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Preface

Section 205(A)(2) of the Department of Energy Organization Act of 1977 (Public Law 95-91) requires the Administrator of the Energy Information Administration (EIA) to carry out a central, comprehensive, and unified energy data information program. Under this program, EIA collects, evaluates, assembles, analyzes, and disseminates data and information relevant to energy resources, reserves, production, demand, technology, and related economic and statistical information.

The legislation that created EIA vested the organization with an element of statutory independence. EIA does not take positions on policy questions. The agency's responsibility is to provide timely, high-quality information and to perform objective, credible analyses in support of deliberations by both public and private decisionmakers. Accordingly, this report does not purport to represent the policy positions of the U.S. Department of Energy or the Administration.

The *Electric Power Annual 2000 Volume I* is intended for a wide audience, including Congress, Federal and State agencies, the electric power industry, and the general public. The primary purpose of this report is to provide a statistical review of the domestic electric power industry's data collected by the EIA for the most recent year. Statistical information contained in this report include industry capability, generation, fossil-fuel consumption, and stocks. Data on utility fossil-fuel receipts and costs as well as data on retail sales of electricity and average revenue per kilowatthour are also presented.

Some discussions, tables, and figures may address utilities only, some nonutilities only, and others the electric power industry as a whole. The combination of utility and nonutility are referred to as "industry." Industry data are presented wherever possible to provide the most complete picture.

The *Electric Power Annual Volume II*, to be released later in the year, will provide additional annual summary statistics for the electric power industry, including information for both electric utilities and nonutilities. Volume II includes data on electric utility retail sales of electricity, associated revenue, and average revenue per kilowatthour of electricity sold; financial statistics; environmental statistics; power transactions; and demand-side management. Also included in the report are data on installed capacity, gross generation, emissions, and supply and disposition of energy for nonutilities.

The *Electric Power Annual Volume 1* can be accessed from EIA's Web Site on the Internet at: http://www.eia.doe.gov/cneaf/electricity/epav1/epav1_sum.html. Technical information regarding the sources and quality of the data in this report is available in the *Electric Power Monthly*, DOE/EIA-0226, via the Internet at:

http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html.

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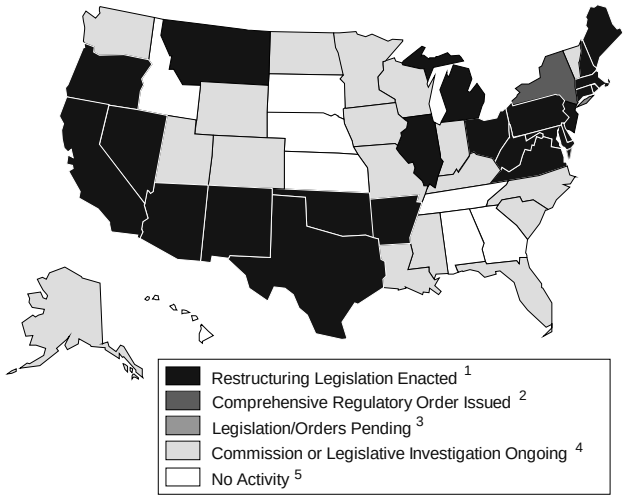
The year 2000 was clearly a transition year for the electric industry as the Nation moved State by State toward restructuring. Consolidation through mergers and acquisitions was prominent as industry participants maneuvered, hoping to gain a competitive advantage. Divestiture of generating assets was common as some electric utilities exited the generation business in order to concentrate on the distribution of electricity. Others used the opportunity to purchase divested assets to build critical mass that many think will be necessary to survive what is expected to be a very competitive industry.

The transition from a highly regulated business into a competitive market did encounter a stumbling block in 2000, one that could slow its course and cause some to reconsider the idea of restructuring—California. In April 1998, California became the first State to restructure its electric industry. Yet, in 2000 there was very little good news concerning restructuring to come out of the State. Rolling blackouts, sky-high electricity prices, and utilities nearing bankruptcy were all linked to the restructuring of California's electric industry. By year-end, re-regulation was a hot topic. In the near term, the attention that was focused on the pitfalls of restructuring in California affected restructuring sentiment in other States. During the year, only two additional States enacted restructuring legislation—Michigan and West Virginia—bringing the year-end total to 23 States and the District of Columbia.[1] In the longer term, California may end up being just a 'lesson learned' for the remainder of the States contemplating changes to their electric industry.

Though restructuring had profound affects in California and other States during 2000, the focus of this report is on basic industry data such as generating capability, generation, fuel consumption, cost of fuels, and retail sales and revenue; to provide a review of various influences on the operations of the electric industry during the year, and to explain significant changes from prior years in State, Census Division, and National level data collected from the industry in 2000. Topics include record nuclear generation, a substantial decline in hydroelectric generation, record high natural gas prices, weather induced changes to industry operations, and the start of Phase II of the Clean Air Act Amendments of 1990. Also, the affect that reclassification of generating plants from the utility sector to the nonutility sector had on the data presented in this publication is discussed.

Figure 1. Status of State Electric Utility Deregulation Activity, as of January 2001



[1]Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Illinois, Maine, Maryland, Massachusetts, Michigan, Montana, Nevada, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Virginia, and West Virginia.
[2]New York.
[3]None.
[4]Alaska, Colorado, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, Wisconsin, and Wyoming.
[5]Alabama, Georgia, Hawaii, Idaho, Kansas, Nebraska, South Dakota, and Tennessee.
Note: The most current status of State restructuring activity is available on the Internet at: http://www.eia.doe.gov/cneaf/electricity/chg_str/regmap.html.
Source: Energy Information Administration.

[1] United States Department of Energy, Energy Information Administration. Extracted from the Internet at http://www.eia.doe.gov/cneaf/electricity/page/restructure.html, on May 29, 2001.

Table 1. Summary of U.S. Electric Power Statistics, 2000 and 1999

Item	2000	1999[a]
Capability[b] (megawatts)	**811,625**	**787,902**
Utility	602,377	639,324
Nonutility	209,248	148,578
Net Generation[c] (billion kilowatthours)	**3,800**	**3,705**
Utility	3,015	3,174
Nonutility	785	531
Utility Retail Sales[b] (billion kilowatthours)	**3,413**	**3,312**
Utility Retail Prices[b]		
(cents per kilowatthour)	**6.68**	**6.66**
Stocks (end-of-year)		
Coal (million short tons)	**103**	**143**
Utility[c]	90	128
Nonutility[b]	13	14
Petroleum (million barrels)	**41**	**53**
Utility[c]	30	44
Nonutility[b]	11	9
Utility Fossil Fuel Consumption[c]		
Coal (million short tons)	859	894
Petroleum (million barrels)	120	144
Petroleum Coke (thousand short tons)	1,132	1,608
Gas (billion cubic feet)	3,043	3,113
Nonutility Fossil Fuel Consumption[b]		
Coal (million short tons)	132	58
Petroleum (million barrels)	53	52
Petroleum Coke (thousand short tons)	3,021	2,915
Gas (billion cubic feet)	3,287	2,636
Utility Fossil Fuel Cost[a] (dollars per million Btu)		
Coal	1.20	1.22
Petroleum	4.45	2.53
Petroleum Coke	0.59	0.65
Gas	4.30	2.57
Utility Fossil Fuel Receipts[a]		
Coal (million short tons)	790	908
Petroleum (million barrels)	100	131
Petroleum Coke (thousand short tons)	1,683	2,906
Gas (billion cubic feet)	2,630	2,809

[a]Data are final.
[b]Data for 2000 are preliminary.
[c]Data for 2000 are final.
NA = Not available.
Btu = British Thermal Unit.
Notes: • Nonutility data represent fuels consumed to produce electricity. • Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels, Electric Power Division.

Reclassification of Electric Utility Plants as Nonutility Plants

Understanding the effect of reclassifying electric plants is important when reviewing utility or nonutility data. Since January 1998, many electric utilities have been in the process of selling their electric plants or spinning them off into unregulated subsidiaries as they prepare for restructuring. Among the most prominent reasons for divestiture are the following: State restructuring laws that require the sale of plants in order to enhance competition, sales made to recoup stranded costs, sales to exit the generating business, or for the purpose of spinning-off the assets into an unregulated subsidiary. Prior to the sale or spin-off, plant specific data is recorded under the utility sector. Once the divestiture is complete, subsequent data collected by the EIA is recorded under the nonutility sector. The result is that tables containing generation, consumption, stocks, and receipt data often show a year-to-year decrease in utility data and a similar increase in year-to-year nonutility data. The reclassification has no affect on industry level data. The breakdown of utility versus nonutility data is made available to help show the transition of the industry from a regulated business (utility) to that of an unregulated business (nonutility).

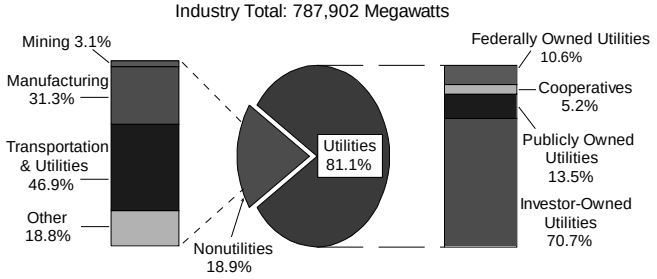
Perhaps the least noticeable but one of the most important affects of reclassification on data presented in this publication can be found in the fuel cost data presented in Table A20. Restructuring has allowed many plants to escape reporting data on the Federal Energy Regulatory Commission (FERC) Form 423 survey. In doing so, data at the State, Census division, and National level have been affected by the elimination of respondents from the survey. Depending on the price of fuel delivered to a specific plant, its removal from the database can substantially change the weighted average cost of fuel shown for a particular State. Data on the cost of fuel collected on this survey have historically been used by many industry participants as part of an index to adjust the price of fuel delivered under contracts. The use of these data should be reviewed to determine the affect that reclassification and subsequent removal of plants from the database have on the index.

Generating Capability

Preliminary estimates show that as of December 31, 2000, U.S. net summer generating capability was 811,625 megawatts, up from 787,902 megawatts on December 31, 1999. On a regional basis, the South Atlantic Census Division added 6,838 or 29 percent of the new capacity while the West South Central Census Division added 5,504 megawatts. The Pacific Contiguous Census Division added the least amount of new capacity with a net increase of only 97 megawatts. On a State-by-State basis, Texas and Georgia added the largest amount of new capacity with additions totaling 3,741 megawatts and 3,402 megawatts, respectively.

Over the past 2 years, shortages of electric power in some areas of the Nation have resulted in more attention being focused on capacity additions to the electric grid.

Figure 2. Share of Total Industry Capability by Industry Sector and Ownership, 1999



Notes: • Totals may not equal sum of components due to independent rounding. • Data are final. • Other includes: agriculture, transportation, and other services.

Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report – Utility," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

Table 3, which provides data on changes to capability at the State and Census Division level over the past decade, shows that State and regional additions to capability have varied greatly since 1990. A 20-percent increase in the South Atlantic Census Division was the largest percentage change among Census Divisions. This was followed by a 15-percent increase in the East South Central Census Division. Other double-digit increases in capability occurred in the Pacific Noncontiguous Census Division, West South Central Census Division, and the Mountain Census Division. The Middle Atlantic Census Division and the New England Census Division show increases of 6 percent and 5 percent, respectively. The smallest percentage increase in capability occurred in the Pacific Contiguous Census Division with a net change of 1 percent.

At the State level, the largest percent changed occurred in Rhode Island as it more than doubled its capability. Georgia, Mississippi, and Nevada each posted increases of 30 percent or more in capability since 1990. The largest volume change occurred in Texas as that State added 10,721 megawatts (15 percent) to its generating capability. Florida and Georgia followed with increases of 7,506 megawatts and 6,651 megawatts, respectively. States posting decreases in capability include Arkansas, California, Connecticut, Maine, New Hampshire, Oregon, and Vermont.[2]

Table 2. Industry Capability by Fuel Source and Industry Sector, 2000 and 1999
(Megawatts)

Item	2000	1999
Total Industry	**811,625**	**787,902**
Utility	**602,377**	**639,324**
Coal-fired	259,059	277,780
Petroleum-fired [a]	26,250	31,488
Gas-fired [b]	38,964	37,416
Duel-Fired	99,945	103,529
Nuclear-powered	85,519	95,030
Hydroelectric	91,590	93,067
Other [c]	1,050	1,014
Nonutility	**209,248**	**148,578**
Coal-fired	56,190	36,917
Petroleum-fired [d]	13,003	3,361
Gas-fired [e]	58,668	45,586
Duel-Fired	45,549	37,919
Nuclear-powered	12,038	2,527
Hydroelectric	7,478	5,974
Other [f]	16,322	16,294

[a]Includes fuel oil Nos. 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke.

[b]Includes gas-fueled fuel cell units and waste heat.

[c]Includes geothermal, wind, solar (photovoltaic), and biomass (wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, fish oils).

[d]Includes petroleum coke, liquid butane, diesel, light oil, kerosene, methanol, oil waste, sludge oil, tar oil, and liquid propane.

[e]Includes natural gas, waste heat, waste gas, butane, methane, propane, other gas, and digester gas.

[f] Includes geothermal, wind, solar (photovoltaic/thermal), multifuel, biomass (wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, fish oils), hydrogen, sulfur, batteries, chemicals, and purchased steam.

Notes: • Data for 2000 are preliminary; 1999 data are final. • Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report – Utility," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

While the electric generating capability of the Nation has increased by 10 percent since 1990, retail sales of electricity have grown by 26 percent.[3] The result has been an increase in use or higher dependence on existing generating facilities. This is evident from an increase in the Nation's plant capacity factor from 49 percent in 1990 to 55 percent in 2000.[4] Contributing to this increase were nuclear facilities, which increased their capacity

[2] Reliability and adequacy of electricity supply is usually a task involving generating capability located in North American Electric Reliability Council (NERC) regions. A percent change in generating capability for a State is not necessarily a meaningful measure of reliability and adequacy of electricity supplies for that particular State.

[3] Data on retail sales of electricity was obtained from Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/06) (Washington, DC, June 2001), Table 44.

[4] Data on net generation used to calculate capacity factor for 1990 was obtained from Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/06) (Washington, DC, June 2001), Tables 3 and 58. Does not include capacity or generation data on pump storage facilities.

Table 3. Industry Capability by Census Division and State, 1990-2000

(Megawatthours)

Census Division State	1990	1995	1999	2000	Percent Change 1990-2000
New England	**26,708**	**27,062**	**26,663**	**27,915**	**4.5**
Connecticut	7,684	7,383	7,077	7,077	-7.9
Maine	3,721	3,790	2,956	3,642	-2.1
Massachusetts	10,723	10,997	11,805	12,126	13.1
New Hampshire	2,901	2,751	2,851	2,857	-1.5
Rhode Island	570	980	981	1,220	114.0
Vermont	1,109	1,161	992	992	-10.5
Middle Atlantic	**82,253**	**90,775**	**87,019**	**87,186**	**6.0**
New Jersey	14,543	16,883	16,651	16,643	14.4
New York	32,409	37,479	33,742	33,742	4.1
Pennsylvania	35,301	36,413	36,627	36,801	4.3
East North Central	**117,980**	**120,143**	**122,349**	**127,001**	**7.6**
Illinois	33,182	33,863	34,338	35,803	7.9
Indiana	21,359	21,524	22,023	23,661	10.8
Michigan	25,095	24,944	25,461	25,672	2.3
Ohio	27,331	27,693	27,391	28,214	3.2
Wisconsin	11,012	12,119	13,136	13,652	24.0
West North Central	**55,356**	**56,681**	**59,536**	**60,212**	**8.8**
Iowa	8,305	8,564	9,003	9,080	9.3
Kansas	9,624	9,725	10,067	10,196	5.9
Minnesota	9,416	9,551	10,157	10,189	8.2
Missouri	15,288	15,833	16,858	17,132	12.1
Nebraska	5,460	5,539	5,846	5,946	8.9
North Dakota	4,555	4,520	4,710	4,774	4.8
South Dakota	2,708	2,950	2,895	2,895	6.9
South Atlantic	**135,487**	**150,106**	**155,947**	**162,785**	**20.1**
Delaware	2,147	2,416	2,452	2,609	21.5
District of Columbia	809	809	806	806	-0.3
Florida	34,166	39,705	40,940	41,672	22.0
Georgia	21,762	23,671	25,011	28,413	30.6
Maryland	10,048	11,321	11,789	11,791	17.4
North Carolina	21,312	22,395	22,962	24,279	13.9
South Carolina	15,287	17,106	18,158	18,681	22.2
Virginia	15,033	17,670	18,767	19,474	29.5
West Virginia	14,924	15,015	15,061	15,061	0.9
East South Central	**60,851**	**61,172**	**65,699**	**69,759**	**14.6**
Alabama	20,582	21,446	22,683	23,145	12.5
Kentucky	15,511	15,429	16,542	17,084	10.1
Mississippi	7,372	7,536	8,099	10,079	36.7
Tennessee	17,386	16,761	18,374	19,452	11.9
West South Central	**112,374**	**116,253**	**119,849**	**125,353**	**11.5**
Arkansas	9,972	10,071	9,684	9,686	-2.9
Louisiana	19,548	19,814	20,202	21,498	10.0
Oklahoma	13,562	13,709	13,690	14,155	4.4
Texas	69,292	72,660	76,272	80,013	15.5
Mountain	**50,611**	**53,392**	**56,046**	**56,486**	**11.6**
Arizona	15,011	15,382	15,260	15,261	1.7
Colorado	6,917	7,280	8,034	8,427	21.8
Idaho	2,621	2,974	3,021	3,021	15.3
Montana	4,972	5,064	5,829	5,832	17.3
Nevada	5,099	6,306	7,019	7,019	37.7
New Mexico	5,191	5,261	5,539	5,539	6.7
Utah	4,887	5,063	5,234	5,240	7.2
Wyoming	5,913	6,063	6,110	6,145	3.9
Pacific Contiguous	**89,473**	**89,558**	**90,455**	**90,552**	**1.2**
California	53,375	53,489	53,157	53,168	-0.4
Oregon	11,546	10,816	11,192	11,277	-2.3
Washington	24,553	25,254	26,106	26,106	6.3
Pacific Noncontiguous	**3,886**	**4,375**	**4,339**	**4,376**	**12.6**
Alaska	1,799	2,012	2,018	2,033	13.0
Hawaii	2,087	2,363	2,322	2,343	12.3
U.S. Total	**734,980**	**769,517**	**787,902**	**811,625**	**10.4**

Notes: • Data for 2000 are preliminary. • Includes facilities with capacities of 1 megawatt or more. Data for 1990 include estimates for nonutility facilities in the 1-to-5 megawatt range. • Totals may not equal the sum of components because of independent rounding.

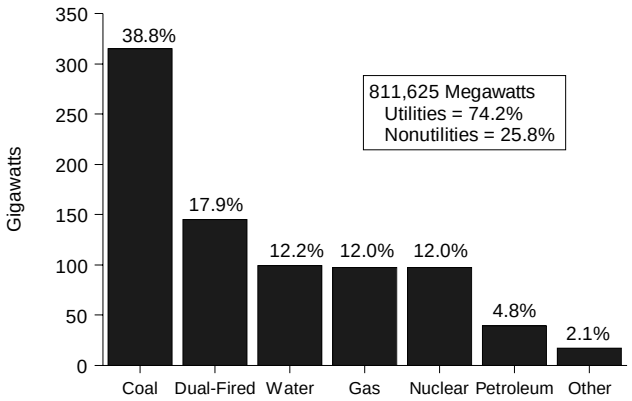
Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report - Utility," and Form EIA-860B, "Annual Electric Generator Report - Nonutility."

factor from 66 percent in 1990 to 88 percent in 2000.[5] The higher utilization rate resulted in nuclear facilities generating 20 percent of the Nation's electricity from only 12 percent of total capability. Since nuclear plants are among the least expensive to operate, they are typically base-load plants that operate on a continuous basis at high levels of output. Coal-fired generating plants ranked second in utilization with a 71 percent capacity factor, up from 59 percent in 1990.[6] While accounting for 39 percent of total capability, they generated 52 percent of the Nation's electricity. Hydroelectric facilities accounted for 12 percent of total capability but only 7 percent of total generation. A reduction in their utilization rate from 1999 resulted from unusually dry weather throughout much of the western half of the Nation.

Together, gas-fired and petroleum-fired facilities had the lowest capacity factor at 29 percent, primarily because many of these facilities were built for the purpose of meeting peak load requirements. Though accounting for 35 percent of total capacity, gas-fired and petroleum-fired facilities produced only 19 percent of total generation. Fuel prices commonly affect the status of gas-fired and petroleum-fired plants that are operated at other than peak load periods. During 2000, high gas and petroleum prices reduced the operating time for some of these plants. Ironically, recent major gains in gas turbine efficiency, coupled with the clean-burning nature of natural gas and low capital cost requirements, have resulted in most new capacity additions being either gas-fired and / or petroleum-fired facilities.

The sale of electric utility plants and their subsequent reclassification to unregulated status continued at a brisk pace during 2000. This resulted in end-of-year electric utility capability of 602,377 megawatts, down from 639,324 megawatts in 1999. Nonutility capability rose to 209,248 megawatts from 148,578 megawatts in 1999. Approximately 48,000 megawatts of utility capacity were either sold or transferred into competitive markets, down from approximately 51,000 megawatts sold or transferred in 1999. Most of the reclassifications occurred in Illinois, Maryland, New Jersey, and Pennsylvania. Notable sales / transfers included facilities owned by Atlantic City Electric Company, Baltimore Gas & Electric Company, Central Illinois Public Service Company, Delmarva Power & Light Company, Duquesne

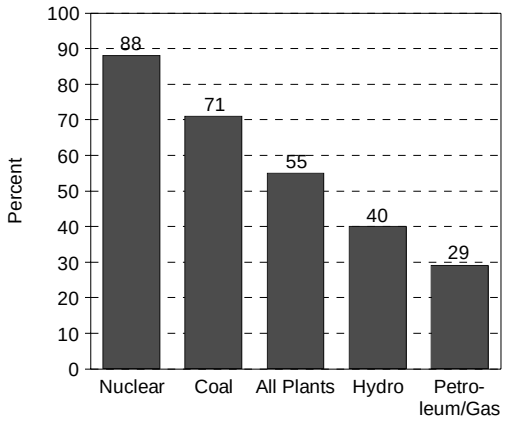
Figure 3. Share of U.S. Net Summer Capability by Energy Source, Year-End 2000



Note: ●Gas includes gas-fueled fuel cell units, waste heat, natural gas, waste gas, butane, methane, propane, other gas, and digester gas. ●Petroleum includes petroleum coke, liquid butane, diesel, light oil, kersone, methanol, oil waste, sludge oil, tar oil, and liquid propane. ●Other includes geothermal, wind, solar (photovoltaic/thermal), multifuel, biomass (wood, wood waste, peat wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, fish oils), hydrogen, sulfur, batteries, chemicals, and purchased steam. ●Data are preliminary. ●Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report – Utility," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

Figure 4. Capacity Factor by Energy Source, 2000



Note: Does not include the operations of pump storage facilities.

Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report – Utility," Form EIA-860B, "Annual Electric Generator Report – Nonutility" Form EIA-759, "Monthly Power Plant Report," and Form EIA-900, "Monthly Nonutility Power Plant Report."

[5] Energy Information Administration, *Monthly Energy Review* (MER), DOE / EIA-0035(2001 / 05) (Washington, DC, May 2001), Table 8.1.

