Table 1. 2003 Summary Statistics

Item	Value	U.S. Rank
Wisconsin		
NERC Region(s)		MAIN/MAPP
Primary Energy Source		Coal
Net Summer Capability (megawatts)	14,309	25
Electric Utilities	12,569	19
Independent Power Producers & Combined Heat and Power	1,739	33
Net Generation (megawatthours)	60,122,425	23
Electric Utilities	56,068,698	18
Independent Power Producers & Combined Heat and Power	4,053,726	37
Emissions (thousand metric tons)		
Sulfur Dioxide	232	18
Nitrogen Oxide	94	17
Carbon Dioxide	48,410	19
Sulfur Dioxide (lbs/MWh)	8.5	11
Nitrogen Oxide (lbs/MWh)	3.4	15
Carbon Dioxide (lbs/MWh)	1,775	15
Total Retail Sales (megawatthours)	67,241,494	22
Full Service Provider Sales (megawatthours)	67,241,494	21
Direct Use (megawatthours)	2,755,932	17
Average Retail Price (cents/kWh)	6.64	26

See footnotes at end of tables.

Table 2. Ten Largest Plants by Generating Capability, 2003

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
Wisconsin			
1. Pleasant Prairie	Petroleum, Gas, Coal	Wisconsin Electric Power Co	1,226
2. South Oak Creek	Gas, Coal	Wisconsin Electric Power Co	1,153
3. Columbia	Petroleum, Coal	Wisconsin Power & Light Co	1,109
4. Point Beach	Petroleum, Nuclear	Wisconsin Electric Power Co	1,041
5. Edgewater	Petroleum, Other, Coal	Wisconsin Power & Light Co	831
6. Weston	Gas, Coal	Wisconsin Public Service Corp	553
7. Kewaunee	Nuclear	Wisconsin Public Service Corp	539
8. RockGen Energy Center	Petroleum, Gas	RockGen Energy LLC	467
9. Pulliam	Gas, Coal	Wisconsin Public Service Corp	463
10. Paris	Petroleum, Gas	Wisconsin Electric Power Co	400

See footnotes at end of tables.

Table 3. Top Five Providers of Retail Electricity, 2003
(Megawatthours)

Entity	Ownership Type	All Sectors	Residential	Commercial	Industrial	Transportation
Wisconsin						
1. Wisconsin Electric Power Co	Investor-Owned	24,858,918	7,761,420	8,515,815	8,581,683	0
2. Wisconsin Public Service Corp	Investor-Owned	10,388,244	2,969,607	3,472,094	3,946,543	0
3. Wisconsin Power & Light Co	Investor-Owned	10,034,852	3,338,576	2,188,777	4,507,499	0
4. Northern States Power Co	Investor-Owned	5,726,898	1,828,670	1,093,670	2,804,558	0
5. Madison Gas & Electric Co	Investor-Owned	3,081,367	800,535	1,981,383	299,449	0
Total Sales, Top Five Providers		54,090,279	16,698,808	17,251,739	20,139,732	0
Percent of Total State Sales		80	78	86	78	0

See footnotes at end of tables.

