas	5.000	5.000	1945
Unit 4	Steam	Gas	5.000	5.000	1949
Unit 5	Steam	Gas	12.500	12.500	1959
Unit 6	Int Comb	Gas/Oil #2	6.000	6.000	1975
Unit 7	Int Comb	Gas/Oil #2	6.000	6.000	1975
<b>Glencoe Light and Power Commission</b>					
Glencoe Municipal Electric Plant McLeod County, MN					
Unit 5	Int Comb	Oil #2/Gas	1.360	1.360	1957
Unit 6	Int Comb	Oil #2/Gas	1.360	1.360	1961
Unit 7	Int Comb	Oil #2/Gas	4.100	4.100	1966
Unit 8	Int Comb	Oil	5.600	5.600	1969
Unit 9	Int Comb	Oil/Gas	7.150	7.150	1973
Unit 10	Int Comb	Diesel	7.060	7.060	1985
Unit 11	Int Comb	Diesel	4.860	4.860	1998
Unit 12	Int Comb	Diesel	4.860	4.860	1998

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Grand Marais Public Utilities</b>					
Grand Marais Power Plant Cook County, MN					
Unit 2	Int Comb	Oil #2	0.670	0.670	1956
Unit 5	Int Comb	Oil #2	1.130	1.130	1961
Unit 6	Int Comb	Oil #2	1.200	1.200	1968
<b>Granite Falls Municipal Utilities</b>					
Granite Falls Municipal Hydroelectric Yellow Medicine County, MN					
Unit 1	Hydro	Water	0.300	0.300	1940
Unit 2	Hydro	Water	0.250	0.250	1932
Unit 3	Hydro	Water	0.867	0.867	1986
<b>Halstad Municipal Utilities</b>					
Halstad Diesel Plant Norman County, MN					
Unit 1	Int Comb	Oil #2	0.550	0.550	1954
Unit 2	Int Comb	Oil #2	0.200	0.200	1946
Unit 3	Int Comb	Oil #2	0.300	0.300	1939
<b>Hastings Public Utilities Commission</b>					
Hastings Hydroelectric Facility Dakota County, MN					
Unit 1	Hydro	Water	2.000	2.000	1987
Unit 2	Hydro	Water	2.000	2.000	1987
<b>Hawley Public Utilities</b>					
Hawley Plant Clay County, MN					
Unit 1	Int Comb	Oil #2	0.089	0.089	1932
Unit 2	Int Comb	Oil #2	0.675	0.675	1957
Unit 3	Int Comb	Oil #2	0.097	0.097	1938
Unit 4	Int Comb	Oil #2	0.300	0.300	1947
Unit 5	Int Comb	Oil #2	0.300	0.300	1947

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Hibbing Public Utilities</b>					
Hibbing Public Utilities Plant St. Louis County, MN					
Unit 3	Steam	Coal/Gas	10.500	10.500	1965
Unit 5	Steam	Coal/Gas	19.500	19.500	1984
Unit 6	Steam	Coal/Gas	1.000	1.000	1996
<b>Hutchinson Utilities Commission</b>					
Hutchinson Municipal Plant No. 1 McLeod County, MN					
Unit 2	Int Comb	Gas/Oil #2	1.970	1.970	1958
Unit 3	Int Comb	Gas/Oil #2	3.900	3.900	1968
Unit 4	Int Comb	Gas/Oil #2	3.900	3.900	1968
Unit 5	Int Comb	Oil #2	1.740	1.740	1941
Unit 6	Int Comb	Oil #2	1.740	1.740	1942
Unit 7	Int Comb	Gas/Oil #2	4.500	4.500	1965
Unit 8	Comb Cycle	Gas/Oil #2	11.000	13.300	1971
Hutchinson Municipal Plant No. 2 McLeod County, MN					
Unit 1	Comb Cycle	Gas	41.000	41.000	1994
Unit 2	Comb Cycle	Steam	10.000	10.000	1994
Unit 9	Gas Turbine	Oil #2	22.000	24.000	1977
<b>Interstate Power Company</b>					
Dubuque Internal Combustion Dubuque County, IA					
Unit 1	Int Comb	Oil #2	2.300	2.000	1966
Unit 2	Int Comb	Oil #2	2.300	2.000	1966
Dubuque Steam Dubuque County, IA					
Unit 2	Steam	Gas	13.000	13.000	1929
Unit 3	Steam	Coal/Gas	30.000	30.000	1952
Unit 4	Steam	Coal/Gas	35.000	35.000	1959
Fox Lake Gas Turbine Martin County, MN					
Unit 4	Gas Turbine	Oil #2	21.300	26.100	1974

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
Fox Lake Steam Martin County, MN					
Unit 1	Steam	Gas/Oil #6	12.000	12.000	1950
Unit 2	Steam	Gas/Oil #6	12.000	12.000	1951
Unit 3	Steam	Coal/Gas/Oil #6	84.000	86.000	1962
Hills Internal Combustion Rock County, MN					
Unit 1	Int Comb	Oil #2	2.000	2.000	1996
Unit 2	Int Comb	Oil #2	2.000	2.000	1960
Lansing Internal Combustion Allamakee County, IA					
Unit 1	Int Comb	Oil #2	1.000	1.000	1970
Unit 2	Int Comb	Oil #2	1.000	1.000	1971
Lansing Steam Allamakee County, IA					
Unit 1	Steam	Coal	15.500	15.500	1948
Unit 2	Steam	Coal	10.700	10.700	1949
Unit 3	Steam	Coal	33.800	33.800	1957
Unit 4	Steam	Coal	260.000	255.000	1977
Lime Creek Cerro Gordo County, IA					
Unit 1	Gas Turbine	Oil #2	35.000	38.000	1991
Unit 2	Gas Turbine	Oil #2	35.000	38.000	1991
Louisa Station No. 1 (4% share) Louisa County, IA					
Unit 1	Steam	Coal/Gas	27.000	27.000	1983
M.L. Kapp Steam Clinton County, IA					
Unit 1	Steam	Gas	18.000	0.000	1947
Unit 2	Steam	Coal/Gas	217.000	217.000	1967
Montgomery Gas Turbine LeSueur County, MN					
Unit 1	Gas Turbine	Oil #2	22.200	27.400	1974
Neal No. 4 (22% share) Woodbury County, IA					
Unit 4	Steam	Coal	134.300	134.300	1979
New Albin Internal Combustion Allamakee County, IA					
Unit 1	Int Comb	Oil #2	0.700	0.700	1970

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Janesville Municipal Utilities</b>					
Janesville Municipal Plant Waseca County, MN					
Unit 1	Int Comb	Oil #2/Gas	1.300	1.365	1972
Unit 2	Int Comb	Oil #2/Gas	1.100	1.100	1964
Unit 3	Int Comb	Oil #2/Gas	0.675	0.675	1955
Unit 4	Int Comb	Oil #2	1.825	1.800	1998
<b>Kenyon Municipal Utility</b>					
Kenyon Municipal Plant Goodhue, MN					
Unit 5	Int Comb	Oil #2	1.825	1.825	1997
Unit 6	Int Comb	Oil #2	1.825	1.825	1997
Unit 7	Int Comb	Oil #2	1.825	1.825	1997
<b>Lake Crystal Municipal Utilities</b>					
Lake Crystal Plant Blue Earth County, MN					
Unit 1	Int Comb	Gas/Oil #2	0.700	0.700	1952
Unit 3	Int Comb	Gas/Oil #2	2.100	2.100	1971
Unit 4	Int Comb	Gas/Oil #2	1.300	1.300	1955
<b>Lakefield Public Utilities</b>					
Lakefield Power Plant Jackson County, MN					
Unit 1	Int Comb	Fuel Oil #2	0.144	0.144	1936
Unit 2	Int Comb	Fuel Oil #2	0.240	0.240	1936
Unit 3	Int Comb	Fuel Oil #2	0.480	0.480	1936
Unit 4	Int Comb	Fuel Oil #2	0.800	0.800	1938
Unit 5	Int Comb	Fuel Oil #2	1.440	1.440	1985

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Lanesboro Public Utilities</b>					
Lanesboro Power Plant - Diesel Fillmore County, MN					
Unit 1	Int Comb	Diesel	0.438	0.438	1931
Unit 2	Int Comb	Diesel	1.000	1.000	1968
Lanesboro Power Plant - Hydroelectric Fillmore County, MN					
Unit 1	Hydro	Water	0.230	0.230	1923
<b>Luverne Public Utilities</b>					
Luverne Municipal Power Plant Rock County, MN					
Unit 4	Int Comb	Oil #2/Gas	3.500	3.500	1967
Unit 5	Int Comb	Oil #2	0.600	0.600	1941
<b>Madelia Municipal Light &amp; Power</b>					
Madelia Municipal Plant Watsonwan County, MN					
Unit 2	Int Comb	Oil #2/Gas	1.900	2.000	1966
Unit 3	Int Comb	Oil #2/Gas	1.000	1.000	1959
Unit 4	Int Comb	Oil #2/Gas	3.800	4.000	1973
Unit 5	Int Comb	Oil #2/Gas	1.100	1.200	1954
<b>Madison Municipal Utilities</b>					
Madison Plant Lac Qui Parle County, MN					
Unit 1	Int Comb	Oil #2	0.300	0.350	1938
Unit 2	Int Comb	Oil #2	0.300	0.350	1938
<b>Melrose Public Utilities</b>					
Melrose Power Plant Stearns County, MN					
Unit 1	Int Comb	Oil #2	0.750	0.750	1945
Unit 2	Int Comb	Oil #2	0.825	0.825	1948
Unit 3	Int Comb	Oil #2/Gas	3.000	3.000	1969
Unit 4	Int Comb	Oil #2/Gas	3.000	3.000	1969

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		

**Minnesota Power Company**

Blanchard Hydroelectric Station  
Morrison County, MN

Unit 1	Hydro	Water	6.000	6.000	1925
Unit 2	Hydro	Water	6.000	6.000	1925
Unit 3	Hydro	Water	6.000	6.000	1988

Boswell EC (79% share of Unit 4)  
Itasca County, MN

Unit 1	Steam	Coal/Oil #2	74.000	74.000	1958
Unit 2	Steam	Coal/Oil #2	74.000	74.000	1960
Unit 3	Steam	Coal/Oil #2	372.000	372.000	1973
Unit 4	Steam	Coal/Oil #2	565.000	565.000	1980

Fond Du Lac Hydroelectric Station  
St. Louis County, MN

Unit 1	Hydro	Water	12.000	12.000	1924
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Knife Falls Hydroelectric Station  
Carlton County, MN

Unit 1	Hydro	Water	0.800	0.800	1922
Unit 2	Hydro	Water	0.800	0.800	1922
Unit 3	Hydro	Water	0.800	0.800	1922

Laskin EC  
St. Louis County, MN

Unit 1	Steam	Coal/Oil #2	55.000	55.000	1953
Unit 2	Steam	Coal/Oil #2	55.000	55.000	1953

Little Falls Hydroelectric Station  
Morrison County, MN

Unit 1	Hydro	Water	0.800	0.800	1919
Unit 2	Hydro	Water	0.800	0.800	1919
Unit 3	Hydro	Water	1.100	1.100	1920
Unit 4	Hydro	Water	1.200	1.200	1979
Unit 5	Hydro	Water	0.400	0.400	1906
Unit 6	Hydro	Water	0.400	0.400	1906

M.L. Hibbard Steam Station  
St. Louis County, MN

Unit 3	Steam	Coal/Wood/Gas	36.850	36.850	1949
Unit 4	Steam	Coal/Wood/Gas	18.200	18.200	1951

Milton R. Young (71% share of Unit 2)  
Oliver County, ND

Unit 2	Steam	Coal/Oil #2	317.300	322.300	1977
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Pillager Hydroelectric Station  
Cass County, MN