[6] Based on data from the Energy Information Administration, *Electric Power Annual 1994,* Volume II, DOE / EIA-0348 / 02 (Washington, DC, November 1995), Tables 54 and 57; and *Electric Power Annual 1990*, DOE / EIA-0348 (90) (Washington, DC, January 1992), Tables 3 and 14.

Table 4. Retired and Added Capability by Energy Source, State, and Sector, 2000
(Megawatts)

State	Energy Source						Total
	Coal	Gas[a]	Petroleum[b]	Nuclear	Hydroelectric	Other[c]	
	Retirements						
Alaska	--	--	2	--	--	--	2
Alabama	--	11	--	--	--	--	11
California	--	41	--	--	--	97	138
Florida	--	80	97	--	--	20	197
Georgia	--	7	9	--	--	--	16
Hawaii	--	--	--	--	--	9	9
Illinois	--	26	1	--	--	53	80
Indiana	--	--	3	--	--	--	3
Massachusetts	--	16	1	--	--	--	17
Michigan	47	6	--	--	--	--	53
Maine	--	--	--	--	4	18	22
Mississippi	--	2	--	--	--	--	2
North Carolina	9	--	6	--	--	--	15
New Jersey	--	1	--	--	--	--	1
New Mexico	8	--	17	--	--	--	25
New York	--	--	2	--	7	--	9
Pennsylvania	310	4	--	--	--	--	314
Rhode Island	--	--	4	--	--	--	4
Texas	--	38	--	--	--	--	38
Virginia	--	--	3	--	--	1	4
Washington	--	--	--	--	--	25	25
Total	**374**	**232**	**145**	**0**	**11**	**223**	**985**
	Capability Additions: Utilities						
Alabama	--	458	4	--	--	--	462
Alaska	--	--	17	--	--	--	17
Colorado	--	--	*	--	--	--	*
Florida	--	786	--	--	--	--	786
Georgia	--	1,247	--	--	--	--	1,247
Hawaii	--	--	22	--	--	--	22
Illinois	--	134	48	--	--	--	182
Indiana	--	73	--	--	--	--	73
Iowa	15	--	81	--	--	--	96
Kansas	--	129	--	--	--	--	129
Maryland	--	--	2	--	--	--	2
Michigan	--	248	2	--	--	--	250
Mississippi	--	--	21	--	--	--	21
Missouri	--	267	8	--	--	--	275
Nebraska	--	--	100	--	--	--	100
North Carolina	--	900	--	--	--	--	900
North Dakota	--	--	1	--	--	--	1
Ohio	--	27	46	--	--	--	73
Oklahoma	--	458	--	--	--	--	458
Tennessee	--	575	--	--	--	2	577
Texas	--	469	--	--	--	--	469
Utah	--	7	--	--	--	--	7
Virginia	--	592	--	--	--	--	592
Wisconsin	--	143	10	--	--	--	153
Wyoming	--	34	--	--	--	1	35
Total	**15**	**6,547**	**363**	**--**	**--**	**3**	**6,928**
	Capability Additions: Nonutilities						
Arizona	--	2	--	--	--	--	2
California	--	5	--	--	--	6	11
Colorado	--	393	--	--	--	--	393

See footnotes at end of table.

Table 4. Retired and Added Capability by Energy Source, State, and Sector, 2000 (Continued)
(Megawatts)

State	Energy Source						Total
	Coal	Gas[a]	Petroleum[b]	Nuclear	Hydroelectric	Other[c]	
	Capability Additions: Nonutilities (continued)						
Delaware	--	--	156	--	--	--	156
Florida	--	2	--	--	--	--	2
Georgia	--	1,064	153	--	--	--	1,217
Hawaii	--	--	56	--	--	--	56
Illinois	--	1,145	--	--	--	5	1,150
Indiana	9	1,555	2	--	--	--	1,566
Kentucky	--	542	--	--	--	--	542
Louisiana	--	1,246	--	--	--	--	1,246
Massachusetts	--	316	--	--	2	3	321
Maine	--	686	--	--	--	--	686
Mississippi	478	1,419	--	--	--	--	1,897
Montana	--	--	--	--	--	3	3
North Carolina	--	412	--	--	5	--	417
New Hampshire	--	5	--	--	--	--	5
New Jersey	--	--	--	--	--	13	13
Ohio	--	749	--	--	--	--	749
Oregon	--	85	--	--	--	--	85
Pennsylvania	--	175	--	--	--	--	175
Rhode Island	--	240	--	--	--	--	240
South Carolina	--	502	--	--	--	--	502
Tenneessee	--	462	--	--	--	--	462
Texas	--	4,198	--	--	--	--	4,198
Virginia	--	115	--	--	--	--	115
Wisconsin	--	317	--	--	--	--	317
Total	**487**	**15,691**	**367**	**--**	**7**	**30**	**16,525**

* = Absolute value is less than 0.5.

[a]Includes: **utilities —** waste heat; **nonutilities —** natural gas, waste heat, waste gas, butane, methane, propane, other gas, and digester gas.

[b]Includes: **utility —** fuel oil Nos. 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke; **nonutility —** liquid butane, diesel, light oil, kerosene, methanol, oil waste, sludge oil, tar oil, and liquid propane.

[c]Includes: **utilities —** geothermal, wind, solar (photovoltaic), and biomass; **nonutilities —** geothermal, wind, solar (photovoltaic/thermal), multifuel, biomass (wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, fish oils), hydrogen, sulfur, batteries, chemicals, and purchased steam.

Notes: • Data are preliminary. • Totals may not equal sum of components due to independent rounding. • For detailed data, see Table A26 (for capability additions) and Table A27 (retirements) in Appendix A.

Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report-Utility," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

Light Company, Pennsylvania Power & Light Company, Potomac Electric Power Company, Power Authority of the State of New York, Public Service Electric & Gas Company of New Jersey, and West Penn Power Company.

Generation

Net generation by the electric power industry totaled 3,800 billion kilowatthours (kWh), up 2.6 percent from 1999. This increase can be attributed in-part to growth in the economy[7] indicated by higher demand for electricity from the commercial and industrial sectors and to a weather-related increase in sales to the residential sector. Total heating and cooling degree-days were above the level of 1999[8] as the year required more heating but slightly less cooling than 1999.

Coal-fired generation topped the fuel mix with 1,968 billion kWh, or 52 percent of total generation. Generation from nuclear facilities totaled 754 billion kWh or 20 percent of total generation, as the industry posted

[7] United States Department of Commerce, Bureau of Economic Analysis. Extracted from the Internet at http://www.bea.doc.gov/bea/glance.htm.

[8] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2000/12) (Washington, DC, May 2001), Tables 1.11 and 1.12.

Table 5. Generating Capability Sold by Utilities to Nonutilities by Energy Source and State, 2000
(Megawatts)

State	Energy Source						Total
	Coal	Gas[a]	Petroleum[b]	Nuclear	Hydroelectric	Other[c]	
Connecticut	--	--	19	--	123	--	142
Delaware	260	511	545				1,316
District of Columbia	--	806	--	--	--	--	806
Indiana	19	--	--	--	--	--	19
Louisiana	1,730	220	--	--	--	--	1,950
Maryland	4,647	1,585	2,297	1,675	--	--	10,204
Massachusetts	--	--	--	--	1,173	--	1,173
New Jersey	1,271	3,711	1,997	3,898	--	--	10,877
New York	--	380	--	1,790	--	--	2,170
Ohio	854	--	49	--	--	--	903
Pennsylvania	6,420	1,712	1,506	2,184	147	--	11,969
Virginia	482	--	38	--	--	--	520
Washington	1,340	--	--	--	--	--	1,340
West Virginia	4,269	--	--	--	52	--	4,321
Total	**21,292**	**8,925**	**6,451**	**9,547**	**1,495**	**--**	**47,710**

[a]Includes: waste heat.
[b]Includes: fuel oil Nos. 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke.
[c]Includes: geothermal, wind, solar (photovoltaic), and biomass.
Note: • Values are preliminary. • Totals may not equal sum of components due to independent rounding. • For detailed data, see Table A25 in Appendix A.
Source: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report – Utility."

Table 6. Net Generation by Energy Source and Sector, 2000 and 1999
(Billion Kilowatthours)

Energy Source	2000			1999		
	Industry	Utility	Nonutility	Industry	Utility	Nonutility
Coal[a]	1,968	1,697	271	1,884	1,768	117
Petroleum[b]	109	72	37	124	87	37
Gas[c]	612	291	322	570	296	274
Nuclear	754	705	48	728	725	3
Hydroelectric	273	248	25	313	294	19
Other[d]	84	2	82	85	4	81
Total	**3,800**	**3,015**	**785**	**3,705**	**3,174**	**531**

[a]Includes coal, anthracite, culm, coke breeze, fine coal, waste coal, bituminous gob, and lignite waste.
[b]Includes petroleum, petroleum coke, diesel, kerosene, liquid butane, liquid propane, oil waste, and tar oil.
[c]Includes natural gas, waste heat, waste gas, butane, methane, propane, and other gas.
[d]Includes: **utilities —** geothermal, biomass (wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, and fish oils), wind, solar, and photovoltaic; **nonutilities —** geothermal, wind, solar (photovoltaic/thermal), multifuel, biomass (wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural byproducts, straw, tires, landfill gases, fish oils), hydrogen, sulfur, batteries, chemicals, and purchased steam.
Notes: • Utility data are final; nonutility values for 1999 are final and for 2000 are preliminary. • Totals may not equal sum of components because of independent rounding.
Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report," Form EIA-900, "Monthly Nonutility Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

another improvement in the plant capacity factor. Gas-fired generation rose to 612 billion kWh or 16 percent of total generation due to substantial increases in both California and Texas. Petroleum-fired generation, while less than 3 percent of total generation, posted a double-digit decline, primarily due to much higher petroleum prices. On the renewable energy front, hydroelectric generation fell to 273 billion kWh or 7 percent of total generation, due to substantially less precipitation in the southern and western regions of the Nation.[9]

[9] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/ann/ann.html, on May 29, 2001.

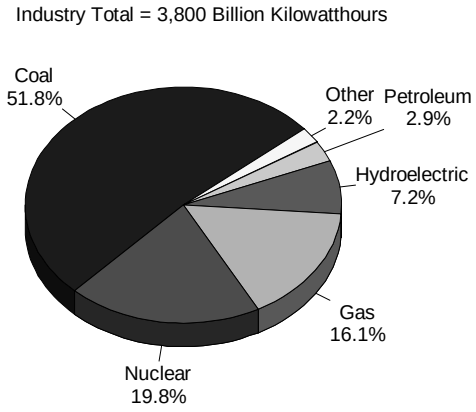
Table 7. Percent of Electricity Generated at U.S. Electric Plants by Energy Source and State, 2000 and 1999
(Percent)

State	2000						1999					
	Coal	Petroleum	Gas	Nuclear	Hydro	Other	Coal	Petroleum	Gas	Nuclear	Hydro	Other
Alabama	61.9	0.2	4.3	25.2	4.7	3.7	61.0	0.2	2.9	25.6	6.4	3.8
Alaska	9.1	10.3	64.2	--	16.3	--	9.2	15.0	61.7	--	14.1	*
Arizona	46.0	0.2	10.0	34.1	9.7	--	45.6	0.1	6.1	36.2	12.0	--
Arkansas	54.7	0.5	7.8	26.5	5.4	5.1	52.9	0.3	9.3	27.7	5.8	4.0
California	1.2	1.1	51.3	17.0	18.9	10.4	1.2	1.1	46.2	17.0	20.6	13.9
Colorado	81.0	0.3	15.3	--	3.4	--	83.2	0.1	12.6	--	4.0	*
Connecticut	11.8	18.5	12.9	48.9	1.5	6.4	5.4	28.9	12.8	44.0	1.5	7.5
Delaware	69.0	14.3	16.7	--	--	--	41.3	23.6	35.2	--	--	--
District of Columbia	--	100.0	--	--	--	--	--	100.0	--	--	--	--
Florida	37.9	18.5	22.7	16.9	*	4.0	36.7	20.1	23.2	17.1	0.1	2.8
Georgia	64.8	1.3	2.7	26.4	1.9	2.9	64.2	1.5	2.7	26.8	2.3	2.6
Hawaii	15.3	72.9	3.5	--	1.1	7.2	14.5	77.7	0.5	--	1.1	6.2
Idaho	0.5	*	1.6	--	91.9	6.0	0.4	*	2.3	--	93.9	3.4
Illinois	46.0	0.3	2.8	50.4	0.1	0.3	45.3	0.5	3.5	50.0	0.1	0.7
Indiana	94.5	0.7	4.3	--	0.5	0.1	94.6	0.8	4.2	--	0.3	0.1
Iowa	84.3	0.3	1.1	10.7	2.2	1.4	85.4	0.4	1.3	9.4	2.4	1.1
Kansas	72.5	0.9	6.3	20.2	*	--	70.5	0.7	7.0	21.8	*	--
Kentucky	97.0	0.1	0.3	--	2.5	*	96.6	0.1	0.5	--	2.7	*
Louisiana	25.6	2.3	49.6	17.6	0.6	4.3	23.8	2.2	54.8	14.8	0.9	3.5
Maine	8.0	23.6	10.4	--	29.4	28.6	4.0	37.2	0.4	--	29.0	29.4
Maryland	56.5	3.8	6.6	27.5	3.4	2.1	57.4	8.0	4.5	25.7	2.8	1.6
Massachusetts	29.8	21.7	28.4	14.1	0.6	5.6	27.9	28.7	26.4	10.8	1.5	4.8
Michigan	65.6	1.1	12.3	18.1	0.4	2.5	68.2	1.4	13.0	14.1	0.5	2.7
Minnesota	65.6	1.6	1.7	25.2	1.8	4.0	62.2	2.2	2.1	27.4	2.4	3.6
Mississippi	37.0	7.9	22.5	28.5	*	4.1	37.4	9.0	25.2	24.1	*	4.2
Missouri	82.1	0.3	3.9	13.0	0.5	0.1	83.3	0.4	2.2	11.6	2.4	0.1
Montana	56.1	1.5	0.1	--	42.1	0.2	54.1	1.6	0.2	--	43.9	0.2
Nebraska	63.4	0.2	1.6	29.6	5.2	--	59.3	0.1	1.3	33.6	5.7	--
Nevada	53.1	0.2	36.0	--	6.8	3.9	58.4	0.1	28.5	--	8.6	4.3
New Hampshire	26.5	3.3	0.7	53.0	8.8	7.6	20.5	9.7	0.5	53.5	8.7	7.1
New Jersey	17.3	1.6	30.1	49.1	0.3	2.1	14.3	2.0	30.7	50.8	0.3	2.5
New Mexico	85.5	0.1	13.7	--	0.7	--	86.1	0.1	13.0	--	0.7	--
New York	17.8	11.1	28.4	22.8	17.6	2.3	14.8	9.2	32.1	25.6	16.3	1.9
North Carolina	62.5	0.9	0.8	32.0	2.7	1.0	61.7	0.8	1.0	32.0	3.3	1.3
North Dakota	92.8	0.2	0.2	--	6.8	*	91.3	0.2	0.2	--	8.3	*
Ohio	87.3	0.2	0.6	11.3	0.4	0.2	86.5	0.3	0.8	11.5	0.3	0.5
Oklahoma	64.0	0.1	31.6	--	3.9	0.4	61.5	*	32.6	--	5.6	0.3
Oregon	7.4	0.1	17.1	--	74.3	1.1	6.6	*	12.0	--	80.5	1.0
Pennsylvania	58.8	1.6	1.6	35.9	0.9	1.3	57.5	1.8	2.2	36.4	0.8	1.5
Rhode Island	--	1.0	97.0	--	0.1	1.9	--	38.1	60.1	--	0.1	1.8
South Carolina	42.0	0.3	1.1	49.7	6.0	0.7	39.2	0.4	1.2	50.4	7.3	1.5
Tennessee	65.0	0.6	0.7	26.9	5.9	0.9	61.1	0.6	0.8	29.2	7.7	0.7
Texas	37.0	0.7	51.6	9.9	0.2	0.6	39.3	0.5	49.3	10.2	0.3	0.4
Utah	94.6	0.2	3.1	--	2.1	*	92.7	0.1	1.8	--	3.4	2.1
Vermont	--	1.0	1.5	74.6	19.6	3.2	--	0.4	0.3	66.1	19.5	13.7
Virginia	51.4	3.7	5.3	36.8	1.0	3.6	48.0	4.6	6.3	38.2	0.9	3.8
Washington	8.8	0.4	7.5	7.9	74.3	1.1	7.4	*	3.4	5.2	82.2	1.8
West Virginia	98.2	0.3	0.3	--	1.2	*	98.6	0.2	0.3	--	1.0	*
Wisconsin	70.8	0.8	3.3	19.5	3.4	2.2	69.1	1.5	2.9	19.3	3.3	3.8
Wyoming	96.3	0.1	1.2	--	2.2	0.2	96.3	0.1	0.9	--	2.7	*
U.S. Total	**51.8**	**2.9**	**16.1**	**19.8**	**7.2**	**2.2**	**50.8**	**3.3**	**15.4**	**19.6**	**8.5**	**2.4**

* = the absolute value is less than 0.05.

Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report," Form EIA-900, "Monthly Nonutility Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report – Nonutility."

Figure 5. Shares of Net Generation by Energy Source and Industry Sector, 2000



Energy Source	Share (Percent)	
	Utility	Nonutility
Coal	86.2	13.8
Petroleum	66.3	33.7
Gas	47.5	52.5
Nuclear	93.6	6.4
Hydro	90.9	9.1
Other	2.7	97.3

Notes: •Utility total = 3,015 billion kilowatthours and nonutility total = 785 billion kilowatthours. •Totals may not equal sum of components due to independent rounding.

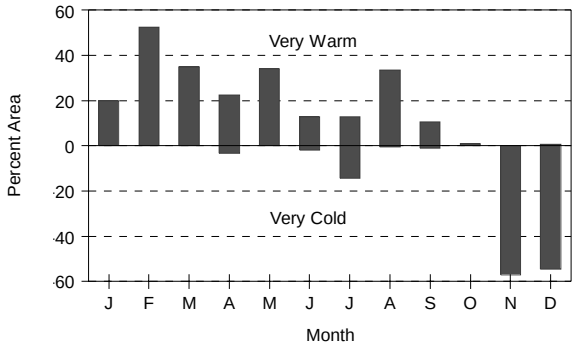
Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report," and Form EIA-900, "Monthly Nonutility Power Plant Report."

Coal

Coal-fired generation totaled a record 1,968 billion kWh, up 4 percent from the level of 1999. Likewise, coal consumption set a record of 991 million short tons, up from 953 million short tons. Higher demand for electricity proved favorable for an increase in the use of coal. There were several specific issues that affected coal use by electric generators including record output from nuclear plants, mild weather, reduced levels of hydroelectric generation, and a substantial increase in the price of petroleum and natural gas.

Like 1999, record nuclear generation and mild weather were two important factors limiting the increase in the use of coal. Nuclear generation rose to a record 754 billion kWh, 4 percent higher than in 1999. (Specific information concerning nuclear generation is provided in more detail later in this review.) As for weather conditions, 2000 was the 13th warmest year since 1895, while 1999 was the second warmest.[10] The winter of December 1999 through February 2000 was the mildest on record for the second consecutive year.[11] This was followed by the second warmest spring (March through May) since 1895.[12] Together, the above normal temperatures during the first 5 months of the year reduced demand for electricity and in-turn limited growth in

Figure 6. U.S. National Percent Area Very Warm and Very Cold, January 2000 to December 2000



Source: National Oceanic and Atmospheric Administration, National Climatic Data Center.

coal-fired generation. During the summer cooling months of June through August, much of the Nation had above normal temperatures. However, summer temperatures in the high population areas of the New England, Middle Atlantic, and East North Central Census Divisions were considerably below normal.[13] This reduced cooling requirements and thereby reduced electricity demand in those regions. Partially countering the above normal warmth of January through May was

[10] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/ann/us_summary.html on May 29, 2001.

[11] United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, Volume 88, No. 03 (January 17, 2001), p. 11.

[12] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/spr/us_national.html on May 29, 2001.

[13] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/sum/us_regional.html#6-8stranks.

the fact that the November through December 2000 period was the coldest on record for the Nation.[14] The accompanying increase in demand for electricity resulted in much higher levels of coal-fired generation during these months.

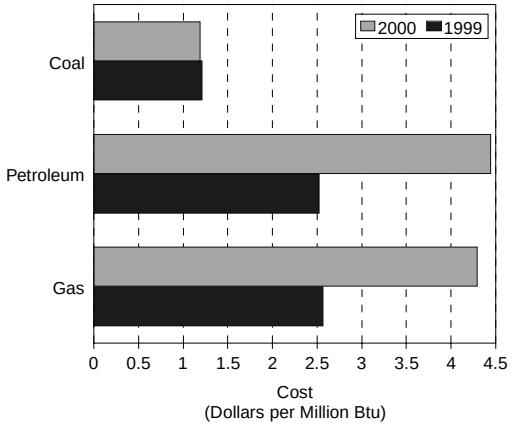
A reduction in hydroelectric generation from 1999 levels led to higher use of coal by electric generators. Since it is the lowest cost power to generate, hydroelectric generation often displaces the use of fossil fuels. Due to dry conditions throughout the southern and western regions of the Nation, generators turned to fossil fuels to replace hydroelectric power. For example, due to a major drought that has lingered for over 2 years, Alabama Power Company increased its coal burn by over 1 million short tons to compensate for a reduction in hydroelectric generation.[15] In the Mountain Census Division, coal-fired generation rose 3 percent from 1999 levels due in part to a substantial decrease in hydroelectric generation throughout most areas of the West.

Another factor contributing to the increased use of coal in 2000 was the large increase in the cost of competing fossil fuels. High demand for petroleum and gas by all consuming sectors resulted in steadily rising prices. For most of the year, the average cost of each fuel delivered to electric utilities was above $4.00 per million Btu, considerably above the levels of 1999 and prior years.[16] By comparison, the delivered cost of coal to electric utilities averaged $1.20 per million Btu. By year-end, extremely cold weather had heightened concerns about low natural gas inventories, resulting in spot prices spiking to as high as $67 per million Btu in California and petroleum spot prices hovering near $30 per barrel.[17] The result was an increase in demand for coal-fired generation.[18] Texas led the Nation in coal-fired generation with 141 billion kWh, nearly unchanged from 1999. Ohio, Indiana, and Pennsylvania ranked second, third, and fourth, respectively, each with output above the 120 billion kWh level. States where coal accounted for greater than 90 percent of total generation included Indiana, Kentucky, North Dakota, Utah, West Virginia, and Wyoming (see Table 7).

Coal consumption followed coal generation, rising to just under 1 billion short tons. Approximately 2 megawatthours (MWh) of electricity were produced for each short ton of coal consumed. At the State level, the ratio ranged from a high of 2.7 (MWh) in Connecticut to a low of 1.2 in North Dakota.[19] The rather substantial range is primarily due to the difference in the Btu content of coal consumed in each State.[20] Texas ranked highest in tons of coal consumed with 100 million short tons, while Indiana and Ohio ranked second and third with 59 million and 56 million short tons, respectively. Large volume increases in coal consumed were notable in Alabama, Illinois, Kansas, Minnesota, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia.

The origin of coal for the electric industry continues to shift toward the western United States, specifically the Powder River Basin (PRB) of Montana and Wyoming. It is estimated that this region supplied approximately 340 million short tons of low sulfur, low Btu coal to electric generators.[21] Wyoming was the largest producer of coal for the industry with over 300 million short tons. Kentucky and West Virginia were a distant second and

Figure 7. Average Cost of Fossil Fuels at U.S. Electric Utilities, 2000 and 1999



Notes: ●Data are final. ●Data are for electric generating plants with a total steam-electric and combined cycle nameplate capacity of 50 or more megawatts. ●Data do not include petroleum coke.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

[14] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/ann/ann.html, on May 29, 2001.

