Table 1.
 2006 Summary Statistics

Item	Value	U.S. Rank
Minnesota		
NERC Region(s)		MRO
Primary Energy Source		Coal
Net Summer Capacity (megawatts)	12,651	28
Electric Utilities	10,458	24
Independent Power Producers & Combined Heat and Power	2,194	34
Net Generation (megawatthours)	53,237,789	26
Electric Utilities	46,710,674	20
Independent Power Producers & Combined Heat and Power	6,527,115	35
Emissions (thousand metric tons)		
Sulfur Dioxide	94	25
Nitrogen Oxide	85	17
Carbon Dioxide	37,565	26
Sulfur Dioxide (lbs/MWh)	3.9	25
Nitrogen Oxide (lbs/MWh)	3.5	11
Carbon Dioxide (lbs/MWh)	1,556	18
Total Retail Sales (megawatthours)	66,769,931	23
Full Service Provider Sales (megawatthours)	66,769,931	22
Direct Use (megawatthours)	1,666,353	20
Average Retail Price (cents/kWh)	6.98	35
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Table 2. Ten Largest Plants by Generating Capacity, 2006

Plant	Primary Energy Source or Technology	Operating Company	Net Summer Capacity (MW)
Minnesota			
1. Sherburne County	Coal	Northern States Power Co	2,239
2. Prairie Island	Nuclear	Northern States Power Co	1,096
3. Clay Boswell	Coal	Minnesota Power Inc	917
4. Black Dog	Coal	Northern States Power Co	580
5. Monticello	Nuclear	Northern States Power Co	572
6. Allen S King	Coal	Northern States Power Co	528
7. Lakefield Junction	Gas	Great River Energy	502
8. Mankato Energy Center	Gas	Calpine Central LP	500
9. Blue Lake	Gas	Northern States Power Co	490
10. Pleasant Valley	Gas	Great River Energy	420

Table 3. Top Five Retailers of Electricity, with End Use Sectors, 2006 (Megawatthours)

Entity	Type of Provider	All Sectors	Residential	Commercial	Industrial	Transportation	
Minnesota							
1. Northern States Power Co	Investor-Owned	31,926,534	8,876,544	13,899,161	9,129,744	21,085	
2. Minnesota Power Inc	Investor-Owned	9,077,994	1,011,699	1,283,320	6,782,975	-	
3. Otter Tail Power Co	Investor-Owned	2,086,367	525,885	1,048,409	512,073	-	
4. Anoka Electric Coop	Cooperative	1,984,591	1,172,332	691,772	120,487	-	
5. Dakota Electric Association	Cooperative	1,830,744	946,385	52,142	832,217	-	
Total Sales, Top Five Providers		46,906,230	12,532,845	16,974,804	17,377,496	21,085	
Percent of Total State Sales		70	57	77	77	100	

Table 4. Electric Power Net Summer Capacity by Primary Energy Source and Industry Sector, 1990, 1995, and 2001 Through 2006

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Energy Source	1990	1995	2001	2002	2003	2004	2005	2006	Percentag	ge Share
Energy Source	1990	1993	2001	2002	2003	2004	2005	2006	1990	2006
Minnesota										
Electric Utilities	8,834	8,923	10,110	10,329	10,162	10,179	10,543	10,458	93.9	82.7
Coal	5,757	5,630	5,729	5,726	5,342	5,260	5,087	5,083	61.2	40.2
Petroleum	1,004 ^R	1,044 ^R	1,051	1,020	669	699	711	718	10.7	5.7
Natural Gas	307 ^R	454 ^R	1,373	1,637	2,276	2,336	2,852	2,719	3.3	21.5
Nuclear	1,540	1,571	1,646	1,646	1,613	1,613	1,617	1,668	16.4	13.2
Hydroelectric	137	142	132	134	133	133	133	132	1.5	1.0
Other Renewables	88	82	179	136 ^R	129	138	143	137	0.9	1.1
Other	*	-	-	-	-	-	-	-	*	-
Independent Power Producers and Combined Heat and Power	579	628	965	958	1,323	1,372	1,562	2,194	6.1	17.3
Coal	348	345	157	158	358	361	358	361	3.7	2.9
Petroleum	14	25	29	29	26	27	28	28	0.1	0.2
Natural Gas	54	50	317	306	306	305	305	805	0.6	6.4
Hydroelectric	60	64	42	42	43	43	43	43	0.6	0.3
Other Renewables	102	145	410	442 ^R	579	626	817	946	1.1	7.5
Other	-	-	11	11	11	11	11	11	-	0.1
Total Electric Industry	9,412	9,551	11,075	11,287	11,485	11,551	12,105	12,651	100.0	100.0
Coal	6,105	5,975	5,886	5,885	5,701	5,621	5,446	5,444	64.9	43.0
Petroleum	1,018 ^R	1,069 ^R	1,080	1,049	696	726	739	746	10.8	5.9
Natural Gas	361 ^R	503 ^R	1,690	1,942	2,581	2,641	3,157	3,524	3.8	27.9
Nuclear	1,540	1,571	1,646	1,646	1,613	1,613	1,617	1,668	16.4	13.2
Hydroelectric	197	206	173	176	176	176	176	175	2.1	1.4
Other Renewables	190	227	588	578	708	763	960	1,083	2.0	8.6
Other	*	-	11	11	11	11	11	11	*	0.1