**TABLE 9**

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Unit 1	Hydro	Water	0.800	0.800	1917
Unit 2	Hydro	Water	0.800	0.800	1917
Prairie River Hydroelectric Station Itasca County, MN					
Unit 1	Hydro	Water	0.700	0.700	1921
Unit 2	Hydro	Water	0.400	0.400	1921
Scanlon Hydroelectric Station Carlton County, MN					
Unit 1	Hydro	Water	0.400	0.400	1923
Unit 2	Hydro	Water	0.400	0.400	1923
Unit 3	Hydro	Water	0.400	0.400	1923
Unit 4	Hydro	Water	0.400	0.400	1923
Sylvan Hydroelectric Station Cass County, MN					
Unit 1	Hydro	Water	0.600	0.600	1913
Unit 2	Hydro	Water	0.600	0.600	1913
Unit 3	Hydro	Water	0.600	0.600	1931
Thomson Hydroelectric Station Carlton County, MN					
Unit 1	Hydro	Water	13.000	13.000	1907
Unit 2	Hydro	Water	13.000	13.000	1907
Unit 3	Hydro	Water	13.000	13.000	1907
Unit 4	Hydro	Water	10.800	10.800	1914
Unit 5	Hydro	Water	10.800	10.800	1918
Unit 6	Hydro	Water	12.000	12.000	1949
Winton Hydroelectric Station Lake County, MN					
Unit 2	Hydro	Water	2.000	2.000	1923
Unit 3	Hydro	Water	2.000	2.000	1923

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Minnkota Power Cooperative, Inc.</b>					
Coyote Station (30% share)					
Mercer County, ND					
Unit 1	Steam	Coal/Oil #2	128.100	128.100	1981
Grand Forks Diesel Plant					
Grand Forks County, ND					
Unit 1	Int Comb	Oil #2	0.679	0.679	1941
Unit 2	Int Comb	Oil #2	0.679	0.679	1941
Unit 3	Int Comb	Oil #2	0.679	0.679	1941
Unit 4	Int Comb	Oil #2	0.970	0.970	1946
Unit 5	Int Comb	Oil #2	0.970	0.970	1946
Unit 6	Int Comb	Oil #2	0.970	0.970	1946
Unit 7	Int Comb	Oil #2	1.067	1.067	1949
Unit 8	Int Comb	Oil #2	1.067	1.067	1949
Unit 9	Int Comb	Oil #2	1.067	1.067	1949
Unit 10	Int Comb	Oil #2	1.067	1.067	1949
Unit 11	Int Comb	Oil #2	1.067	1.067	1949
Harwood Diesel Plant					
Cass County, ND					
Unit 1	Int Comb	Oil #2	1.455	1.455	1947
Unit 2	Int Comb	Oil #2	1.552	1.552	1947
Unit 3	Int Comb	Oil #2	1.552	1.552	1947
Milton R. Young (29% share of Unit 2)					
Oliver County, ND					
Unit 1	Steam	Coal/Oil #2	250.000	250.000	1970
Unit 2	Steam	Coal/Oil #2	130.700	132.700	1977
Potlatch Cogeneration (50% share)					
Beltrami County, MN					
Unit 1	Steam	Wood Waste/REF	5.375	5.375	1992
<b>Missouri River Energy Services</b>					
Laramie River Station (16% share)					
Platte County, WY					
Unit 1	Steam	Coal/Oil #2	272.000	272.000	1980
Watertown Power Plant					
Codington County, SD					
Unit 1	Gas Turbine	Oil #2	59.000	73.000	1979

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Moorhead, City of</b>					
Moorhead Power Plant Clay County, MN					
Unit 6	Gas Turbine	Oil #2	10.000	10.000	1960
Unit 7	Steam	Coal	22.000	22.000	1970
<b>Moose Lake Water &amp; Light Commission</b>					
Moose Lake Municipal Plant Carlton County, MN					
Unit 1	Int Comb	Oil #2	1.360	1.360	1973
Unit 2	Int Comb	Oil #2	1.136	1.136	1953
Unit 4	Int Comb	Oil #2	1.360	1.360	1962
<b>New Ulm Public Utilities</b>					
New Ulm Gas Turbine Plant Brown County, MN					
Unit 5	Gas Turbine	Oil #2	20.700	28.000	1975
New Ulm Steam Plant Brown County, MN					
Unit 3	Steam	Coal/Gas	4.700	4.700	1957
Unit 4	Steam	Coal/Gas	12.200	12.200	1963
Unit 6	Steam	Coal/Gas	4.700	4.300	1947
<b>Northern States Power Company</b>					
Alliant Tech Systems Hennepin County, MN					
Unit 1 & 2	Gas Turbine	Oil #2	1.600	1.600	1993
Allen S. King Washington County, MN					
Unit 1	Steam	Coal/Wood/Gas	571.000	585.000	1968
Angus Anson Minnehaha County, SD					
Unit 2	Gas Turbine	Gas/Oil #2	116.000	125.000	1994
Unit 3	Gas Turbine	Gas/Oil #2	116.000	125.000	1994
Apple River Hydroelectric St. Croix County, WI					
Unit 1	Hydro	Water	1.000	1.000	1900
Unit 2	Hydro	Water	0.900	0.900	1900
Unit 3	Hydro	Water	0.900	0.900	1900

**TABLE 9**

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Bayfront Steam					
Ashland County, WI					
Unit 3	Steam	Wood/Coal/Gas	20.200	20.200	1949
Unit 4	Steam	Wood/Coal/Gas	22.700	22.700	1952
Unit 5	Steam	Wood/Coal/Gas	30.000	30.000	1957
Big Falls Hydroelectric					
Rusk County, WI					
Unit 1	Hydro	Water	2.500	2.500	1922
Unit 2	Hydro	Water	2.500	2.500	1922
Unit 3	Hydro	Water	2.600	2.600	1925
Black Dog Steam					
Dakota County, MN					
Unit 1	Steam	Coal/Gas	75.000	50.000	1952
Unit 2	Steam	Coal/Gas	101.000	101.000	1954
Unit 3	Steam	Coal/Gas	113.200	96.600	1955
Unit 4	Steam	Coal/Gas	173.000	173.000	1960
Blue Lake Gas Turbine					
Scott County, MN					
Unit 1	Gas Turbine	Oil #2	47.000	60.000	1974
Unit 2	Gas Turbine	Oil #2	47.000	60.000	1974
Unit 3	Gas Turbine	Oil #2	47.000	60.000	1974
Unit 4	Gas Turbine	Oil #2	49.000	62.000	1974
Cedar Falls Hydroelectric					
Dunn County, WI					
Unit 1	Hydro	Water	2.600	2.600	1910
Unit 2	Hydro	Water	2.300	2.300	1911
Unit 3	Hydro	Water	2.300	2.300	1915
Chippewa Falls Hydroelectric					
Chippewa County, WI					
Unit 1	Hydro	Water	4.050	4.050	1928
Unit 2	Hydro	Water	3.600	3.600	1928
Unit 3	Hydro	Water	3.600	3.600	1928
Unit 4	Hydro	Water	3.600	3.600	1928
Unit 5	Hydro	Water	4.100	4.100	1928
Unit 6	Hydro	Water	4.300	4.300	1928

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
Cornell Hydroelectric Chippewa County, WI					
Unit 1	Hydro	Water	9.900	9.900	1976
Unit 2	Hydro	Water	9.900	9.900	1976
Unit 3	Hydro	Water	10.000	10.000	1976
Unit 4	Hydro	Water	0.500	0.500	1976
Dells Hydroelectric Eau Claire County, WI					
Unit 1	Hydro	Water	2.300	2.300	1923
Unit 2	Hydro	Water	1.200	1.200	1924
Unit 3	Hydro	Water	1.200	1.200	1930
Unit 4	Hydro	Water	1.200	1.200	1930
Unit 5	Hydro	Water	1.300	1.300	1930
Unit 6	Hydro	Water	0.600	0.600	1916
Unit 7	Hydro	Water	0.700	0.700	1907
Flambeau Price County, WI					
Unit 1	Gas Turbine	Gas/Oil #2	17.000	12.000	1969
French Island Gas Turbine La Crosse County, WI					
Unit 3	Gas Turbine	Oil #2	96.000	71.000	1974
Unit 4	Gas Turbine	Oil #2	96.000	71.000	1974
French Island Steam Plant La Crosse County, WI					
Unit 1	Steam	Wood/Gas/RDF	15.000	15.000	1969
Unit 2	Steam	Wood/Gas/RDF	14.000	14.000	1969
Granite City Gas Turbine Sherburne County, MN					
Unit 1	Gas Turbine	Gas/Oil #2	15.000	20.000	1969
Unit 2	Gas Turbine	Gas/Oil #2	15.000	20.000	1969
Unit 3	Gas Turbine	Gas/Oil #2	15.000	20.000	1969
Unit 4	Gas Turbine	Gas/Oil #2	16.000	20.000	1969
Hayward Hydroelectric Sawyer County, WI					
Unit 1	Hydro	Water	0.200	0.200	1925

**TABLE 9**

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Hennepin Island Hydroelectric					
Hennepin County, MN					
Unit 1	Hydro	Water	2.400	2.400	1954
Unit 2	Hydro	Water	2.400	2.400	1954
Unit 3	Hydro	Water	2.400	2.400	1954
Unit 4	Hydro	Water	2.400	2.400	1954
Unit 5	Hydro	Water	2.400	2.400	1955
High Bridge Steam					
Ramsey County, MN					
Unit 5	Steam	Coal/Gas	97.000	94.000	1956
Unit 6	Steam	Coal/Gas	170.000	170.000	1959
Holcombe Hydroelectric					
Chippewa County, WI					
Unit 1	Hydro	Water	11.900	11.900	1950
Unit 2	Hydro	Water	11.800	11.800	1950
Unit 3	Hydro	Water	11.800	11.800	1950
Inver Hills Gas Turbine					
Dakota County, MN					
Unit 1	Gas Turbine	Oil #2	54.000	69.000	1972
Unit 2	Gas Turbine	Oil #2	61.000	69.000	1972
Unit 3	Gas Turbine	Oil #2	55.000	69.000	1972
Unit 4	Gas Turbine	Oil #2	55.000	70.000	1972
Unit 5	Gas Turbine	Oil #2	64.000	70.000	1972
Unit 6	Gas Turbine	Oil #2	54.000	70.000	1972
Jim Falls Hydroelectric					
Chippewa County, WI					
Unit 1	Hydro	Water	29.000	29.000	1988
Unit 2	Hydro	Water	27.900	27.900	1988
Unit 3	Hydro	Water	0.500	0.500	1986
Key City Gas Turbine					
Blue Earth County, MN					
Unit 1	Gas Turbine	Gas/Oil #2	16.000	20.000	1969
Unit 2	Gas Turbine	Gas/Oil #2	16.000	20.000	1969
Unit 3	Gas Turbine	Gas/Oil #2	16.000	20.000	1969
Unit 4	Gas Turbine	Gas/Oil #2	17.000	20.000	1969

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
Ladysmith Hydroelectric Rusk County, WI					
Unit 1	Hydro	Water	0.900	0.900	1940
Unit 2	Hydro	Water	0.800	0.800	1940
Unit 3	Hydro	Water	1.000	1.000	1983
Menomonie Hydroelectric Dunn County, WI					
Unit 1	Hydro	Water	2.600	2.600	1958
Unit 2	Hydro	Water	2.700	2.700	1958
Minnesota Valley Steam Chippewa County, MN					
Unit 3	Steam	Coal/Gas/Oil #2	47.000	47.000	1953
Monticello Nuclear Wright County, MN					
Unit 1	Nuclear	Uranium	545.000	562.000	1971
Pathfinder Minnehaha County, SD					
Unit 1	Steam	Gas	61.000	0.000	1969
Prairie Island Nuclear Goodhue County, MN					
Unit 1	Nuclear	Uranium	514.000	533.000	1973
Unit 2	Nuclear	Uranium	513.000	531.000	1974
Red Wing Steam Goodhue County, MN					
Unit 1	Steam	RDF/Gas	11.000	11.000	1949
Unit 2	Steam	RDF/Gas	11.000	11.000	1949
Riverdale Hydroelectric St. Croix County, WI					
Unit 1	Hydro	Water	0.300	0.300	1905
Unit 2	Hydro	Water	0.300	0.300	1905
Riverside Steam Hennepin County, MN					
Unit 7	Steam	Coal/Gas/Oil #2	150.000	153.000	1987
Unit 8	Steam	Coal/Oil #2	222.000	222.000	1964