[15] McGraw-Hill Companies, "Drought Favors Coal Use at Alabama Power's Plants," *Coal Week*, Vol. 26, No. 46 (November 13, 2000).

[16] Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/04) (Washington, DC, May 2001), Table 26.

[17] J. Edmiston, "Big-Chill Fears Push Natural Gas to Historic High," *The Wall Street Journal* (December 12, 2000).

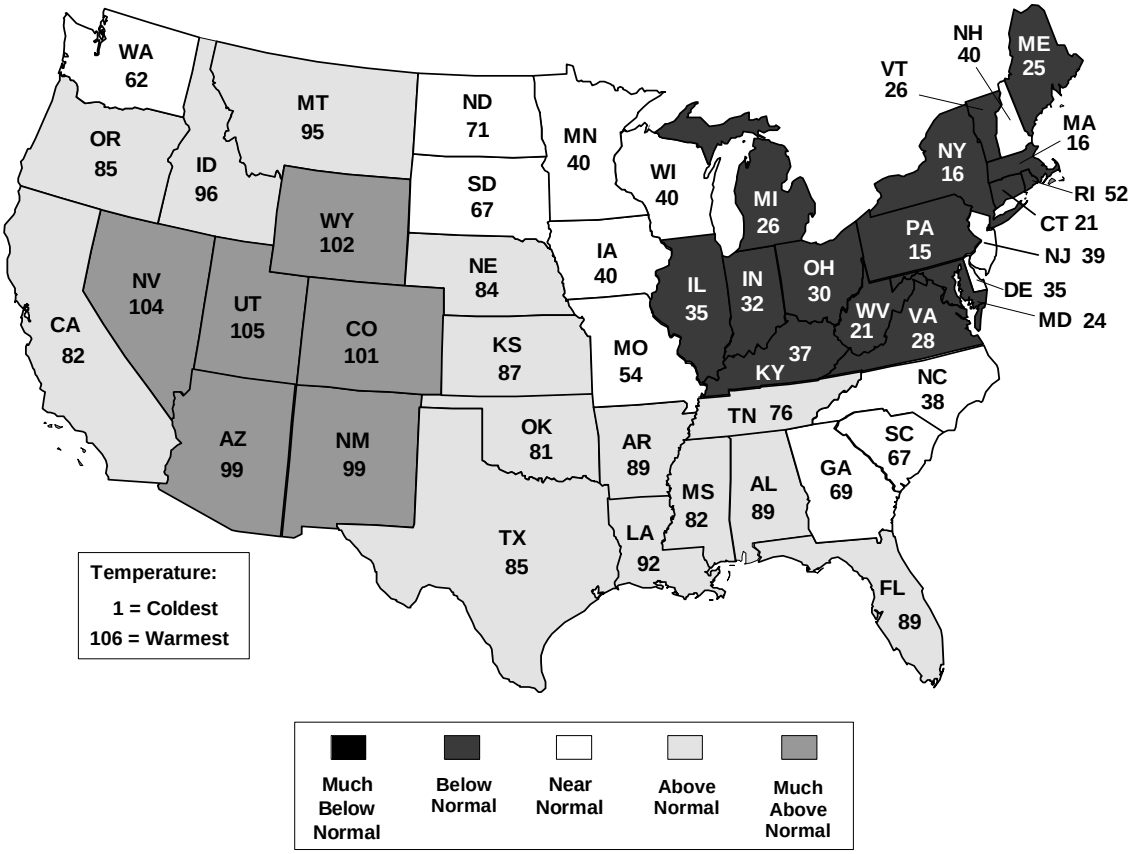
[18] Financial Times Energy, "Coal Market Heads for 'Hot' Winter, Uncertain Future," *Coal Outlook*, Vol. 24 , No. 49 (December 4, 2000).

[19] Alaska omitted due to low volume of coal use.

[20] Connecticut generating facilities use primarily high-Btu bituminous coal while North Dakota consumes low Btu lignite.

[21] Based on data available from the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Figure 8. U.S. Statewide Temperature Ranking, June–August, 2000



Note: Rank based on annual June through August average temperature each of the past 106 years.
Source: National Climatic Data Center, National Oceanic and Atmospheric Administration.

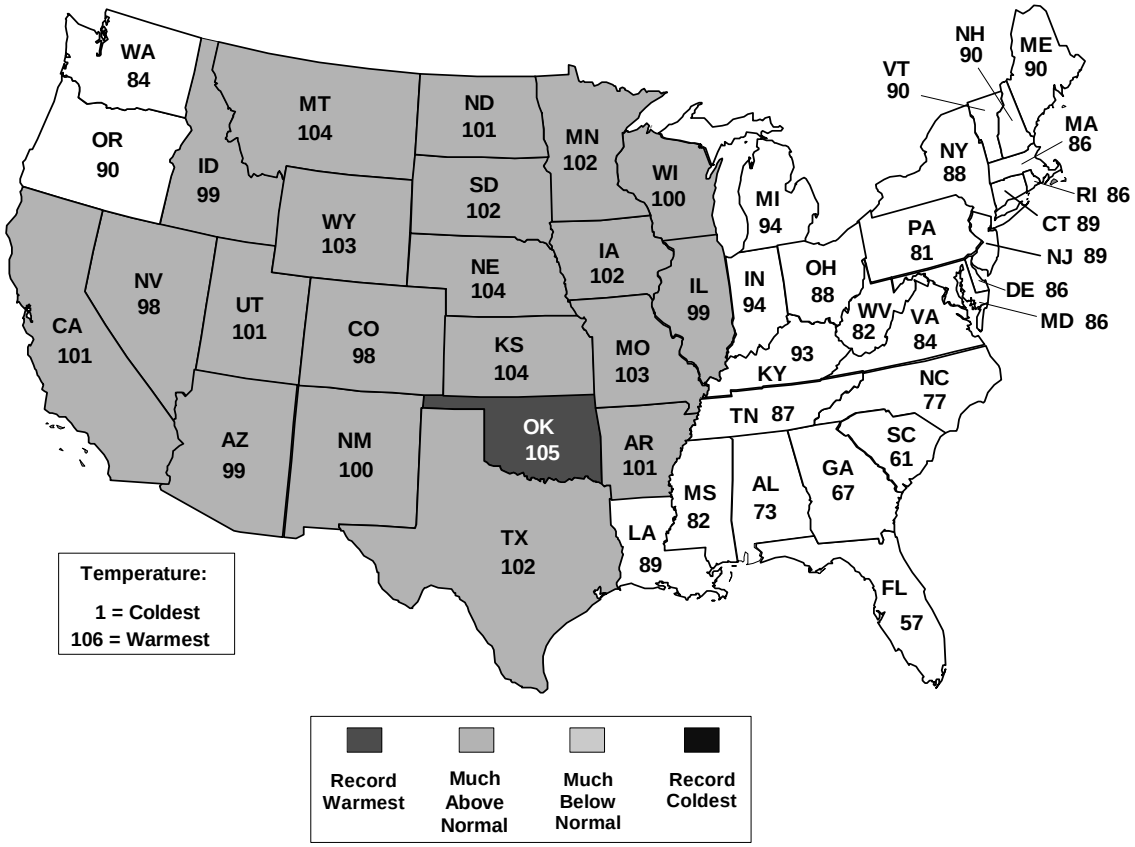
third with approximately 100 million short tons each.[22] Imports accounted for approximately 1 percent of all coal consumed by the electric power industry.

Stocks of coal held by electric generators went from excessively high levels at the start of the year to very lean levels by year-end. The industry began 2000 with an inventory of 143 million short tons, the highest start-of-year level since 1993. Some of the build-up can be attributed to Year 2000 concerns about the coal supply-chain. Additionally, mild weather from late 1999 through the first few months of 2000 reduced the burn rate more than expected. Low prices and reduced demand by the electric industry led to production cuts by coal producers.[23] With both producers and electric generators each reducing inventory, some minor spot shortages began to show up in early summer.[24] An increased burn rate due to a very cold November and December, coupled with rising spot market prices that discouraged purchases of coal, contributed to year-end stocks falling to 103 million short tons.

On January 1, 2000, the electric industry came under Phase II regulations of the Clean Air Act Amendments of 1990. This Act was primarily designed to reduce power plant emissions, specifically sulfur dioxide and nitrogen oxides. Phase I, which began on January 1, 1995, affected 435 generating units and allowed the release of 2.5 pounds of sulfur dioxide per each million Btu of fuel consumed.[25] Under Phase II, coverage increased to more than 2,000 units, while restrictions on emissions were set at 1.2 pounds of sulfur dioxide per million Btu of fuel consumed.[26] Since 1995, some generators have over complied with Phase I in order to

[22] *Ibid.*
[23] Financial Times Energy, "Producers Seek Higher Prices After Cuts," *Coal Outlook*, Vol. 24, No. 21 (May 22, 2000).
[24] Financial Times Energy, "Coal Supply Tight Despite Cooler Weather," *Coal Outlook*, Vol. 24, No. 37 (September 11, 2000).
[25] Allowances are based on the average number of Btu's of fuel consumed between 1985 and 1987.
[26] Energy Information Administration, *The Effects of Title IV of the Clean Air Act Amendments of 1990 on Electric Utilities: An Update*, DOE/EIA-0582(97) (Washington, DC, March 1997), pg. vii, 45.

Figure 9. U.S. Statewide Temperature Ranking, December 1999–February 2000



Note: Rank based on annual December through February average temperature for each of the past 106 years.
Source: National Climatic Data Center, National Oceanic and Atmospheric Administration.

create excess allowances. This has allowed them to delay enacting additional strategies that would be necessary for compliance with Phase II.[27] Strategies that are being used for compliance include fuel switching/ blending, co-firing with natural gas, allowance acquisitions, scrubbers, repowering, and plant retirements.[28]

Petroleum

Petroleum-fired generation totaled 109 billion kWh, down 12 percent from 1999. Consumption decreased to 173 million barrels, down from 196 million in 1999.[29] Most, if not all of the decrease, can be attributed to a substantial increase in the cost of petroleum. The refiner acquisition cost of crude oil rose 61 percent from 1999 levels to $28.23, its highest level since 1984.[30] This is reflected in the average cost of heavy oil delivered to electric utilities, which increased to $4.29 per million Btu, up from $2.44 per million Btu in 1999.[31]

Many factors affect the use of petroleum by electric generators. One of the most important is the price of fuel oil in relation to the price of natural gas. Some facilities have the capability to burn either fuel and usually the less expensive of the two fuels is consumed. Petroleum-fired units are often some of the most expensive to operate; this makes them among the last units to be dispatched to meet system load. While there are some companies that continue to use petroleum-fired units as base-load plants, particularly in Florida, Hawaii, and the Northeast, most use them to meet peak power demand. December 2000 brought exactly the right

[27] *Ibid.*
[28] *Ibid.*
[29] Generation data includes petroleum coke while consumption data does not.
[30] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2001/03) (Washington, DC, March 2001), Table 9.1.
[31] Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/04) (Washington, DC, May 2001), Table 26.

conditions necessary for increased use of petroleum by electric generators. Extreme cold weather over much of the Nation increased demand for power. This, coupled with a spike in natural gas prices to record levels, resulted in petroleum-fired generation reaching levels not seen since January 1994.

As has been the case for the past several years, utilities and nonutilities in the New England, Middle Atlantic, and South Atlantic Census Divisions consumed most of the petroleum used to generate electricity. Petroleum consumption increased in the Middle Atlantic in part due to lower nuclear generation but was down considerably in both the New England and South Atlantic Census Divisions. Each reported gains in both coal-fired and nuclear generation. The South Atlantic Census Division accounted for 41 percent of all petroleum consumption by the electric industry. Florida, with 19 percent of the U.S. petroleum-fired generating capacity, accounted for 55 million barrels (32 percent of total consumption); New York accounted for 26 million barrels (15 percent of total consumption). Connecticut, Hawaii, and Massachusetts were all large users of petroleum, each consuming over 10 million barrels. Hawaii was the State most dependant on petroleum with 73 percent of its electricity being generated from fuel oil.

Number 6 fuel oil is the primary fuel oil product consumed by steam-electric plants, accounting for approximately 80 percent of petroleum consumption by electric utilities. Number 2 fuel oil accounts for most of the remainder and is used primarily for startup and flame stabilization in steam-electric plants, and as a peaking fuel in both diesels and gas turbines. The use of petroleum as a fuel for electric generation has been declining since the mid-70's and accounted for less than 3 percent of total generation in 2000. That percentage is significantly higher in some States including Connecticut, Delaware, Florida, Hawaii, Maine, Massachusetts, and New York, which still have significant amounts of petroleum-fired generating capacity.

Gas

Gas-fired generation totaled 612 billion kWh, an increase of 42 billion kWh or 7 percent from 1999. Consumption of gas totaled 6.3 trillion cubic feet (Tcf), up from 5.7 Tcf in 1999. Specific issues that affected the volume of gas used by the electric industry during the year included above normal summer temperatures in the Southwest, a reduction in the availability of hydroelectric generation, rising natural gas prices, and an increase in gas-fired generating capacity.

During 2000, strong demand, short supplies, and rapidly rising prices were characteristic of the natural gas markets for most of the year. This is in contrast to 1999 when ample supplies and steady prices were common. Total end-use demand was nearly 23 Tcf, up from 22 Tcf in 1999.[32]

One factor that resulted in higher demand for gas by the electric sector was above normal temperatures in the southwestern United States during the summer of 2000. This area of the Nation, which consumes nearly one-half of the gas used to produce electricity, had its second warmest June through August period since 1895,[33] continuing the trend of above normal temperatures over the last 7 years. Consumption was also higher in California with the electric sector consuming 1.1 Tcf of gas, up 22 percent from 1999. Demand for electricity was strong from both the residential and commercial sectors. In addition, a decrease in the availability of hydroelectric generation from neighboring States required California to rely more on its gas-fired generating capacity.

Also contributing to an increase in the use of gas by electric generators were new capacity additions. Most of the new capacity added by the industry in recent years uses natural gas as its primary energy source. In 2000, gas-fired capacity additions accounted for 22,238 megawatts (MW) out of 23,453 MW added to the electric grid. Most of these additions were gas turbines, which have found favor over the past several years due to their high efficiency, low capital cost requirements, and relatively short construction period.

The spike in natural gas prices late in the year had the tendency to reduce the use of natural gas. The average cost of gas delivered to electric utilities in December was $8.41 per million Btu, the highest level ever reported.[34] Purchased power and the consumption of other fossil fuels such as fuel oil were, in some cases, less expensive alternatives.

Nuclear

Nuclear generation totaled a record 754 billion kWh, up nearly 4 percent from the previous record of 728 billion

[32] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2001/03) (Washington, DC, March 2001), Table 4.4.

[33] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/sum/us_regional.html, on May 29, 2001.

[34] Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/04) (Washington, DC, May 2001), Table 26.

kWh generated in 1999. The annual capacity factor[35] was 88 percent compared with 85 percent in 1999. This was the highest annual capacity factor for nuclear plants since data collection began in 1973.[36] The July 2000 capacity factor was an impressive 95 percent. This has major implications on the fossil-fuel requirements of electric utilities because like hydroelectric, nuclear generation displaces fossil-fired generation. (Based on national level consumption and generation data presented in the *Electric Power Monthly*, and assuming a net summer nuclear capability of 97,557 megawatts, a 1-percent increase in the annual nuclear plant capacity factor (equivalent to 8,545,993 megawatthours[37]) of additional nuclear generation translates into a reduction in annual consumption of either approximately 4.3 million short tons of coal,[38] 14 million barrels of petroleum, or 89 billion cubic feet of gas. Most likely, it would be a combination of each.)

Since 1990, nuclear's share of electricity generation has been relatively stable at 18 to 20 percent.[39] Currently, nuclear power represents approximately 12 percent of total generating capacity.[40] Due to the retirement of generating units, the number of operable units now stands at 104, down from a peak of 112 in 1990.[41]

Nuclear generation often displaces fossil-fired generation because of its lower cost of fuel per unit of electricity produced. In 1999, the average cost of uranium for major investor-owned electric utility nuclear plants was 0.52 cents per kilowatthour, while the comparable cost of fuel for fossil-fired steam plants was 1.56 cents per kilowatthour.[42] An additional incentive for producing nuclear generation instead of fossil-fired generation is a reduction in emissions of carbon dioxide, sulfur dioxide, and nitrogen oxides. The passage of Title IV of the *Clean Air Act Amendments of 1990* set limits on the amount of sulfur dioxide and nitrogen oxides that can be emitted by electric utilities. Since nuclear plants emit neither of these gases, they have become especially important in strategies designed to ensure that a utility is in compliance with air quality emission regulations. Perhaps even more important is the fact that unlike fossil-fired plants, nuclear plants emit no carbon dioxide. The buildup of this gas in the atmosphere is said to affect the global climate.

Nuclear generation rose in all Census divisions except the Middle Atlantic and the Mountain Census Divisions. The East North Central Census Division posted a 12-billion-kWh increase primarily due to higher output from the Clinton and Lasalle County plants in Illinois and the return-to-service of the Donald Cook facility in Michigan. The New England Census Division posted an increase due to an increase in generation from the Millstone facility. A substantial decrease in output from the Indian Point facility (Consolidated Edison Company of New York) contributed to a reduction in nuclear generation from the Middle Atlantic Census Division. Nuclear power provided 33 percent of total electricity generation in the Middle Atlantic Census Division, followed by the New England and South Atlantic Census Divisions at 30 and 26 percent, respectively. At the State level, Illinois ranked highest in nuclear generation with 89 billion kWh, followed by Pennsylvania and South Carolina with 74 billion kWh and 51 billion kWh, respectively.

Hydroelectric

Hydroelectric generation totaled 273 billion kWh, down from 313 billion kWh in 1999. Contributing to this decrease was a drought that covered most of the western half of the Nation including the major hydroelectric producing region of the Pacific Northwest. Above normal precipitation in the Northeast and the Great Lakes region, as well as a continuing drought in the South, also affected hydroelectric generation levels during the year.

According to the National Oceanic and Atmospheric Administration (NOAA), the Nation recorded its 25th driest year out of the last 106 years, compared to its 29th

[35] Capacity factor is the ratio of the amount of electricity produced by a generating plant for a given period of time to the electricity that the plant could have produced at continuous full-power operation during the same period.

[36] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2001/03) (Washington, DC, March 2001), Table 8.1.

[37] This number is derived by multiplying 97,557 megawatts of summer capability by 8,760 hours (number of hours in a year). The result is then multiplied by 0.01 (1 percent). A one percent change equals 8,545,993 MWh.

[38] This calculation is based on a simple ratio of 2000 national level electric utility data. If the consumption of 859 million short tons of coal (Table A14) produces 1,696,619,000 MWh of generation (Table A8), then it would take approximately 4.3 million short tons of coal to produce 8,545,993 MWh of generation.

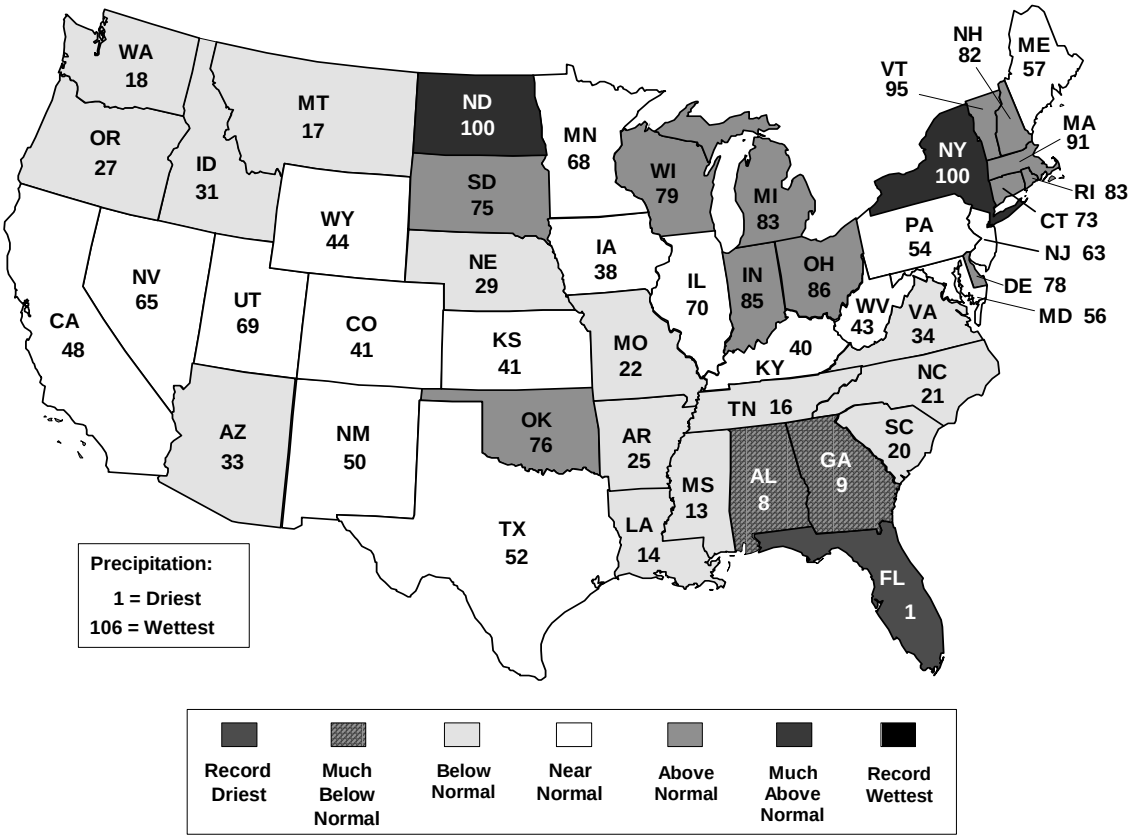
[39] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2001/03) (Washington, DC, March 2001), Table 8.1.

[40] Based on estimated U.S. total net summer capability of 811,625 megawatts on December 31, 2000.

[41] Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(2001/03) (Washington, DC, March 2001), Table 8.2.

[42] Energy Information Administration, *Electric Power Annual, Volume II*, DOE/EIA-0348(99)/2 (Washington, DC, October 2000), Table 13.

Figure 10. U.S. Statewide Precipitation Ranking, 2000



Note: Rank based on the annual precipitation for each of the past 106 years
Source: National Climatic Data Center, National Oceanic and Atmospheric Administration.

driest in 1999, and the third wettest in 1998.[43] Based on the Palmer Drought Index, 36 percent of the Nation was under severe or extreme drought conditions in August 2000, the highest level since 1988.[44]

Below normal levels of precipitation throughout most of the western United States was the principal reason for a 13 percent reduction in hydroelectric generation. Of particular importance was a substantial decline in precipitation in the NOAA Pacific Northwest Region (Oregon, Washington, and Idaho) where most of the Nation's hydroelectric generation is produced. Oregon and Washington recorded their 27th and 18th driest year, respectively, out of the last 106 years as compared to their 42nd and 33rd wettest in 1999.[45] The year-to-year change is even more striking when considering the very high levels of precipitation that fell in both States during late 1998 and contributed greatly to the snow pack and stream flow levels of 1999. Though 2000 was dry on an annual basis , the January through April 2000 snow pack in both States was at normal levels due to above normal precipitation early in the year.[46] In fact, Western storage reservoirs were above average on April 1, 2000.[47] However, October through December precipitation in the higher elevations of the Cascade Mountain Range that ranged from 35 to 65 percent of normal resulted in snow pack and stream flow levels that were considerably below normal.[48] By December 2000, hydroelectric

[43] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/cag3/NA.html, on May 29, 2001.