Table 5. Electric Power Net Generation by Primary Energy Source and Industry Sector, 1990, 1995, and 2001 Through 2006 (Megawatthours)

Energy Source	1990	1995	2001	2002	2003	2004	2005	2006	Percer Sha	0
									1990	2006
Minnesota										
Electric Utilities	41,549,628	42,502,869	44,798,014	48,568,719	49,576,276	47,232,462	46,791,349	46,710,674	96.5	87.7
Coal	27,587,603	26,820,765	31,037,544	32,200,713	33,157,032	31,477,117	30,514,512	30,600,302	64.1	57.5
Petroleum	440,740	484,708	599,557	640,129	845,239	752,362	752,774	484,235	1.0	0.9
Natural Gas	326,083	702,702	371,643	897,018	1,072,867	923,557	1,706,322	1,629,343	0.8	3.1
Nuclear	12,139,302	13,243,469	11,789,027	13,684,824	13,413,828	13,295,502	12,835,219	13,183,418	28.2	24.8
Hydroelectric	657,574	822,599	619,404	736,795	686,227	549,598	574,680	426,960	1.5	0.8
Other Renewables	398,326	428,626	217,078	229,176	220,598	137,351	237,425	231,429	0.9	0.4
Other	-	-	163,761	180,064	180,485	96,975	170,417	154,987	-	0.3
Independent Power Producers and Combined Heat and Power	1,520,748	2,668,015	3,725,212	4,209,248	5,474,720	5,131,665	6,227,645 ^R	6,527,115	3.5	12.3
Coal	588,677	1,243,174	781,619	1,719,496	2,498,497	2,538,896	2,395,830	2,454,513	1.4	4.6
Petroleum	7,074	10,118	25,499	12,662	27,826	28,418	30,584	6,645	*	*
Natural Gas	213,756	327,705	827,934	694,936	771,569	583,855	1,037,664 ^R	927,323	0.5	1.7
Hydroelectric	199,472	275,526	212,214	72,289	128,346	188,713	200,049	144,770	0.5	0.3
Other Renewables	511,769	811,492	1,760,034	1,557,511	1,900,033	1,596,500	2,410,196 ^R	2,826,049	1.2	5.3
Other	-	-	117,912	152,354	148,450	195,283	153,323	167,815	-	0.3
Total Electric Industry	43,070,376	45,170,884	48,523,226	52,777,967	55,050,996	52,364,127	53,018,995	53,237,789	100.0	100.0
Coal	28,176,280	28,063,939	31,819,163	33,920,209	35,655,529	34,016,013	32,910,342	33,054,815	65.4	62.1
Petroleum	447,814	494,826	625,056	652,791	873,065	780,780	783,358	490,880	1.0	0.9
Natural Gas	539,839	1,030,407	1,199,577	1,591,954	1,844,436	1,507,412	2,743,986 ^R	2,556,666	1.3	4.8
Nuclear	12,139,302	13,243,469	11,789,027	13,684,824	13,413,828	13,295,502	12,835,219	13,183,418	28.2	24.8
Hydroelectric	857,046	1,098,125	831,618	809,084	814,573	738,311	774,729	571,730	2.0	1.1
Other Renewables	910,095	1,240,118	1,977,113	1,786,687	2,120,631	1,733,851	2,647,622	3,057,478	2.1	5.7
Other	-	-	281,672	332,418	328,935	292,258	323,740	322,802	-	0.6

Table 6. Electric Power Delivered Fuel Prices and Quality for Coal, Petroleum, and Natural Gas, 1990, 1995, and 2001 Through 2006

Till ough 2000								
Fuel, Quality	1990	1995	2001	2002	2003	2004	2005	2006
Minnesota								
Coal (cents per million Btu)	125	114	102	W	W	W	W	W
Average heat value (Btu per pound)	8,788	8,828	8,930	8,860	8,895	8,914	8,909	8,911
Average sulfur Content (percent)	0.51	0.47	0.47	0.45	0.46	0.44	0.44	0.44
Petroleum (cents per million Btu)	93	85	65	60	W	W	W	W
Average heat value (Btu per gallon)	73,719	73,310	132,857	131,267	133,093	134,967	133,848	134,976
Average sulfur Content (percent)	5.17	5.11	5.43	5.76	5.72	5.38	5.45	5.99
Natural Gas (cents per million Btu)	192	176	521	W	W	W	W	W
Average heat value (Btu per cubic foot)	1,003	1,006	1,000	1,007	1,007	1,008	1,012	1,008