**TABLE 9**

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Saxon Falls Hydroelectric Jackson County, WI					
Unit 1	Hydro	Water	0.700	0.600	1913
Unit 2	Hydro	Water	0.700	0.600	1913
Sherburne County Steam (59% share of Unit 3) Sherburne County, MN					
Unit 1	Steam	Coal/Oil #2	712.000	712.000	1976
Unit 2	Steam	Coal/Oil #2	712.000	712.000	1977
Unit 3	Steam	Coal/Oil #2	514.000	514.000	1987
St. Croix Falls Hydroelectric Polk County, WI					
Unit 1	Hydro	Water	3.000	3.000	1905
Unit 2	Hydro	Water	3.000	3.000	1905
Unit 3	Hydro	Water	2.900	2.900	1905
Unit 4	Hydro	Water	2.900	2.900	1905
Unit 5	Hydro	Water	3.100	3.100	1910
Unit 6	Hydro	Water	3.000	3.000	1910
Unit 7	Hydro	Water	3.100	3.100	1923
Unit 8	Hydro	Water	2.900	2.900	1923
Superior Falls Hydroelectric Gogebic County, MI					
Unit 1	Hydro	Water	0.900	0.700	1917
Unit 2	Hydro	Water	0.900	0.700	1917
Thornapple Hydroelectric Rusk County, WI					
Unit 1	Hydro	Water	0.800	0.800	1929
Unit 2	Hydro	Water	0.800	0.800	1929
Trego Hydroelectric Washburn County, WI					
Unit 1	Hydro	Water	0.800	0.800	1927
Unit 2	Hydro	Water	0.500	0.500	1927
United Health Care Hennepin County, MN					
Unit 1&2	Gas Turbine	Oil #2	3.600	3.600	1993
United Hospital Ramsey County, MN					
Unit 1	Gas Turbine	Oil #2	4.800	4.800	1992

**TABLE 9**

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
West Faribault Jet Engine Rice County, MN					
Unit 2	Gas Turbine	Gas	17.000	0.000	1965
Unit 3	Gas Turbine	Gas	15.000	0.000	1965
Wheaton Chippewa County, WI					
Unit 1	Gas Turbine	Oil #2/Gas	55.000	68.000	1973
Unit 2	Gas Turbine	Oil #2/Gas	63.000	73.000	1973
Unit 3	Gas Turbine	Oil #2/Gas	55.000	70.000	1973
Unit 4	Gas Turbine	Oil #2/Gas	55.000	70.000	1973
Unit 5	Gas Turbine	Oil #2/Gas	57.000	81.000	1973
Unit 6	Gas Turbine	Oil #2/Gas	57.000	81.000	1973
White River Hydroelectric Ashland County, WI					
Unit 1	Hydro	Water	0.400	0.300	1907
Unit 2	Hydro	Water	0.400	0.300	1907
Wilmarth Steam Blue Earth County, MN					
Unit 1	Steam	RDF/Gas	11.000	11.000	1948
Unit 2	Steam	RDF/Gas	11.000	11.000	1951
Wissota Hydroelectric Chippewa County, WI					
Unit 1	Hydro	Water	6.000	6.000	1917
Unit 2	Hydro	Water	6.200	6.200	1917
Unit 3	Hydro	Water	6.200	6.200	1917
Unit 4	Hydro	Water	6.300	6.300	1917
Unit 5	Hydro	Water	6.300	6.300	1917
Unit 6	Hydro	Water	6.200	6.200	1917

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Otter Tail Power Company</b>					
Bemidji Hydroelectric Beltrami County, MN					
Unit 1	Hydro	Water	0.240	0.240	1907
Unit 2	Hydro	Water	0.620	0.620	1907
Big Stone Plant (54% share ) Grant County, SD					
Unit 1	Steam	Coal/RRF	244.437	249.988	1975
Unit 2	Int Comb	Oil #2	0.614	0.614	1975
Coyote Station (35% share) Mercer County, ND					
Unit 1	Steam	Coal/Oil #2	149.450	149.450	1981
Dayton Hollow Hydroelectric Otter Tail County, MN					
Unit 1	Hydro	Water	0.550	0.550	1909
Unit 2	Hydro	Water	0.440	0.440	1919
Fergus Control Center Otter Tail County, MN					
Unit 1	Int Comb	Oil #2	2.049	2.049	1995
Hoot Lake Hydroelectric Otter Tail County, MN					
Unit 1	Hydro	Water	0.810	0.810	1914
Hoot Lake Steam Plant Otter Tail County, MN					
Unit 1	Steam	Coal/Oil #2	7.630	7.630	1948
Unit 2	Steam	Coal/Oil #2	63.750	63.750	1959
Unit 2A	Int Comb	Oil #2	0.265	0.265	1959
Unit 3	Steam	Coal/Oil #2	82.650	82.650	1964
Unit 3A	Int Comb	Oil #2	0.170	0.170	1964
Jamestown Turbine Plant Stutsman County, ND					
Unit 1	Int Comb	Oil #2	20.700	29.300	1976
Unit 2	Int Comb	Oil #2	21.000	29.400	1978
Lake Preston Turbine Plant Kingsbury County, SK					
Unit 1	Int Comb	Oil #2	21.400	29.400	1978
Pisgah Hydroelectric Otter Tail County, MN					
Unit 1	Hydro	Water	0.720	0.720	1918

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Potlatch Cogeneration (50% share) Beltrami County, MN					
Unit 1	Steam	Wood Waste/REF	5.375	5.375	1992
Taplin Gorge Hydroelectric Otter Tail County, MN					
Unit 1	Hydro	Water	0.530	0.530	1925
Wright Hydroelectric Otter Tail County, MN					
Unit 1	Hydro	Water	0.464	0.464	1922
<b>Princeton Public Utilities</b>					
Princeton Power Plant Mille Lacs County, MN					
Unit 1	Int Comb	Oil #2	1.000	1.000	1938
Unit 2	Int Comb	Oil #2	1.000	1.000	1938
Unit 3	Int Comb	Oil #2	2.000	2.000	1977
Unit 4	Int Comb	Oil #2	1.000	1.000	1967
Unit 5	Int Comb	Oil #2	1.000	1.000	1953
Unit 6	Int Comb	Oil #2	2.700	2.700	1963
<b>Redwood Falls Public Utilities Commission</b>					
Redwood Falls Power Plant Redwood County, MN					
Unit 1	Hydro	Water	3.000	3.000	1930
Unit 7	Int Comb	Diesel	5.600	5.600	1973
Southside Substation Plant Redwood County, MN					
Unit 6	Int Comb	Diesel	2.100	2.100	1968
<b>Rochester Public Utilities</b>					
Cascade Creek Olmsted County, MN					
Unit 1	Gas Turbine	Oil #2	30.000	40.000	1974
Lake Zumbro Hydroelectric Wabasha County, MN					
Unit 1	Hydro	Water	1.500	1.000	1984
Unit 2	Hydro	Water	1.500	1.000	1984

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
<b>Silver Lake Steam Plant</b> Olmsted County, Mn					
Unit 1	Steam	Coal/Gas	9.000	9.000	1949
Unit 2	Steam	Coal/Gas	14.000	14.000	1953
Unit 3	Steam	Coal/Gas	23.000	23.000	1962
Unit 4	Steam	Coal/Gas	59.000	59.000	1969
<b>Rock Rapids, City of</b> Rock Rapids Plant Lyon County, IA					
Unit 1	Int Comb	Oil #2	2.500	2.500	1968
<b>Roseau Municipal Water &amp; Light</b> Roseau Municipal Power Plant Roseau County, MN					
Unit 1	Int Comb	Oil #2	1.400	1.400	1956
Unit 2	Int Comb	Oil #2	1.136	1.136	1949
Unit 3	Int Comb	Oil #2	0.550	0.550	1946
<b>Sleepy Eye Public Utilities</b> Sleepy Eye Power Plant Brown County, MN					
Unit 2	Steam	Gas	2.000	2.000	1946
Unit 3	Int Comb	Gas/Oil #2	1.500	1.500	1961
Unit 4	Int Comb	Oil #2	1.800	1.800	1994
Unit 5	Int Comb	Oil #2	1.800	1.800	1995
<b>Southern Minnesota Municipal Power Agency</b> Blooming Prairie Plant Steele County, MN					
Unit 1	Int Comb	Oil #2/Gas	1.300	1.300	1957
Unit 2	Int Comb	Oil #2/Gas	1.200	1.200	1975
Unit 3	Int Comb	Oil #2/Gas	0.800	0.800	1975
Cascade Creek Olmsted County, MN					
Unit 1	Gas Turbine	Oil #2	29.300	39.200	1975
Main Plant Meeker County, MN					
Unit 5	Int Comb	Gas/FO#2	2.000	2.000	1963
Unit 6	Int Comb	Gas/FO#2	2.000	2.000	1963

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
	Unit Type	Energy Source	Capacity		Year Installed
			Summer (MW)	Winter (MW)	
Mora Municipal Plant Kanabec County, MN					
Unit 2	Int Comb	Oil #2/Gas	0.800	0.800	1960
Unit 5	Int Comb	Oil #2/Gas	4.100	4.100	1972
Unit 6	Int Comb	Oil #2/Gas	6.600	6.600	1975
New Prague Power Plant LeSueur County, MN					
Unit 2	Int Comb	Gas/Oil #2	4.700	4.700	1975
Unit 3	Int Comb	Gas/Oil #2	2.600	2.600	1963
Unit 4	Int Comb	Gas/Oil #2	3.600	3.600	1967
Unit 6	Int Comb	Gas/Oil #2	6.400	6.400	1981
North Branch Power Plant Chisago County, MN					
Unit 1	Int Comb	Gas/Oil #2	0.800	0.800	1960
Unit 2	Int Comb	Gas/Oil #2	1.200	1.200	1970
Owatonna Downtown Steele County, MN					
Unit 5	Steam	Gas	9.400	9.400	1957
Unit 6	Steam	Gas	20.800	20.800	1969
Owatonna West Sub. Steele County, MN					
Unit 7	Gas Turbine	Gas	19.100	19.100	1982
Preston Municipal Plant Fillmore County, MN					
Unit 4	Int Comb	Oil #2/Gas	0.600	0.600	1949
Unit 5	Int Comb	Oil #2/Gas	1.000	1.000	1954
Unit 6	Int Comb	Oil #2/Gas	2.200	2.200	1974
Redwood Falls Diesel Plant Redwood County, MN					
Unit 1	Int Comb	Oil #2/Gas	2.100	2.100	1970
Unit 2	Int Comb	Oil #2/Gas	5.600	5.600	1974
Sherburne Steam Plant (41% share) Sherburne County, MN					
Unit 3	Steam	Coal/Oil #2	357.100	357.100	1988
Spring Valley Plant Fillmore County, MN					
Unit 1	Int Comb	Gas/Oil #2	0.500	0.500	1952
Unit 2	Int Comb	Gas/Oil #2	0.800	0.800	1952
Unit 3	Int Comb	Gas/Oil #2	1.800	1.800	1960

