

**Table 1. 2003 Summary Statistics**

Item	Value	U.S. Rank
<b>Kansas</b>		
NERC Region(s).....		SPP/MAPP
Primary Energy Source .....		Coal
Net Summer Capability (megawatts).....	10,877	31
Electric Utilities .....	10,731	21
Independent Power Producers & Combined Heat and Power .....	146	47
Net Generation (megawatthours).....	46,567,560	31
Electric Utilities .....	46,155,505	21
Independent Power Producers & Combined Heat and Power .....	412,056	47
Emissions (thousand metric tons)		
Sulfur Dioxide .....	128	23
Nitrogen Oxide.....	86	19
Carbon Dioxide.....	38,463	26
Sulfur Dioxide (lbs/MWh).....	6.1	19
Nitrogen Oxide (lbs/MWh).....	4.1	10
Carbon Dioxide (lbs/MWh).....	1,821	14
Total Retail Sales (megawatthours).....	36,735,390	32
Full Service Provider Sales (megawatthours).....	36,735,390	32
Direct Use (megawatthours).....	62,101	49
Average Retail Price (cents/kWh).....	6.35	30

See footnotes at end of tables.

**Table 2. Ten Largest Plants by Generating Capability, 2003**

Plant	Energy Sources	Operating Company	Net Summer Capability (MW)
<b>Kansas</b>			
1. Jeffrey Energy Center .....	Other, Petroleum, Coal	Westar Energy	2,213
2. La Cygne .....	Petroleum, Coal	Kansas City Power & Light Co	1,362
3. Wolf Creek Generating Station .....	Nuclear	Wolf Creek Nuclear Optg Corp	1,165
4. Gordon Evans Energy Center.....	Gas, Petroleum	Kansas Gas & Electric Co	836
5. Lawrence Energy Center.....	Gas, Coal	Westar Energy	567
6. Hutchinson Energy Center.....	Gas, Petroleum	Westar Energy	477
7. Holcomb .....	Gas, Coal	Sunflower Electric Power Corp	360
8. Murray Gill.....	Gas, Petroleum	Kansas Gas & Electric Co	322
9. Quindaro .....	Petroleum, Gas, Coal	Kansas City City of	316
10. West Gardner.....	Gas	Kansas City Power & Light Co	308

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
<b>Kansas</b>						
1. Westar Energy .....	Investor-Owned	9,354,267	3,188,966	4,176,558	1,988,743	0
2. Kansas Gas & Electric Co .....	Investor-Owned	9,029,921	2,842,279	2,728,712	3,458,930	0
3. Kansas City Power & Light Co.....	Investor-Owned	5,842,912	2,598,208	2,861,868	382,836	0
4. Kansas City City of.....	Public	2,254,332	537,863	824,903	891,566	0
5. Aquila Inc .....	Investor-Owned	1,841,911	469,741	575,858	796,312	0
Total Sales, Top Five Providers.....		28,323,343	9,637,057	11,167,899	7,518,387	0
Percent of Total State Sales .....		77	76	81	72	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
<b>Kansas</b>							
<b>Electric Utilities</b> .....	<b>9,715</b>	<b>9,916</b>	<b>10,731</b>	<b>1.1</b>	<b>99.5</b>	<b>99.5</b>	<b>98.7</b>
Coal.....	5,220	5,407	5,265	.1	53.5	54.3	48.4
Petroleum.....	212	214	277	3.0	2.2	2.1	2.5
Natural Gas.....	470	388	990	8.6	4.8	3.9	9.1
Dual Fired.....	2,653	2,743	3,032	1.5	27.2	27.5	27.9
Nuclear.....	1,160	1,164	1,165	*	11.9	11.7	10.7
Other Renewables.....	0	0	2	NM	.0	.0	*
<b>Independent Power Producers and Combined</b>							
<b>Heat and Power</b> .....	<b>49</b>	<b>49</b>	<b>146</b>	<b>12.9</b>	<b>.5</b>	<b>.5</b>	<b>1.3</b>
Petroleum.....	4	4	0	NM	*	*	.0
Natural Gas.....	1	41	27	44.2	*	.4	.2
Dual Fired.....	42	2	4	-23.0	.4	*	*
Hydroelectric.....	2	2	3	4.6	*	*	*
Other Renewables.....	0	0	112	NM	.0	.0	1.0
<b>Total Electric Industry</b> .....	<b>9,763</b>	<b>9,964</b>	<b>10,877</b>	<b>1.2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Coal.....	5,220	5,407	5,265	.1	53.5	54.3	48.4
Petroleum.....	216	218	277	2.8	2.2	2.2	2.5
Natural Gas.....	471	428	1,017	8.9	4.8	4.3	9.3
Dual Fired.....	2,694	2,745	3,036	1.3	27.6	27.5	27.9
Nuclear.....	1,160	1,164	1,165	*	11.9	11.7	10.7
Hydroelectric.....	2	2	3	4.6	*	*	*
Other Renewables.....	0	0	114	NM	.0	.0	1.0