Table 4. Electric Power Industry Net Summer Capability by Primary Energy Source, 1994, 1998, and 2003
(Megawatts)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
Wisconsin							
Electric Utilities	**11,265**	**11,863**	**12,569**	**1.2**	**94.9**	**91.8**	**87.8**
Coal	7,182	7,198	7,123	–.1	60.5	55.7	49.8
Petroleum	796	854	618	–2.8	6.7	6.6	4.3
Natural Gas	98	235	417	17.5	.8	1.8	2.9
Dual Fired	1,146	1,579	2,382	8.5	9.7	12.2	16.6
Nuclear	1,499	1,494	1,565	.5	12.6	11.6	10.9
Hydroelectric	440	443	427	–.3	3.7	3.4	3.0
Other Renewables	104	60	37	–10.8	.9	.5	.3
Independent Power Producers and Combined Heat and Power	**607**	**1,056**	**1,739**	**12.4**	**5.1**	**8.2**	**12.2**
Coal	408	448	316	–2.8	3.4	3.5	2.2
Petroleum	8	3	3	–10.3	.1	*	*
Natural Gas	15	21	189	32.5	.1	.2	1.3
Dual Fired	45	461	956	40.4	.4	3.6	6.7
Hydroelectric	65	54	50	–2.9	.5	.4	.3
Other Renewables	66	69	204	13.4	.6	.5	1.4
Other	0	0	21	NM	.0	.0	.1
Total Electric Industry	**11,872**	**12,919**	**14,309**	**2.1**	**100.0**	**100.0**	**100.0**
Coal	7,590	7,646	7,439	–.2	63.9	59.2	52.0
Petroleum	804	857	621	–2.8	6.8	6.6	4.3
Natural Gas	113	256	606	20.5	1.0	2.0	4.2
Dual Fired	1,191	2,040	3,338	12.1	10.0	15.8	23.3
Nuclear	1,499	1,494	1,565	.5	12.6	11.6	10.9
Hydroelectric	506	497	478	–.6	4.3	3.8	3.3
Other Renewables	169	129	241	4.0	1.4	1.0	1.7
Other	0	0	21	NM	.0	.0	.1

See footnotes at end of tables.

Table 5. Electric Power Industry Generation by Primary Energy Source, 1994, 1998, and 2003
(Megawatthours)

Energy Source	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
Wisconsin							
Electric Utilities	**49,437,481**	**52,529,065**	**56,068,698**	**1.4**	**94.4**	**93.1**	**93.3**
Coal	35,282,695	39,785,759	40,579,973	1.6	67.4	70.5	67.5
Petroleum	171,563	200,225	185,625	.9	.3	.4	.3
Natural Gas	286,969	1,187,522	1,131,999	16.5	.5	2.1	1.9
Nuclear	11,516,469	9,397,174	12,215,463	.7	22.0	16.6	20.3
Hydroelectric	1,914,414	1,517,765	1,623,369	–1.8	3.7	2.7	2.7
Other Renewables	265,371	440,620	332,269	2.5	.5	.8	.6
Independent Power Producers and Combined Heat and Power	**2,921,474**	**3,918,366**	**4,053,726**	**3.7**	**5.6**	**6.9**	**6.7**
Coal	1,196,324	1,238,234	1,137,243	–.6	2.3	2.2	1.9
Petroleum	258,100	291,270	287,162	1.2	.5	.5	.5
Natural Gas	317,686	1,296,753	1,346,392	17.4	.6	2.3	2.2
Hydroelectric	313,895	229,659	219,926	–3.9	.6	.4	.4
Other Renewables	835,469	862,450	1,034,221	2.4	1.6	1.5	1.7
Other	0	0	28,782	NM	.0	.0	*
Total Electric Industry	**52,358,955**	**56,447,431**	**60,122,425**	**1.5**	**100.0**	**100.0**	**100.0**
Coal	36,479,019	41,023,993	41,717,216	1.5	69.7	72.7	69.4
Petroleum	429,663	491,495	472,787	1.1	.8	.9	.8
Natural Gas	604,655	2,484,275	2,478,391	17.0	1.2	4.4	4.1
Nuclear	11,516,469	9,397,174	12,215,463	.7	22.0	16.6	20.3
Hydroelectric	2,228,309	1,747,424	1,843,295	–2.1	4.3	3.1	3.1
Other Renewables	1,100,840	1,303,070	1,366,490	2.4	2.1	2.3	2.3
Other	0	0	28,782	NM	.0	.0	*

See footnotes at end of tables.