[44] United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, Vol. 88, No. 03 (January 17, 2001), p. 13.

[45] National Oceanic and Atmospheric Administration, National Data Climatic Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/cag3/NA.html. on May 29, 2001.

[46] U.S. Department of Agriculture, National Resource Conservation Service, National Water and Climate Center. Extracted from the Internet at http://www.wcc.nrcs.usda.gov/water/snow/colusnow.pl?state=columbia_river, on May 29, 2001.

[47] United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, Vol. 87, No. 15 (April 11, 2000), p. 15.

[48] United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, Vol. 88, No. 1 (January 3, 2001), p. 3.

generation levels in Washington and Oregon were running 32 percent and 26 percent, respectively, below the levels generated in December 1999.[49]

For the year, hydroelectric facilities in Washington produced 81 billion kWh, down from 97 billion kWh in 1999. Likewise, totals in Oregon were 38 billion kWh, down from 46 billion kWh in 1999. From a historical perspective of 10 years, hydroelectric generation by electric utilities in Washington has ranged from a high of 104 billion kWh in 1997 to a low of 65 billion kWh in 1994.[50] Output from facilities in Oregon ranged from just over 46 billion kWh in 1997 to a low of 31 billion kWh in 1994. It is important to note that most effects of the late year drought will not be felt until the first quarter of 2001.

Hydroelectric generation in California totaled 39 billion kWh, down from 40 billion kWh in 1999. This occurred despite the fact that the State received more precipitation in 2000 than during 1999. Very heavy precipitation in late 1998 had a substantial affect on hydroelectric generation in 1999. During the first half of 2000, California received above normal levels of precipitation. However, the rain and snow that normally arrives in the Sierra Nevada Mountain Range during the fall never materialized. December precipitation throughout California was less than 25 percent of normal.[51] The result was a mountain snow pack that was under 70 percent of normal as of January 1, 2001.[52] Based on data from the past 10 years, hydroelectric generation in California during 2000 was at the upper-end of the scale compared to a high of 49 billion kWh in 1998 and a low of 19 billion kWh in 1992.[53]

A two-year drought throughout much of the South resulted in hydroelectric generation falling below the already low levels of 1999. Alabama and Georgia experienced their 8th and 9th driest years, respectively, in the past 106 years. Alabama reported hydroelectric generation down 45 percent from the pre-drought year of 1998, while Georgia and South Carolina reported decreases of 54 percent and 82 percent, respectively. At the Census division level, hydroelectric generation in the East South Central and the South Atlantic Census Divisions was down 42 percent and 50 percent, respectively, from the levels of 1998. On a positive note, above normal precipitation aided hydroelectric generation in the New England and Middle Atlantic Census Divisions. New York, the largest producer of hydroelectric power after Washington, California, and Oregon, was aided by its 6th wettest year since 1895.[54]

Electricity Sales and Revenue

Retail electricity sales by electric utilities and power marketers totaled 3,413 billion kWh, up from 3,312 billion kWh in 1999. Sales rose in all consumer sectors with the largest volume and percentage increase occurring in the residential sector. Factors affecting the year-to-year change in sales include an increase in the number of retail customers, warmer-than-normal weather during the period of January through April, the coldest November-December period in the last 106 years, and strong economic growth during the first half of the year. On a State-by-State basis, retail sales to ultimate consumers were highest in Texas at 316 billion kWh. California and Florida ranked second and third with 247 billion kWh and 195 billion kWh, respectively.

Sales to residential customers totaled 1,193 billion kWh, up 4.2 percent from the 1,145 billion kWh reported in 1999. Record cold weather during November and December was a major contributor to the increase in sales. August sales set a monthly record at 124 billion kWh, but were up only slightly from the previous record set in August 1999. Texas led the Nation in retail sales to residential consumers with 116 billion kWh. Florida and California ranked second and third with 99 billion kWh and 80 billion kWh, respectively.

Commercial sales totaled 1,038 billion kWh, up from 1,002 billion kWh reported in 1999. California led the Nation with 93 billion kWh, followed by Texas and Florida with 84 billion kWh and 72 billion kWh, respectively. Industrial sales totaled 1,071 billion kWh, up from 1,058 billion kWh reported in 1999. Texas led the Nation with sales of 101 billion kWh to the industrial sector. Ohio and California followed with 68 billion kWh and 64 billion kWh, respectively.

[49] Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226(2001/03) (Washington, DC, May 2001), Table 11.

[50] Energy Information Administration, *Electric Power Annual, Volume I*, DOE/EIA-0348(99/1) (Washington, DC, August 2000), Table 11, and previous years issues. Data for each year do not include a small amount of generation from nonutility hydroelectric facilities.

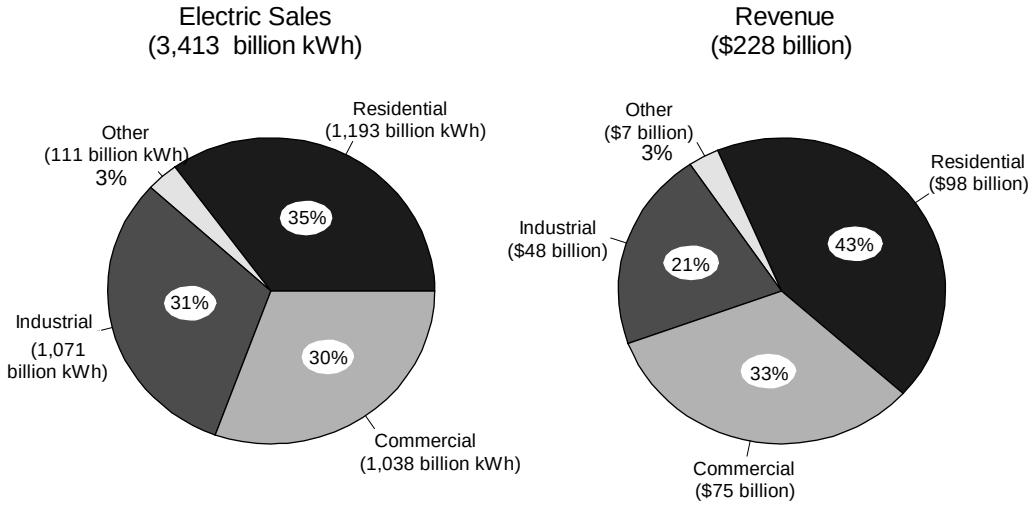
[51] United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, Vol. 88, No. 2 (January 9, 2001), p. 12.

[52] U.S. Department of Agriculture, National Resource Conservation Service, National Water and Climate Center. Extracted from the Internet at http://www.wcc.nrcs.usda.gov/water/snow/snow_map.html, on May 29, 2001.

[53] Energy Information Administration, *Electric Power Annual, Volume I*, DOE/EIA-0348(99/1) (Washington, DC, August 2000), Table 11, and previous years issues.

[54] U.S. Department of Agriculture, National Resource Conservation Service, National Water and Climate Center. Extracted from the Internet at http://www.ncdc.noaa.gov/ol/climate/research/2000/ann/us_summary.html.

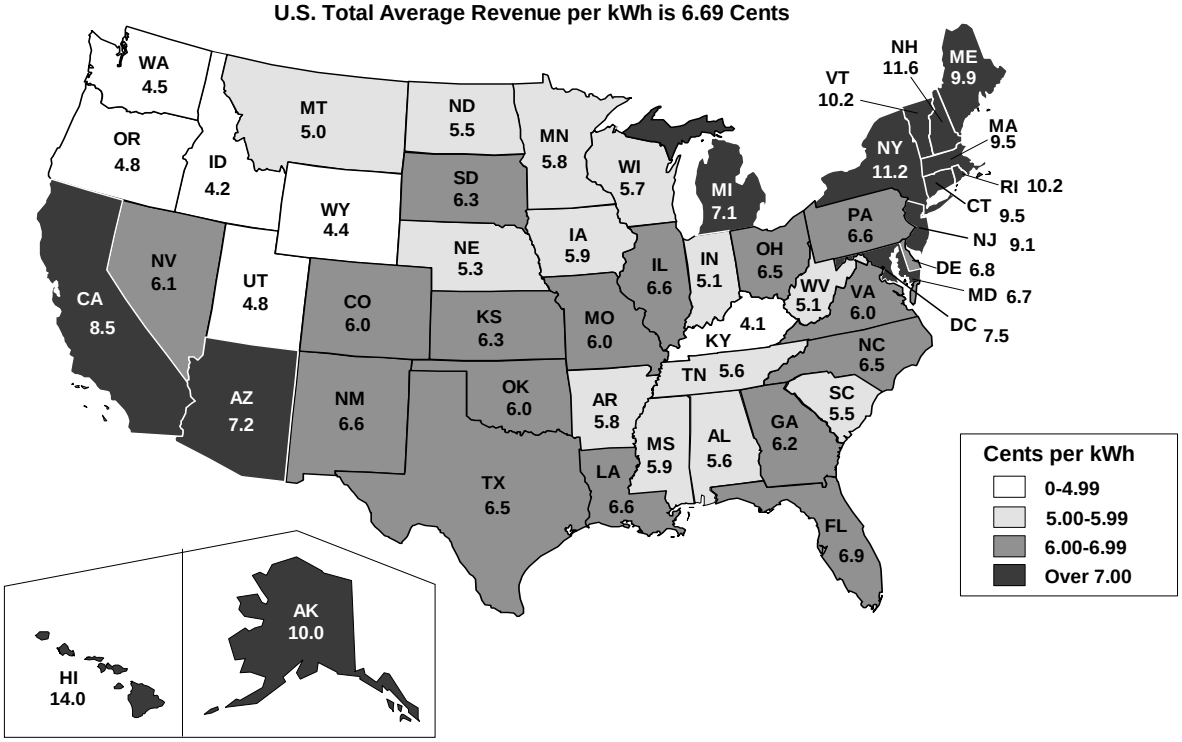
Figure 11. U.S. Electric Utility Sales and Revenue to Ultimate Consumers, 2000



kWh = kilowatthours.
Source: Energy Information Administration, Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions."

On a revenue-per-kilowatthour basis for the residential sector, New York was highest at 14.1 cents per kWh. New Hampshire and Vermont ranked second and third at 13.6 cents per kWh and 12.1 cents per kWh, respectively. The State of Washington reported the lowest revenue per kWh for electricity sales to the residential sector at 5.2 cents. Kentucky and Idaho ranked second and third at 5.3 cents per kWh and 5.4 cents per kWh, respectively. Additional States with revenue per kWh at or below 6.5 cents per kWh include Montana, Oregon, Nebraska, North Dakota, Tennessee, and West Virginia.

Figure 12. Estimated Average Revenue per Kilowatthour for All Sectors at Electric Utilities by State, 2000



kWh = Kilowatthour.

Note: ●Estimates are preliminary. ●The average revenue per kilowatthour of electricity sold is calculated by dividing revenue by sales. ●Values for average revenue per kilowatthour do not account for all energy service providers. Consequently, the growth in sales is underestimated (in particular for the commercial and industrial sectors). This, in turn, may affect the rates of associated revenue to sales of electricity.

Source: Energy Information Administration, Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions."

At the completion of a sale by an investor-owned utility to a nonutility, data on generation, consumption, and stocks for that plant are no longer collected on EIA Form-759, "Monthly Power Plant Report." However, these data are collected on the Form EIA-900, "Monthly Nonutility Power Plant Report." Subsequent to this change in ownership, data on fossil fuel receipts, costs, and quality are no longer collected on the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." These changes affect comparisons between 2000 and prior-year data for generation, consumption, stocks, fossil fuel receipts, costs, and quality at the State, Census Division, and U.S. levels.

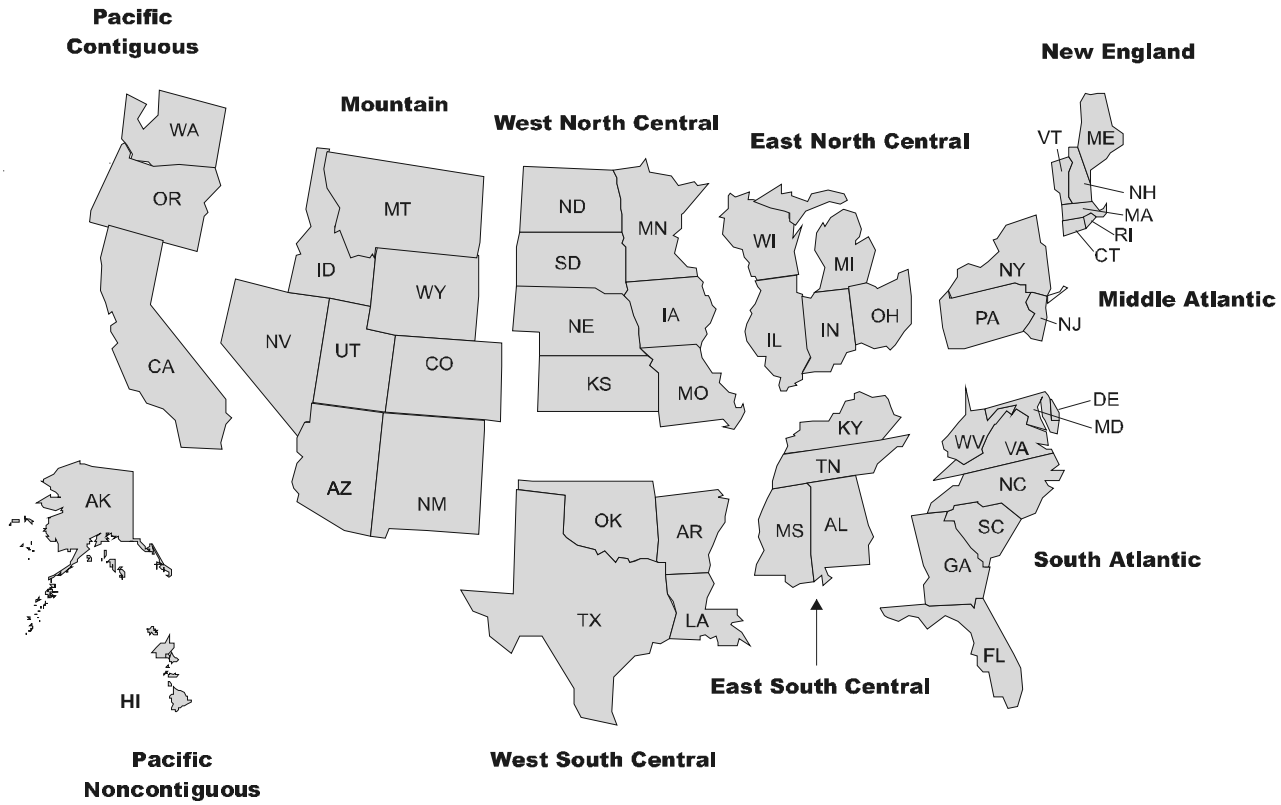
Appendix A. U.S. Electric Power Industry Statistics

Some of the 2000 data in this Appendix have been estimated using standard statistical techniques. To give the reader a better idea of the accuracy of these estimates, they are reported along with the "relative standard error" (RSE). Ordinarily, it is expected that on approximately two out of three occasions, the true value of a statistic, such as a total, will be within one standard error, either high or low, of the estimated statistic. A relative standard error is the standard error divided by the statistic (for example, a total) expressed as a percent. The smaller the RSE, the smaller is the range around the estimate and, therefore, the more confidence one can have in using the estimate. (Another name for relative standard error is "coefficient of variation," or CV, and the EIA has often used that term.)

For example, if a total is estimated to be 213.3, with an estimated RSE of 5 percent, then there are about two chances in three that the actual total is between 202.6 and 224.0. Nonsampling error is not fully taken into account, and may make results substantially less accurate. Thus, a more reasonable estimated total to report, along with an estimated RSE of 5 percent, would be 210.

Technical information regarding the sources and quality of the data in this report is available in the Technical Notes of the *Electric Power Monthly*, DOE/EIA-0226. That report is accessible via the Internet at: http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html.

Figure A1. Census Divisions



Source: Energy Information Administration.

Table A1. Net Generation, 1991 Through 2000

(Million Kilowatthours)

Period	Industry	Utilities	Nonutilities
1991	3,071,201	2,825,023	246,178
1992	3,083,367	2,797,219	286,148
1993	3,196,924	2,882,525	314,399
1994	3,253,799	2,910,712	343,087
1995	3,357,837	2,994,529	363,308
1996	3,446,994	3,077,442	369,552
1997	3,494,223	3,122,523	371,700
1998	3,617,873	3,212,171	405,702
1999	3,704,544	3,173,674	530,871
2000	3,799,944	3,015,383	784,561

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 and prior years are final. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Utility Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report - Nonutility,'' (and predecessor forms).

Table A2. Consumption of Fossil Fuels, 1991 Through 2000

Period	Industry			Utilities			Nonutilities		
	Coal (thousand short tons)	Petroleum (thousand barrels)	Gas (thousand Mcf)	Coal (thousand short tons)	Petroleum (thousand barrels)	Gas (thousand Mcf)	Coal (thousand short tons)	Petroleum (thousand barrels)	Gas (thousand Mcf)
1991	810,387	212,768	5,723,570	772,268	184,886	2,789,014	38,119	27,882	2,934,556
1992	824,467	179,211	6,198,097	779,860	147,335	2,765,608	44,607	31,876	3,432,489
1993	861,851	199,415	6,378,144	813,508	162,454	2,682,440	48,343	36,961	3,695,704
1994	869,531	192,893	6,727,443	817,270	151,004	2,987,146	52,261	41,889	3,740,297
1995	879,336	137,182	7,112,444	829,007	102,150	3,196,507	50,329	35,032	3,915,937
1996	927,880	151,718	6,917,097	874,681	113,274	2,732,107	53,199	38,444	4,184,990
1997	952,918	160,021	6,153,423	900,361	125,146	2,968,453	52,557	34,875	3,184,970
1998	967,718	232,890	6,805,501	910,867	178,614	3,258,054	56,851	54,276	3,547,447
1999	952,516	195,971	5,748,944	894,120	143,830	3,113,419	58,396	52,141	2,635,525
2000	990,966	172,769	6,330,184	859,335	120,129	3,043,094	131,631	52,640	3,287,090

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 and prior years are final. •Does not include petroleum coke consumption. The utility petroleum coke consumption was 1,132 thousand short tons in 2000 and 1,608 thousand short tons in 1999. The nonutility petroleum coke consumption was 3,021 thousand short tons in 2000 and 2,915 thousand short tons in 1999. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Nonutility data for 1998 and prior years are for fuels consumed to produce both electricity and steam. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report - Nonutility,'' (and predecessor forms).

Table A3. Fossil Fuel Stocks, 1991 Through 2000

Period	Industry		Utilities		Nonutilities	
	Coal (thousand short tons)	Petroleum (thousand barrels)	Coal (thousand short tons)	Petroleum (thousand barrels)	Coal (thousand short tons)	Petroleum (thousand barrels)
1991	157,876	74,993	157,876	74,993	NA	NA
1992	154,130	71,849	154,130	71,849	NA	NA
1993	111,341	62,443	111,341	62,443	NA	NA
1994	126,897	62,986	126,897	62,986	NA	NA
1995	126,304	50,495	126,304	50,495	NA	NA
1996	114,623	47,690	114,623	47,690	NA	NA
1997	98,826	48,792	98,826	48,792	NA	NA
1998	120,501	53,790	120,501	53,790	NA	NA
1999	142,543	52,977	128,493	44,311	14,050	8,666
2000	103,117	40,643	90,115	29,554	13,001	11,089

NA = Not Available.

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 and prior years are final. •Does not include petroleum coke stocks. The utility stocks of petroleum coke were 186 thousand short tons at the end of 2000 and 355 thousand short tons at the end of 1999. •Totals may not equal sum of components because of independent rounding. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report - Nonutility,'' (and predecessor forms).

Table A4. Electric Utility Retail Sales of Electricity by Sector, 1991 Through 2000

(Million Kilowatthours)

Period	Residential	Commercial	Industrial	Other	All Sectors
1991	955,417	765,664	946,583	94,339	2,762,003
1992	935,939	761,271	972,714	93,442	2,763,365
1993	994,781	794,573	977,164	94,944	2,861,462
1994	1,008,482	820,269	1,007,981	97,830	2,934,563
1995	1,042,501	862,685	1,012,693	95,407	3,013,287
1996	1,082,512	887,446	1,033,631	97,539	3,101,127
1997	1,075,881	928,633	1,038,196	102,901	3,145,611
1998	1,130,109	979,401	1,051,203	103,518	3,264,230
1999	1,144,923	1,001,996	1,058,217	106,952	3,312,088
2000	1,193,380	1,037,936	1,070,827	110,622	3,412,766

Notes: •Values for 2000 are preliminary; values for 1999 and prior years are final. •Values for 1996 - 2000 include revenue from retail sales by all energy service providers. •Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A5. Revenue from Electric Utility Retail Sales of Electricity by Sector, 1991 Through 2000
(Million Dollars)

Period	Residential	Commercial	Industrial	Other	All Sectors
1991	76,828	57,655	45,737	6,138	186,359
1992	76,848	58,343	46,993	6,296	188,480
1993	82,814	61,521	47,357	6,528	198,220
1994	84,552	63,396	48,069	6,689	202,706
1995	87,610	66,365	47,175	6,567	207,717
1996	90,501	67,827	47,385	6,741	212,455
1997	90,694	70,482	46,772	7,110	215,059
1998	93,164	71,769	46,549	6,864	218,346
1999	93,476	72,757	46,847	6,793	219,872
2000	98,172	75,249	47,818	7,074	228,313

Notes: •Values for 2000 are preliminary; values for 1999 and prior years are final. •Values for 1996 - 2000 include revenue from retail sales by all energy service providers. •Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A6. Electric Utility Average Revenue per Kilowatthour by Sector, 1991 Through 2000
(Cents)

Period	Residential	Commercial	Industrial	Other	All Sectors
1991	8.04	7.53	4.83	6.51	6.75
1992	8.21	7.66	4.83	6.74	6.82
1993	8.32	7.74	4.85	6.88	6.93
1994	8.38	7.73	4.77	6.84	6.91
1995	8.40	7.69	4.66	6.88	6.89
1996	8.36	7.64	4.60	6.91	6.86
1997	8.43	7.59	4.53	6.91	6.85
1998	8.26	7.41	4.48	6.63	6.74
1999	8.16	7.26	4.43	6.35	6.66
2000	8.22	7.22	4.46	6.38	6.68

Notes: •Values for 2000 are preliminary; values for 1999 and prior years are final. •Values for 1996 - 2000 include revenue from retail sales by all energy service providers. •Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A7. Net Generation by Census Division and State, 2000 and 1999