Table 7. Electric Power Industry Emissions Estimates, 1990, 1995, and 2001 Through 2006 (Thousand Metric Tons)

Emission Type	1990	1995	2001	2002	2003	2004	2005	2006
Minnesota								
Sulfur Dioxide								
Coal	95	102	70	83	83	86	82	80
Petroleum	*	*	17	14	27	17	15	10
Natural Gas	*	*	*	*	*	*	*	*
Other	6	8	4	4	3	4	4	4
Total	102	111	91	101	113	108	101	94
Nitrogen Oxide								
Coal	156	165	77	80	87	83	76	76
Petroleum	*	*	2	2	3	3	2	2
Natural Gas	2	3	2	2	2	2	3	3
Other	3	4	4	5	4	4	4	4
Total	161	172	85	89	97	92	86	85
Carbon Dioxide								
Coal	30,021	31,532	33,858	35,004	37,068	36,012	35,794	34,916
Petroleum	486	526	687	654	881	826	798	544
Natural Gas	704	1,142	1,079	1,158	1,221	1,121	1,787	1,637
Other Renewables	186	187	326	493	487	360	500	467
Total	31,396	33,387	35,950	37,309	39,658	38,318	38,879	37,565

Table 8. Retail Sales, Revenue, and Average Retail Prices by Sector, 1990, 1995, and 2001 Through 2006

Sector	1990 1995 2	2001	2002	2003	2004	2005	2006	Percenta	ge Share	
Sector	1990	1773	2001	2002	2003	2004	2003	2000	1990	2006
Minnesota										
Retail Sales (thousand megawatthours)										
Residential	14,858	16,974	19,400	20,451	20,638	20,507	21,743	21,909	31.5	32.8
Commercial	8,086	9,700	19,799	19,457	20,533	20,407	21,985	22,175	17.1	33.2
Industrial	23,497	26,577	20,767	21,515	21,916	22,415	22,266	22,664	49.8	33.9
Other	727	707	721	740	NA	NA	NA	NA	1.5	NA
Transportation	NA	NA	NA	NA	NA	11	25	21	NA	*
All Sectors	47,167	53,959	60,687	62,162	63,087	63,340	66,019	66,770	100.0	100.0
Retail Revenue (million dollars)										
Residential	1,011	1,217	1,476	1,531	1,579	1,624	1,799	1,905	40.2	40.9
Commercial	483	601	1,193	1,143	1,257	1,287	1,448	1,556	19.2	33.4
Industrial	973	1,143	902	875	955	1,038	1,118	1,198	38.7	25.7
Other	49	51	54	54	NA	NA	NA	NA	1.9	NA
Transportation	NA	NA	NA	NA	NA	1	2	2	NA	*
All Sectors	2,516	3,011	3,626	3,604	3,791	3,950	4,366	4,662	100.0	100.0
Average Retail Prices (cents/KWh)										
Residential	6.80	7.17	7.61	7.49	7.65	7.92	8.28	8.70	NA	NA
Commercial	5.98	6.19	6.03	5.88	6.12	6.31	6.59	7.02	NA	NA
Industrial	4.14	4.30	4.34	4.07	4.36	4.63	5.02	5.29	NA	NA
Other	6.72	7.21	7.43	7.36	NA	NA	NA	NA	NA	NA
Transportation	NA	NA	NA	NA	NA	6.75	6.21	7.95	NA	NA
All Sectors	5.33	5.58	5.97	5.80	6.01	6.24	6.61	6.98	NA	NA

Table 9. Retail Electricity Sales Statistics, 2006

Item		Full	Service Provid	ers		Other 1		
	Investor- Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	Total
Minnesota								
Number of Entities	5	125	1	46	NA	NA	NA	177
Number of Retail Customers	1,425,201	353,878	5	730,497	NA	NA	NA	2,509,581
Retail Sales (thousand megawatthours)	43,927	9,499	52	13,292	NA	NA	NA	66,770
Percentage of Retail Sales	65.79	14.23	0.08	19.91	NA	NA	NA	100.00
Revenue from Retail Sales (million dollars)	2,961	676	1	1,023	NA	NA	NA	4,662
Percentage of Revenue	63.52	14.51	0.02	21.95	NA	NA	NA	100.00
Average Retail Price (cents/kWh)	6.74	7.12	1.73	7.70	NA	NA	NA	6.98

