



Ottertail	2001	2002	2003	2004	2005	2006
Fuel Sources (% of total)						
Coal	81.68	78.12	-	77.19	72.8	73
Biomass	1.3	1.11	-	0.83	0.78	0.52
Wind	0	0.04	-	1.83	1.94	1.66
Hydro	7.02	8.17	-	7.02	6.99	6.14
Natural Gas	0	0	-	0.14	0.06	0.11
Purchases	9.31	11.85	-	12.26	16.66	17.83
Fuel Oil	0.03	0.02	-	0.13	0.07	0
Solid Waste	1.66	0.69	-	0.6	0.71	0.74

Emissions (lbs/ 1,000 kilowatt hours)

Coal						
CO2	2471	2462	-	2506	2452	2465
SO2	8.564	7.949	-	8.667	7.955	7.753
Nox	8.288	8.007	-	8.475	7.866	7.724
PM	0.5036	0.6972	-	0.5044	0.5668	0.4475
Mercury	0.00007340	0.00007511	-	0.00005805	0.00006440	0.00005643
Fuel Oil						
CO2	2823	3204	-	2192	2915	2493
SO2	7.072	9.050	-	7.003	8.460	7.370
Nox	10.592	12.020	-	8.189	10.080	8.740
PM	1.0969	1.2500	-	0.8467	1.0400	0.9000
Mercury	0.00000827	0.00000940	-	0.00000640	0.00000900	0.00000700
Biomass						
CO2	3291	3198	-	4176	4212	3517
SO2	0.063	0.384	-	0.460	0.440	0.390
Nox	1.935	3.110	-	2.450	2.840	2.490
PM	0.4753	0.4600	-	0.5508	0.5300	0.4700
Mercury	0.00000218	0.00000210	-	0.00000304	0.00000270	0.00000260
Solid Waste						
CO2	2470	2461	-	2433	2384	2384
SO2	8.478	7.870	-	7.470	7.480	7.480
Nox	8.280	8.000	-	9.660	9.700	9.700
PM	0.5056	0.7000	-	0.0012	0.0012	0.0012
Mercury	0.00007322	0.00007500	-	0.00006600	0.00005200	0.00005200
Purchases						
CO2	1949	1839	-	1839	1839	1839
SO2	7.094	5.537	-	5.537	5.537	5.537
Nox	4.865	3.982	-	3.982	3.982	3.982
PM	0.4099	0.3257	-	0.3257	0.3257	0.3257
Mercury	0.00004016	0.00004319	-	0.00004319	0.00004319	0.00004319
Natural Gas						
CO2	0	0	-	1237	1386	1828
SO2	0.000	0.000	-	0.006	0.008	0.008
Nox	0.000	0.000	-	1.059	1.290	1.530
PM	0.0000	0.0000	-	0.0687	0.0800	0.1000
Mercury	0.00000000	0.00000000	-	0.00000001	0.00000001	0.00000001



Energy Conservation
kWH saved
emissions avoided (tons)

	10,533,420	113,444,953	-	131,082,743	146,401,910	157,388,505
CO2	11,901	124,451	-	145,053	156,949	170,413
SO2	41	393	-	487	496	528
Nox	39	387	-	467	475	506
PM	2	34	-	29	35	31
Mercury	0.000	0.004	-	0.003	0.004	0.004