(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**112,829**	**111,634**	**36,720**	**44,653**	**76,108**	**66,981**
Connecticut	33,478	28,830	16,993	20,484	16,486	8,346
Maine	13,050	12,958	3	1,189	13,048	11,769
Massachusetts	39,148	41,519	1,705	4,360	37,443	37,160
New Hampshire	14,944	16,206	12,702	13,876	2,242	2,330
Rhode Island	5,926	6,411	11	9	5,915	6,402
Vermont	6,282	5,709	5,307	4,735	975	975
Middle Atlantic	**401,746**	**397,283**	**195,503**	**297,473**	**206,243**	**99,810**
New Jersey	58,204	56,995	25,252	38,868	32,952	18,127
New York	138,039	144,643	73,188	97,009	64,851	47,634
Pennsylvania	205,502	195,645	97,062	161,596	108,440	34,049
East North Central	**617,265**	**589,446**	**522,881**	**547,482**	**94,383**	**41,964**
Illinois	177,404	163,601	113,555	149,808	63,849	13,793
Indiana	127,970	121,594	119,724	114,183	8,247	7,411
Michigan	104,222	103,350	89,576	87,875	14,646	15,476
Ohio	148,438	142,401	144,358	140,912	4,079	1,489
Wisconsin	59,230	58,500	55,668	54,704	3,562	3,796
West North Central	**284,512**	**275,382**	**277,171**	**268,492**	**7,341**	**6,891**
Iowa	41,519	38,842	39,634	37,032	1,885	1,810
Kansas	44,834	42,070	44,766	42,003	67	67
Minnesota	51,429	48,607	46,618	44,154	4,811	4,453
Missouri	76,626	73,827	76,286	73,505	340	322
Nebraska	29,122	30,057	29,046	29,981	76	76
North Dakota	31,284	31,421	31,123	31,260	161	161
South Dakota	9,697	10,557	9,697	10,557	—	—
South Atlantic	**754,785**	**740,313**	**682,493**	**687,223**	**72,292**	**53,090**
Delaware	5,912	6,877	4,137	6,239	1,775	638
District of Columbia	142	230	97	230	44	—
Florida	190,936	186,928	169,890	166,914	21,046	20,014
Georgia	123,067	117,681	116,180	110,537	6,887	7,144
Maryland	50,204	51,733	31,778	49,324	18,425	2,410
North Carolina	122,114	117,588	114,435	109,882	7,679	7,705
South Carolina	92,614	90,330	90,424	87,347	2,190	2,982
Virginia	77,013	74,165	65,844	65,071	11,170	9,094
West Virginia	92,783	94,781	89,708	91,678	3,076	3,103
East South Central	**350,619**	**342,307**	**325,602**	**317,461**	**25,017**	**24,845**
Alabama	124,554	120,865	118,040	113,909	6,514	6,957
Kentucky	92,630	93,108	81,351	81,658	11,279	11,450
Mississippi	37,516	34,915	33,896	32,212	3,620	2,703
Tennessee	95,918	93,419	92,314	89,683	3,604	3,736
West South Central	**569,110**	**551,181**	**447,790**	**451,705**	**121,320**	**99,476**
Arkansas	43,975	46,622	41,489	44,131	2,486	2,491
Louisiana	89,938	90,096	57,597	64,837	32,341	25,259
Oklahoma	55,441	55,016	51,403	50,279	4,038	4,737
Texas	379,756	359,448	297,300	292,458	82,456	66,990
Mountain	**325,013**	**315,255**	**287,614**	**296,479**	**37,399**	**18,776**
Arizona	89,101	84,012	88,151	83,096	950	916
Colorado	43,661	39,530	40,109	36,167	3,552	3,363
Idaho	11,967	14,404	10,114	12,456	1,853	1,948
Montana	28,803	31,483	6,627	27,597	22,176	3,886
Nevada	35,639	32,800	29,342	26,486	6,297	6,315
New Mexico	33,994	32,581	32,857	31,654	1,137	927
Utah	36,590	36,812	35,828	36,071	763	741
Wyoming	45,257	43,632	44,586	42,951	672	681
Pacific Contiguous	**367,273**	**365,428**	**228,135**	**251,645**	**139,138**	**113,783**
California	207,047	191,584	85,852	87,875	121,195	103,710
Oregon	51,415	56,708	46,060	51,698	5,355	5,010
Washington	108,811	117,135	96,223	112,072	12,588	5,064
Pacific Noncontiguous	**16,792**	**16,314**	**11,473**	**11,061**	**5,319**	**5,253**
Alaska	6,140	5,812	4,938	4,609	1,202	1,202
Hawaii	10,652	10,503	6,536	6,452	4,117	4,050
U.S. Total	**3,799,944**	**3,704,544**	**3,015,383**	**3,173,674**	**784,561**	**530,871**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A8. Net Generation from Coal by Census Division and State, 2000 and 1999

(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**20,632**	**16,965**	**5,060**	**4,402**	**15,572**	**12,563**
Connecticut	3,966	1,548	0	0	3,966	1,548
Maine	1,044	515	—	—	1,044	515
Massachusetts	11,657	11,574	1,095	1,074	10,562	10,501
New Hampshire	3,966	3,328	3,966	3,328	—	—
Rhode Island	—	—	—	—	—	—
Vermont	—	—	—	—	—	—
Middle Atlantic	**155,362**	**141,903**	**46,031**	**102,918**	**109,331**	**38,985**
New Jersey	10,084	8,134	5,315	6,388	4,769	1,746
New York	24,520	21,367	4,026	10,949	20,494	10,418
Pennsylvania	120,758	112,402	36,690	85,580	84,068	26,822
East North Central	**442,283**	**424,057**	**382,407**	**409,118**	**59,876**	**14,939**
Illinois	81,587	74,155	30,515	64,919	51,071	9,237
Indiana	120,921	114,991	117,622	112,337	3,299	2,655
Michigan	68,387	70,501	66,983	69,118	1,404	1,383
Ohio	129,540	123,246	126,226	122,846	3,314	400
Wisconsin	41,847	41,163	41,060	39,899	787	1,264
West North Central	**215,328**	**204,788**	**211,768**	**201,291**	**3,560**	**3,496**
Iowa	34,984	33,175	33,852	31,946	1,132	1,229
Kansas	32,509	29,649	32,509	29,649	—	—
Minnesota	33,736	30,237	31,732	28,367	2,004	1,870
Missouri	62,923	61,519	62,627	61,250	296	269
Nebraska	18,469	17,839	18,425	17,794	44	44
North Dakota	29,037	28,695	28,953	28,610	84	84
South Dakota	3,671	3,674	3,671	3,674	—	—
South Atlantic	**430,890**	**413,180**	**403,234**	**395,574**	**27,656**	**17,606**
Delaware	4,078	2,838	3,319	2,762	758	75
District of Columbia	—	—	—	—	—	—
Florida	72,280	67,814	67,145	62,681	5,134	5,134
Georgia	79,773	75,573	79,010	74,068	763	1,505
Maryland	28,365	29,702	20,347	29,352	8,018	349
North Carolina	76,305	72,417	71,722	68,569	4,583	3,848
South Carolina	39,321	35,837	38,667	35,246	654	590
Virginia	39,623	35,588	33,965	31,743	5,658	3,845
West Virginia	91,146	93,412	89,059	91,152	2,087	2,260
East South Central	**243,241**	**233,780**	**230,090**	**220,023**	**13,151**	**13,757**
Alabama	77,149	73,763	76,934	73,221	215	543
Kentucky	89,864	89,939	78,600	78,545	11,264	11,394
Mississippi	13,879	13,043	13,879	13,037	—	5
Tennessee	62,349	57,036	60,677	55,221	1,672	1,815
West South Central	**223,315**	**220,645**	**209,287**	**214,444**	**14,028**	**6,201**
Arkansas	24,076	24,671	24,076	24,612	—	59
Louisiana	23,064	21,184	14,481	21,166	8,584	18
Oklahoma	35,492	33,839	32,853	30,588	2,639	3,251
Texas	140,683	140,951	137,878	138,077	2,805	2,874
Mountain	**218,674**	**212,175**	**201,491**	**207,400**	**17,182**	**4,775**
Arizona	41,012	38,318	40,664	37,994	348	324
Colorado	35,386	32,888	35,103	32,605	283	283
Idaho	59	59	—	—	59	59
Montana	16,149	17,034	324	15,982	15,825	1,052
Nevada	18,932	19,158	18,932	16,908	—	2,250
New Mexico	29,067	28,068	29,067	28,068	—	—
Utah	34,477	34,695	34,046	34,125	431	570
Wyoming	43,592	41,955	43,355	41,719	237	237
Pacific Contiguous	**15,815**	**14,802**	**7,066**	**12,354**	**8,749**	**2,448**
California	2,471	2,376	—	—	2,471	2,376
Oregon	3,810	3,723	3,785	3,698	25	25
Washington	9,534	8,703	3,280	8,656	6,254	47
Pacific Noncontiguous	**2,186**	**2,027**	**185**	**156**	**2,001**	**1,871**
Alaska	561	533	185	156	376	376
Hawaii	1,625	1,495	—	—	1,625	1,495
U.S. Total	**1,967,726**	**1,884,322**	**1,696,619**	**1,767,679**	**271,106**	**116,642**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A9. Net Generation from Petroleum by Census Division and State, 2000 and 1999
(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**18,373**	**29,111**	**613**	**8,285**	**17,760**	**20,825**
Connecticut	6,196	8,341	8	5,794	6,188	2,547
Maine	3,080	4,809	—	673	3,080	4,136
Massachusetts	8,478	11,923	124	300	8,354	11,623
New Hampshire	496	1,573	410	1,486	86	86
Rhode Island	60	2,440	11	9	49	2,430
Vermont	63	25	61	22	3	3
Middle Atlantic	**19,561**	**17,988**	**13,401**	**15,330**	**6,160**	**2,658**
New Jersey	907	1,170	295	532	612	638
New York	15,385	13,362	11,449	11,735	3,936	1,627
Pennsylvania	3,270	3,456	1,657	3,063	1,612	392
East North Central	**3,458**	**4,584**	**2,514**	**3,163**	**944**	**1,421**
Illinois	591	765	141	372	450	392
Indiana	872	930	845	813	26	117
Michigan	1,188	1,487	994	1,283	194	204
Ohio	355	486	342	474	13	12
Wisconsin	452	916	191	221	261	696
West North Central	**1,836**	**1,969**	**1,358**	**1,488**	**479**	**481**
Iowa	136	169	96	128	40	40
Kansas	423	314	421	311	3	3
Minnesota	848	1,084	440	674	407	410
Missouri	260	293	248	281	12	12
Nebraska	55	30	54	29	1	1
North Dakota	63	55	47	40	15	15
South Dakota	52	24	52	24	—	—
South Atlantic	**44,431**	**49,780**	**40,378**	**46,528**	**4,053**	**3,252**
Delaware	847	1,620	398	1,234	449	386
District of Columbia	142	230	97	230	44	—
Florida	35,403	37,151	34,336	36,697	1,067	453
Georgia	1,585	1,720	641	663	944	1,058
Maryland	1,914	4,164	1,509	3,897	405	266
North Carolina	1,133	939	469	284	664	654
South Carolina	295	382	266	301	29	81
Virginia	2,858	3,388	2,408	3,035	450	353
West Virginia	254	186	254	186	*	*
East South Central	**3,924**	**4,080**	**3,868**	**3,902**	**56**	**178**
Alabama	281	285	241	154	40	131
Kentucky	122	128	119	104	3	25
Mississippi	2,973	3,145	2,969	3,142	3	3
Tennessee	549	521	540	502	9	19
West South Central	**5,016**	**4,137**	**2,080**	**692**	**2,936**	**3,444**
Arkansas	207	157	207	141	*	16
Louisiana	2,107	1,951	625	397	1,482	1,554
Oklahoma	47	17	47	8	*	9
Texas	2,655	2,011	1,201	146	1,454	1,865
Mountain	**948**	**773**	**470**	**244**	**477**	**528**
Arizona	194	50	189	46	4	4
Colorado	113	54	91	32	22	22
Idaho	3	1	3	*	—	1
Montana	442	506	*	15	441	492
Nevada	65	37	65	35	—	1
New Mexico	37	44	30	40	7	4
Utah	57	31	57	29	*	2
Wyoming	38	49	35	46	3	3
Pacific Contiguous	**2,830**	**2,239**	**423**	**69**	**2,407**	**2,170**
California	2,359	2,179	145	52	2,215	2,127
Oregon	57	8	52	8	5	*
Washington	413	52	226	10	187	43
Pacific Noncontiguous	**8,404**	**8,900**	**7,075**	**7,227**	**1,330**	**1,672**
Alaska	635	876	557	798	78	78
Hawaii	7,769	8,023	6,518	6,429	1,251	1,594
U.S. Total	**108,781**	**123,560**	**72,180**	**86,929**	**36,601**	**36,631**

* = For detailed data, the absolute value is less than 0.5; for percentage calculations, the absolute value is less than 0.05 percent.

Notes: •Petroleum includes fuel oil Nos. 2,4,5 and 6, crude oil, kerosene, and petroleum coke. Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A10. Net Generation from Gas by Census Division and State, 2000 and 1999
(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**22,726**	**18,618**	**475**	**2,109**	**22,251**	**16,509**
Connecticut	4,320	3,681	—	1,180	4,320	2,501
Maine	1,363	49	—	—	1,363	49
Massachusetts	11,099	10,943	307	866	10,792	10,078
New Hampshire	106	75	77	45	29	29
Rhode Island	5,746	3,851	—	—	5,746	3,851
Vermont	91	18	91	18	—	—
Middle Atlantic	**59,888**	**68,217**	**10,810**	**21,218**	**49,077**	**46,999**
New Jersey	17,518	17,470	1,611	3,122	15,907	14,348
New York	39,167	46,469	8,969	17,183	30,198	29,286
Pennsylvania	3,203	4,277	231	913	2,972	3,365
East North Central	**26,185**	**27,040**	**4,643**	**7,877**	**21,542**	**19,163**
Illinois	5,042	5,668	216	3,042	4,826	2,626
Indiana	5,466	5,142	668	626	4,798	4,516
Michigan	12,816	13,412	2,441	2,448	10,374	10,963
Ohio	890	1,081	426	747	464	334
Wisconsin	1,971	1,738	892	1,013	1,079	724
West North Central	**7,933**	**6,719**	**7,168**	**5,900**	**765**	**819**
Iowa	468	510	323	364	145	146
Kansas	2,829	2,938	2,776	2,886	52	52
Minnesota	882	1,018	433	523	449	495
Missouri	2,969	1,636	2,938	1,597	31	39
Nebraska	469	379	438	348	31	31
North Dakota	56	56	*	*	57	57
South Dakota	259	181	259	181	—	—
South Atlantic	**57,099**	**57,939**	**42,971**	**44,914**	**14,128**	**13,025**
Delaware	987	2,419	420	2,243	567	177
District of Columbia	—	—	—	—	—	—
Florida	43,285	42,935	36,003	35,854	7,282	7,081
Georgia	3,307	3,149	1,755	1,654	1,552	1,495
Maryland	3,318	2,316	1,884	1,340	1,434	976
North Carolina	959	1,167	839	851	120	316
South Carolina	903	1,059	188	337	715	722
Virginia	4,070	4,642	1,840	2,600	2,230	2,043
West Virginia	269	252	42	37	227	215
East South Central	**14,696**	**13,553**	**10,468**	**10,174**	**4,228**	**3,380**
Alabama	5,307	3,558	3,680	1,882	1,628	1,676
Kentucky	308	471	308	453	—	18
Mississippi	8,433	8,814	6,354	7,605	2,080	1,209
Tennessee	648	711	127	234	521	477
West South Central	**261,325**	**247,820**	**166,074**	**166,899**	**95,250**	**80,921**
Arkansas	3,424	4,346	3,184	3,765	240	581
Louisiana	44,589	48,736	26,696	30,162	17,893	18,574
Oklahoma	17,538	17,922	16,354	16,614	1,184	1,309
Texas	195,773	176,816	119,840	116,358	75,933	60,458
Mountain	**34,924**	**25,154**	**24,311**	**17,198**	**10,613**	**7,956**
Arizona	8,872	5,145	8,274	4,557	598	588
Colorado	6,668	4,989	3,540	2,050	3,128	2,939
Idaho	186	331	—	—	186	331
Montana	30	69	13	20	16	49
Nevada	12,822	9,353	7,930	6,735	4,892	2,617
New Mexico	4,669	4,227	3,539	3,304	1,130	923
Utah	1,146	668	831	515	315	153
Wyoming	531	373	184	16	347	357
Pacific Contiguous	**123,288**	**101,283**	**20,601**	**17,255**	**102,687**	**84,029**
California	106,313	90,516	12,412	13,918	93,901	76,598
Oregon	8,793	6,799	4,440	2,759	4,352	4,041
Washington	8,183	3,968	3,749	578	4,433	3,390
Pacific Noncontiguous	**4,317**	**3,635**	**3,194**	**2,838**	**1,123**	**797**
Alaska	3,941	3,586	3,194	2,838	747	747
Hawaii	376	50	—	—	376	50
U.S. Total	**612,380**	**569,979**	**290,715**	**296,381**	**321,665**	**273,598**

* = For detailed data, the absolute value is less than 0.5; for percentage calculations, the absolute value is less than 0.05 percent.

Notes: •Gas includes natural gas, waste heat, waste gas, butane, methane, propane, other gas, and digester gas. Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A11. Net Generation from Nuclear by Census Division and State, 2000 and 1999

(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**34,348**	**29,908**	**28,835**	**27,342**	**5,512**	**2,566**
Connecticut	16,365	12,675	16,365	12,675	—	—
Maine	—	—	—	—	—	—
Massachusetts	5,512	4,497	—	1,931	5,512	2,566
New Hampshire	7,922	8,676	7,922	8,676	—	—
Rhode Island	—	—	—	—	—	—
Vermont	4,548	4,059	4,548	4,059	—	—
Middle Atlantic	**133,857**	**137,145**	**105,327**	**136,874**	**28,530**	**271**
New Jersey	28,578	28,971	18,171	28,971	10,407	—
New York	31,508	37,019	29,888	37,019	1,620	—
Pennsylvania	73,771	71,156	57,268	70,885	16,504	271
East North Central	**136,614**	**124,245**	**129,699**	**123,863**	**6,914**	**381**
Illinois	89,438	81,737	82,524	81,356	6,914	381
Indiana	—	—	—	—	—	—
Michigan	18,882	14,591	18,882	14,591	—	—
Ohio	16,781	16,422	16,781	16,422	—	—
Wisconsin	11,512	11,495	11,512	11,495	—	—
West North Central	**45,094**	**44,790**	**45,094**	**44,790**	**—**	**—**
Iowa	4,453	3,640	4,453	3,640	—	—
Kansas	9,061	9,157	9,061	9,157	—	—
Minnesota	12,960	13,316	12,960	13,316	—	—
Missouri	9,992	8,587	9,992	8,587	—	—
Nebraska	8,629	10,091	8,629	10,091	—	—
North Dakota	—	—	—	—	—	—
South Dakota	—	—	—	—	—	—
South Atlantic	**196,927**	**192,954**	**189,424**	**192,954**	**7,503**	**—**
Delaware	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—
Florida	32,291	31,526	32,291	31,526	—	—
Georgia	32,473	31,478	32,473	31,478	—	—
Maryland	13,827	13,312	6,324	13,312	7,503	—
North Carolina	39,127	37,524	39,127	37,524	—	—
South Carolina	50,888	50,814	50,888	50,814	—	—
Virginia	28,321	28,301	28,321	28,301	—	—
West Virginia	—	—	—	—	—	—
East South Central	**67,888**	**66,548**	**67,888**	**66,548**	**—**	**—**
Alabama	31,369	30,892	31,369	30,892	—	—
Kentucky	—	—	—	—	—	—
Mississippi	10,695	8,428	10,695	8,428	—	—
Tennessee	25,825	27,227	25,825	27,227	—	—
West South Central	**65,003**	**62,791**	**65,003**	**62,791**	**—**	**—**
Arkansas	11,652	12,920	11,652	12,920	—	—
Louisiana	15,796	13,112	15,796	13,112	—	—
Oklahoma	—	—	—	—	—	—
Texas	37,556	36,760	37,556	36,760	—	—
Mountain	**30,381**	**30,416**	**30,381**	**30,416**	**—**	**—**
Arizona	30,381	30,416	30,381	30,416	—	—
Colorado	—	—	—	—	—	—
Idaho	—	—	—	—	—	—
Montana	—	—	—	—	—	—
Nevada	—	—	—	—	—	—
New Mexico	—	—	—	—	—	—
Utah	—	—	—	—	—	—
Wyoming	—	—	—	—	—	—
Pacific Contiguous	**43,781**	**39,458**	**43,781**	**39,458**	**—**	**—**
California	35,176	33,372	35,176	33,372	—	—
Oregon	—	—	—	—	—	—
Washington	8,605	6,086	8,605	6,086	—	—
Pacific Noncontiguous	—	—	—	—	—	—
Alaska	—	—	—	—	—	—
Hawaii	—	—	—	—	—	—
U.S. Total	**753,893**	**728,254**	**705,433**	**725,036**	**48,460**	**3,218**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A12. Net Generation from Hydroelectric by Census Division and State, 2000 and 1999
(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**7,060**	**7,286**	**1,072**	**1,834**	**5,988**	**5,452**
Connecticut	486	425	143	368	343	57
Maine	3,834	3,758	3	516	3,831	3,242
Massachusetts	227	490	179	189	49	300
New Hampshire	1,312	1,411	328	339	984	1,072
Rhode Island	6	6	—	—	6	6
Vermont	1,195	1,196	420	421	775	775
Middle Atlantic	**25,916**	**25,011**	**19,933**	**21,133**	**5,984**	**3,878**
New Jersey	–123	–128	–141	–145	17	17
New York	24,232	23,642	18,857	20,124	5,375	3,519
Pennsylvania	1,807	1,497	1,217	1,155	591	342
East North Central	**3,688**	**3,483**	**3,256**	**3,051**	**432**	**432**
Illinois	150	142	60	52	90	90
Indiana	588	407	588	407	—	—
Michigan	366	526	275	435	91	91
Ohio	583	423	583	423	—	—
Wisconsin	2,000	1,985	1,749	1,734	251	251
West North Central	**11,595**	**14,883**	**11,274**	**14,534**	**321**	**349**
Iowa	906	946	891	931	15	15
Kansas	12	12	—	—	12	12
Minnesota	930	1,179	636	857	295	322
Missouri	408	1,740	408	1,740	—	—
Nebraska	1,501	1,719	1,501	1,719	—	—
North Dakota	2,123	2,609	2,123	2,609	—	—
South Dakota	5,716	6,677	5,716	6,677	—	—
South Atlantic	**8,399**	**9,202**	**6,444**	**7,236**	**1,955**	**1,966**
Delaware	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—
Florida	87	140	87	140	—	—
Georgia	2,329	2,703	2,301	2,674	29	29
Maryland	1,731	1,424	1,714	1,422	17	2
North Carolina	3,325	3,860	2,279	2,654	1,046	1,206
South Carolina	456	691	416	650	41	41
Virginia	–629	–546	–690	–608	62	62
West Virginia	1,099	930	338	303	761	628
East South Central	**13,820**	**17,472**	**13,287**	**16,815**	**533**	**657**
Alabama	5,818	7,760	5,818	7,760	—	—
Kentucky	2,325	2,557	2,325	2,557	—	—
Mississippi	13	6	—	—	13	6
Tennessee	5,665	7,150	5,145	6,499	520	652
West South Central	**5,870**	**7,685**	**5,346**	**6,879**	**525**	**806**
Arkansas	2,372	2,694	2,370	2,693	1	1
Louisiana	520	802	—	—	520	802
Oklahoma	2,150	3,069	2,150	3,069	—	—
Texas	829	1,120	825	1,117	3	3
Mountain	**37,687**	**44,443**	**30,809**	**41,066**	**6,878**	**3,376**
Arizona	8,643	10,083	8,643	10,083	—	—
Colorado	1,494	1,599	1,375	1,480	119	119
Idaho	11,000	13,443	10,111	12,456	888	987
Montana	12,131	13,822	6,290	11,581	5,842	2,241
Nevada	2,436	2,828	2,416	2,807	21	21
New Mexico	221	243	221	243	—	—
Utah	751	1,255	742	1,247	8	8
Wyoming	1,011	1,170	1,011	1,170	—	—
Pacific Contiguous	**157,932**	**182,979**	**155,757**	**180,549**	**2,174**	**2,430**
California	39,211	40,350	37,975	38,842	1,235	1,508
Oregon	38,187	45,639	37,782	45,234	405	405
Washington	80,534	96,989	80,000	96,472	534	517
Pacific Noncontiguous	**1,114**	**934**	**1,017**	**835**	**97**	**99**
Alaska	1,002	817	1,002	817	—	—
Hawaii	112	118	15	19	97	99
U.S. Total	**273,081**	**313,377**	**248,195**	**293,932**	**24,886**	**19,445**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A13. Net Generation from Other by Census Division and State, 2000 and 1999
(Million Kilowatthours)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**9,690**	**9,747**	**665**	**681**	**9,026**	**9,066**
Connecticut	2,145	2,161	477	467	1,668	1,694
Maine	3,730	3,827	—	0	3,730	3,827
Massachusetts	2,174	2,092	—	—	2,174	2,092
New Hampshire	1,143	1,143	—	—	1,143	1,143
Rhode Island	114	114	—	—	114	114
Vermont	384	411	188	214	197	197
Middle Atlantic	**7,161**	**7,019**	**—**	*****	**7,161**	**7,019**
New Jersey	1,241	1,378	—	—	1,241	1,378
New York	3,227	2,784	—	*	3,227	2,784
Pennsylvania	2,693	2,857	—	—	2,693	2,857
East North Central	**5,037**	**6,037**	**362**	**409**	**4,675**	**5,628**
Illinois	596	1,134	99	67	497	1,067
Indiana	123	123	—	—	123	123
Michigan	2,582	2,834	—	—	2,582	2,834
Ohio	288	743	—	—	288	743
Wisconsin	1,448	1,204	263	343	1,185	861
West North Central	**2,726**	**2,234**	**510**	**489**	**2,216**	**1,745**
Iowa	572	403	20	22	553	381
Kansas	—	—	—	—	—	—
Minnesota	2,073	1,773	417	417	1,656	1,356
Missouri	75	52	73	50	1	2
Nebraska	—	—	—	—	—	—
North Dakota	6	6	—	—	6	6
South Dakota	—	—	—	—	—	—
South Atlantic	**17,039**	**17,258**	**42**	**16**	**16,997**	**17,242**
Delaware	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—
Florida	7,590	7,363	28	16	7,562	7,346
Georgia	3,599	3,058	—	—	3,599	3,058
Maryland	1,049	816	—	—	1,049	816
North Carolina	1,266	1,682	—	—	1,266	1,682
South Carolina	751	1,548	—	—	751	1,548
Virginia	2,770	2,792	—	—	2,770	2,792
West Virginia	15	*	15	—	—	*
East South Central	**7,050**	**6,873**	**—**	**—**	**7,050**	**6,873**
Alabama	4,631	4,607	—	—	4,631	4,607
Kentucky	12	12	—	—	12	12
Mississippi	1,524	1,480	—	—	1,524	1,480
Tennessee	882	774	—	—	882	774
West South Central	**8,581**	**8,103**	*****	*****	**8,581**	**8,103**
Arkansas	2,244	1,833	—	—	2,244	1,833
Louisiana	3,862	4,311	—	—	3,862	4,311
Oklahoma	214	168	—	—	214	168
Texas	2,261	1,790	*	*	2,261	1,790
Mountain	**2,400**	**2,296**	**152**	**156**	**2,248**	**2,141**
Arizona	—	—	—	—	—	—
Colorado	—	—	—	—	—	—
Idaho	719	570	—	—	719	570
Montana	51	51	—	—	51	51
Nevada	1,384	1,426	—	—	1,384	1,426
New Mexico	—	—	—	—	—	—
Utah	160	164	152	156	8	8
Wyoming	85	85	—	—	85	85
Pacific Contiguous	**23,628**	**24,667**	**507**	**1,961**	**23,121**	**22,706**
California	21,518	22,791	145	1,691	21,373	21,100
Oregon	567	540	—	—	567	540
Washington	1,542	1,336	362	270	1,180	1,066
Pacific Noncontiguous	**771**	**818**	**3**	**4**	**768**	**814**
Alaska	—	—	—	—	—	—
Hawaii	771	818	3	4	768	814
U.S. Total	**84,083**	**85,052**	**2,241**	**3,716**	**81,842**	**81,336**

