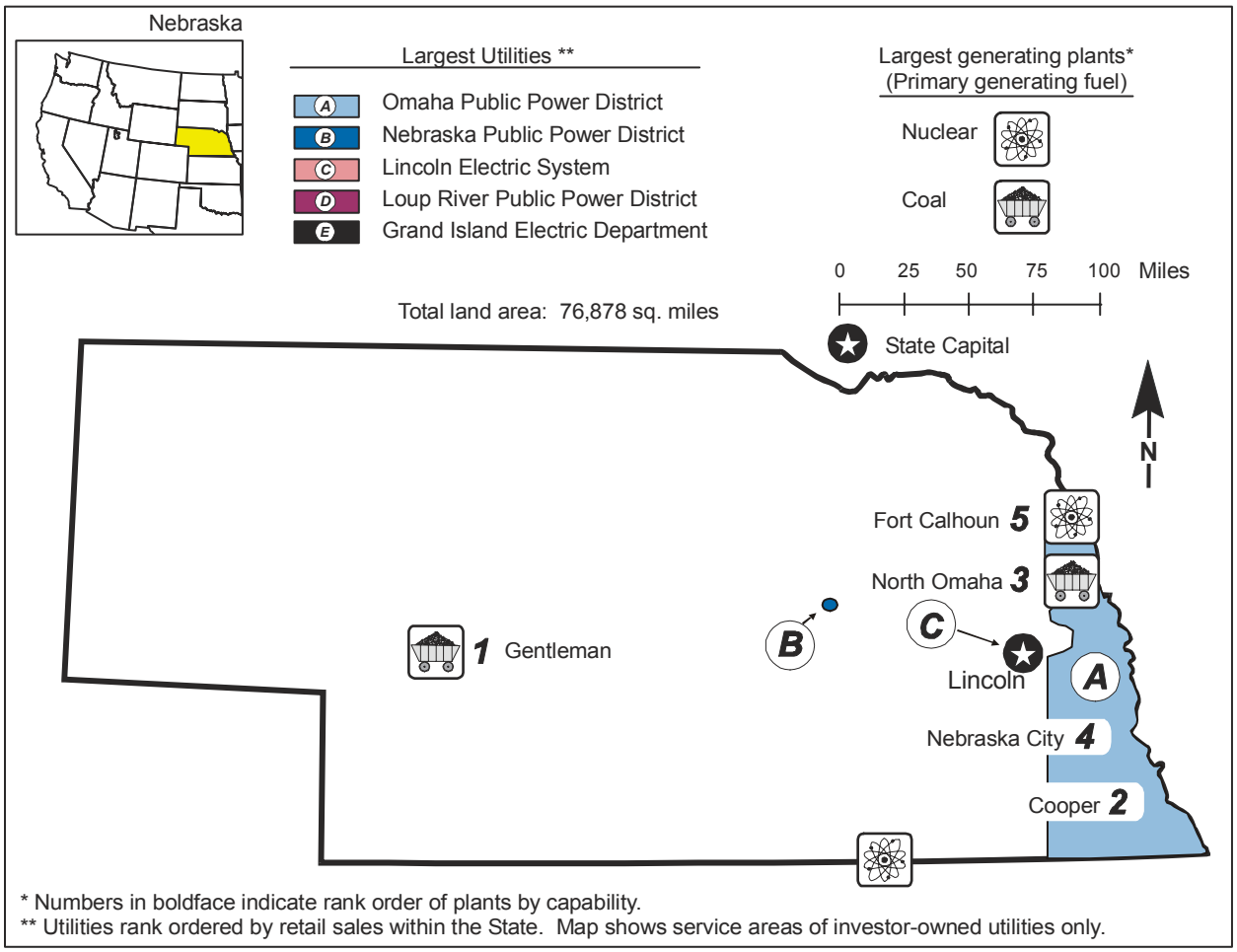
Nebraska



* Numbers in boldface indicate rank order of plants by capability.
** Utilities rank ordered by retail sales within the State. Map shows service areas of investor-owned utilities only.

