

Table 1. 2004 Summary Statistics

Item	Value	U.S. Rank
Minnesota		
NERC Region(s).....		MAPP
Primary Energy Source		Coal
Net Summer Capability (megawatts).....	11,551	30
Electric Utilities	10,179	23
Independent Power Producers & Combined Heat and Power	1,372	38
Net Generation (megawatthours).....	52,364,127	25
Electric Utilities	47,232,462	21
Independent Power Producers & Combined Heat and Power	5,131,665	33
Emissions (thousand metric tons)		
Sulfur Dioxide	108	24
Nitrogen Oxide	90	15
Carbon Dioxide	37,605	26
Sulfur Dioxide (lbs/MWh).....	4.5	25
Nitrogen Oxide (lbs/MWh).....	3.8	10
Carbon Dioxide (lbs/MWh).....	1,583	19
Total Retail Sales (megawatthours).....	63,340,315	24
Full Service Provider Sales (megawatthours).....	63,340,315	22
Direct Use (megawatthours).....	2,931,271	15
Average Retail Price (cents/kWh).....	6.24	36

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2004

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
Minnesota			
1. Sherburne County.....	Petroleum,Coal	Northern States Power Co	2,302
2. Prairie Island	Nuclear	Northern States Power Co	1,044
3. Clay Boswell	Petroleum,Coal	Minnesota Power Inc	918
4. Allen S King	Gas,Petroleum,Coal	Northern States Power Co	573
5. Monticello.....	Nuclear	Northern States Power Co	569
6. Black Dog.....	Petroleum,Gas,Coal	Northern States Power Co	566
7. Lakefield Junction.....	Petroleum,Gas	Great River Energy	515
8. Pleasant Valley.....	Petroleum,Gas	Great River Energy	427
9. Riverside	Gas,Petroleum,Coal	Northern States Power Co	387
10. Inver Hills.....	Petroleum,Gas	Northern States Power Co	361

See footnotes at end of tables.

Table 3. Top Five Providers of Retail Electricity, 2004
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
Minnesota						
1. Northern States Power Co.....	Investor-Owned	30,403,203	8,289,361	12,613,671	9,489,401	10,770
2. Minnesota Power Inc.....	Investor-Owned	8,903,621	967,785	1,236,952	6,698,884	0
3. Otter Tail Power Co.....	Investor-Owned	1,955,812	502,139	1,027,828	425,845	0
4. Anoka Electric Coop	Cooperative	1,798,419	1,042,616	630,521	125,282	0
5. Dakota Electric Assn.....	Cooperative	1,675,150	859,923	70,553	744,674	0
Total Sales, Top Five Providers.....		44,736,205	11,661,824	15,579,525	17,484,086	10,770
Percent of Total State Sales		71	57	76	78	100

See footnotes at end of tables.

Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1990, 1995, and 2000 Through 2004
(Megawatts)

Energy Source	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
Minnesota									
Electric Utilities	8,834	8,923	9,067	10,110	10,329	10,162	10,179	93.9	88.1
Coal.....	5,757	5,630	5,613	5,729	5,726	5,342	5,260	61.2	45.5
Petroleum.....	844	909	945	975	943	581	593	9.0	5.1
Natural Gas.....	131	240	284	429	294	539	666	1.4	5.8
Dual Fired.....	335	349	264	1,020	1,420	1,826	1,776	3.6	15.4
Nuclear.....	1,540	1,571	1,646	1,646	1,646	1,613	1,613	16.4	14.0
Hydroelectric	137	142	136	132	134	133	133	1.5	1.2
Other Renewables.....	88	82	178	179	166	129	138	.9	1.2
Independent Power Producers and Combined									
Heat and Power.....	579	628	1,187	965	958	1,323	1,372	6.2	11.9
Coal.....	348	345	354	157	158	358	361	3.7	3.1
Petroleum.....	14	23	25	29	29	26	27	.1	.2
Natural Gas.....	37	32	131	145	133	133	130	.4	1.1
Dual Fired.....	18	20	179	173	172	172	174	.2	1.5
Hydroelectric	60	64	64	42	42	43	43	.6	.4
Other Renewables.....	102	145	436	410	412	579	626	1.1	5.4
Other	0	0	0	11	11	11	11	.0	.1
Total Electric Industry	9,412	9,551	10,255	11,075	11,287	11,485	11,551	100.0	100.0
Coal.....	6,105	5,975	5,967	5,886	5,885	5,701	5,621	64.9	48.7
Petroleum.....	858	932	970	1,005	973	607	620	9.1	5.4
Natural Gas.....	168	272	415	573	427	672	797	1.8	6.9
Dual Fired.....	353	369	443	1,193	1,592	1,998	1,950	3.8	16.9
Nuclear.....	1,540	1,571	1,646	1,646	1,646	1,613	1,613	16.4	14.0
Hydroelectric	197	206	200	173	176	176	176	2.1	1.5
Other Renewables.....	190	227	614	588	578	708	763	2.0	6.6
Other	0	0	0	11	11	11	11	.0	.1

See footnotes at end of tables.