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
<b>Kansas</b>							
<b>Electric Utilities</b> .....	<b>37,283,871</b>	<b>41,480,827</b>	<b>46,155,505</b>	<b>2.4</b>	<b>99.1</b>	<b>99.7</b>	<b>99.1</b>
Coal.....	26,488,755	28,023,687	35,109,616	3.2	70.4	67.4	75.4
Petroleum.....	82,809	122,143	963,751	31.4	.2	.3	2.1
Natural Gas.....	2,183,250	2,924,279	1,190,819	-6.5	5.8	7.0	2.6
Nuclear.....	8,529,002	10,410,718	8,889,667	.5	22.7	25.0	19.1
Other Renewables.....	55	0	1,651	45.9	.0	.0	*
<b>Independent Power Producers and Combined</b>							
<b>Heat and Power</b> .....	<b>335,998</b>	<b>104,401</b>	<b>412,056</b>	<b>2.3</b>	<b>.9</b>	<b>.3</b>	<b>.9</b>
Petroleum.....	5,789	458	381	-26.1	*	*	*
Natural Gas.....	320,355	92,518	34,951	-21.8	.9	.2	.1
Hydroelectric.....	9,854	11,425	12,435	2.6	*	*	*
Other Renewables.....	0	0	364,288	NM	.0	.0	.8
<b>Total Electric Industry</b> .....	<b>37,619,869</b>	<b>41,585,228</b>	<b>46,567,560</b>	<b>2.4</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Coal.....	26,488,755	28,023,687	35,109,616	3.2	70.4	67.4	75.4
Petroleum.....	88,598	122,601	964,132	30.4	.2	.3	2.1
Natural Gas.....	2,503,605	3,016,797	1,225,770	-7.6	6.7	7.3	2.6
Nuclear.....	8,529,002	10,410,718	8,889,667	.5	22.7	25.0	19.1
Hydroelectric.....	9,854	11,425	12,435	2.6	*	*	*
Other Renewables.....	55	0	365,939	165.9	.0	.0	.8

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)
<b>Kansas</b>				
Coal (cents per million Btu).....	102.5	98.1	101.5	-0.1
Average heat value (Btu per pound).....	8,708	8,696	8,619	-.1
Average sulfur Content (percent).....	.5	.5	.5	-.2
Petroleum (cents per million Btu).....	396.8	265.5	361.7	-1.0
Average heat value (Btu per gallon).....	138,892	144,689	156,947	1.4
Average sulfur Content (percent).....	.2	.5	1.6	26.6
Natural Gas (cents per million Btu).....	192.1	213.7	529.6	11.9
Average heat value (Btu per cubic foot).....	983	1,001	1,014	.4

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)
<b>Kansas</b>				
<b>Sulfur Dioxide</b>				
Coal.....	65	102	119	7.0
Petroleum.....	*	*	9	52.1
Natural Gas.....	*	*	—	NM
Other.....	—	—	—	NM
Total.....	65	102	128	7.8
<b>Nitrogen Oxide</b>				
Coal.....	142	68	82	-6.0
Petroleum.....	*	*	3	46.8
Gas.....	4	6	2	-10.4
Other.....	—	—	—	NM
Total.....	147	73	86	-5.8
<b>Carbon Dioxide</b>				
Coal.....	28,414	29,412	36,784	2.9
Petroleum.....	81	125	843	29.8
Gas.....	1,782	2,144	836	-8.1
Geothermal.....	—	—	—	NM
Other.....	—	—	—	NM
Total.....	30,276	31,681	38,463	2.7

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
<b>Kansas</b>							
Retail Sales (thousand megawatthours)							
Residential.....	10,131	11,832	12,602	2.4	34.2	34.7	34.3
Commercial.....	10,111	12,073	13,751	3.5	34.1	35.4	37.4
Industrial.....	9,001	9,762	10,382	1.6	30.4	28.6	28.3
Other.....	371	473	NA	NM	1.3	1.4	NA
Total.....	29,614	34,140	36,735	2.4	100.0	100.0	100.0
Retail Revenue (million dollars)							
Residential.....	799	905	971	2.2	40.8	42.2	41.6
Commercial.....	674	766	882	3.0	34.4	35.7	37.8
Industrial.....	444	435	479	.8	22.7	20.3	20.5
Other.....	41	38	NA	NM	2.1	1.8	NA
Total.....	1,957	2,145	2,333	2.0	100.0	100.0	100.0
Average Retail Price (cents/kWh)							
Residential.....	7.89	7.65	7.71	-.3	NA	NA	NA
Commercial.....	6.66	6.34	6.42	-.4	NA	NA	NA
Industrial.....	4.93	4.46	4.61	-.7	NA	NA	NA
Other.....	10.94	7.96	NA	NM	NA	NA	NA
Total.....	6.61	6.28	6.35	-.4	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	
<b>Kansas</b>								
Number of Entities.....	6	119	NA	29	NA	NA	NA	154
Number of Retail Customers.....	952,229	236,715	NA	212,001	NA	NA	NA	1,400,945
Retail Sales (thousand megawatthours).....	26,335	6,483	NA	3,918	NA	NA	NA	36,735
Percentage of Retail Sales.....	71.69	17.65	NA	10.66	NA	NA	NA	100.00
Revenue from Retail Sales (million dollars).....	1,582	412	NA	338	NA	NA	NA	2,333
Percentage of Revenue.....	67.82	17.68	NA	14.50	NA	NA	NA	100.00
Average Retail Price (cents/kWh).....	6.01	6.36	NA	8.63	NA	NA	NA	6.35

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.