MN Power		2001	2002	2003	2004	2005	2006	2007
Fuel Sources (% of total)								
Coal		83.4	-	88.3	77.3	83.71	82.84	72.9
Biomass		0.4	-	0.6	0.4	0.35	0.48	0.48
Wind		0	-	0.1	0	0.03	0.15	1.97
Hydro		5.4	-	4.2	4.6	4.82	3.38	4.02
Natural Gas		0.5	-	0.6	0.3	0.28	0.37	0.59
Purchases		10.3	-	6.2	17.4	10.81	12.78	20.04
Emissions (lbs/ 1,000 kilowatt hours)								
Coal								
	CO2	2305	-	2330	2360	2340	2350	2487
	SO2	5.522	-	5.925	6.311	5.533	5.866	6.209
	Nox	5.350	-	5.331	5.534	5.276	5.232	5.141
	PM	0.5110	-	0.7018	0.4069	0.3490	0.6130	0.7390
	Mercury	0.00007420	-	0.00005832	0.00005841	0.00006452	0.00006410	0.00005934
Biomass								
	CO2	1299	-	947	1554	1603	1693	1493
	SO2	0.000	-	0.000	0.000	0.000	0.000	0.000
	Nox	2.620	-	2.133	1.534	6.275	1.910	3.110
	PM	0.1470	-	0.1080	0.0777	0.4119	0.0100	0.2900
	Mercury	0.00000980	-	0.00000976	0.00000702	0.00000680	0.00000000	0.00002510
Purchases								
	CO2	1949	-	1839	1839	1839	1839	1839
	SO2	7.094	-	5.537	5.537	5.537	5.537	5.537
	Nox	4.870	-	3.982	3.982	3.982	3.982	3.982
	PM	0.4100	-	0.3257	0.3257	0.3257	0.3260	0.3260
	Mercury	0.00004020	-	0.00004319	0.00004319	0.00004319	0.00000000	0.00004319
Natural Gas								
	CO2	711	-	501	499	668	632	806
	SO2	0.000	-	0.000	0.000	0.000	0.000	0.000
	Nox	2.090	-	2.133	2.133	2.130	2.130	3.110
	PM	0.0000	-	0.0000	0.0000	0.0000	0.0000	0.0000
	Mercury	0.00000000	-	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Energy Conservation								
kWH saved		257,746,961	-	407,455,361	443,528,934	742,575,083	786,447,554	763,529,375
emissions avoided (tons)								
	CO2	274,902	-	450,186	483,576	803,926	864,100	837,248
	SO2	688	-	1155	1316	1948	2192	2152
	Nox	643	-	1026	1118	1810	1915	1746
	PM	61	-	132	83	122	216	231
	Mercury	0.009	-	0.011	0.012	0.022	0.023	0.020



Alliant		2001	2002	2003	2004	2005	2006	2007
Fuel Sources (% of total)								
	Coal		66.4	69.1	65	63.6	63.3	64.9
	Biomass		0	0	0	0.1	0.1	0.2
	Wind		1.9	0.2	0	4.5	6.2	4.1
	Hydro		4.5	5.5	4	0.2	0.2	0.2
	Natural Gas		3.1	3.1	5	10.7	8.9	10.6
	Fuel Oil		0.2	2.3	2	0.6	0.4	0.6
	Nuclear		22.4	20.1	24	20.4	20.8	19.5
Emissions (lbs/ 1,000 kilowatt hours)								
Coal	CO2		2322	2284	2356	2623	2598	2573
	SO2		7.090	7.400	7.620	8.400	8.950	9.190
	Nox		4.060	3.970	4.120	4.440	4.120	3.740
	PM		0.5700	0.4400	0.5300	0.3800	0.6200	0.6200
	Mercury		0.00005710	0.00007180	0.00007500	0.00004400	0.00004800	0.00007700
Fuel Oil	CO2		2189	1959	2234	2336	2569	2981
	SO2		4.220	8.300	18.900	4.940	5.030	2.880
	Nox		8.490	6.090	14.820	8.310	8.620	11.250
	PM		0.9000	0.8800	0.9000	0.5700	0.5900	0.9000
	Mercury		0.00001250	0.00006700	0.00017220	0.00001100	0.00001000	0.00001600
Biomass	CO2		0	0	0	0	0	0
	SO2		0.000	0.000	0.000	0.000	0.000	0.000
	Nox		0.000	0.000	0.000	0.000	0.000	0.000
	PM		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Mercury		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Natural Gas	CO2		1703	4580	566	934	1090	927
	SO2		0.250	0.040	0.040	0.480	0.190	0.370
	Nox		1.790	2.560	0.380	0.320	0.270	0.230
	PM		0.0800	0.1100	0.0100	0.1300	0.1100	0.0400
	Mercury		0.00000240	0.00000000	0.00000000	0.00000029	0.00000009	0.00000000
Energy Conservation								
kWH saved			95,973,234	91,238,714	103,828,927	125,357,000	134,177,000	136,177,236
emissions avoided (tons)								
	CO2		111,421	104,210	122,320	111,653	117,613	121,487
	SO2		340	338	396	340	383	410
	Nox		195	181	214	182	179	171
	PM		28	20	27	16	27	28
	Mercury		0.0027	0.0033	0.0039	0.0018	0.0020	0.0034