* = For detailed data, the absolute value is less than 0.5; for percentage calculations, the absolute value is less than 0.05 percent.

Notes: •Other includes geothermal, wood, wind, waste, photovoltaic, and solar. Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A14. Coal Consumption by Census Division and State, 2000 and 1999

(Thousand Short Tons)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**7,976**	**6,456**	**2,115**	**1,768**	**5,861**	**4,688**
Connecticut	1,474	593	0	0	1,474	593
Maine	328	261	—	—	328	261
Massachusetts	4,502	4,261	442	427	4,060	3,834
New Hampshire	1,673	1,341	1,673	1,341	—	—
Rhode Island	—	—	—	—	—	—
Vermont	—	—	—	—	—	—
Middle Atlantic	**66,006**	**62,195**	**18,538**	**41,554**	**47,468**	**20,641**
New Jersey	4,278	3,380	2,267	2,583	2,011	797
New York	9,635	9,135	1,608	4,412	8,027	4,722
Pennsylvania	52,093	49,680	14,663	34,558	37,430	15,121
East North Central	**220,131**	**208,309**	**186,107**	**200,288**	**34,024**	**8,021**
Illinois	46,601	41,065	16,807	35,995	29,795	5,070
Indiana	59,461	56,409	57,741	55,105	1,720	1,304
Michigan	33,654	34,253	33,044	33,615	610	638
Ohio	55,879	52,311	54,464	52,122	1,415	189
Wisconsin	24,536	24,271	24,051	23,450	484	821
West North Central	**138,530**	**132,463**	**136,464**	**130,538**	**2,066**	**1,926**
Iowa	21,741	20,683	21,178	20,071	563	612
Kansas	20,700	18,888	20,700	18,888	—	—
Minnesota	19,945	18,244	18,639	17,114	1,306	1,130
Missouri	37,320	36,670	37,184	36,546	136	124
Nebraska	11,518	11,234	11,503	11,219	15	15
North Dakota	25,094	24,585	25,048	24,540	46	46
South Dakota	2,211	2,159	2,211	2,159	—	—
South Atlantic	**174,253**	**166,795**	**162,024**	**158,463**	**12,229**	**8,331**
Delaware	1,787	1,276	1,464	1,244	322	32
District of Columbia	—	—	—	—	—	—
Florida	29,866	28,166	27,534	26,090	2,332	2,076
Georgia	33,474	32,675	33,151	31,506	323	1,169
Maryland	11,049	11,376	7,741	10,931	3,308	444
North Carolina	29,914	28,047	27,925	26,507	1,990	1,540
South Carolina	15,333	13,910	15,034	13,666	299	244
Virginia	15,862	13,922	13,524	12,427	2,338	1,495
West Virginia	36,968	37,424	35,651	36,093	1,318	1,332
East South Central	**108,092**	**103,425**	**102,147**	**97,377**	**5,945**	**6,049**
Alabama	35,616	33,722	35,482	33,428	134	295
Kentucky	40,181	39,595	35,031	34,710	5,150	4,885
Mississippi	6,232	6,024	6,232	6,022	—	2
Tennessee	26,063	24,084	25,401	23,216	661	867
West South Central	**149,453**	**149,185**	**141,583**	**144,989**	**7,870**	**4,196**
Arkansas	14,868	15,018	14,868	14,974	—	44
Louisiana	13,851	13,925	9,959	13,916	3,892	9
Oklahoma	20,986	19,831	19,679	18,353	1,306	1,478
Texas	99,749	100,411	97,077	97,746	2,672	2,666
Mountain	**116,757**	**113,600**	**105,724**	**111,144**	**11,033**	**2,456**
Arizona	20,586	19,190	20,409	19,025	177	165
Colorado	18,963	17,860	18,807	17,704	156	156
Idaho	27	27	—	—	27	27
Montana	10,391	10,903	317	10,198	10,074	705
Nevada	8,634	8,569	8,634	7,763	—	806
New Mexico	16,504	16,224	16,504	16,224	—	—
Utah	15,166	15,067	14,688	14,590	479	477
Wyoming	26,486	25,760	26,366	25,639	121	121
Pacific Contiguous	**8,483**	**8,920**	**4,463**	**7,860**	**4,020**	**1,059**
California	1,172	1,018	—	—	1,172	1,018
Oregon	2,251	2,164	2,240	2,154	10	10
Washington	5,061	5,737	2,223	5,707	2,838	30
Pacific Noncontiguous	**1,283**	**1,169**	**170**	**140**	**1,113**	**1,029**
Alaska	546	516	170	140	376	376
Hawaii	737	653	—	—	737	653
U.S. Total	**990,966**	**952,516**	**859,335**	**894,120**	**131,631**	**58,396**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A15. Petroleum Consumption by Census Division and State, 2000 and 1999

(Thousand Barrels)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**31,266**	**49,065**	**1,226**	**14,486**	**30,041**	**34,580**
Connecticut	10,338	14,537	21	10,008	10,317	4,529
Maine	5,747	8,812	—	1,133	5,747	7,679
Massachusetts	14,015	18,199	244	600	13,771	17,600
New Hampshire	904	3,328	783	2,663	120	665
Rhode Island	93	4,114	18	19	74	4,095
Vermont	171	76	159	64	11	11
Middle Atlantic	**33,518**	**30,975**	**23,711**	**27,045**	**9,807**	**3,930**
New Jersey	1,856	1,685	715	1,205	1,141	480
New York	25,625	23,165	19,304	20,243	6,321	2,922
Pennsylvania	6,036	6,125	3,692	5,597	2,344	528
East North Central	**4,835**	**7,278**	**3,901**	**5,222**	**934**	**2,057**
Illinois	855	1,312	276	722	579	590
Indiana	644	840	530	554	114	285
Michigan	2,096	2,692	2,049	2,620	47	73
Ohio	802	1,008	777	985	25	23
Wisconsin	438	1,426	270	341	168	1,085
West North Central	**3,860**	**3,726**	**2,183**	**2,044**	**1,677**	**1,682**
Iowa	289	369	219	299	70	70
Kansas	803	633	802	632	1	1
Minnesota	1,793	1,780	219	201	1,574	1,579
Missouri	613	724	592	703	21	21
Nebraska	121	71	119	70	2	2
North Dakota	105	90	95	81	10	10
South Dakota	136	59	136	59	—	—
South Atlantic	**70,880**	**79,530**	**64,628**	**73,997**	**6,252**	**5,533**
Delaware	1,413	2,318	729	2,059	684	259
District of Columbia	343	547	272	547	71	—
Florida	55,462	57,162	53,523	56,225	1,939	937
Georgia	2,221	2,518	1,397	1,416	824	1,102
Maryland	3,444	7,472	2,689	7,117	755	354
North Carolina	2,174	1,912	1,005	632	1,169	1,279
South Carolina	773	907	716	807	57	99
Virginia	4,600	6,372	3,847	4,873	753	1,500
West Virginia	449	322	448	321	1	1
East South Central	**6,511**	**6,879**	**6,371**	**6,535**	**140**	**344**
Alabama	574	562	468	295	105	267
Kentucky	266	263	261	220	5	43
Mississippi	4,590	4,984	4,583	4,978	7	6
Tennessee	1,081	1,069	1,059	1,042	22	28
West South Central	**3,936**	**2,032**	**3,752**	**1,215**	**183**	**817**
Arkansas	360	303	360	260	*	43
Louisiana	1,049	688	1,021	644	28	45
Oklahoma	78	44	77	24	*	20
Texas	2,449	996	2,295	288	155	709
Mountain	**980**	**571**	**950**	**472**	**31**	**99**
Arizona	407	92	402	88	4	4
Colorado	202	77	197	72	4	4
Idaho	5	2	5	*	—	2
Montana	3	69	1	30	2	39
Nevada	119	107	119	73	—	34
New Mexico	76	81	60	72	16	8
Utah	99	55	99	52	*	3
Wyoming	70	89	66	85	4	4
Pacific Contiguous	**1,784**	**439**	**888**	**155**	**897**	**285**
California	946	325	330	120	617	205
Oregon	115	16	105	15	11	*
Washington	723	99	454	19	269	79
Pacific Noncontiguous	**15,199**	**15,476**	**12,520**	**12,660**	**2,680**	**2,816**
Alaska	1,254	1,638	1,080	1,464	174	174
Hawaii	13,946	13,837	11,440	11,195	2,506	2,642
U.S. Total	**172,769**	**195,971**	**120,129**	**143,830**	**52,640**	**52,141**

* = For detailed data, the absolute value is less than 0.5; for percentage calculations, the absolute value is less than 0.05 percent.

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final. •While generation includes petroleum coke, consumption does not. The utility petroleum coke consumption was 1,132 thousand short tons in 2000 and 1,608 thousand short tons in 1999. The nonutility petroleum coke consumption was 3,021 thousand short tons in 2000 and 2,915 thousand short tons in 1999. •Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A16. Gas Consumption by Census Division and State, 2000 and 1999

(Millon Cubic Feet)

Census Division and State	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	**196,038**	**164,224**	**4,996**	**22,058**	**191,042**	**142,166**
Connecticut	37,067	33,718	—	13,095	37,067	20,623
Maine	15,094	595	—	—	15,094	595
Massachusetts	94,793	95,465	3,190	8,141	91,603	87,324
New Hampshire	979	767	783	572	196	196
Rhode Island	47,082	33,429	—	—	47,082	33,429
Vermont	1,023	250	1,023	250	—	—
Middle Atlantic	**573,153**	**623,199**	**115,718**	**224,853**	**457,435**	**398,347**
New Jersey	167,291	150,016	16,952	32,653	150,339	117,364
New York	374,086	438,280	95,812	181,823	278,275	256,457
Pennsylvania	31,776	34,903	2,955	10,376	28,821	24,527
East North Central	**368,897**	**376,462**	**72,900**	**124,677**	**295,997**	**251,785**
Illinois	56,176	68,611	2,764	40,717	53,412	27,894
Indiana	138,002	123,705	7,754	7,656	130,248	116,049
Michigan	138,114	142,765	43,548	51,122	94,566	91,643
Ohio	12,796	15,746	6,791	11,105	6,005	4,641
Wisconsin	23,809	25,636	12,043	14,077	11,766	11,558
West North Central	**93,587**	**85,351**	**83,250**	**74,245**	**10,337**	**11,106**
Iowa	6,320	6,843	4,735	5,249	1,585	1,594
Kansas	33,907	36,289	33,509	35,890	398	398
Minnesota	12,970	14,835	5,411	6,595	7,559	8,239
Missouri	30,832	19,860	30,480	19,428	352	432
Nebraska	5,683	4,730	5,508	4,555	175	175
North Dakota	268	268	0	0	268	268
South Dakota	3,607	2,527	3,607	2,527	—	—
South Atlantic	**522,563**	**565,642**	**391,676**	**415,635**	**130,887**	**150,007**
Delaware	9,361	21,969	4,337	19,879	5,024	2,090
District of Columbia	—	—	—	—	—	—
Florida	373,148	399,686	316,486	319,269	56,662	80,417
Georgia	36,815	38,279	21,447	20,539	15,368	17,741
Maryland	44,245	35,127	20,665	16,401	23,580	18,726
North Carolina	10,612	13,386	9,579	10,586	1,033	2,800
South Carolina	8,733	11,277	2,814	5,119	5,919	6,158
Virginia	36,906	43,317	15,923	23,457	20,982	19,859
West Virginia	2,743	2,601	425	385	2,318	2,216
East South Central	**176,136**	**175,007**	**131,355**	**131,594**	**44,782**	**43,413**
Alabama	54,187	41,364	36,344	20,920	17,843	20,444
Kentucky	4,073	5,686	4,073	5,591	—	95
Mississippi	109,633	117,171	89,110	101,623	20,523	15,548
Tennessee	8,244	10,787	1,829	3,461	6,416	7,326
West South Central	**2,783,157**	**2,516,182**	**1,740,644**	**1,737,553**	**1,042,513**	**778,630**
Arkansas	36,629	47,033	34,603	40,089	2,027	6,944
Louisiana	502,014	497,807	292,002	320,326	210,011	177,481
Oklahoma	180,291	182,014	169,031	169,846	11,259	12,168
Texas	2,064,224	1,789,329	1,245,008	1,207,292	819,216	582,037
Mountain	**350,195**	**244,314**	**254,862**	**177,647**	**95,333**	**66,667**
Arizona	96,080	54,755	92,019	50,875	4,061	3,880
Colorado	60,179	41,705	32,148	19,155	28,031	22,550
Idaho	1,036	2,776	—	—	1,036	2,776
Montana	444	1,084	192	289	252	796
Nevada	120,778	87,692	80,037	65,104	40,742	22,589
New Mexico	51,671	43,920	38,080	35,580	13,592	8,340
Utah	13,658	7,799	10,544	6,478	3,114	1,321
Wyoming	6,348	4,583	1,843	167	4,506	4,416
Pacific Contiguous	**1,221,103**	**958,252**	**212,121**	**174,631**	**1,008,981**	**783,621**
California	1,062,668	870,005	129,449	144,647	933,219	725,357
Oregon	74,804	52,069	41,500	23,291	33,304	28,778
Washington	83,631	36,178	41,173	6,693	42,458	29,485
Pacific Noncontiguous	**45,353**	**40,311**	**35,570**	**30,528**	**9,783**	**9,783**
Alaska	44,967	39,924	35,570	30,528	9,396	9,396
Hawaii	387	387	—	—	387	387
U.S. Total	**6,330,184**	**5,748,944**	**3,043,094**	**3,113,419**	**3,287,090**	**2,635,525**

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final. •Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' Form EIA-900, ''Monthly Nonutility Power Plant Report,'' and Form EIA-860B, ''Annual Electric Generator Report-Nonutility.''

Table A17. Coal Stocks by Census Division, 2000 and 1999

(Thousand Short Tons)

Census Division	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	995	W	218	W	777	693
Middle Atlantic	5,458	8,800	960	4,307	4,498	4,493
East North Central	26,101	38,255	22,959	33,073	3,142	5,182
West North Central	16,207	W	15,737	21,199	470	W
South Atlantic	15,515	23,736	14,158	22,924	1,356	812
East South Central	8,254	W	6,992	12,154	1,262	W
West South Central	18,259	21,980	17,464	21,626	795	354
Mountain	11,535	W	11,314	11,797	221	W
Pacific Contiguous	697	W	312	W	385	105
Pacific Noncontiguous	95	W	--	--	95	W
U.S. Total	**103,117**	**142,543**	**90,115**	**128,493**	**13,001**	**14,050**

W = Withheld to avoid disclosure of individual company data.

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final.•Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' and Form EIA-900, ''Monthly Nonutility Power Plant Report.''

Table A18. Petroleum Stocks by Census Division, 2000 and 1999

(Thousand Barrels)

Census Division	Industry		Utility		Nonutility	
	2000	1999	2000	1999	2000	1999
New England	3,342	5,693	554	990	2,788	4,703
Middle Atlantic	8,560	9,538	3,736	7,890	4,825	1,649
East North Central	2,388	W	1,876	2,536	511	W
West North Central	1,851	W	1,851	2,016	0	W
South Atlantic	12,643	18,594	10,343	17,182	2,300	1,412
East South Central	1,685	W	1,671	2,117	14	W
West South Central	6,257	W	6,112	6,433	145	W
Mountain	1,004	W	994	1,052	10	W
Pacific Contiguous	1,641	W	1,208	2,600	433	W
Pacific Noncontiguous	1,272	W	1,209	1,495	62	W
U.S. Total	**40,643**	**52,977**	**29,554**	**44,311**	**11,089**	**8,666**

W = Withheld to avoid disclosure of individual company data.

Notes: •Values for the industry and nonutilities for 2000 are preliminary; utility values for 2000 are final. Values for 1999 are final. •Does not include petroleum coke stocks. The utility stocks of petroleum coke were 186 thousand short tons at the end of 2000 and 355 thousand short tons at the end of 1999. •Totals may not equal sum of components because of independent rounding. •For a given fuel type, estimated totals for nonutility data at the Census division level will not exactly equal the sum of the estimated totals for all corresponding States. This is because Census division level estimation is done by combining data regardless of State; thus avoiding the need to add State level estimates that may not all be available.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report,'' and Form EIA-900, ''Monthly Nonutility Power Plant Report.''

Table A19. Fossil Fuel Receipts at U.S. Electric Utilities by Census Division and State, 2000 and 1999

Census Division State	Coal (thousand short tons)		Petroleum (thousand barrels)		Gas (million cubic feet)	
	2000	1999	2000	1999	2000	1999
New England	**1,842**	**1,764**	**758**	**13,621**	**7,422**	**23,065**
Connecticut	—	35	—	9,756	—	14,093
Maine	—	—	—	1,045	—	—
Massachusetts	324	394	87	205	5,998	8,524
New Hampshire	1,518	1,335	594	2,615	351	196
Rhode Island	—	—	—	—	—	—
Vermont	—	—	77	—	1,073	252
Middle Atlantic	**13,013**	**40,575**	**19,644**	**25,624**	**101,385**	**209,381**
New Jersey	1,825	2,597	776	2,437	8,674	19,473
New York	1,289	4,047	16,740	18,477	90,372	180,131
Pennsylvania	9,899	33,932	2,127	4,709	2,339	9,778
East North Central	**167,092**	**201,873**	**2,638**	**4,586**	**43,561**	**89,494**
Illinois	14,263	36,241	79	771	1,127	34,497
Indiana	51,494	56,933	360	665	2,427	3,816
Michigan	32,491	33,281	1,552	2,367	34,982	43,686
Ohio	46,680	51,568	596	739	1,412	3,222
Wisconsin	22,164	23,850	51	44	3,612	4,273
West North Central	**128,864**	**133,751**	**1,050**	**738**	**40,300**	**45,268**
Iowa	21,510	21,474	67	159	3,852	3,958
Kansas	19,276	19,553	571	356	27,561	29,991
Minnesota	17,717	16,559	36	42	2,167	2,246
Missouri	32,871	37,486	323	116	5,298	7,402
Nebraska	10,756	11,970	9	15	1,421	1,671
North Dakota	24,731	24,650	45	50	1	*
South Dakota	2,003	2,059	—	—	—	—
South Atlantic	**143,082**	**159,284**	**55,375**	**69,006**	**289,386**	**335,459**
Delaware	575	1,204	394	2,071	4,563	21,859
District of Columbia	76	—	183	412	—	—
Florida	24,547	25,477	47,323	54,285	254,847	269,232
Georgia	35,623	33,296	452	575	4,251	10,684
Maryland	6,171	11,143	1,029	6,675	11,770	12,149
North Carolina	22,365	25,575	343	497	1,597	1,986
South Carolina	14,282	12,877	115	93	113	337
Virginia	12,584	12,932	5,212	4,024	12,012	18,807
West Virginia	26,857	36,780	324	374	234	405
East South Central	**97,352**	**99,586**	**4,971**	**5,717**	**71,741**	**76,294**
Alabama	32,099	30,192	159	170	6,795	2,174
Kentucky	32,247	35,435	173	212	656	875
Mississippi	5,293	6,423	4,579	4,982	64,290	73,245
Tennessee	27,713	27,537	60	352	—	—
West South Central	**135,798**	**151,343**	**1,392**	**942**	**1,682,834**	**1,676,039**
Arkansas	14,569	15,406	61	109	26,947	26,189
Louisiana	9,845	13,854	591	636	292,002	306,767
Oklahoma	18,375	20,999	74	10	162,751	160,569
Texas	93,009	101,084	666	187	1,201,134	1,182,513
Mountain	**99,360**	**112,242**	**565**	**364**	**215,506**	**162,672**
Arizona	18,974	19,712	324	127	71,966	48,136
Colorado	17,025	18,389	64	7	28,818	15,799
Idaho	—	—	—	—	—	—
Montana	317	10,417	—	20	16	373
Nevada	7,872	8,075	17	20	67,341	58,902
New Mexico	14,786	16,059	51	65	37,905	34,862
Utah	15,430	14,193	39	42	8,864	4,435
Wyoming	24,957	25,396	70	84	596	166
Pacific Contiguous	**3,871**	**7,812**	**125**	**65**	**161,060**	**171,352**
California	—	—	27	10	121,362	148,001
Oregon	2,000	2,326	93	42	39,698	23,351
Washington	1,871	5,486	5	13	—	—
Pacific Noncontiguous	**—**	**—**	**13,339**	**10,744**	**16,792**	**20,430**
Alaska	—	—	—	—	16,792	20,430
Hawaii	—	—	13,339	10,744	—	—
U. S. Total	**790,274**	**908,232**	**99,855**	**131,407**	**2,629,986**	**2,809,455**

* =Value less than 0.5.