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Springfield Public Utilities Commission</b>					
Springfield Municipal Plant Brown County, MN					
Unit 4	Steam	Gas	4.000	4.000	1960
Unit 5	Int Comb	Diesel	1.825	1.825	1994
Unit 6	Int Comb	Diesel	1.825	1.825	1996
Unit 7	Int Comb	Diesel	1.825	1.825	1998
Unit 8	Int Comb	Diesel	11.300	11.300	1998
<b>Steele Waseca Cooperative Electric</b>					
Windmills Co-Generators Steele County, MN					
Unit 1	Wind	Wind	0.004	0.004	1984
Unit 2	Wind	Wind	0.018	0.018	1984
Unit 3	Wind	Wind	0.025	0.025	1996
Unit 4	Wind	Wind	0.035	0.035	1997
<b>Thief River Falls Municipal Utility</b>					
Thief River Falls Municipal Power Plant (HC) Pennington County, MN					
Unit 1	Hydro	Water	0.220	0.220	1927
Unit 2	Hydro	Water	0.300	0.300	1927
Thief River Falls Municipal Power Plant (IC) Pennington County, MN					
Unit 1	Int Comb	Oil #2	1.200	1.200	1955
Unit 2	Int Comb	Oil #2	1.000	1.000	1952
Unit 3	Int Comb	Oil #2	0.900	0.900	1940
Unit 4	Int Comb	Oil #2	1.900	1.900	1948
<b>Truman Public Utilities</b>					
Truman Municipal Plant Martin County, MN					
Unit 1	Int Comb	Gas/Diesel	0.200	0.200	1938
Unit 2	Int Comb	Gas/Diesel	0.200	0.200	1938
Unit 3	Int Comb	Gas/Diesel	2.200	2.200	1975
Unit 4	Int Comb	Gas/Diesel	0.700	0.700	1954
Unit 5	Int Comb	Gas/Diesel	0.800	0.800	1960
Unit 6	Int Comb	Gas/Diesel	0.800	0.800	1997

TABLE 9

<b>ELECTRIC GENERATING PLANTS SERVING MINNESOTA DURING CALENDAR YEAR 1998</b>
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Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Two Harbors Water &amp; Light</b>					
Two Harbors Plant Lake County, MN					
Unit 1	Int Comb	Diesel	2.000	2.000	1971
<b>United Power Association</b>					
Cambridge Gas Turbine Plant Isanti County, MN					
Unit 1	Gas Turbine	Oil #2	21.400	29.300	1978
Coal Creek Diesel (44% share) McLean County, ND					
Unit 1	Int Comb	Diesel	0.920	0.920	1979
Coal Creek Station (44% share) McLean County, ND					
Unit 1	Steam	Coal	233.160	233.160	1979
Unit 2	Steam	Coal	238.660	238.660	1980
Elk River Station Sherburne County, MN					
Unit 1	Steam	RDF/Gas/Oil #2	10.250	10.250	1951
Unit 2	Steam	RDF/Gas/Oil #2	11.250	11.250	1951
Unit 3	Steam	RDF/Gas/Oil #2	17.500	17.500	1959
Maple Lake Wright County, MN					
Unit 1	Gas Turbine	Oil #2	21.400	29.300	1978
Rock Lake Pine County, MN					
Unit 1	Gas Turbine	Oil #2	21.400	29.300	1978
Stanton Station Steam Plant Mercer County, ND					
Unit 1	Steam	Coal/Oil #2	185.100	187.500	1966
<b>Virginia Public Utilities</b>					
Virginia Power Plant St. Louis County, MN					
Unit 1	Steam	Coal/Gas	4.000	4.000	1947
Unit 5	Steam	Coal/Gas	8.300	8.300	1953
Unit 6	Steam	Coal/Gas	18.500	18.500	1971

TABLE 9

**ELECTRIC GENERATING PLANTS SERVING MINNESOTA  
DURING CALENDAR YEAR 1998**

Plant Profile					
Unit Type	Energy Source	Capacity		Year Installed	
		Summer (MW)	Winter (MW)		
<b>Warren, City of</b>					
Warren Plant Marshall County, MN					
Unit 1	Int Comb	Diesel	0.500	0.575	1953
Unit 2	Int Comb	Diesel	1.000	1.150	1943
Unit 3	Int Comb	Diesel	0.200	0.300	1941
Unit 4	Int Comb	Diesel	0.100	0.200	1935
<b>Wells Public Utilities</b>					
Wells Plant Fairbault County, MN					
Unit 1	Int Comb	Oil #2/Gas	1.400	1.400	1953
Unit 2	Int Comb	Oil #2/Gas	1.500	1.500	1957
Unit 3	Int Comb	Oil #2/Gas	1.000	1.000	1950
Unit 4	Int Comb	Oil #2/Gas	2.300	2.300	1966
Unit 5	Int Comb	Oil #2/Gas	2.200	2.200	1975
<b>Willmar Municipal Utilities</b>					
Willmar Plant Kandiyohi County, MN					
Unit 1	Steam	Coal/Gas	4.000	4.000	1947
Unit 2	Steam	Coal/Gas	7.000	7.000	1952
Unit 3	Steam	Coal/Gas	15.000	8.000	1959
<b>Windom Municipal Utilities</b>					
Windom Gas Turbine Cottonwood County, MN					
Unit 1	Gas Turbine	Oil #2	3.000	3.000	1980

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Adrian Public Utilities</b>							
Adrian Power Plant Nobles County, MN							
Unit 3	0			0			
Unit 4	0			0			
<b>Aitkin Public Utilities Commission</b>							
Aitkin Power Plant Aitkin County, MN							
Unit 1 & 4-6	26			1,973			
<b>Alexandria Board of Public Works</b>							
Alexandria Power Plant Douglas County, MN							
Unit 1	9			1,139			
Unit 2	134		472	2,025			
Unit 3	179		715	1,680			
<b>Arlington, City of</b>							
Wastewater & Lift Station Sibley County, MN							
Unit 1	32			432			
Unit 2	32			138			
<b>Austin Utilities</b>							
Downtown Plant Mower County, MN							
Units 2 - 5	17,244		283,607				
Northeast Plant Mower County, MN							
Unit 1	129,761	61,087	197,699				

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Baudette, City of</b>							
Baudette Power Plant							
Lake of the Woods County, MN							
Unit 2	0			0			
Unit 3	1			20			
Unit 4	1			50			
Unit 5	3			50			
<b>Benson Municipal Utilities</b>							
Benson Municipal Utilities							
Swift County, MN							
Unit 4	2			480			
Unit 5	4			457			
Unit 6	9			750			
<b>Blue Earth Light &amp; Water</b>							
Blue Earth City Plant							
Faribault County, MN							
Unit 1	163		468	5,762			
Unit 3	178			12,176			
Unit 4	202			13,405			
Unit 5	197			13,886			
Unit 6	200			13,638			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Cooperative Power Association</b>							
Coal Creek Diesel (56% share) McLean County, ND Unit 1	0						
Coal Creek Station (56% share) McLean County, ND Unit 1	2,280,237	2,114,619			76,963		
Unit 2	2,054,236	1,861,718			169,949		
St. Bonifacious Power Plant Carver County, MN Unit 1	6,982			651,030			
<b>Dairyland Power Cooperative</b>							
Alma Station Buffalo County, WI Unit 1	37,915	23,919		14,770			
Unit 2	41,932	26,454		16,340			
Unit 3	39,198	24,729		15,270			
Unit 4	260,466	131,511		19,350			
Unit 5	365,428	181,897		14,260			
Flambeau Hydroelectric Rusk County, WI Unit 1	2,995						
Unit 2	17,492						
Unit 3	17,090						
Genoa 3 Vernon County, WI Unit 1	1,573,478	730,722		418,000			
JP Madgett Buffalo County, WI Unit 1	2,503,270	1,251,635		343,000			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Delano Municipal Utilities</b>							
Delano Municipal Plant							
Wright County, MN							
Unit 1	47			3,730			
Unit 3	108			6,291			
Unit 4	106			8,540			
Unit 5	127			10,230			
Unit 6	96			5,541			
Unit 7	74			6,253			
Unit 8	0			0			
<b>Detroit Lakes Public Utilities</b>							
Jet Plant							
Becker County, MN							
Unit 1	20			2,612			
<b>Elk River Municipal Utilities</b>							
Elk River Mun. Utilities Diesel Plant							
Sherburne County, MN							
Unit 1	1			152			
Unit 2	0			0			
Unit 3	10			6,804			
Unit 4	11			8,251			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Fairfax, City of</b>							
Fairfax Municipal Power Plant Renville County, MN							
Unit 1 & 2	0			1,420			
Unit 4	0			620			
<b>Fairmont Public Utilities</b>							
Fairmont Power Plant Martin County, MN							
Unit 3	348		7,805				
Unit 4	914		21,277				
Unit 5	3,455		72,232				
Unit 6	2,494		23,879	16,660			
Unit 7	2,189		20,487	16,986			
<b>Glencoe Light and Power Commission</b>							
Glencoe Municipal Electric Plant McLeod County, MN							
Unit 5 - 12	3,400		34,876	238,191			
<b>Grand Marais Utilities</b>							
Grand Marais Power Plant Cook County, MN							
Unit 2	44			3,000			
Unit 5	46			3,540			
Unit 6	109			8,475			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Granite Falls Municipal Utilities</b>							
Granite Falls Municipal Hydroelectric Yellow Medicine County, MN							
Unit 1	956						
Unit 2	189						
Unit 3	2,223						
<b>Halstad Municipal Utilities</b>							
Halstad Diesel Plant Norman County, MN							
Unit 1-3	9			650			
<b>Hastings Public Utilities Commission</b>							
Hastings Hydroelectric Facility Dakota County, MN							
Unit 1	11,642						
Unit 2	14,047						
<b>Hawley Public Utilities</b>							
Hawley Plant Clay County, MN							
Unit 1	1			37			
Unit 2	3			260			
Unit 3	1			37			
Unit 4	1			104			
Unit 5	7			105			
<b>Hibbing Public Utilities</b>							
Hibbing Public Utilities Plant St. Louis County, MN							
Unit 3, 5 & 6	21,459	64,930	917				