Xcel		2001	2002	2003	2004	2005	2006	2007
Fuel Sources (% of total)								
Coal	-		37.4	45.4	41.9	40.9	36.8	37.7
Biomass	-		0.4	0.4	0.5	0.7	0.8	1.6
Wind	-		2.2	1.9	2.9	3	3.1	4.5
Hydro	-		12.6	10	12.1	11.1	11.7	7.1
Natural Gas	-		2.3	2.4	2.2	3.3	3.2	14.1
Purchases	-		10.3	11.5	13.3	15.2	18.7	7.2
Fuel Oil	-		0.2	0.1	0.1	0.3	0.4	0.3
Nuclear	-		33.1	27.1	25.9	24.6	24.6	26.4
Refuse Derived Fuel	-		1.5	1.2	1.1	0.9	0.9	1
Emissions (lbs/ 1,000 kilowatt hours)								
Coal								
	CO2 -		2400	2358	2403	2362	2369	2356
	SO2 -		5.9	6.3	6.0	5.9	5.2	4.7
	Nox -		5.3	5.3	5.3	5.3	4.7	4.9
	PM -		0.34	0.41	0.42	0.35	0.30	0.30
	Mercury -		0.00005	0.00006	0.00006	0.000057	0.000060	0.000065
Fuel Oil								
	CO2 -		2521	1909	2263	2535	2619	2478
	SO2 -		5.4	2.1	2.3	2.3	2.6	2.8
	Nox -		8.7	9.1	9.2	10.5	11.2	9.1
	PM -		0.43	0.43	0.39	0.54	0.73	0.73
	Mercury -		0.000030	0.000007	0.000007	0.000008	0.000008	0.000008
Biomass								
	CO2 -		35553	3139	4012	3641	3910	3440
	SO2 -		1.6	0.4	0.6	0.6	0.6	3.9
	Nox -		6.4	7.9	7.5	7.3	8.1	4.3
	PM -		0.77	0.88	1.38	1.15	1.36	1.36
	Mercury -		0.00008	0.00003	0.00007	0.000035	0.000013	0.000013
Purchases								
	CO2 -		1839	1839	1839	1839	1839	1820
	SO2 -		5.5	5.5	5.5	5.5	5.5	6.1
	Nox -		4.0	4.0	4.0	4.0	4.0	3.7
	PM -		0.33	0.33	0.33	0.33	0.33	0.34
	Mercury -		0.000040	0.000040	0.000090	0.000043	0.000043	0.000042
Natural Gas								
	CO2 -		1191	1344	1240	1393	1192	1121
	SO2 -		0.0	0.0	0.0	0.0	0.0	0.4
	Nox -		1.9	1.8	1.3	1.6	1.2	1.8
	PM -		0.07	0.06	0.07	0.08	0.07	0.07
	Mercury -		0.000004	0.00000001	0.00000001	0.00000001	0.00000001	0.00001
Refuse Derived Fuel								
	CO2 -		5605	6300	6220	6036	5870	6359
	SO2 -		1.2	1.3	1.1	1.3	1.0	1.9
	Nox -		9.2	9.4	10.1	10.4	9.6	9.3
	PM -		0.15	0.34	0.24	0.23	0.22	0.22