Table 1. 1999 Summary Statistics

Item	Value	U.S. Rank
NERC Region(s)		WSCC/MAPP
Primary Energy Source		Coal
Net Summer Capability (megawatts)	5,846	37
Utility	5,829	34
Nonutility	16	49
Net Generation (megawatthours)	30,057,082	40
Utility	29,980,967	37
Nonutility	76,115	48
Emissions (thousand short tons)		
Sulfur Dioxide	58	33
Nitrogen Oxide	91	34
Carbon Dioxide	20,471	37
Sulfur Dioxide/sq. mile	1	38
Nitrogen Oxide/sq. mile	1	39
Carbon Dioxide/sq. mile	266	42
Electricity Consumption (MWh) (excludes line losses)	22,886,127	36
Utility Retail Electricity Sales (megawatthours)	22,810,012	36
Nonutility Retail Sales and Direct Use (megawatthours)	76,115	48
Utility Average Retail Price (cents/kWh)	5.31	42

Table 2. Ten Largest Plants by Generating Capability, 1999

Plant	Primary Energy Source(s)	Operating Company	Net Summer Capability (MW)
1. Gentleman	Petroleum, Gas, Coal	Nebraska Public Power District	1,365
2. Cooper	Nuclear	Nebraska Public Power District	758
3. North Omaha	Gas, Coal	Omaha Public Power District	663
4. Nebraska City	Petroleum, Coal	Omaha Public Power District	632
5. Fort Calhoun	Nuclear	Omaha Public Power District	476
6. Sheldon	Gas, Coal	Nebraska Public Power District	225
7. Sarpy County	Petroleum, Gas	Omaha Public Power District	212
8. Rokeby	Petroleum, Gas	Lincoln Electric System	172
9. Lon Wright	Petroleum, Gas, Coal	Fremont City of	120
10. Canaday	Petroleum, Gas	Nebraska Public Power District	113

Table 3. Five Largest Utilities by Retail Sales within the State, 1999
(Megawatthours)

Utility	Total	Residential	Commercial	Industrial	Other
A. Omaha Public Power District	8,145,388	2,719,020	3,025,455	2,315,924	84,989
B. Nebraska Public Power District	3,068,010	919,912	860,210	1,085,579	202,309
C. Lincoln Electric System	2,620,847	898,085	935,639	530,915	256,208
D. Loup River Public Power Dist	908,175	198,470	130,544	543,707	35,454
E. Grand Island Electric Dept	569,159	167,302	131,628	262,155	8,074
Total	15,311,579	4,902,789	5,083,476	4,738,280	587,034
Percentage of Utility Sales	67	62	76	69	44

Table 4. Electric Power Industry Generating Capability by Primary Energy Source, 1990, 1994, and 1999
(Megawatts)

Plant Type	1990	1994	1999	Average Annual Rate of Growth (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Total Utility	5,452	5,518	5,829	0.7	99.8	99.8	99.7
Coal	3,094	3,112	3,181	0.3	56.7	56.3	54.4
Petroleum	370	342	528	4.0	6.8	6.2	9.0
Gas	565	643	723	2.8	10.4	11.6	12.4
Nuclear	1,254	1,254	1,234	-0.2	23.0	22.7	21.1
Hydroelectric	168	167	162	-0.4	3.1	3.0	2.8
Other	0	0	2	0.0	0.0	0.0	0.0
Total Nonutility	8	8	16	7.9	0.2	0.2	0.3
Coal	W	W	7	W	W	W	0.1
Petroleum	W	W	4	W	W	W	0.1
Gas	W	W	1	W	W	W	0.0
Other	0	0	3	0.0	0.0	0.0	0.1
Total Industry	5,460	5,526	5,846	0.8	100.0	100.0	100.0
Coal	W	W	3,189	W	W	W	54.5
Petroleum	W	W	532	W	W	W	9.1
Gas	W	W	724	W	W	W	12.4
Nuclear	1,254	1,254	1,234	-0.2	23.0	22.7	21.1
Hydroelectric	168	167	162	-0.4	3.1	3.0	2.8
Other	0	0	5	0.0	0.0	0.0	0.1