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Hutchinson Utilities Commission</b>							
Hutchinson Municipal Plant No. 1 McLeod County, MN							
Unit 2	22		100	1,069			
Unit 3	438		4,335	3,528			
Unit 4	1,326		13,255	14,028			
Unit 5	18			1,080			
Unit 6	12			710			
Unit 7	927		7,441	17,860			
Unit 8	35,957		396,301	1,021			
Hutchinson Municipal Plant No. 2 McLeod County, MN							
Unit 1 & 2	188,590		1,538,752				
Unit 9	3,674			364,443			
<b>Interstate Power Company</b>							
Dubuque Internal Combustion Dubuque County, IA							
Unit 1 & 2	115			16,632			
Dubuque Steam Dubuque County, IA							
Unit 2	160		791				
Unit 3	133,332	82,005	7,665				
Unit 4	162,386	99,972	6,068				
Fox Lake Gas Turbine Martin County, MN							
Unit 4	4,378			380,268			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Fox Lake Steam Martin County, MN							
Unit 1	6,086		71,783				
Unit 2	6,065		71,746				
Unit 3	106,889		1,264,609		30,342		
Hills Internal Combustion Rock County, MN							
Unit 1 & 2	-89			7,224			
Lansing Internal Combustion Allamakee County, IA							
Unit 1	15			672			
Unit 2	40			1,722			
Lansing Steam Allamakee County, IA							
Unit 1	13,630	8,516					
Unit 2	14,765	9,225					
Unit 3	123,959	77,445					
Unit 4	1,075,129	743,979					
Lime Creek Cerro Gordo County, IA							
Unit 1	4,578			497,700			
Unit 2	5,907			642,222			
Louisa Station No. 1 (4% share) Louisa County, IA							
Unit 1	180,938	113,320	3,990				
M.L. Kapp Steam Clinton County, IA							
Unit 1	3,239		23,895				
Unit 2	1,071,648	517,873	35,843				
Montgomery Gas Turbine LeSueur County, MN							
Unit 1	2,041			240,408			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Neal No. 4 (22% share) Woodbury County, IA Unit 4	888,259	560,854					
New Albin Internal Combustion Allamakee County, IA Unit 1	-38			294			
<b>Janesville Municipal Utilities</b>							
Janesville Municipal Plant Waseca County, MN							
Unit 1	262		26,241	2,110			
Unit 2	16		1,348	450			
Unit 3	106		2,317	1,532			
Unit 4	15			1,100			
<b>Kenyon Municipal Utilities</b>							
Kenyon Municipal Plant Goodhue County, MN							
Unit 5	83			8,162			
Unit 6	159			14,257			
Unit 7	185			15,908			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Lake Crystal Municipal Utilities</b>							
Lake Crystal Plant Blue Earth County, MN							
Unit 1	5		52	140			
Unit 3	268		2,552	1,615			
Unit 4	91		760	1,360			
<b>Lakefield Public Utilities</b>							
Lakefield Power Plant Jackson County, MN							
Unit 1-5	3			2,800			
<b>Lanesboro Public Utilities</b>							
Lanesboro Power Plant - Diesel Fillmore County, MN							
Units 1 & 2	419			3,133			
Lanesboro Power Plant - Hydro Fillmore County, MN							
Unit 1	0						
<b>Luverne Public Utilities</b>							
Luverne Municipal Power Plant Rock County, MN							
Unit 4	20			1,918			
Unit 5	4			400			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Madelia Municipal Light &amp; Power</b>							
Madelia Municipal Plant Watonswan County, MN							
Unit 2	394		3,746	3,162			
Unit 3	4		5	16			
Unit 4	849		7,711	9,037			
Unit 5	50		554	185			
<b>Madison Municipal Utilities</b>							
Madison Plant Lac Qui Parle County, MN Units 1 & 2							
	0						
<b>Melrose Public Utilities</b>							
Melrose Power Plant Stearns County, MN							
Unit 1	37			3,090			
Unit 2	100			9,850			
Unit 3	409			40,748			
Unit 4	407			40,308			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Minnesota Power Company</b>							
Blanchard Hydroelectric Station Morrison County, MN							
Unit 1	37,485						
Unit 2	43,080						
Unit 3	27,085						
Boswell EC (79% share Unit 4) Itasca County, MN							
Unit 1	323,500	203,200		47,918			
Unit 2	393,500	240,700		60,562			
Unit 3	2,143,300	1,245,200		369,006			
Unit 4	3,556,300	2,139,100		311,975			
Fond Du Lac Hydroelectric Station St. Louis County, MN							
Unit 1	52,194						
Knife Falls Hydroelectric Station Carlton County, MN							
Unit 1	4,304						
Unit 2	4,142						
Unit 3	3,183						
Laskin EC St. Louis County, MN							
Unit 1	286,100	191,800		33,200			
Unit 2	285,500	191,700		34,400			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Little Falls Hydroelectric Station Morrison County, MN							
Unit 1	6,194						
Unit 2	6,551						
Unit 3	6,913						
Unit 4	9,768						
Unit 5	1,669						
Unit 6	1,300						
M.L. Hibbard Steam Station St. Louis County, MN							
Unit 3	12,932	9,914					103,678
Unit 4	4,406	21,668					105,277
Milton R. Young (71% share Unit 2) Oliver County, ND							
Unit 2	2,128,272	1,811,703		406,532			
Pillager Hydroelectric Station Cass County, MN							
Unit 1	5,943						
Unit 2	5,639						
Prairie River Hydroelectric Station Itasca County, MN							
Unit 1	1,097						
Unit 2	2,053						
Scanlon Hydroelectric Station Carlton County, MN							
Unit 1	1,368						
Unit 2	2,429						
Unit 3	2,251						
Unit 4	2,452						

TABLE 10

**NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING  
POWER FOR MINNESOTA DURING 1998**

	Net MWh Generation*	Fuel Used					Nuclear (Mbtu)	Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)			
Sylvan Hydroelectric Station Cass County, MN								
Unit 1	3,952							
Unit 2	4,142							
Unit 3	4,869							
Thomson Hydroelectric Station Carlton County, MN								
Unit 1	61,996							
Unit 2	44,094							
Unit 3	40,690							
Unit 4	44,681							
Unit 5	49,623							
Unit 6	70,818							
Winton Hydroelectric Station Lake County, MN								
Unit 2	8,504							
Unit 3	10,245							

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Minnkota Power Cooperative, Inc.</b>							
Coyote Station (30% share)							
Mercer County, ND							
Unit 1	838,770	703,691		101,709			
Grand Forks Diesel Plant							
Grand Forks County, ND							
Units 1 - 11	0			0			
Harwood Diesel Plant							
Cass County, ND							
Unit 1	16			1,085			
Unit 2	16			1,154			
Unit 3	18			1,161			
Milton R. Young (29% share Unit 2)							
Oliver County, ND							
Unit 1	1,826,748	1,584,589		1,041,712			
Unit 2	866,837	739,991		166,048			
Potlatch Cogeneration (50% share)							
Beltrami County, MN							
Unit 1	27,270						131,780
<b>Missouri River Energy Services</b>							
Laramie River Station (16% share)							
Platte County, WY							
Unit 1	2,096,511	1,332,719		230,000			
Watertown Power Plant							
Codington County, SD							
Unit 1	1,356			55,818			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Moorhead, City of</b>							
Moorhead Power Plant							
Clay County, MN							
Unit 6	30			4,804			
Unit 7	0	0					
<b>Moose Lake Water &amp; Light Commission</b>							
Moose Lake Municipal Plant							
Carlton County, MN							
Unit 1	44			3,605			
Unit 2	29			2,460			
Unit 4	36			2,850			
<b>New Ulm Public Utilities</b>							
New Ulm Gas Turbine Plant							
Brown County, MN							
Unit 5	2,933			288,155			
New Ulm Steam Plant							
Brown County, MN							
Unit 3	3,079		39,987				
Unit 4	6,527		69,575				
Unit 6	11,332		110,806				

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Northern States Power Company</b>							
Allen S. King Washington County, MN Unit 1	2,646,203	1,437,831	39,406				
Angus Anson Minnehaha County, SD Units 2 & 3	168,903		2,162,349	37,560			
Apple River Hydroelectric St. Croix County, WI Units 1 - 3	16,975						
Bayfront Steam Ashland County, WI Units 3 - 5	322,864	67,548	687,235				218,952
Big Falls Hydroelectric Rusk County, WI Units 1 - 3	26,295						
Black Dog Steam Dakota County, MN Unit 1	11,080	1,779	209,848				
Unit 2	-4,808	6,568	36,047				
Unit 3	481,488	311,304	256,146				
Unit 4	1,005,129	613,703	76,717				
Blue Lake Gas Turbine Scott County, MN Units 1 - 4	11,784			1,454,720			
Cedar Falls Hydroelectric Dunn County, WI Units 1 - 3	27,420						

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Chippewa Falls Hydroelectric Chippewa County, WI Units 1 - 6	47,774						
Cornell Hydroelectric Chippewa County, WI Units 1 - 4	47,480						
Dells Hydroelectric Eau Claire County, WI Units 1 - 7	30,846						
Flambeau Price County, WI Unit 1	7,804		150,058				
French Island Gas Turbine La Crosse County, WI Units 3 & 4	11,128			1,424,530			
French Island Steam Plant La Crosse County, WI Units 1 & 2	68,170		2,032				63,382
Granite City Gas Turbine Sherburne County, MN Units 1 - 4	10,585		189,160	621			
Hayward Hydroelectric Sawyer County, WI Unit 1	1,491						
Hennepin Island Hydroelectric Hennepin County, MN Units 1 - 5	81,917						

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
High Bridge Steam Ramsey County, MN Unit 5	533,172	342,083	119,563				
Unit 6	994,114	589,570	126,494				
Holcombe Hydroelectric Chippewa County, WI Units 1 - 3	65,209						
Inver Hills Gas Turbine Dakota County, MN Units 1 - 6	89,796		461,444	446,714			
Jim Falls Hydroelectric Chippewa County, WI Units 1 - 3	88,693						
Key City Gas Turbine Blue Earth County, MN Units 1 - 4	20,515		296,081				
Ladysmith Hydroelectric Rusk County, WI Units 1 - 3	7,729						
Menomonie Hydroelectric Dunn County, WI Units 1 & 2	22,759						
Minnesota Valley Steam Chippewa County, MN Unit 3	7,147	3,657	11,592	1,354			
Monticello Nuclear Wright County, MN Unit 1	4,118,927					42,746,195	

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Nuclear (Mbtu)	Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)			
Pathfinder Minnehaha County, SD Unit 1	-1,505		5,909					
Prairie Island Nuclear Goodhue County, MN Unit 1	4,209,066					44,195,052		
Unit 2	3,335,254					36,463,199		
Red Wing Steam Goodhue County, MN Unit 1	64,333		14,286				103,738	
Unit 2	64,567		14,378				102,985	
Riverdale Hydroelectric St. Croix County, WI Units 1 & 2	3,448							
Riverside Steam Hennepin County, MN Unit 7	1,038,440	646,968	31,170	4,250				
Unit 8	1,529,339	844,527		81,253				
Saxon Falls Hydroelectric Jackson County, WI Units 1 & 2	8,530							
Sherburne Cnty Steam (59% share Unit 3) Sherburne County, MN Unit 1	3,810,676	2,290,633		294,883				
Unit 2	4,429,170	2,696,518		229,296				
Unit 3	3,696,628	2,117,685		307,608				
St. Croix Falls Hydroelectric Polk County, WI Units 1 - 8	98,947							

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Superior Falls Hydroelectric Gogebic County, MI Units 1 & 2	8,640						
Thornapple Hydroelectric Rusk County, WI Units 1 & 2	6,424						
Trego Hydroelectric Washburn County, WI Units 1 & 2	6,725						
West Faribault Jet Engine Rice County, MN Units 2 & 3	1,958		32,727				
Wheaton Chippewa County, WI Units 1 - 6	93,544		834,871	4,660,698			
White River Hydroelectric Ashland County, WI Units 1 & 2	4,338						
Wilmarth Steam Blue Earth County, MN Unit 1	64,062		8,782				97,768
Unit 2	69,710		10,097				106,335
Wissota Hydroelectric Chippewa County, WI Units 1 - 6	87,335						
Dispersed Generation Units 1 - 7	-32			33,699			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Otter Tail Power Company</b>							
Bemidji Hydroelectric Beltrami County, MN Units 1 & 2	2,421						
Big Stone Plant (54% share ) Grant County, SD Units 1 & 2	1,551,959	916,160		174,874			52,656
Coyote Station (35% share) Mercer County, ND Unit 1	985,281	825,734		118,660			
Dayton Hollow Hydroelectric Otter Tail County, MN Units 1 & 2	7,022						
Fergus Control Center Otter Tail County, MN Unit 1	20			300			
Hoot Lake Hydroelectric Otter Tail County, MN Unit 1	3,575						
Hoot Lake Steam Plant Otter Tail County, MN Unit 1	-763	0					
Unit 2	324,207	195,874		13,446			
Unit 2A	0						
Unit 3	309,009	195,370		92,508			
Unit 3A	0						