Notes: •Data are final. Does not include petroleum coke. Petroleum coke receipts were 1,683 thousand short tons in 2000 and 2,906 thousand short tons in 1999. •Data are for electric generating plants with a total steam-electric and combined-cycle nameplate capacity of 50 or more megawatts. •Totals may not equal sum of components because of independent rounding.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table A20. Average Delivered Cost of Fossil Fuel Receipts at U.S. Electric Utilities by Census Division and State, 2000 and 1999

Census Division State	Coal[1]			Petroleum			Gas		
	2000		1999	2000		1999	2000		1999
	(cents per million Btu)	($ per short ton)	(cents per million Btu)	(cents per million Btu).	($ per barrel)	(cents per million Btu)	(cents per million Btu).	($ per Mcf)	(cents per million Btu)
New England	**153.1**	**40.16**	**156.8**	**398.0**	**25.16**	**218.4**	**443.4**	**4.59**	**267.1**
Connecticut	—	—	169.3	—	—	223.5	—	—	267.3
Maine	—	—	—	—	—	177.9	—	—	—
Massachusetts	174.7	45.89	173.4	553.3	33.30	243.2	443.7	4.60	265.3
New Hampshire	148.5	38.94	151.5	345.3	22.30	213.6	315.1	3.37	261.0
Rhode Island	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	675.5	38.04	—	485.5	4.91	319.3
Middle Atlantic	**121.9**	**31.16**	**132.5**	**427.8**	**27.14**	**247.4**	**455.0**	**4.64**	**281.1**
New Jersey	139.4	36.66	145.4	484.1	30.41	288.2	430.4	4.42	298.9
New York	149.1	39.11	144.9	430.6	27.34	236.5	459.7	4.68	278.5
Pennsylvania	114.9	29.11	129.9	384.6	24.39	269.1	370.7	3.83	293.1
East North Central	**123.8**	**26.35**	**125.9**	**515.5**	**31.10**	**334.4**	**406.8**	**3.13**	**251.2**
Illinois	115.1	22.31	143.7	705.6	40.73	345.0	469.1	4.84	236.2
Indiana	108.0	22.91	111.0	669.9	38.66	426.3	445.3	4.56	289.3
Michigan	130.4	27.18	130.6	414.9	25.76	289.2	389.9	2.77	252.3
Ohio	145.7	34.45	136.2	668.7	38.68	391.7	485.5	4.98	306.4
Wisconsin	101.7	18.64	102.3	626.7	36.85	413.7	444.5	4.48	290.5
West North Central	**88.0**	**14.69**	**87.3**	**508.2**	**31.42**	**359.5**	**424.7**	**4.28**	**249.5**
Iowa	81.6	14.08	82.1	643.1	37.47	398.8	454.7	4.56	313.7
Kansas	98.5	17.08	95.4	400.0	26.02	319.0	414.2	4.18	234.1
Minnesota	111.1	19.83	109.6	660.3	38.18	420.9	448.6	4.54	266.3
Missouri	91.8	16.36	92.6	648.7	37.55	381.5	439.0	4.42	265.6
Nebraska	56.0	9.66	55.4	648.5	37.52	431.5	460.0	4.61	281.1
North Dakota	72.4	9.45	73.0	692.3	40.40	417.2	639.9	6.69	404.0
South Dakota	99.3	16.81	93.6	—	—	—	—	—	—
South Atlantic	**142.0**	**34.81**	**141.1**	**434.8**	**27.74**	**249.7**	**435.5**	**4.52**	**296.6**
Delaware	152.1	39.54	158.9	445.9	28.18	243.9	488.5	4.92	303.3
District of Columbia	143.7	38.07	—	543.4	32.56	339.5	—	—	—
Florida	156.9	38.69	158.9	430.5	27.56	245.6	433.8	4.50	297.2
Georgia	154.2	35.65	154.6	690.6	40.17	389.6	417.6	4.31	248.9
Maryland	133.0	34.44	137.9	400.7	25.27	257.4	442.3	4.62	307.6
North Carolina	142.7	35.53	143.8	615.6	35.77	398.4	432.2	4.43	283.3
South Carolina	139.0	35.37	141.6	672.3	39.04	406.7	556.9	5.72	347.3
Virginia	133.0	34.09	134.3	423.9	26.88	229.9	451.2	4.66	299.7
West Virginia	120.4	29.57	118.2	721.3	42.21	463.5	498.1	4.98	299.8
East South Central	**119.7**	**27.28**	**123.2**	**356.6**	**23.10**	**181.1**	**395.6**	**4.07**	**245.2**
Alabama	141.0	30.88	147.6	651.7	37.61	326.0	437.5	4.52	295.1
Kentucky	102.3	23.74	105.8	680.8	39.90	431.9	495.8	5.08	340.4
Mississippi	152.2	35.16	155.2	333.3	21.78	154.1	390.1	4.01	242.6
Tennessee	110.6	25.73	113.1	635.2	37.32	393.3	—	—	—
West South Central	**121.4**	**19.08**	**120.4**	**557.2**	**33.72**	**255.9**	**422.6**	**4.33**	**249.0**
Arkansas	142.1	24.68	145.6	465.7	27.48	329.3	437.5	4.46	253.0
Louisiana	132.0	20.94	139.8	459.2	28.90	204.2	439.6	4.55	249.0
Oklahoma	94.3	16.46	91.2	586.1	34.68	495.5	441.6	4.54	271.7
Texas	122.7	18.53	120.0	655.7	38.47	396.0	415.5	4.24	245.8
Mountain	**106.3**	**21.13**	**106.1**	**798.8**	**46.37**	**487.2**	**446.9**	**4.56**	**247.5**
Arizona	123.8	25.33	132.7	859.9	50.06	479.8	477.9	4.86	264.3
Colorado	92.6	18.14	98.5	693.7	39.61	543.8	403.1	4.12	256.9
Idaho	—	—	—	—	—	—	—	—	—
Montana	91.5	12.12	72.7	—	—	491.0	510.4	5.81	184.5
Nevada	126.4	28.34	129.4	721.6	42.16	452.6	475.0	4.86	242.3
New Mexico	137.8	25.38	132.9	758.5	43.32	502.3	387.7	3.94	228.2
Utah	101.3	23.66	103.1	678.6	39.70	513.6	383.6	4.02	253.8
Wyoming	77.9	13.72	76.2	724.3	42.35	476.0	375.8	3.92	372.3
Pacific Contiguous	**136.2**	**23.09**	**140.8**	**799.1**	**46.99**	**413.2**	**509.1**	**5.16**	**261.8**
California	—	—	—	619.4	36.42	327.2	581.1	5.88	272.5
Oregon	106.8	18.45	107.9	858.6	50.48	414.1	289.6	2.94	193.6
Washington	168.8	28.05	156.0	664.0	39.04	478.8	—	—	—
Pacific Noncontiguous	**—**	**—**	**—**	**503.9**	**31.68**	**319.9**	**177.1**	**1.77**	**159.3**
Alaska	—	—	—	—	—	—	177.1	1.77	159.3
Hawaii	—	—	—	503.9	31.68	319.9	—	—	—
U. S. Total	**120.0**	**24.28**	**121.6**	**445.0**	**28.24**	**252.7**	**430.2**	**4.39**	**257.4**

[1] Some coal delivered to Alabama, Florida, Kentucky, and Tennessee is reported on FERC Form 423 as delivered to storage facilities. The cost reported for this coal does not include transportation costs incurred later in transporting the coal to the plant.

Mcf = thousand cubic feet.

NM = Not Meaningful.

Notes: •Data are final. Does not include petroleum coke. Petroleum coke cost was 58.5 cents per million Btu in 2000 and 65.4 cents per million Btu in 1999. •Data are for electric generating plants with a total steam-electric and combined-cycle nameplate capacity of 50 or more megawatts. •Totals may not equal sum of components because of independent rounding.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table A21. Retail Sales of Electricity, Revenue, and Average Revenue per Kilowatthour (and RSEs) by U.S. Electric Utilities to Ultimate Consumers by Census Division, and State, 2000 and 1999 -- All Sectors

Census Division and State	2000		1999	2000		1999	2000		1999
	Sales (million kWh)	RSE (percent)	Sales (million kWh)	Revenue (million dollars)	RSE (percent)	Revenue (million dollars)	Average Revenue per kWh (cents)	RSE (percent)	Average Revenue per kWh (cents)
New England	**123,013**	**0.2**	**113,720**	**12,072**	**0.3**	**11,032**	**9.8**	**0.4**	**9.7**
Connecticut	29,917	.1	29,803	2,849	.2	2,965	9.5	.1	9.9
Maine	17,607	.4	11,944	1,739	.2	1,168	9.9	.3	9.8
Massachusetts	51,197	.4	49,407	4,864	.7	4,517	9.5	.8	9.1
New Hampshire	9,949	.3	9,888	1,154	.4	1,162	11.6	.3	11.8
Rhode Island	8,693	1.2	7,150	887	1.8	638	10.2	.6	8.9
Vermont	5,651	.2	5,527	578	.5	568	10.2	.3	10.3
Middle Atlantic	**341,776**	**.6**	**338,964**	**30,529**	**.6**	**31,413**	**8.9**	**.4**	**9.3**
New Jersey	70,882	.1	70,703	6,437	.1	7,060	9.1	.1	10.0
New York	135,754	.4	139,378	15,188	.9	14,543	11.2	.6	10.4
Pennsylvania	135,140	1.5	128,883	8,904	1.4	9,526	6.6	.7	7.4
East North Central	**560,572**	**.2**	**561,216**	**35,352**	**.2**	**35,805**	**6.3**	**.1**	**6.4**
Illinois	136,124	.2	132,682	8,957	.4	9,254	6.6	.3	7.0
Indiana	97,116	.3	96,735	4,986	.4	5,118	5.1	.3	5.3
Michigan	103,972	.1	103,981	7,397	.1	7,412	7.1	.1	7.1
Ohio	158,672	.5	164,271	10,333	.3	10,505	6.5	.3	6.4
Wisconsin	64,689	.4	63,547	3,680	.3	3,515	5.7	.5	5.5
West North Central	**249,363**	**.2**	**238,143**	**14,727**	**.3**	**14,105**	**5.9**	**.3**	**5.9**
Iowa	38,812	.4	38,034	2,272	.5	2,252	5.9	.7	5.9
Kansas	35,842	.3	33,820	2,245	.4	2,101	6.3	.4	6.2
Minnesota	59,851	.4	57,399	3,479	.6	3,345	5.8	.4	5.8
Missouri	72,882	.5	69,045	4,408	.7	4,187	6.0	.6	6.1
Nebraska	23,918	.6	22,810	1,261	.8	1,213	5.3	.6	5.3
North Dakota	9,698	.9	9,112	533	.9	501	5.5	.4	5.5
South Dakota	8,360	.6	7,922	528	.8	503	6.3	.4	6.4
South Atlantic	**717,116**	**.2**	**688,478**	**45,724**	**.2**	**43,867**	**6.4**	**.1**	**6.4**
Delaware	11,137	1.1	10,552	759	1.2	750	6.8	.7	7.1
District of Columbia	10,633	—	10,418	799	—	776	7.5	—	7.4
Florida	195,278	.3	187,270	13,497	.4	12,817	6.9	.2	6.8
Georgia	119,922	.8	112,656	7,487	1.0	7,032	6.2	.6	6.2
Maryland	60,936	.2	59,086	4,113	.5	4,152	6.7	.3	7.0
North Carolina	118,458	.3	115,015	7,711	.4	7,421	6.5	.2	6.5
South Carolina	76,418	.4	73,304	4,193	.4	4,089	5.5	.4	5.6
Virginia	96,520	.3	93,032	5,746	.5	5,447	6.0	.2	5.9
West Virginia	27,813	.2	27,144	1,420	.2	1,384	5.1	—	5.1
East South Central	**304,012**	**.4**	**296,659**	**16,034**	**.4**	**15,488**	**5.3**	**.3**	**5.2**
Alabama	83,692	.5	80,401	4,686	.7	4,449	5.6	.5	5.5
Kentucky	78,429	1.3	79,098	3,230	1.1	3,294	4.1	1.1	4.2
Mississippi	45,166	.7	43,980	2,680	.9	2,483	5.9	.4	5.6
Tennessee	96,725	.6	93,180	5,438	.5	5,241	5.6	.2	5.6
West South Central	**487,032**	**.3**	**466,636**	**31,039**	**.4**	**27,566**	**6.4**	**.4**	**5.9**
Arkansas	41,435	.5	39,789	2,398	.6	2,261	5.8	.6	5.7
Louisiana	80,416	.3	78,267	5,308	.8	4,546	6.6	.6	5.8
Oklahoma	49,480	.7	46,737	2,944	1.2	2,510	6.0	.9	5.4
Texas	315,701	.4	301,844	20,389	.6	18,238	6.5	.6	6.0
Mountain	**222,356**	**.2**	**212,193**	**13,201**	**.3**	**12,454**	**5.9**	**.2**	**5.9**
Arizona	61,454	.3	57,662	4,412	.4	4,169	7.2	.3	7.2
Colorado	43,321	.4	40,571	2,598	.9	2,414	6.0	.4	6.0
Idaho	22,862	.4	22,722	959	.5	894	4.2	.3	3.9
Montana	11,718	3.4	13,282	589	1.6	644	5.0	2.5	4.8
Nevada	28,089	.6	26,253	1,719	.8	1,557	6.1	.2	5.9
New Mexico	18,953	.8	18,041	1,247	1.0	1,187	6.6	1.3	6.6
Utah	23,151	.3	21,879	1,116	.3	1,065	4.8	.1	4.9
Wyoming	12,807	1.1	11,782	561	1.1	507	4.4	.3	4.3
Pacific Contiguous	**392,525**	**.4**	**381,405**	**27,744**	**.4**	**27,677**	**7.1**	**.4**	**7.3**
California	246,652	.4	234,831	21,050	.5	21,697	8.5	.5	9.2
Oregon	52,828	1.2	47,544	2,524	.7	2,306	4.8	.8	4.9
Washington	93,044	.9	99,030	4,170	.6	3,996	4.5	.8	4.0
Pacific Noncontiguous	**15,001**	**.1**	**14,674**	**1,890**	**.1**	**1,641**	**12.6**	**.1**	**11.2**
Alaska	5,321	.2	5,293	531	.4	518	10.0	.3	9.8
Hawaii	9,680	—	9,381	1,360	.1	1,124	14.0	.1	12.0
U.S. Total	**3,412,766**	**.1**	**3,312,087**	**228,313**	**.1**	**219,872**	**6.68**	**.1**	**6.66**

kWh = Kilowatthours.
RSE = Relative standard error.

Notes: •Values for 2000 are preliminary; values for 1999 are final. •Values include retail sales by all energy service providers. •Revenue and average revenue per kilowatthour do not include taxes such as sales and excise taxes that are assessed on the consumer and collected through the utility. •Weather-related phenomena, reclassification of retail sales, changes in number of customers, prior period adjustments, and changes in billing procedures may contribute to substantial year-to-year changes in the data in this table. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A22. Retail Sales of Electricity, Revenue, and Average Revenue per Kilowatthour (and RSEs) by U.S. Electric Utilities to Ultimate Consumers by Census Division, and State, 2000 and 1999 -- Residential

Census Division and State	2000		1999	2000		1999	2000		1999
	Sales (million kWh)	RSE (percent)	Sales (million kWh)	Revenue (million dollars)	RSE (percent)	Revenue (million dollars)	Average Revenue per kWh (cents)	RSE (percent)	Average Revenue per kWh (cents)
New England	**43,863**	**0.2**	**41,022**	**5,022**	**0.2**	**4,586**	**11.4**	**0.2**	**11.2**
Connecticut	11,644	.1	11,619	1,264	.2	1,330	10.9	.1	11.4
Maine	6,430	.1	3,704	820	.2	484	12.8	.1	13.1
Massachusetts	16,999	.5	17,392	1,839	.5	1,753	10.8	.6	10.1
New Hampshire	3,621	.4	3,640	491	.4	504	13.6	.3	13.8
Rhode Island	3,120	.8	2,667	359	1.3	269	11.5	.5	10.1
Vermont	2,050	.4	1,999	249	.4	243	12.1	.4	12.2
Middle Atlantic	**112,558**	**.7**	**111,596**	**12,738**	**.7**	**12,621**	**11.3**	**.4**	**11.3**
New Jersey	24,333	.6	24,551	2,631	.5	2,798	10.8	.2	11.4
New York	41,970	.6	42,919	5,911	1.0	5,720	14.1	.6	13.3
Pennsylvania	46,255	1.4	44,126	4,196	1.5	4,053	9.1	.6	9.2
East North Central	**165,055**	**.2**	**165,228**	**13,524**	**.3**	**13,652**	**8.2**	**.1**	**8.3**
Illinois	40,162	.4	39,631	3,551	.5	3,503	8.8	.2	8.8
Indiana	28,382	.6	28,806	1,930	.7	2,008	6.8	.4	7.0
Michigan	30,557	.3	30,661	2,601	.3	2,674	8.5	.2	8.7
Ohio	46,200	.3	46,629	3,954	.4	4,045	8.6	.3	8.7
Wisconsin	19,754	.7	19,502	1,489	.5	1,426	7.5	.5	7.3
West North Central	**88,956**	**.4**	**83,516**	**6,483**	**.5**	**6,148**	**7.3**	**.3**	**7.4**
Iowa	12,053	.8	11,867	973	1.1	991	8.1	.8	8.3
Kansas	12,638	.8	11,347	966	.7	866	7.6	.5	7.6
Minnesota	18,686	.7	17,998	1,383	.6	1,334	7.4	.6	7.4
Missouri	30,137	1.0	27,766	2,127	1.2	1,975	7.1	.7	7.1
Nebraska	8,322	1.0	7,929	540	1.1	518	6.5	.6	6.5
North Dakota	3,583	1.3	3,307	233	1.3	215	6.5	.5	6.5
South Dakota	3,537	1.1	3,302	260	1.2	245	7.4	.3	7.4
South Atlantic	**290,024**	**.3**	**276,708**	**22,428**	**.3**	**21,371**	**7.7**	**.2**	**7.7**
Delaware	3,592	.8	3,532	328	.6	324	9.1	.5	9.2
District of Columbia	1,624	—	1,643	130	—	131	8.0	—	8.0
Florida	98,735	.4	93,846	7,664	.5	7,256	7.8	.2	7.7
Georgia	44,085	1.1	41,767	3,420	1.6	3,161	7.8	.9	7.6
Maryland	24,097	.3	23,342	1,922	.6	1,959	8.0	.4	8.4
North Carolina	45,751	.7	43,648	3,668	.7	3,491	8.0	.3	8.0
South Carolina	24,908	.6	23,699	1,851	.7	1,791	7.4	.5	7.6
Virginia	37,455	.5	35,779	2,828	.7	2,674	7.5	.2	7.5
West Virginia	9,778	.3	9,452	618	.3	594	6.3	.1	6.3
East South Central	**106,215**	**.5**	**101,342**	**6,807**	**.6**	**6,508**	**6.4**	**.2**	**6.4**
Alabama	28,813	1.0	27,048	2,024	1.2	1,903	7.0	.4	7.0
Kentucky	23,419	1.3	22,548	1,247	1.6	1,255	5.3	.6	5.6
Mississippi	17,130	1.0	16,321	1,204	1.1	1,100	7.0	.4	6.7
Tennessee	36,853	.9	35,425	2,332	.9	2,245	6.3	.1	6.3
West South Central	**177,995**	**.5**	**167,364**	**13,854**	**.6**	**12,333**	**7.8**	**.4**	**7.4**
Arkansas	14,818	.6	14,045	1,108	.8	1,042	7.5	.4	7.4
Louisiana	27,460	.6	26,426	2,171	1.1	1,881	7.9	.8	7.1
Oklahoma	19,509	1.0	18,301	1,395	1.5	1,209	7.1	.8	6.6
Texas	116,207	.8	108,591	9,180	.9	8,197	7.9	.5	7.5
Mountain	**73,290**	**.3**	**67,415**	**5,435**	**.3**	**5,015**	**7.4**	**.1**	**7.4**
Arizona	24,845	.3	22,517	2,094	.4	1,919	8.4	.2	8.5
Colorado	14,305	.7	13,131	1,054	1.0	969	7.4	.4	7.4
Idaho	7,064	.6	6,806	381	.6	357	5.4	.4	5.2
Montana	3,940	.8	3,664	250	.8	249	6.4	.9	6.8
Nevada	9,409	1.2	8,386	684	1.1	597	7.3	.2	7.1
New Mexico	5,072	.6	4,649	421	.9	402	8.3	.6	8.6
Utah	6,467	.5	6,236	406	.6	391	6.3	.2	6.3
Wyoming	2,188	1.2	2,025	144	1.4	128	6.6	.4	6.3
Pacific Contiguous	**130,799**	**.3**	**126,178**	**11,216**	**.3**	**10,761**	**8.6**	**.2**	**8.5**
California	79,865	.4	75,303	8,453	.4	8,065	10.6	.2	10.7
Oregon	18,145	.8	18,058	1,073	.8	1,037	5.9	.2	5.7
Washington	32,789	.5	32,817	1,690	.7	1,672	5.2	.5	5.1
Pacific Noncontiguous	**4,625**	**.1**	**4,555**	**665**	**.2**	**593**	**14.4**	**.1**	**13.0**
Alaska	1,855	.2	1,866	212	.4	208	11.4	.3	11.2
Hawaii	2,770	.1	2,689	454	.1	385	16.4	.1	14.3
U.S. Total	**1,193,380**	**.1**	**1,144,923**	**98,172**	**.2**	**93,476**	**8.22**	**.1**	**8.16**

kWh = Kilowatthours.
RSE = Relative standard error.