Figure 1. Industry Generating Capability by Primary Energy Source, 1999

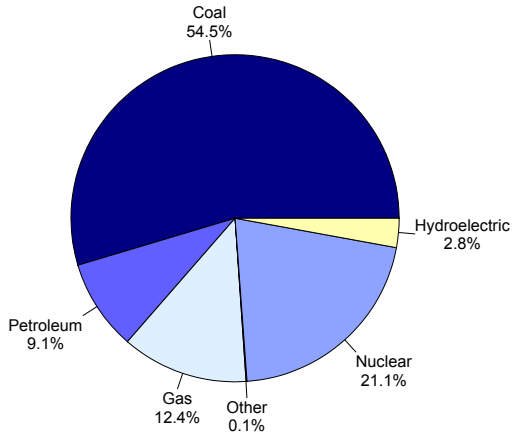


Figure 2. Industry Generation by Energy Source, 1999

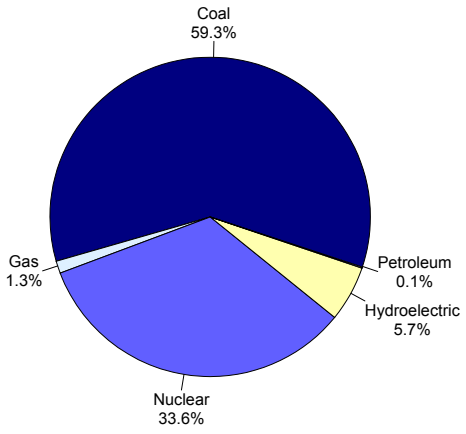


Table 5. Electric Power Industry Generation of Electricity by Energy Source, 1990, 1994, and 1999
(Megawatthours)

Fuel	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Total Utility	21,630,677	21,945,525	29,980,967	3.7	99.8	99.8	99.7
Coal	12,658,464	14,002,015	17,794,136	3.9	58.4	63.7	59.2
Petroleum	12,981	18,201	28,807	9.3	0.1	0.1	0.1
Gas	307,841	258,764	347,902	1.4	1.4	1.2	1.2
Nuclear	7,511,298	6,345,330	10,091,092	3.3	34.7	28.9	33.6
Hydroelectric	1,140,093	1,311,883	1,719,030	4.7	5.3	6.0	5.7
Other	0	9,332	0	0.0	0.0	0.0	0.0
Total Nonutility	38,251	37,606	76,115	7.9	0.2	0.2	0.3
Coal	W	W	44,371	W	W	W	0.1
Petroleum	0	0	816	0.0	0.0	0.0	0.0
Gas	W	W	30,928	W	W	W	0.1
Total Industry	21,668,928	21,983,131	30,057,082	3.7	100.0	100.0	100.0
Coal	W	W	17,838,507	W	W	W	59.3
Petroleum	12,981	18,201	29,623	9.6	0.1	0.1	0.1
Gas	W	W	378,830	W	W	W	1.3
Nuclear	7,511,298	6,345,330	10,091,092	3.3	34.7	28.9	33.6
Hydroelectric	1,140,093	1,311,883	1,719,030	4.7	5.3	6.0	5.7
Other	0	9,332	0	0.0	0.0	0.0	0.0

Table 6. Utility Delivered Fuel Costs and Quality for Coal, Petroleum, and Gas, 1990, 1994, and 1999

Fuel	1990	1994	1999	Average Annual Rate of Change (Percent)
Coal (cents per million Btu) (1999 dollars)	91.2	83.5	55.4	-5.4
Average heat value (Btu per pound)	8561	8571	8498	-0.1
Average sulfur Content (percent)	0.4	0.3	0.3	-2.0
Petroleum (cents per million Btu) (1999 dollars)	852.6	438.7	431.5	-7.3
Average heat value (Btu per gallon)	138043	137641	137673	*
Gas (cents per million Btu) (1999 dollars)	243.4	223.9	281.1	1.6
Average heat value (Btu per cubic foot)	946	987	995	0.6

Table 7. Electric Power Industry Emissions Estimates by Fuel, 1990, 1994, and 1999
(Thousand Short Tons)