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
Jamestown Turbine Plant Stutsman County, ND							
Unit 1	1,692			204,332			
Unit 2	1,885			223,960			
Lake Preston Turbine Plant Kingsbury County, SK							
Unit 1	3,603			409,087			
Pisgah Hydroelectric Otter Tail County, MN							
Unit 1	5,268						
Potlatch Cogeneration (50% share) Beltrami County, MN							
Unit 1	27,270						131,780
Taplin Gorge Hydroelectric Otter Tail County, MN							
Unit 1	4,281						
Wright Hydroelectric Otter Tail County, MN							
Unit 1	2,683						
<b>Princeton Public Utilities</b>							
Princeton Power Plant Mille Lacs County, MN							
Unit 1	0						
Unit 2	0						
Unit 3	266			20,885			
Unit 4	39			3,026			
Unit 5	63			3,026			
Unit 6	10			865			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Redwood Falls Public Utilities Commission</b>							
Redwood Falls Hydroelectric Plant Redwood County, MN							
Unit 1	2,094						
Redwood Falls Power Plant (IC) Unit 7	2,010			141,711			
Southside Substation Unit 6	750			52,120			
<b>Rochester Public Utilities</b>							
Cascade Creek Olmsted County, MN							
Unit 1	1,277			222,087			
Lake Zumbro Hydroelectric Wabasha County, MN							
Units 1 & 2	14,206						
Silver Lake Steam Plant Olmsted County, MN							
Unit 1	4,354	2,780	8,948				
Unit 2	9,725	5,252	11,586				
Unit 3	42,698	22,619	17,969				
Unit 4	165,128	81,493	77,386				
<b>Rock Rapids, City of</b>							
Rock Rapids Plant Lyon County, IA							
Unit 1	0			1,790			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Roseau Municipal Water &amp; Light</b>							
Roseau Municipal Power Plant Roseau County, MN Units 1 - 3	0						
<b>Sleepy Eye Public Utilities</b>							
Sleepy Eye Power Plant Brown County, MN Unit 2	-114						
Unit 3	134			9,899			
Unit 4	224			15,354			
Unit 5	107			18,889			
<b>Southern Minnesota Municipal Power Agency</b>							
Blooming Prairie Plant Steele County, MN Units 1-3	378			31,584			
Cascade Creek Olmsted County, MN Unit 1	1,607			195,972			
Main Plant Meeker County, MN Units 5 & 6	578		58,372	3,024			
Mora Municipal Plant Kanabec County, MN Units 2, 5 & 6	21		1,608	1,680			
New Prague Power Plant LeSueur County, MN Units 2, 3, 4 & 6	3,556		25,747	33,306			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
North Branch Power Plant Chisago County, MN Units 1 & 2	81			1,344			
Owatonna Downtown Steele County, MN Units 5 - 7	23,767		193,976				
Preston Municipal Plant Fillmore County, MN Units 4 - 6	284		667	6,468			
Redwood Falls Diesel Plant Redwood County, MN Units 1 & 2	2,705			192,906			
Sherburne Steam Plant (41% share) Sherburne County, MN Unit 3	2,416,573	1,383,778		207,009			
Spring Valley Plant Fillmore County, MN Units 1-3	285		1,799	11,508			
<b>Springfield Public Utilities Commission</b>							
Springfield Municipal Plant Brown County, MN Units 4-8	45			3,250			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Steele Waseca Cooperative Electric</b>							
Windmills							
Steele County, MN							
Unit 1	1						
Unit 2	3						
Unit 3	42						
Unit 4	23						
<b>Thief River Falls Municipal Utility</b>							
Thief River Falls Municipal Power Plant (HC)							
Pennington County, MN							
Unit 1	1,222						
Unit 2	1,536						
Thief River Falls Municipal Power Plant (IC)							
Pennington County, MN							
Unit 1	25			2,116			
Unit 2	20			1,710			
Unit 3	18			1,651			
Unit 4	10			860			
<b>Truman Public Utilities</b>							
Truman Municipal Plant							
Martin County, MN							
Unit 1	5			190			
Unit 2	0			40			
Unit 3	339		16,064	1,852			
Unit 4	5			564			
Unit 5	113		448	1,132			
Unit 6	156			11,420			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Two Harbors Water &amp; Light</b>							
Two Harbors Plant Lake County, MN Unit 1	48			3,104			
<b>United Power Association</b>							
Cambridge Gas Turbine Plant Isanti County, MN Unit 1	803			91,804			
Coal Creek Diesel (44% share) McLean County, ND Unit 1	0						
Coal Creek Station (44% share) McLean County, ND Unit 1	1,791,615	1,661,487			60,471		
Unit 2	1,614,043	1,462,778			133,532		
Elk River Station Sherburne County, MN Units 1 - 3	184,995		65,272	21,100			300,730
Maple Lake Wright County, MN Unit 1	475			49,761			
Rock Lake Pine County, MN Unit 1	784			84,968			
Stanton Station Steam Plant Mercer County, ND Unit 1	1,102,245	900,670		107,249			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)	Nuclear (Mbtu)	
<b>Virginia Public Utilities</b>							
Virginia Power Plant St. Louis County, MN Units 1, 5 & 6	52,040	219	81				
<b>Warren, City of</b>							
Warren Plant Marshall County, MN							
Unit 1	0						
Unit 2	0						
Unit 3	0						
Unit 4	0						
<b>Wells Public Utilities</b>							
Wells Plant Fairbault County, MN							
Unit 1	71		754	1,220			
Unit 2	135		1,560	740			
Unit 3	3		9	260			
Unit 4	135		1,566	540			
Unit 5	129		195	8,050			
<b>Willmar Municipal Utilities</b>							
Willmar Plant Kandiyohi County, MN Units 1 - 3	33,861	39,815	296,710				
<b>Windom Municipal Utilities</b>							
Windom Gas Turbine Cottonwood County, MN Unit 1	1			3,570			

TABLE 10

<b>NET GENERATION AND FUEL CONSUMPTION FOR ELECTRIC GENERATING PLANTS PRODUCING POWER FOR MINNESOTA DURING 1998</b>
---

	Net MWh Generation*	Fuel Used					Nuclear (Mbtu)	Other^^ (Tons)
		Coal (Tons)	Nat Gas (MCF)	Fuel Oil #2^ (Gallons)	Fuel Oil #6 (Gallons)			
<b>PUBLIC UTILITY TOTALS</b>	73,142,941	38,766,788	10,933,771	19,210,843	471,257	123,404,446	1,519,061	
<b>PRIVATE INDUSTRIAL FIRMS**</b>	2,893,417	795,196	2,554,076	5,778	0	0	998,111	
<b>QUALIFYING FACILITIES***</b>	487,732							

\* Net generation values of zero indicate less than one MWh of production; however, values are included in the Public Utility Total. Negative net generation values indicate that the station electric consumption exceeded the gross generation of the plant. However, these plants did produce positive amounts of energy during the year.

^ Fuel Oil #2 includes Diesel Fuel.

^^ "Other" fuels include wood, wood by-products, and refuse-derived fuel (RDF).

\*\* Information about individual plants owned by private industrial firms is proprietary.

\*\*\* Qualifying facilities are addressed under Minn. Rules, Chapter 7835. Reported information for qualifying facilities is required annually in Minn. Rules 7835.1300, 1400 & 1800. Qualifying facilities were excluded if already included in public utility or private industrial totals. 146,591 MWh (30%) of the net generation from qualifying facilities was produced using wind or solar.

## **SECTION II**

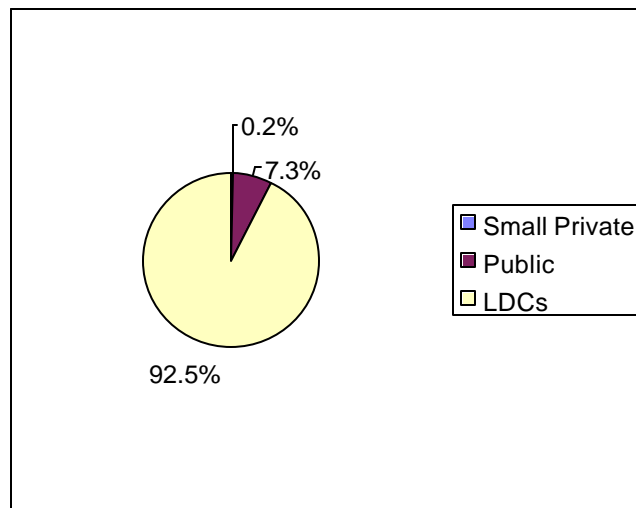
### **NATURAL-GAS UTILITIES**

## SECTION II: NATURAL-GAS UTILITIES

### *Overview*

Natural-gas companies in Minnesota are owned both privately and publicly. These distribution companies deliver gas to customers, regardless of whether the utility or a third party<sup>1</sup> purchases the gas for the customer. The Minnesota Public Utilities Commission regulates the rates of large privately-owned local distribution companies (LDCs). The Commission generally does not regulate rates of publicly-owned utilities. The Commission also does not regulate rates of privately-owned companies that are smaller than legislatively set limits. As Figure 3 below shows, LDCs distribute most of Minnesota's natural gas.

**Figure 3: Natural-Gas Throughput Reported by Type of Utility<sup>2</sup>**



In 1998 there were seven investor-owned local distribution companies serving customers in Minnesota. There are seven small privately-owned and 25 municipal gas utilities serving Minnesota customers. Not all non-regulated natural gas companies reported 1998 data to the Department. Those that did not report are not included in Tables 11 through 15.

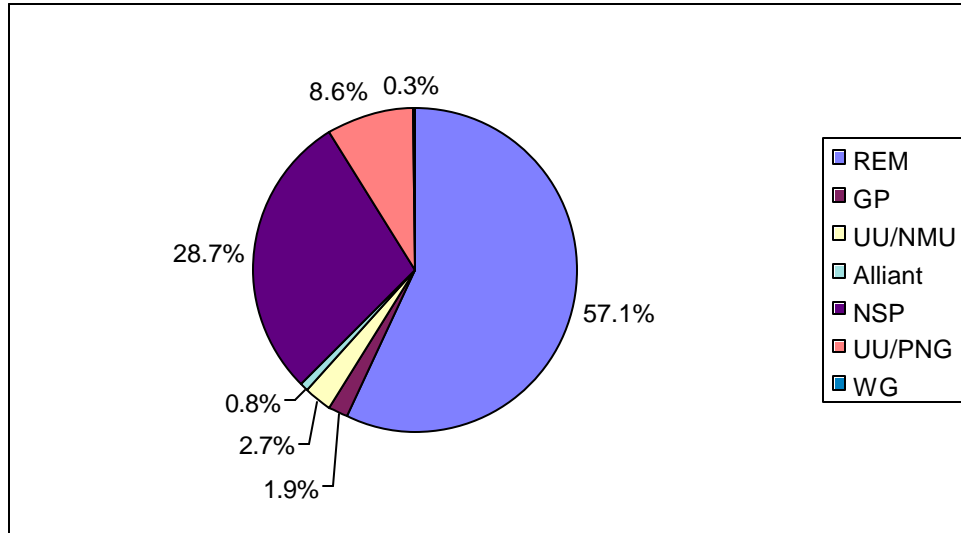
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<sup>1</sup> Certain customers can purchase natural-gas supplies from companies that are not regulated by state authorities. However, these customers must still transport the gas through their state-regulated local natural-gas companies.

<sup>2</sup> See Table 13 for consumption by company.

As Figure 4 shows, Reliant Energy Minnegasco is the largest investor-owned utility, followed by Northern States Power Company and UtiliCorp United/Peoples Natural Gas Company. The investor-owned company with the smallest Minnesota consumption in 1998 was Western Gas Utilities, Inc, accounting for 0.2 percent of natural-gas consumption in Minnesota.

**Figure 4: Natural-Gas Throughput Reported by Investor-Owned Utilities**



### Investor-Owned Natural-Gas Companies<sup>3</sup>

**Alliant:** Alliant Energy

**GP:** Great Plains Natural Gas Co.

**NSP:** Northern States Power Co.

**REM:** Reliant Energy Minnegasco

**UU/NMU:** UtiliCorp United/Northern Minnesota Utilities

**UU/PNG:** UtiliCorp United/Peoples Natural Gas Co.

**WG:** Western Gas Utilities, Inc.

<sup>3</sup> See Table 13 for consumption by company.