Table 5. Electric Power Industry Generation by Primary Energy Source, 1990, 1995, and 2000 Through 2004
(Megawatthours)

Energy Source	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
Minnesota									
Electric Utilities	41,549,628	42,502,869	46,615,673	44,798,014	48,568,719	49,576,276	47,232,462	96.5	90.2
Coal.....	27,587,603	26,820,765	31,731,081	31,037,544	32,200,713	33,157,032	31,477,117	64.1	60.1
Petroleum.....	440,740	484,708	440,264	599,557	640,129	845,239	752,362	1.0	1.4
Natural Gas.....	326,083	702,702	433,177	371,643	897,018	1,072,867	923,557	.8	1.8
Nuclear.....	12,139,302	13,243,469	12,959,976	11,789,027	13,684,824	13,413,828	13,295,502	28.2	25.4
Hydroelectric.....	657,574	822,599	635,541	619,404	736,795	686,227	549,598	1.5	1.0
Other Renewables.....	398,326	428,626	415,634	380,839	409,240	401,083	234,326	.9	.4
Independent Power Producers and Combined Heat and Power	1,520,748	2,668,015	4,807,666	3,725,212	4,209,248	5,474,720	5,131,665	3.5	9.8
Coal.....	588,677	1,243,174	2,017,007	781,619	1,719,496	2,498,497	2,538,896	1.4	4.8
Petroleum.....	7,074	10,118	34,513	25,499	12,662	27,826	28,418	*	.1
Natural Gas.....	213,756	327,705	831,844	827,934	694,936	771,569	583,855	.5	1.1
Hydroelectric.....	199,472	275,526	295,842	212,214	72,289	128,346	188,713	.5	.4
Other Renewables.....	511,769	811,492	1,628,460	1,877,946	1,667,855	2,009,833	1,706,358	1.2	3.3
Other.....	0	0	0	0	42,010	38,650	85,425	.0	.2
Total Electric Industry	43,070,376	45,170,884	51,423,339	48,523,226	52,777,965	55,050,995	52,364,127	100.0	100.0
Coal.....	28,176,280	28,063,939	33,748,088	31,819,163	33,920,209	35,655,529	34,016,013	65.4	65.0
Petroleum.....	447,814	494,826	474,777	625,056	652,791	873,065	780,780	1.0	1.5
Natural Gas.....	539,839	1,030,407	1,265,021	1,199,577	1,591,954	1,844,436	1,507,412	1.3	2.9
Nuclear.....	12,139,302	13,243,469	12,959,976	11,789,027	13,684,824	13,413,828	13,295,502	28.2	25.4
Hydroelectric.....	857,046	1,098,125	931,383	831,618	809,084	814,573	738,311	2.0	1.4
Other Renewables.....	910,095	1,240,118	2,044,094	2,258,785	2,077,095	2,410,916	1,940,684	2.1	3.7
Other.....	0	0	0	0	42,010	38,650	85,425	.0	.2

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1990, 1995, and 2000 Through 2004

Fuel, Quality	1990	1995	2000	2001	2002	2003	2004
Minnesota							
Coal (cents per million Btu).....	125.2	114.0	111.1	101.8	W	W	W
Average heat value (Btu per pound).....	8,788	8,828	8,929	8,932	8,818	8,895	8,914
Average sulfur Content (percent).....	.5	.5	.4	.5	.4	.5	.4
Petroleum (cents per million Btu).....	92.5	85.0	53.5	65.5	60.1	W	W
Average heat value (Btu per gallon).....	73,720	73,310	72,532	132,857	131,276	133,093	134,967
Average sulfur Content (percent).....	5.2	5.1	5.2	5.4	5.8	5.7	5.4
Natural Gas (cents per million Btu).....	192.1	176.1	448.6	520.8	W	W	W
Average heat value (Btu per cubic foot).....	1,003	1,006	1,011	1,010	1,006	1,007	1,008