Emission Type	1990	1994	1999	Average Annual Rate of Change (Percent)
Sulfur Dioxide				
Coal	51	54	58	1.5
Petroleum	*	*	*	14.9
Total	51	54	58	1.5
Nitrogen Oxide				
Coal	74	73	90	2.1
Petroleum	*	*	*	9.9
Gas	*	*	1	3.8
Total	75	74	91	2.2
Carbon Dioxide				
Coal	14,398	15,935	20,157	3.8
Petroleum	14	20	34	10
Gas	205	173	280	3.5
Total	14,617	16,129	20,471	3.8

Figure 3. Industry Generation of Electricity by Energy Source, 1990-1999

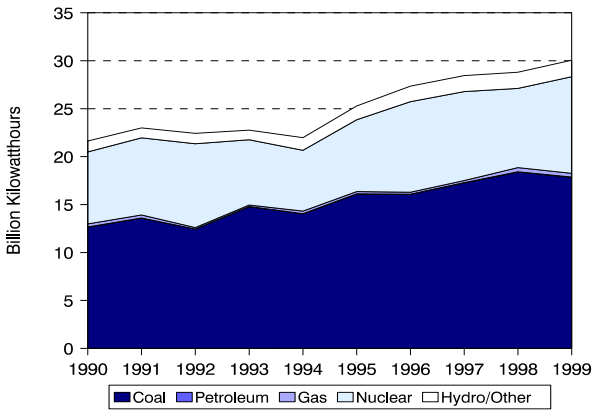


Figure 4. Utility Delivered Fuel Costs for Coal, Petroleum, and Gas, 1990-1999 (1999 Dollars)