## Introduction to Natural-Gas Tables

The tables in this section provide both aggregate and individual company information reported by natural-gas companies serving Minnesota. Tables 11 and 12 provide overall natural-gas consumption and numbers of natural-gas customers in Minnesota.

Tables 13 and 14 provide natural-gas consumption and numbers of natural-gas customers reported by each natural-gas company serving Minnesota in 1998. Table 15 provides revenues reported by the natural-gas companies.

Utility names used in these tables are as indicated by each utility that reported data for 1998. Some utilities have changed their names subsequent to the 1998 reporting cycle or may sometimes be referred to by different names. Notable examples of these include:

- NSP is now known as Xcel Energy (merger completed August 2000)
- Interstate Power Company is a subsidiary of Alliant Energy
- Western Gas Utilities, Inc. has been purchased by Xcel Energy (January 2000)

Table 11 indicates that 1998 consumption of natural gas in the residential sector was 14.1 percent lower than 1997 consumption. As Figure 5 below indicates, residential consumption of natural gas on a weather-normalized basis has declined since 1973 but has remained relatively steady in recent years.

**Figure 5: Weather-Normalized Natural-Gas Use Per Residential Customer**

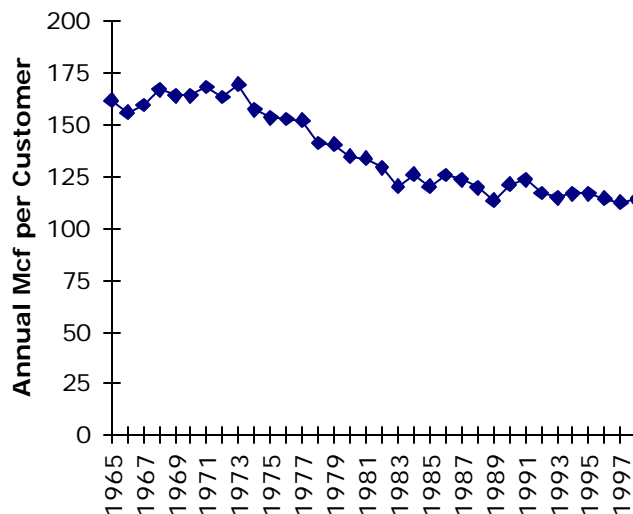


TABLE 11

## TOTAL MINNESOTA HISTORICAL NATURAL-GAS CONSUMPTION (1,000 MCF)

Year	Residential	Commercial	Industrial	Company Use	Unaccounted For	Deliveries to Transportation	Total
1965	87,309	52,121	107,914	952	524	0	248,821
1966	87,586	51,739	124,548	1,027	898	0	265,798
1967	89,671	61,014	130,519	1,076	1,002	0	283,282
1968	91,597	63,783	149,646	1,228	845	0	307,098
1969	97,181	69,359	147,976	1,218	726	0	316,460
1970	102,625	74,096	149,782	1,099	1,040	0	328,642
1971	103,291	74,081	155,428	1,195	1,009	0	335,004
1972	112,303	79,578	140,631	1,247	1,007	0	334,765
1973	98,547	80,111	159,942	1,396	256	0	340,253
1974	102,861	79,637	143,553	1,333	625	0	328,009
1975	104,377	78,752	121,772	1,158	122	0	306,181
1976	106,415	74,651	103,545	2,657	765	0	288,033
1977	101,361	72,167	84,873	225	158	0	258,784
1978	106,238	77,378	86,263	335	1,488	0	271,701
1979	111,917	79,599	95,839	570	(1,227)	0	286,699
1980	103,208	80,845	90,551	342	1,650	0	276,596
1981	95,969	77,263	84,288	304	58	0	257,882
1982	107,478	83,208	64,473	463	(1,957)	0	253,664
1983	97,359	79,025	59,101	231	3,746	0	239,470
1984	101,868	82,770	64,584	258	(587)	0	248,893
1985	106,870	85,273	63,096	213	1,515	0	256,967
1986	103,139	80,382	52,364	238	(3,278)	0	232,846
1987	89,919	70,581	51,064	275	19	11,736	223,594
1988	108,423	85,462	41,344	284	1,060	32,916	269,489
1989	112,496	84,155	41,804	275	965	40,567	280,262
1990	106,894	85,978	44,635	217	(2,790)	48,843	283,777
1991	117,229	86,312	39,586	223	2,098	59,221	304,668
1992	113,160	83,255	36,977	430	3,260	57,086	294,169
1993	124,114	85,505	43,331	225	2,288	51,129	306,592
1994	121,450	80,888	42,452	335	1,014	59,177	305,317
1995	128,458	86,473	37,945	257	1,860	76,072	331,065
1996	142,268	94,824	44,429	333	1,938	61,007	344,799
1997	129,182	96,089	42,294	305	1,054	64,380	333,304
1998	110,934	84,596	43,837	194	1,673	63,934	305,168

\* Some natural gas customers can purchase gas supplies from unregulated natural gas suppliers and transport this gas through regulated utilities' systems.

Note: Industrial data includes natural gas sold to produce electricity.

TABLE 12

<b>NUMBER OF MINNESOTA NATURAL-GAS CUSTOMERS*</b>
---

Year	Residential Firm	Commercial Firm	Commercial Interruptible	Industrial Firm	Industrial Interruptible	Total
1965	513,568	40,432	3,324	709	725	558,758
1966	529,405	42,649	3,540	728	797	577,119
1967	546,115	45,352	3,799	758	932	596,956
1968	563,641	47,825	4,047	795	1,022	617,330
1969	577,380	49,670	4,179	818	1,044	633,091
1970	591,584	51,649	4,300	825	1,085	649,443
1971	603,357	53,230	4,418	838	1,137	662,980
1972	615,681	55,198	4,487	849	1,167	677,382
1973	631,314	56,701	4,670	861	1,210	694,756
1974	653,376	59,660	4,796	882	1,262	719,976
1975	666,996	60,972	4,789	967	1,270	734,994
1976	678,811	61,993	4,895	953	1,231	747,883
1977	691,089	62,778	4,910	929	1,249	760,955
1978	710,498	64,665	4,874	867	1,160	782,064
1979	732,503	66,974	4,556	855	1,224	806,112
1980	767,457	70,997	4,283	881	1,209	844,827
1981	785,008	73,204	4,168	972	1,136	864,488
1982	792,088	75,016	3,529	1,012	1,011	872,656
1983	803,542	76,605	3,374	979	881	885,381
1984	822,509	79,032	3,371	1,098	950	906,960
1985	841,760	82,256	3,417	1,072	983	929,488
1986	860,695	85,063	3,581	1,023	800	951,162
1987	884,476	86,887	3,523	1,036	823	976,745
1988	904,515	88,675	3,452	1,067	783	998,492
1989	935,252	91,628	3,371	1,085	788	1,032,124
1990	962,006	94,214	3,264	1,088	797	1,061,369
1991	979,426	95,641	3,263	1,072	702	1,080,104
1992	1,008,912	97,810	3,272	1,118	749	1,111,861
1993	1,034,433	98,917	3,174	1,074	526	1,138,124
1994	1,060,692	100,952	3,359	987	667	1,166,657
1995	1,091,477	102,097	3,343	814	672	1,198,403
1996	1,124,739	105,158	3,471	842	773	1,234,983
1997	1,151,421	107,223	3,422	772	753	1,263,591
1998	1,176,228	109,220	3,718	610	832	1,290,612

\* Sales and transportation customers are combined.

TABLE 13

## MINNESOTA NATURAL-GAS CONSUMPTION (MCF) BY COMPANY IN 1998

Name	Residential	Commercial	Industrial	Company Use	Unaccounted For	Deliveries to Transportation Customers	Electric Generation^	Total
Alliant Energy**	854,828	548,878	392,720	1,659	32,515	285,122	0	2,115,722
Argyle Mun Utilities	21,561	6,184	0	0	0	0	0	27,745
Austin Utilities-Gas Dept	1,161,232	272,364	*	18,702	0	0	*	2,618,262
Circle Pines Utilities	208,868	96,582	0	5,744	1,706	0	0	312,900
Cohasset, City of	35,001	*	*	0	0	0	0	55,821
Community Utilities Co. Inc.	64,278	19,773	32,539	960	0	0	0	117,550
Duluth Water&Gas	2,317,614	1,676,829	660,751	0	4,596	367,955	0	5,027,745
Gorhams' Inc.	716	906	1,232	0	0	0	0	2,854
Great Plains Nat Gas Co	1,442,662	*	1,001,363	7,952	0	2,334,049	*	6,494,137
Greater Minnesota Gas, Inc.	49,912	6,003	0	0	0	5,610	0	61,525
Hallock Mun Gas	47,530	16,890	0	0	0	0	0	64,420
Hawley Pub Util-Nat Gas	30,749	34,241	0	0	1,391	0	0	66,381
Hibbing Pub Util-Nat Gas	487,590	60,461	*	0	11,713	0	*	560,682
Hutchinson Util-Nat Gas	409,239	380,638	529,938	4,791	5,801	0	1,960,184	3,290,591
Lake Park Pub Utilities	20,354	10,726	0	265	0	0	0	31,345
New Ulm Public Utilities	453,660	163,885	*	15,171	0	0	*	1,539,633
New York Mills Mun Gas	33,287	58,722	0	0	546	0	0	92,555
Northern States Power-Gas	29,458,446	18,472,493	13,601,418	11,977	257,116	5,699,226	1,949,020	69,449,696
Northwest Natural Gas LLC	91,427	34,037	39,773	0	0	0	0	165,237
Northwest Natural Gas of Murray Co., Ir	41,181	28,144	27,434	0	0	0	0	96,759
Owatonna Pub Util-Nat Gas	756,222	548,395	889,078	0	50,811	0	4,541	2,249,047
Perham Mun Gas System	155,789	80,127	640,917	0	(3,617)	0	0	873,216
Reliant Energy-Minnegascc	58,543,822	50,024,506	16,657,524	114,559	1,298,430	4,266,777	1,207,180	132,112,798
Stephen Mun Gas	16,329	8,800	0	0	429	0	0	25,558
Two Harbors Mun Gas	154,904	106,901	135,440	0	6,086	0	0	403,331
UtiliCorp United, Inc./Northern MN Util	2,704,073	2,798,143	421,282	3,105	0	8,732,389	0	14,658,992
UtiliCorp United, Inc./Peoples Nat Gas	10,889,657	7,038,247	1,168,889	8,944	0	42,214,778	0	61,320,515
Virginia Public Utilities	65,476	*	0	0	6,087	0	*	604,498
Warren, City of	43,617	44,068	0	0	2,538	0	0	90,223
Western Gas Utilities, Inc.	373,817	153,624	84,473	168	(3,472)	28,389	1,003	638,002
<b>TOTAL</b>	<b>110,933,841</b>	<b>84,595,516</b>	<b>37,268,652</b>	<b>193,997</b>	<b>1,672,676</b>	<b>63,934,295</b>	<b>6,568,763</b>	<b>305,167,740</b>

^Includes natural gas sales and transportation.

\*Withheld to avoid disclosure of individual company information. Data included in totals.