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1990, 1995, and 2000 Through 2004
(Thousand Metric Tons)

Emission Type	1990	1995	2000	2001	2002	2003	2004
Minnesota							
Sulfur Dioxide							
Coal	95	102	90	99	105	83	87
Petroleum.....	*	*	12	*	*	27	17
Natural Gas	0	0	0	0	0	*	*
Other.....	6	8	4	4	2	3	4
Total.....	102	111	106	104	107	113	108
Nitrogen Oxide							
Coal	156	165	91	83	86	86	82
Petroleum.....	*	*	1	*	*	3	2
Gas.....	2	3	2	2	2	2	1
Other.....	3	4	4	2	2	4	4
Total.....	161	172	97	87	90	94	90
Carbon Dioxide							
Coal	29,757	31,814	35,507	34,168	34,987	37,048	35,287
Petroleum.....	84	526	754	687	653	881	825
Gas.....	767	1,141	1,160	1,078	1,157	1,220	1,133
Geothermal.....	0	0	0	0	0	0	0
Other.....	593	52	46	47	493	487	360
Total.....	31,202	33,533	37,467	35,979	37,291	39,637	37,605

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1990, 1995, and 2000 Through 2004

Sector	1990	1995	2000	2001	2002	2003	2004	Percentage Share	
								1990	2004
Minnesota									
Retail Sales (thousand megawatthours)									
Residential.....	14,858	16,974	18,629	19,400	20,451	20,638	20,507	31.5	32.4
Commercial	8,086	9,700	11,580	19,799	19,457	20,533	20,407	17.1	32.2
Industrial.....	23,497	26,577	28,842	20,767	21,515	21,916	22,415	49.8	35.4
Other	727	707	730	721	740	NA	NA	1.5	NA
Transportation.....	NA	NA	NA	NA	NA	0	11	NA	.0
Total.....	47,167	53,959	59,782	60,687	62,162	63,087	63,340	100.0	100.0
Retail Revenue (million dollars)									
Residential.....	1,011	1,217	1,400	1,476	1,531	1,579	1,624	40.2	41.1
Commercial	483	601	736	1,193	1,143	1,257	1,287	19.2	32.6
Industrial.....	973	1,143	1,319	902	875	955	1,038	38.7	26.3
Other	49	51	56	54	54	NA	NA	1.9	NA
Transportation.....	NA	NA	NA	NA	NA	0	1	NA	.0
Total.....	2,516	3,011	3,511	3,626	3,604	3,791	3,950	100.0	100.0
Average Retail Price (cents/kWh)									
Residential.....	6.80	7.17	7.51	7.61	7.49	7.65	7.92	NA	NA
Commercial	5.98	6.19	6.35	6.03	5.88	6.12	6.31	NA	NA
Industrial.....	4.14	4.30	4.57	4.34	4.07	4.36	4.63	NA	NA
Other	6.72	7.21	7.60	7.43	7.36	NA	NA	NA	NA
Transportation.....	NA	NA	NA	NA	NA	.00	6.75	NA	NA
Total.....	5.33	5.58	5.87	5.97	5.80	6.01	6.24	NA	NA

See footnotes at end of tables.

Table 9. Retail Electricity Sales Statistics, 2004

Item	Full Service Providers					Other Providers		Total
	Investor-Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	
Minnesota								
Number of Entities.....	5	125	1	46	NA	NA	NA	177
Number of Retail Customers.....	1,427,978	343,402	5	695,952	NA	NA	NA	2,467,337
Retail Sales (thousand megawatthours).....	42,051	8,906	51	12,332	NA	NA	NA	63,340
Percentage of Retail Sales.....	66.39	14.06	.08	19.47	NA	NA	NA	100.00
Revenue from Retail Sales (million dollars).....	2,482	564	1	904	NA	NA	NA	3,950
Percentage of Revenue.....	62.83	14.28	.02	22.88	NA	NA	NA	100.00
Average Retail Price (cents/kWh).....	5.90	6.33	1.48	7.33	NA	NA	NA	6.24

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 service. 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.

Other Notes: NA = Not applicable; NM = Not meaningful;

W = Withheld to avoid disclosure of individual company data;

* = 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 4 "Other Renewables" includes generation from municipal solid waste;

Table 7 "Other" includes emissions from municipal solid 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.