Table 9 Notes: Data are shown for All Sectors. Full Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full Service Providers may purchase electricity from others (such as independent Power Producers or other full service providers) prior to delivery. Other Providers sell either the energy or the delivery services, but not both. Sales volumes and customer counts shown for Other Providers refer to delivered electricity, which is a joint activity of both energy and delivery providers; for clarity, they are reported only in the Energy column in this table. The revenue shown under Other Providers represents the revenue realized from the sale of the energy and the delivery services distinctly. "Public" entities include municipalities, State power agencies, and municipal marketing authorities. "Federal" entities are either owned or financed by the Federal Government. "Cooperatives" are electric utilities legally established to be owned by and operated for the benefit of those using its services. The cooperative will generate, transmit and/or distribute supplies of electric energy to a specified area not being serviced by another utility. "Facility" sales represent direct electricity transactions from independent generators to end use consumers

Table 10. Supply and Disposition of Electricity, 1990, 1995, and 2001 Through 2006 (Million Kilowatthours)

Category	1990	1995	2001	2002	2003	2004	2005	2006
Minnesota	•							
Supply								
Generation								
Electric Utilities	41,550	42,503	44,798	48,569	49,576	47,232	46,791	46,711
Independent Power Producers	240	399	1,424	1,206	2,858	2,792	3,332	4,136
Combined Heat and Power, Electric	-	-	510	552	697	309	938	639
Electric Power Sector Generation Subtotal	41,789	42,902	46,732	50,327	53,132	50,333	51,062	51,485
Combined Heat and Power, Commercial	101	92	137	124	117	107	108	104
Combined Heat and Power, Industrial	1,180	2,177	1,655	2,327	1,802	1,924	1,849	1,649
Industrial and Commercial Generation Subtotal	1,281	2,269	1,791	2,451	1,919	2,031	1,957	1,753
Total Net Generation	43,070	45,171	48,523	52,778	55,051	52,364	53,019	53,238
Total International Imports	1,742	8,589	8,871	6,605	3,852	6,152	10,768	11,208
Total Supply	44,812	53,760	57,394	59,383	58,903	58,516	63,787	64,446
Disposition								
Retail Sales								
Full Service Providers	47,167	53,959	60,687	62,162	62,502	63,340	66,019	66,770
Facility Direct Retail Sales	-	-	-	-	586	-	-	-
Total Electric Industry Retail Sales	47,167	53,959	60,687	62,162	63,087	63,340	66,019	66,770
Direct Use	1,273	2,280	2,830	2,892	2,928	2,931	1,467	1,666
Total International Exports	1,014	113	601	2,431	6,363	3,542	3,014	3,290
Estimated Losses	3,536	4,096	6,080	4,641	4,665	5,374	5,047	4,966
Total Disposition	52,991	60,448	70,197	72,126	77,044	75,188	75,547	76,692
Net Interstate Trade	-8,178	-6,688	-12,804	-12,742	-18,141	-16,672	-11,760	-12,247
Net Trade Index (ratio)	0.85	0.89	0.82	0.82	0.76	0.78	0.84	0.84

R = Revised.

NA = Not applicable; NM = Not meaningful.

W = Withheld to avoid disclosure of individual company data.

 [–] Data not available.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is 1 and values under 0.5 are shown as *.)

Totals may not equal sum of components because of independent rounding.

Table 10 Notes: Estimated Losses are reported at the utility level, and then allocated to States based on the utility's retail sales by State. Reported losses may include electricity unaccounted for by the utility. Net Interstate Trade represents the difference between the amount of electricity; produced in the State and consumed in the State. Positive values indicate a State that is a net interstate exporter of electricity; negative values indicate a State that is a net interstate importer of electricity. The Net Trade Index represents a State's electricity self-sufficiency. Values greater than 1 indicate that, on an annual net basis, the State supplied electricity consumed outside the State; values less than 1 indicate that, on an annual net basis, the State consumed electricity produced outside the State.

General Notes: Table 4 "Other Renewables" includes wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind. The "Other" category includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tire-derived fuels and miscellaneous technologies. However, Table 5 "Other Renewables" includes only biogenic municipal solid waste, in addition to wood, black liquor, other wood waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind. In Table 5 "Other" includes Non-biogenic municipal solid waste, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tire-derived fuels and miscellaneous technologies. In Table 7, "Other Renewables" emissions include biogenic municipal solid waste, and other renewable waste.

Direct use is commercial or industrial use of electricity that (1) is self-generated (2) is produced by either the same entity that consumes the power or an affiliate, and (3) is used in direct support of a service or industrial process located within the same facility or group of facilities that houses the generating equipment. Direct use is exclusive of station use.