Table 6. Electric Power Delivered Fuel Prices for Coal, Petroleum, and Natural Gas, 1994, 1998, and 2003

Fuel, Quality	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
Wisconsin				
Coal (cents per million Btu)	120.9	107.4	W	W
Average heat value (Btu per pound)	9,565	9,299	9,006	–0.7
Average sulfur Content (percent)	.5	.5	.4	–3.2
Petroleum (cents per million Btu)	220.8	83.4	W	W
Average heat value (Btu per gallon)	103,860	75,080	134,342	2.9
Average sulfur Content (percent)	3.0	5.3	5.3	6.7
Natural Gas (cents per million Btu)	263.4	264.1	581.8	9.2
Average heat value (Btu per cubic foot)	1,011	1,013	1,002	–.1

See footnotes at end of tables.

Table 7. Electric Power Industry Emissions Estimates, 1994, 1998, and 2003
(Thousand Metric Tons)

Emission Type	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)
Wisconsin				
Sulfur Dioxide				
Coal	217	222	215	–0.1
Petroleum	18	3	9	–7.6
Natural Gas	—	*	*	NM
Other	21	5	9	–9.5
Total	255	231	232	–1.1
Nitrogen Oxide				
Coal	180	113	87	–7.8
Petroleum	2	1	2	2.9
Gas	2	2	2	1.2
Other	5	4	3	–6.0
Total	189	121	94	–7.5
Carbon Dioxide				
Coal	38,896	44,312	45,549	1.8
Petroleum	869	844	932	.8
Gas	833	1,948	1,753	8.6
Geothermal	—	—	—	NM
Other	1	1	176	81.8
Total	40,599	47,105	48,410	2.0

See footnotes at end of tables.

Table 8. Retail Sales, Revenue, and Average Retail Price by Sector, 1994, 1998, and 2003

Sector	1994	1998	2003	Annual Growth Rate 1994-2003 (Percent)	Percentage Share		
					1994	1998	2003
Wisconsin							
Retail Sales (thousand megawatthours)							
Residential	17,660	19,087	21,364	2.1	31.9	30.8	31.8
Commercial	14,378	16,193	20,056	3.8	25.9	26.1	29.8
Industrial	22,714	26,040	25,821	1.4	41.0	42.0	38.4
Other	659	741	NA	NM	1.2	1.2	NA
Total	55,412	62,061	67,241	2.2	100.0	100.0	100.0
Retail Revenue (million dollars)							
Residential	1,250	1,369	1,853	4.5	41.3	40.5	41.5
Commercial	844	951	1,397	5.8	27.9	28.2	31.3
Industrial	883	1,004	1,217	3.6	29.2	29.7	27.2
Other	46	52	NA	NM	1.5	1.5	NA
Total	3,023	3,376	4,468	4.4	100.0	100.0	100.0
Average Retail Price (cents/kWh)							
Residential	7.08	7.17	8.67	2.3	NA	NA	NA
Commercial	5.87	5.87	6.97	1.9	NA	NA	NA
Industrial	3.89	3.86	4.71	2.1	NA	NA	NA
Other	7.00	7.01	NA	NM	NA	NA	NA
Total	5.46	5.44	6.64	2.2	NA	NA	NA

See footnotes at end of tables.

Table 9. Retail Electricity Sales Statistics, 2003

Item	Full Service Providers					Other Providers		Total
	Investor-Owned	Public	Federal	Cooperative	Facility	Energy	Delivery	
Wisconsin								
Number of Entities	12	82	NA	25	6	NA	NA	125
Number of Retail Customers	2,262,424	254,781	NA	236,036	6	NA	NA	2,753,247
Retail Sales (thousand megawatthours)	56,396	7,500	NA	3,282	63	NA	NA	67,241
Percentage of Retail Sales	83.87	11.15	NA	4.88	.09	NA	NA	100.00
Revenue from Retail Sales (million dollars)	3,780	412	NA	273	2	NA	NA	4,468
Percentage of Revenue	84.61	9.22	NA	6.12	.05	NA	NA	100.00
Average Retail Price (cents/kWh)	6.70	5.49	NA	8.33	3.58	NA	NA	6.64

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.