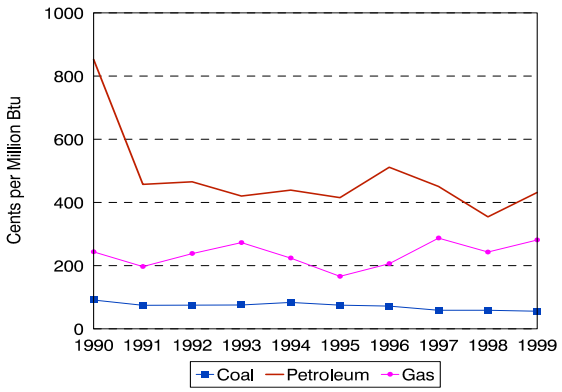


Figure 5. Estimated Sulfur Dioxide Emissions, 1990-1999

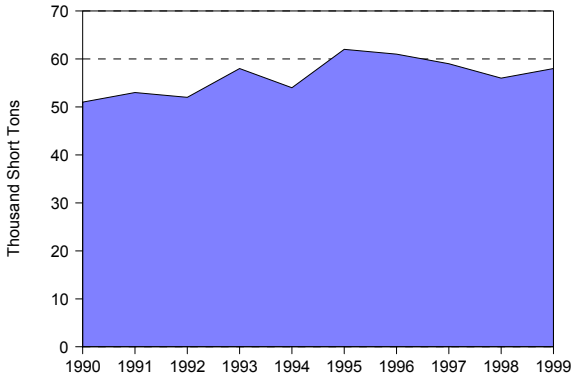


Figure 6. Estimated Nitrogen Oxide Emissions, 1990-1999

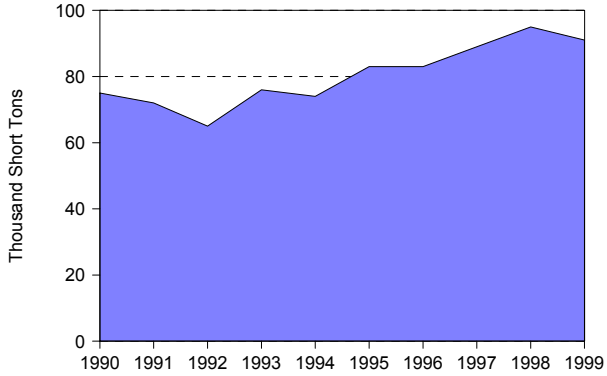


Figure 7. Estimated Carbon Dioxide Emissions, 1990-1999

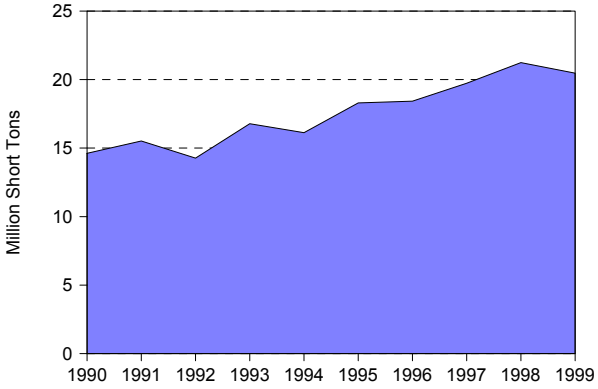


Figure 8. Nuclear Power Capacity Factor Comparison, 1990-1999

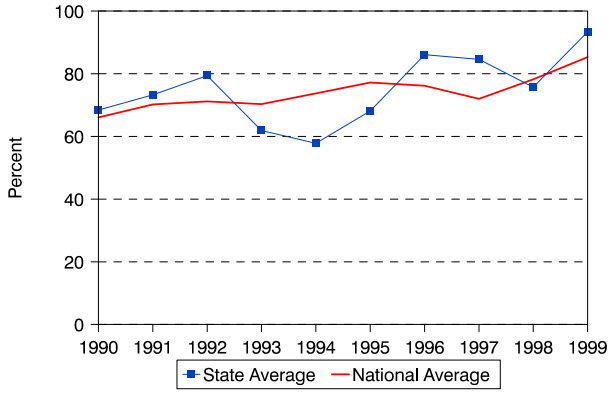


Table 8. Utility Retail Sales, Revenue, and Average Revenue per Kilowatthour by Sector, 1990, 1994, and 1999

	1990	1994	1999	Average Annual Rate of Change (Percent)	Percentage Share 1990	Percentage Share 1994	Percentage Share 1999
Utility Retail Sales							
(thousand megawatthours)							
Residential	6,800	7,379	7,929	1.7	38.0	37.1	34.8
Commercial	5,086	5,809	6,661	3.0	28.5	29.2	29.2
Industrial	4,618	5,345	6,883	4.5	25.8	26.9	30.2
Other	1,364	1,340	1,336	-0.2	7.6	6.7	5.9
Total	17,868	19,873	22,810	2.8	100.0	100.0	100.0
Retail Sales Revenue							
(million 1999 dollars)							
Residential	513	508	517	0.1	42.5	42.7	42.7
Commercial	353	354	362	0.3	29.3	29.7	29.9
Industrial	234	233	246	0.5	19.4	19.6	20.3
Other	106	96	86	-2.2	8.8	8.0	7.1
Total	1,206	1,190	1,212	0.0	100.0	100.0	100.0
Average Revenue per Kilowatthour							
(cents/kWh) (1999 dollars)							
Residential	7.54	6.88	6.52	NA	NA	NA	NA
Commercial	6.94	6.09	5.44	NA	NA	NA	NA
Industrial	5.08	4.35	3.57	NA	NA	NA	NA
Other	7.73	7.13	6.47	NA	NA	NA	NA
Total	6.75	5.99	5.31	NA	NA	NA	NA

Table 9. Utility Retail Sales, Revenue, and Number of Customers by Type of Utility, 1999

Item	Investor-Owned	Public	Federal	Cooperative	Total
Number of Utilities	0	151	1	10	162
Number of Retail Customers	0	865,002	12	20,701	885,715
Retail Sales (thousand megawatthours)	0	22,194	145	472	22,810
Percentage of Retail Sales	0.0	97.3	0.6	2.1	100.0
Revenue from Retail Sales (million dollars)	0	1,175	2	35	1,212
Percentage of Revenue	0.0	97.0	0.2	2.9	100.0
Average Revenue per Kilowatthour (cents/kWh) (1999 dollars)	0.00	5.29	1.33	7.40	5.31