\*\* f.n.a. Interstate Power-Nat Gas

TABLE 14

## MINNESOTA NATURAL-GAS CUSTOMERS BY COMPANY IN 1998\*

Name	Residential Firm	Commercial Firm	Commercial Interruptible	Industrial Firm	Industrial Interruptible	Electric Generation	Total
Alliant Energy^	9,025	1,135	47	13	8	0	10,228
Argyle Mun Utilities	215	36	0	0	0	0	251
Austin Utilities-Gas Dept	9,975	45	45	1	2	1	10,069
Circle Pines Utilities	2,470	95	0	0	0	0	2,567
Cohasset, City of	460	33	0	1	0	0	494
Community Utilities Co. Inc.	579	87	0	4	0	0	670
Duluth Water&Gas	22,121	1,717	93	13	11	0	23,955
Gorhams' Inc.	57	26	0	1	3	0	87
Great Plains Nat Gas Co	17,080	2,570	165	0	14	1	19,830
Greater Minnesota Gas, Inc.	872	20	11	0	0	0	903
Hallock Mun Gas	408	10	0	0	0	0	418
Hawley Pub Util-Nat Gas	362	73	0	0	0	0	435
Hibbing Pub Util-Nat Gas	2,974	325	10	0	3	1	3,313
Hutchinson Util-Nat Gas	4,029	462	6	2	1	0	4,502
Lake Park Pub Utilities	233	49	0	0	0	0	282
New Ulm Public Utilities	5,223	483	13	0	22	1	5,742
New York Mills Mun Gas	372	89	0	0	0	0	461
Northern States Power-Gas	321,253	27,241	481	107	134	6	349,222
Northwest Natural Gas LLC	1,183	117	0	0	21	0	1,321
Northwest Natural Gas of Murray Co., Ir	588	71	0	0	10	0	669
Owatonna Pub Util-Nat Gas	7,725	605	0	0	87	0	8,417
Perham Mun Gas System	1,895	96	0	0	18	0	2,009
Reliant Energy-Minnegasco	610,853	54,791	2,364	211	363	18	668,600
Stephen Mun Gas	210	54	0	0	0	0	264
Two Harbors Mun Gas	1,264	156	6	8	0	0	1,434
UtiliCorp United, Inc./Northern MN Util	29,067	4,675	150	0	18	0	33,910
UtiliCorp United, Inc./Peoples Nat Gas	120,005	13,317	310	197	117	0	133,946
Virginia Public Utilities	734	242	1	0	0	1	978
Warren, City of	479	111	4	0	0	0	594
Western Gas Utilities, Inc.	4,517	489	12	21	0	2	5,041
<b>TOTAL</b>	<b>1,176,228</b>	<b>109,220</b>	<b>3,718</b>	<b>579</b>	<b>832</b>	<b>31</b>	<b>1,290,612</b>

\*Sales and transportation customers are combined.

^ f.n.a. Interstate Power-Nat Gas

TABLE 15

MINNESOTA NATURAL-GAS REVENUE IN 1998<sup>^</sup>

Name	Residential	Commercial Firm	Commercial Interruptible	Industrial Firm	Industrial Interruptible	TOTAL
Alliant**	\$5,283,961	\$2,171,769	\$578,951	\$351,136	\$1,182,343	\$9,568,160
Argyle Mun Utilities	\$161,442	\$53,067	\$0	\$0	\$0	\$214,509
Austin Utilities-Gas Dept	\$6,035,291	\$236,109	\$630,017	*	*	\$8,619,401
Circle Pines Utilities	\$1,169,208	\$192,775	\$166,310	\$0	\$0	\$1,528,293
Cohasset, City of	\$256,073	*	\$0	*	\$0	\$364,877
Community Utilities Co. Inc.	\$284,630	\$84,499	\$0	\$140,591	\$0	\$509,721
Duluth Water&Gas	\$13,388,301	\$4,532,256	\$2,237,580	\$236,993	\$1,544,364	\$21,939,494
Gorhams' Inc.	\$5,324	\$6,065	\$0	*	*	\$16,080
Great Plains Nat Gas Co	\$8,182,290	\$4,438,552	\$2,871,288	\$0	\$2,808,530	\$18,300,660
Greater Minnesota Gas, Inc.	\$306,351	\$33,315	\$24,915	\$0	\$0	\$364,581
Hallock Mun Gas	\$218,215	\$81,072	\$0	\$0	\$0	\$299,287
Hawley Pub Util-Nat Gas	\$163,021	\$173,037	\$0	\$0	\$0	\$336,058
Hibbing Pub Util-Nat Gas	\$2,362,513	\$259,160	\$8,096	\$0	\$2,343	\$2,632,112
Hutchinson Util-Nat Gas	\$1,961,713	\$1,242,688	*	\$1,253,806	*	\$5,379,136
Lake Park Pub Utilities	\$85,485	\$47,896	\$0	\$0	\$0	\$133,381
New Ulm Public Utilities	\$2,318,449	\$725,466	\$829,660	\$0	\$0	\$3,873,575
New York Mills Mun Gas	\$175,285	\$273,569	\$0	\$0	\$0	\$448,855
Northern States Power-Gas	\$174,643,870	\$77,977,213	\$10,903,389	\$7,011,653	\$32,042,701	\$302,578,826
Northwest Natural Gas Co.	\$643,789	\$207,367	\$0	\$0	\$169,937	\$1,021,093
Northwest Natural Gas of Murray Co., Inc.	\$301,535	\$170,288	\$0	\$0	\$123,079	\$594,902
Owatonna Pub Util-Nat Gas	\$3,845,417	\$1,872,421	\$0	\$20,033	\$2,601,416	\$8,339,287
Perham Mun Gas System	\$1,012,877	\$383,611	\$0	\$0	\$1,922,751	\$3,319,239
Reliant Energy-Minnegasco	\$309,229,643	\$140,458,136	\$61,642,963	\$4,557,383	\$44,233,221	\$560,121,346
Stephen Mun Gas	\$116,207	\$55,511	\$0	\$0	\$0	\$171,718
Two Harbors Mun Gas	\$674,152	\$334,541	\$108,127	\$471,710	\$0	\$1,588,530
UtiliCorp United, Inc./Northern MN Util	\$16,825,034	\$10,713,635	\$2,571,922	\$0	\$2,963,691	\$33,074,282
UtiliCorp United, Inc./Peoples Nat Gas	\$56,486,174	\$26,029,636	\$4,972,374	\$4,756,684	\$5,447,710	\$97,692,578
Virginia Public Utilities	\$347,606	*	*	\$1,443,888	\$0	\$2,590,953
Warren, City of	\$236,696	\$163,716	\$54,801	\$0	\$0	\$455,213
Western Gas Utilities, Inc.	\$2,026,732	\$741,516	\$81,999	\$452,308	\$0	\$3,302,555
<b>TOTAL</b>	<b>\$608,747,284</b>	<b>\$274,549,174</b>	<b>\$88,166,364</b>	<b>\$21,129,058</b>	<b>\$96,786,820</b>	<b>\$1,089,378,702</b>

<sup>^</sup>Includes natural gas sales and transportation.

\*Withheld to avoid disclosure of individual company information. Data included in totals.

\*\* f.n.a. Interstate Power-Nat Gas

**SECTION III**

**ATTACHMENTS**

## GENERAL NOTES ON DATA

**1) Consumption.** Electric companies report retail electric consumption as follows:

Farm. Electricity used for farm households and agricultural purposes. Utilities are using this category less often, and reporting farm use with either residential or commercial categories.

Residential. Electricity used by non-farm private households.

Commercial. Electricity used by non-manufacturing business establishments such as motels, restaurants, wholesale businesses, retail stores, service enterprises, health and educational institutions, and local, state, and federal governments. Includes use by some apartment dwellers.

Industrial. Electricity used by manufacturing, construction, mining, fishing, and forestry establishments.

**2) Missing Data.** Although all utilities are required to report data used in this report annually, some utilities have provided either partial information or no information. In most cases, for the general purpose of comparing 1998 data to previous years' data, this report shows the most recent comparable data for non-reporting companies. Historically, several municipal natural gas utilities have not been included in the Utility Data Book because they were not sent reporting forms. These utilities have now been added to the REIS mailing; therefore, subsequent utility Data Books will reflect the data from these formerly omitted municipal natural gas utilities.

**3) Accuracy of Data.** While the Department does not audit the records supporting the data companies provide, we do check the reasonableness of the data. We also correct errors in reported data where feasible. However, some data reported by smaller companies may contain a few errors or inconsistencies. These errors should not significantly affect the totals.

## GLOSSARY OF TERMS AND ABBREVIATIONS

**Btu:** British thermal unit; the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit under stated conditions of pressure and temperature (equal to 252 calories, 778 foot-pounds, 1,005 joules and 0.293 watt-hours). It is the U.S. customary unit of measuring the quality of heat, such as the heat content of fuel.

**cf:** cubic foot; the U.S. customary unit of measurement of gas volume. It is the amount of gas required to fill a volume of one cubic foot under stated conditions of temperature, pressure and water vapor. One cubic foot of natural gas equals 1,000 British thermal units under standard conditions of atmosphere (one) and temperature (60 degrees Fahrenheit).

**Ccf:** one hundred cubic feet.

**Cooperative utility:** utilities owned and operated by its members.

**Department or DOC:** the Minnesota Department of Commerce.

**Gas turbine:** a type of electric generation plant that relies on turbines driven by the combustion of natural gas or diesel fuel to produce electricity.

**GWh:** gigawatt-hour; the unit of energy equal to that expended in one hour at a rate of one billion watts. One GWh equals 1,000 megawatt-hours.

**Hydro:** a type of electric generation plant that relies on a water wheel to convert falling water into electricity.

**Int. comb. (Internal Combustion):** a type of electric generation plant that relies on an internal combustion engine to convert burned diesel, fuel oil, gasoline, or natural gas into electricity.

**Investor-owned utility (IOU):** Common term for an electric privately-owned utility regulated by the Minnesota Public Utilities Commission.

**kW:** one kilowatt or one thousand watts.

**Local Distribution Company (LDC):** Common term for a gas privately-owned utility regulated by the MPUC.

**Mcf:** one thousand cubic feet; a unit of measure of gas volumes.

**Minnesota Public Utilities Commission (Commission):** the state agency with regulatory jurisdiction over certain Minnesota utilities.

**MWh:** megawatt-hour; the unit of energy equal to that expended in one hour at a rate of one million watts. One MWh equals 3,414,000 Btus.

**Natural Gas (gas):** a mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs. It comes from the ground with or without crude oil and is generally much higher in heat content than manufactured gas.

**Net generation:** the total amount of electric energy produced by a generating unit less the electricity consumed by the generating station.

**Nuclear:** a type of electric generation plant that uses energy obtained by fission, fusion or by radioactive decay to drive the turbines.

**Number 2 fuel oil:** a distillate fuel oil used for domestic heating and in moderate capacity commercial or industrial burners as well as for generating electricity.

**Number 6 fuel oil:** a residual fuel oil that is heavier than distillate fuel oil and is used to generate electricity as well as in industrial burners.

**Plant capacity:** the amount of electric load, measured in megawatts or kilowatts, for which a generating unit is rated either by the user or the manufacturer.

**Privately-owned utilities:** utility corporations owned by shareholders. Large privately-owned utilities are regulated by the Minnesota Public Utilities Commission.

**Publicly-owned utilities:** utilities owned, operated and regulated by the city or legal entity in which it resides.

**REIS:** Regional Energy Information System; the Minnesota Department of Commerce's computerized state energy data collection and information system. It includes energy data the DOC collects directly from energy suppliers as well as data collected by other state departments such as the Minnesota Department of Revenue, Petroleum Taxation Division. It also includes energy data specific to Minnesota collected by the U.S. Department of Energy, the U.S. Department of Commerce, Bureau of Census and the U. S. Department of Transportation.

**RDF:** refuse-derived fuel, composed of garbage, that is used in some electric generation plants.

**Steam:** a type of electric generation plant that relies on steam-driven turbines to generate electricity. Steam is produced in a boiler heated by several combinations of fossil, refuse-derived, or wood-waste fuels.

**Transportation (of natural gas):** the action taken by a retail customer who purchases natural gas supplies directly from a supplier or marketer and then moves or transports the gas through a utility's distribution system to the customer's destination.

**Watt:** the unit of measure for electric power or rate of doing work. The rate of energy transfer equivalent to one ampere flowing under pressure of one volt.

**Weather-normalized information:** information adjusted to remove fluctuation due to changes in weather.

**Wind:** a type of electric generation plant that uses turbines powered by wind to generate electricity.