	Mercury -	0.00004	0.0001	0.0007	0.000068	0.00006923	0.000069
Energy Conservation							
kWH saved	-	2,900,000,000	2,450,000,000	264,000,000	2,500,000,000	2,700,000,000	2,800,000,000
emissions avoided (tons)							
	CO2 -	2,105,536	2,192,626	187,156	1,918,420	1,939,385	1,725,130
	SO2 -	4,994	5,575	458	4,686	4,298	3,293
	Nox -	4,588	4,844	404	4,156	3,890	3,444
	PM -	297	369	32	291	269	202
	Mercury -	0.00004210	0.00005180	0.00000420	0.0436	0.0450	0.040



Dakota Electric		2001	2002	2003	2004	2005	2006	2007
Fuel Sources (% of total)								
	Coal		79.6	79.4	75.8	78.9	80.3	73.2
	Wind		0.3	0.4	0.4	0.7	2.7	2.8
	Hydro		1.7	2.4	2.4	2.5	1.6	4.5
	Natural Gas		2.2	2.5	1.4	4.2	4.1	4.8
	Purchases		12.8	12	16.7	10.6	8.4	13.6
	Fuel Oil		2.1	2.1	2.1	1.9	1.9	0
	Refuse Derived Fuel		1.3	1.2	1.2	1.2	1	1.1
Emissions (lbs/ 1,000 kilowatt hours)								
Coal								
	CO2		2423	2426	2418	2393	2381	2402
	SO2		7.500	8.000	7.700	6.500	7.100	6.700
	Nox		2.800	2.700	2.800	2.800	2.800	2.600
	PM		0.4000	0.4000	0.3400	0.3600	0.3800	0.1200
	Mercury		0.00007800	0.00008200	0.00008700	0.00008200	0.00008500	0.00008500
Fuel Oil								
	CO2		2095	2162	2547	2437	2380	0
	SO2		6.700	7.000	8.200	0.620	0.770	0.000
	Nox		11.700	33.800	10.100	8.300	7.800	0.000
	PM		0.1700	0.1700	0.1900	0.1800	0.1800	0.0000
	Mercury		0.00001700	0.00001700	0.00001900	0.00001800	0.00001800	0.00000000
Purchases								
	CO2		1839	1839	1839	1839	1839	1820
	SO2		5.500	5.500	5.500	5.500	5.500	6.100
	Nox		4.000	4.000	4.000	4.000	4.000	3.700
	PM		0.3300	0.3300	0.3300	0.3300	0.3300	0.0340
	Mercury		0.00004300	0.00004300	0.00004300	0.00004300	0.00004300	0.00004200
Natural Gas								
	CO2		911	1370	1287	1410	1333	1383
	SO2		0.100	0.000	0.000	0.010	0.010	0.018
	Nox		0.400	0.500	0.400	0.420	0.690	0.640
	PM		0.0900	0.0800	0.0700	0.0800	0.0700	0.0800
	Mercury		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Refuse Derived Fuel								
	CO2		3421	3403	3404	3447	3420	3577
	SO2		0.300	0.300	0.400	0.320	0.490	0.240
	Nox		4.100	3.900	3.800	4.000	3.300	3.400
	PM		0.2200	0.2200	0.2100	0.2200	0.3200	0.2300
	Mercury		0.00001300	0.00001300	0.00001300	0.00000900	0.00001000	0.00001000
Energy Conservation								
kWH saved			51,600,000	61,000,000	72,000,000	76,000,000	84,000,000	95,000,000
emissions avoided (tons)								
	CO2		58,550	69,200	81,000	84,739	92,444	100,284



SO2	176	218	244	217	262	272
Nox	78	104.5	106	107	118	118
PM	9.35	11.15	11.45	12	14	7
Mercury	0.00175	0.00215	0.00265	0.00265	0.00305	0.00325