Notes: •Values for 2000 are preliminary; values for 1999 are final. •Values include retail sales by all energy service providers. •Revenue and average revenue per kilowatthour do not include taxes such as sales and excise taxes that are assessed on the consumer and collected through the utility. •Weather-related phenomena, reclassification of retail sales, changes in number of customers, prior period adjustments, and changes in billing procedures may contribute to substantial year-to-year changes in the data in this table. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A23. Retail Sales of Electricity, Revenue, and Average Revenue per Kilowatthour (and RSEs) by U.S. Electric Utilities to Ultimate Consumers by Census Division, and State, 2000 and 1999 -- Commercial

Census Division and State	2000		1999	2000		1999	2000		1999
	Sales (million kWh)	RSE (percent)	Sales (million kWh)	Revenue (million dollars)	RSE (percent)	Revenue (million dollars)	Average Revenue per kWh (cents)	RSE (percent)	Average Revenue per kWh (cents)
New England	**47,883**	**0.3**	**45,484**	**4,560**	**0.4**	**4,318**	**9.5**	**0.5**	**9.5**
Connecticut	11,928	—	11,834	1,105	.1	1,146	9.3	.1	9.7
Maine	4,072	.2	3,491	435	.2	367	10.7	.1	10.5
Massachusetts	22,828	.5	21,489	2,062	.8	1,915	9.0	1.0	8.9
New Hampshire	3,625	.4	3,604	409	.5	410	11.3	.4	11.4
Rhode Island	3,525	1.0	3,171	347	1.6	266	9.8	.6	8.4
Vermont	1,905	.2	1,896	202	.4	202	10.6	.3	10.7
Middle Atlantic	**130,196**	**.5**	**127,997**	**12,360**	**.6**	**12,777**	**9.5**	**.5**	**10.0**
New Jersey	32,993	.2	32,506	2,836	.1	3,163	8.6	.1	9.7
New York	56,785	.5	57,894	6,982	.9	6,477	12.3	.6	11.2
Pennsylvania	40,418	1.4	37,596	2,543	1.1	2,964	6.3	1.2	7.9
East North Central	**157,089**	**.2**	**154,324**	**11,205**	**.2**	**11,138**	**7.1**	**.1**	**7.2**
Illinois	41,964	.3	41,968	3,001	.3	3,107	7.2	.2	7.4
Indiana	20,423	.3	20,161	1,200	.4	1,219	5.9	.3	6.0
Michigan	35,720	.2	35,096	2,822	.2	2,761	7.9	.1	7.9
Ohio	40,743	.2	39,461	3,084	.3	3,019	7.6	.2	7.7
Wisconsin	18,239	.3	17,638	1,097	.3	1,037	6.0	.4	5.9
West North Central	**70,170**	**.2**	**66,413**	**4,248**	**.3**	**4,061**	**6.1**	**.3**	**6.1**
Iowa	8,292	.5	8,269	547	.5	532	6.6	.5	6.4
Kansas	12,471	.5	11,822	778	.7	739	6.2	.5	6.3
Minnesota	11,882	.8	10,909	739	.7	689	6.2	.5	6.3
Missouri	25,259	.3	24,111	1,476	.6	1,440	5.8	.6	6.0
Nebraska	6,943	.5	6,661	377	.8	362	5.4	.5	5.4
North Dakota	2,822	1.2	2,350	168	1.0	145	5.9	.4	6.2
South Dakota	2,501	.7	2,291	163	.6	154	6.5	.3	6.7
South Atlantic	**236,143**	**.3**	**224,731**	**14,889**	**.2**	**14,254**	**6.3**	**.2**	**6.3**
Delaware	3,511	1.0	3,353	230	2.8	248	6.5	2.1	7.4
District of Columbia	8,332	—	8,146	629	—	608	7.6	—	7.5
Florida	72,126	.3	69,055	4,508	.4	4,291	6.2	.3	6.2
Georgia	36,917	1.4	34,093	2,423	.7	2,273	6.6	1.0	6.7
Maryland	25,928	.2	24,988	1,699	.4	1,698	6.6	.3	6.8
North Carolina	36,460	.4	35,069	2,333	.4	2,224	6.4	.4	6.3
South Carolina	17,661	.4	16,585	1,088	.5	1,045	6.2	.4	6.3
Virginia	28,305	.2	26,968	1,601	.3	1,494	5.7	.2	5.5
West Virginia	6,903	.2	6,473	378	.2	358	5.5	—	5.5
East South Central	**61,575**	**.3**	**67,746**	**3,798**	**.3**	**4,160**	**6.2**	**.3**	**6.1**
Alabama	17,557	.2	18,145	1,168	.3	1,184	6.7	.3	6.5
Kentucky	13,668	.6	13,222	690	1.0	696	5.0	.6	5.3
Mississippi	11,442	.6	11,151	745	.8	691	6.5	.4	6.2
Tennessee	18,907	.7	25,228	1,195	.6	1,586	6.3	.8	6.3
West South Central	**124,121**	**.2**	**117,742**	**8,403**	**.4**	**7,518**	**6.8**	**.3**	**6.4**
Arkansas	8,707	.4	8,374	518	.5	487	5.9	.6	5.8
Louisiana	18,153	.3	17,581	1,327	.9	1,154	7.3	.7	6.6
Oklahoma	13,099	.7	12,398	812	1.3	691	6.2	1.0	5.6
Texas	84,162	.3	79,388	5,747	.5	5,180	6.8	.5	6.5
Mountain	**73,777**	**.3**	**67,994**	**4,549**	**.3**	**4,265**	**6.2**	**.1**	**6.3**
Arizona	21,234	.3	19,776	1,560	.4	1,486	7.3	.3	7.5
Colorado	18,246	.4	17,006	1,029	.7	953	5.6	.3	5.6
Idaho	7,007	1.2	6,450	298	1.4	271	4.3	.2	4.2
Montana	3,267	.4	3,025	192	.5	192	5.9	.4	6.4
Nevada	6,578	.3	6,049	442	.4	402	6.7	.1	6.7
New Mexico	6,734	1.8	5,892	469	1.4	443	7.0	.7	7.5
Utah	7,934	.3	7,282	410	.4	385	5.2	.2	5.3
Wyoming	2,778	.7	2,514	148	.7	132	5.3	.2	5.3
Pacific Contiguous	**131,704**	**.3**	**124,292**	**10,578**	**.4**	**10,399**	**8.0**	**.4**	**8.4**
California	92,924	.5	86,371	8,639	.5	8,697	9.3	.5	10.1
Oregon	15,035	.4	14,912	769	.3	735	5.1	.2	4.9
Washington	23,744	.4	23,009	1,170	.6	1,118	4.9	.3	4.9
Pacific Noncontiguous	**5,277**	**.5**	**5,273**	**659**	**.4**	**587**	**12.5**	**.2**	**11.1**
Alaska	2,243	1.1	2,385	210	1.3	220	9.3	.5	9.2
Hawaii	3,035	.1	2,887	450	.1	368	14.8	.1	12.7
U.S. Total	**1,037,936**	**.1**	**1,001,996**	**75,249**	**.1**	**72,757**	**7.22**	**.1**	**7.26**

kWh = Kilowatthours.
RSE = Relative standard error.

Notes: •Values for 2000 are preliminary; values for 1999 are final. •Values include retail sales by all energy service providers. •Revenue and average revenue per kilowatthour do not include taxes such as sales and excise taxes that are assessed on the consumer and collected through the utility. •Weather-related phenomena, reclassification of retail sales, changes in number of customers, prior period adjustments, and changes in billing procedures may contribute to substantial year-to-year changes in the data in this table. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A24. Retail Sales of Electricity, Revenue, and Average Revenue per Kilowatthour (and RSEs) by U.S. Electric Utilities to Ultimate Consumers by Census Division, and State, 2000 and 1999 -- Industrial

Census Division and State	2000		1999	2000		1999	2000		1999
	Sales (million kWh)	RSE (percent)	Sales (million kWh)	Revenue (million dollars)	RSE (percent)	Revenue (million dollars)	Average Revenue per kWh (cents)	RSE (percent)	Average Revenue per kWh (cents)
New England	**29,456**	**0.4**	**25,750**	**2,245**	**0.6**	**1,939**	**7.6**	**0.5**	**7.5**
Connecticut	5,805	.2	5,836	425	.2	433	7.3	.1	7.4
Maine	6,906	1.1	4,687	436	.6	301	6.3	.6	6.4
Massachusetts	10,747	.7	9,966	875	1.5	772	8.1	1.0	7.7
New Hampshire	2,570	.6	2,516	238	.6	232	9.3	.4	9.2
Rhode Island	1,780	1.9	1,158	151	2.6	86	8.5	.6	7.4
Vermont	1,648	.6	1,587	121	.8	117	7.3	.4	7.4
Middle Atlantic	**83,960**	**1.2**	**85,016**	**4,086**	**1.1**	**4,704**	**4.9**	**.6**	**5.5**
New Jersey	13,018	.4	13,121	882	.2	1,008	6.8	.3	7.7
New York	24,109	.7	25,835	1,180	.7	1,233	4.9	.6	4.8
Pennsylvania	46,833	2.0	46,059	2,024	2.1	2,402	4.3	1.0	5.2
East North Central	**222,040**	**.3**	**226,435**	**9,622**	**.4**	**10,039**	**4.3**	**.3**	**4.4**
Illinois	43,844	.5	41,972	1,854	.8	2,103	4.2	.9	5.0
Indiana	47,799	.6	47,230	1,805	.5	1,838	3.8	.3	3.9
Michigan	36,676	.5	37,276	1,872	.6	1,881	5.1	.3	5.0
Ohio	67,792	1.0	74,293	3,053	.8	3,209	4.5	.5	4.3
Wisconsin	25,928	.4	25,665	1,038	.3	999	4.0	.6	3.9
West North Central	**84,079**	**.2**	**82,445**	**3,622**	**.3**	**3,528**	**4.3**	**.3**	**4.3**
Iowa	17,002	.5	16,499	661	.5	641	3.9	.6	3.9
Kansas	10,304	.3	10,215	464	.8	457	4.5	.7	4.5
Minnesota	28,551	.4	27,764	1,302	.6	1,268	4.6	.4	4.6
Missouri	16,346	.6	16,122	737	1.0	707	4.5	1.1	4.4
Nebraska	7,084	.5	6,883	255	.8	246	3.6	.6	3.6
North Dakota	2,860	3.1	3,013	114	2.7	122	4.0	1.3	4.1
South Dakota	1,931	.4	1,949	88	.5	89	4.6	.4	4.6
South Atlantic	**168,606**	**.2**	**165,310**	**7,023**	**.3**	**6,917**	**4.2**	**.2**	**4.2**
Delaware	3,983	1.4	3,613	193	2.1	171	4.8	1.7	4.7
District of Columbia	290	—	249	14	—	11	4.8	—	4.6
Florida	18,488	.7	18,579	909	.8	887	4.9	.5	4.8
Georgia	37,317	.5	35,255	1,511	1.2	1,465	4.0	.7	4.2
Maryland	10,062	.2	9,936	417	.7	423	4.1	.7	4.3
North Carolina	33,991	.4	34,165	1,563	.6	1,561	4.6	.4	4.6
South Carolina	32,907	.4	32,117	1,199	.5	1,199	3.6	.3	3.7
Virginia	20,528	.5	20,269	801	.7	779	3.9	.4	3.8
West Virginia	11,041	.1	11,126	416	.1	424	3.8	—	3.8
East South Central	**130,223**	**.6**	**121,816**	**5,072**	**.5**	**4,472**	**3.9**	**.4**	**3.7**
Alabama	36,635	1.1	34,533	1,446	1.1	1,313	3.9	.5	3.8
Kentucky	38,017	1.6	40,054	1,148	1.3	1,194	3.0	1.6	3.0
Mississippi	15,804	.5	15,735	667	.9	631	4.2	.6	4.0
Tennessee	39,767	.5	31,493	1,812	.4	1,319	4.6	.2	4.2
West South Central	**163,731**	**.4**	**161,176**	**7,406**	**.4**	**6,469**	**4.5**	**.5**	**4.0**
Arkansas	17,209	1.0	16,680	724	1.0	688	4.2	1.0	4.1
Louisiana	32,002	.2	31,484	1,613	.4	1,339	5.0	.4	4.3
Oklahoma	13,985	1.0	13,271	585	1.3	476	4.2	1.2	3.6
Texas	100,536	.6	99,741	4,484	.6	3,964	4.5	.7	4.0
Mountain	**67,441**	**.5**	**68,856**	**2,798**	**.4**	**2,760**	**4.1**	**.5**	**4.0**
Arizona	12,296	.5	12,456	618	.8	629	5.0	.8	5.0
Colorado	9,812	.4	9,521	435	.6	417	4.4	.6	4.4
Idaho	8,482	.8	9,171	266	1.4	252	3.1	.7	2.7
Montana	4,262	7.5	6,258	126	4.4	182	3.0	6.3	2.9
Nevada	11,554	.3	10,861	568	.7	520	4.9	.5	4.8
New Mexico	5,505	1.4	5,957	262	2.5	254	4.8	3.5	4.3
Utah	7,880	.1	7,568	263	.2	255	3.3	.1	3.4
Wyoming	7,650	1.3	7,065	260	1.5	237	3.4	.4	3.4
Pacific Contiguous	**116,450**	**.6**	**116,821**	**5,415**	**1.3**	**5,936**	**4.6**	**1.4**	**5.1**
California	64,266	.7	63,217	3,581	1.8	4,520	5.6	1.9	7.1
Oregon	19,215	1.8	14,106	651	1.5	502	3.4	1.5	3.6
Washington	32,970	1.2	39,499	1,183	2.5	1,070	3.6	2.5	2.7
Pacific Noncontiguous	**4,841**	**.3**	**4,591**	**529**	**.4**	**425**	**10.9**	**.1**	**9.3**
Alaska	1,022	1.4	844	81	2.3	62	8.0	.9	7.3
Hawaii	3,819	—	3,748	448	.1	364	11.7	.1	9.7
U.S. Total	**1,070,827**	**.2**	**1,058,217**	**47,818**	**.2**	**46,847**	**4.46**	**.2**	**4.43**

kWh = Kilowatthours.
RSE = Relative standard error.

Notes: •Values for 2000 are preliminary; values for 1999 are final. •Values include retail sales by all energy service providers. •Revenue and average revenue per kilowatthour do not include taxes such as sales and excise taxes that are assessed on the consumer and collected through the utility. •Weather-related phenomena, reclassification of retail sales, changes in number of customers, prior period adjustments, and changes in billing procedures may contribute to substantial year-to-year changes in the data in this table. •Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-826, ''Monthly Electric Utility Sales and Revenue Report with State Distributions,'' and Form EIA-861, ''Annual Electric Utility Report.''

Table A25. Capacity Sold by Utilities to Nonutilities by State, Company, and Plant, 2000
(Megawatts)

State/Seller/Plant	Energy Source	Capacity [a]	Date [b]	Buyer
Connecticut		**142**		
Connecticut Light & Power Co				
Batnam	Water	3	March 15, 2000	Northeast Generation Co
Bulls Bridge	Water	8	March 15, 2000	Northeast Generation Co
Falls Village	Water/Petroleum	10	March 15, 2000	Northeast Generation Co
Middletown	Water	*	March 15, 2000	Northeast Generation Co
Robertsville	Water	*	March 15, 2000	Northeast Generation Co
Rocky River	Water	29	March 15, 2000	Northeast Generation Co
Scotland Dam	Water	2	March 15, 2000	Northeast Generation Co
Shepaug	Water	43	March 15, 2000	Northeast Generation Co
Stevenson	Water	29	March 15, 2000	Northeast Generation Co
Taftville	Water	2	March 15, 2000	Northeast Generation Co
Tunnel	Water/Petroleum	19	March 15, 2000	Northeast Generation Co
Delaware		**1,316**		
Delmarva Power & Light Co				
Christiana	Petroleum	45	July 1, 2000	Connectiv Energy Supply Inc
Delaware City	Petroleum	16	July 1, 2000	Connectiv Energy Supply Inc
Edge Moor	Petroleum/Coal	718	July 1, 2000	Connectiv Energy Supply Inc
Hay Road	Natural Gas	511	July 1, 2000	Connectiv Energy Supply Inc
Madison Street	Petroleum	11	July 1, 2000	Connectiv Energy Supply Inc
West Substation	Petroleum	15	July 1, 2000	Connectiv Energy Supply Inc
District of Columbia		**806**		
Potomac Electric Power Co				
Benning	Petroleum	550	December 19, 2000	Potomac Power Resources Inc
Buzzard Point	Petroleum	256	December 19, 2000	Potomac Power Resources Inc
Indiana		**19**		
Indianapolis Power & Light Co				
Perry K	Coal	19	November 19, 2000	Citizens Thermal Energy
Louisiana		**1,950**		
Cajun Electric Power Coop Inc				
Big Cajun 1**	Natural Gas	220	March 31, 2000	Louisiana Generating LLC
Big Cajun 2**	Coal	1,730	March 31, 2000	Louisiana Generating LLC
Maryland		**10,204**		
Baltimore Gas & Electric Co				
Brandon Shores	Coal	1,296	July 1, 2000	Constellation Power Source Generation
Calvert Cliffs 1	Nuclear	1,675	July 1, 2000	Constellation Power Source Generation
C P Crane	Coal/Petroleum	399	July 1, 2000	Constellation Power Source Generation
Gould Street	Natural Gas	104	July 1, 2000	Constellation Power Source Generation
Herbert A Wagner	Petroleum/Coal	1,020	July 1, 2000	Constellation Power Source Generation
Notch Cliff	Natural Gas	128	July 1, 2000	Constellation Power Source Generation
Perryman	Petroleum/Natural Gas	350	July 1, 2000	Constellation Power Source Generation
Philadelphia Road	Petroleum	64	July 1, 2000	Constellation Power Source Generation
Riverside	Natural Gas/Petroleum	251	July 1, 2000	Constellation Power Source Generation
Westport	Natural Gas	121	July 1, 2000	Constellation Power Source Generation
Delmarva Power & Light Co				
Crisfield	Petroleum	10	July 1, 2000	Connectiv Energy Supply Inc
Potomac Edison Co				
R P Smith	Coal	114	August 1, 2000	Allgeheny Energy Supply LLC
Potomac Electric Power Co				
Chalk Point**	Petroleum/Coal/Natural Gas	2,423	December 19, 2000	Mirant Corp
Dickerson	Coal/Natural Gas	837	December 19, 2000	Mirant Corp
Morgantown	Coal/Petroleum	1,412	December 19, 2000	Mirant Corp
Massachusetts		**1,173**		
Western Massachusetts Elec Co				
Cabot	Water	53	March 15, 2000	Northeast Generation Co
Cobble Mountain	Water	34	March 15, 2000	Northeast Generation Co
Northfield Mountain**	Water	1,080	March 15, 2000	Northeast Generation Co
Turners Falls	Water	6	March 15, 2000	Northeast Generation Co

See footnotes at end of table.

Table A25. Capability Sold by Utilities to Nonutilities by State, Company, and Plant, 2000 (Continued)

State/Seller/Plant	Energy Source	Capacity [a]	Date [b]	Buyer
New Jersey		**10,877**		
Atlantic City Electric Co				
Carlls Corner	Natural Gas	73	July 1, 2000	Atlantic Elec Connectiv
Cedar	Petroleum	68	July 1, 2000	Atlantic Elec Connectiv
Cumberland	Natural Gas	84	July 1, 2000	Atlantic Elec Connectiv
Micketon	Natural Gas	59	July 1, 2000	Atlantic Elec Connectiv
Middle	Petroleum	77	July 1, 2000	Atlantic Elec Connectiv
Missouri Avenue	Petroleum	60	July 1, 2000	Atlantic Elec Connectiv
Sherman Avenue	Natural Gas	81	July 1, 2000	Atlantic Elec Connectiv
GPU Nuclear Corp				
Oyster Creek	Nuclear	619	August 8, 2000	AmerGen
Public Service Electric & Gas Co				
Bayonne	Petroleum	42	August 21, 2000	PSEG Power LLC
Bergen	Natural Gas	696	August 21, 2000	PSEG Power LLC
Burlington	Petroleum/Natural Gas	629	August 21, 2000	PSEG Power LLC
Edison	Natural Gas	504	August 21, 2000	PSEG Power LLC
Essex	Natural Gas	617	August 21, 2000	PSEG Power LLC
Hope Creek	Nuclear	1,031	August 21, 2000	PSEG Power LLC
Hudson	Coal/Natural Gas/Petroleum	1,120	August 21, 2000	PSEG Power LLC
Kearney	Petroleum/Natural Gas	804	August 21, 2000	PSEG Power LLC
Linden	Petroleum/Natural Gas	647	August 21, 2000	PSEG Power LLC
Mercer	Coal/Petroleum	777	August 21, 2000	PSEG Power LLC
National Park	Petroleum	21	August 21, 2000	PSEG Power LLC
Salem	Nuclear/Petroleum	2,286	August 21, 2000	PSEG Power LLC
Sewaren	Natural Gas/Petroleum	582	August 21, 2000	PSEG Power LLC
New York		**2,170**		
Niagara Mohawk Power Corp				
Albany	Natural Gas	380	May 12, 2000	PSEG Power LLC
Power Authority of State of NY				
Indian Point 3	Nuclear	970	November 21, 2000	Entergy Nuclear
James A Fitzpatrick	Nuclear	820	November 21, 2000	Entergy Nuclear
Ohio		**903**		
Duquesne Light Co				
Avon Lake**	Coal/Petroleum	740	April 27, 2000	Orion Power
Niles**	Coal/Petroleum	163	April 27, 2000	Orion Power
Pennsylvania		**11,969**		
Duquesne Light Co				
Brunot Island	Petroleum	327	April 27, 2000	Orion Power
Cheswick	Petroleum	562	April 27, 2000	Orion Power
Elrama	Coal	474	April 27, 2000	Orion Power
F R Phillips	Coal	310	April 27, 2000	Orion Power
New Castle	Coal/Petroleum	339	April 27, 2000	Orion Power
PPL Electric Utilities Corp				
Allentown	Petroleum	56	July 1, 2000	PPL Corp
Brunner Island	Coal/Petroleum	1,442	July 1, 2000	PPL Corp
Fishbach	Petroleum	28	July 1, 2000	PPL Corp
Harrisburg	Petroleum	56	July 1, 2000	PPL Corp
Harwood	Petroleum	28	July 1, 2000	PPL Corp
Holtwood	Water	103	July 1, 2000	PPL Corp
Jenkins	Petroleum	28	July 1, 2000	PPL Corp
Lock Haven	Petroleum	14	July 1, 2000	PPL Corp
Martins Creek	Natural Gas/Coal/Petroleum	1,997	July 1, 2000	PPL Corp
Montour	Coal	1,505	July 1, 2000	PPL Corp
Susquehanna**	Nuclear	2,184	July 1, 2000	PPL Corp
Wallenpaupack	Water	44	July 1, 2000	PPL Corp
West Shore	Petroleum	28	July 1, 2000	PPL Corp
Williamsport	Petroleum	28	July 1, 2000	PPL Corp
West Penn Power Co				
Armstrong	Coal	343	January 1, 2000	Allegheny Energy Supply LLC
Hatfield's Ferry	Coal	1,466	January 1, 2000	Allegheny Energy Supply LLC
Mitchell	Coal/Petroleum	400	January 1, 2000	Allegheny Energy Supply LLC
Springdale	Petroleum	207	January 1, 2000	Allegheny Energy Supply LLC

See footnotes at end of table.

Table A25. Capability Sold by Utilities to Nonutilities by State, Company, and Plant, 2000 (Continued)

State/Seller/Plant	Energy Source	Capacity [a]	Date [b]	Buyer
Virginia		**520**		
Delmarva Power & Light Co				
Bayview	Petroleum	12	July 1, 2000	Connectiv Energy Supply Inc
Tasley	Petroleum	26	July 1, 2000	Connectiv Energy Supply Inc
Potomac Electric Power Co				
Potomac River	Coal	482	December 19, 2000	Mirant Corp
Washington		**1,340**		
PacificCorp				
Centralia**	Coal	1,340	May 4, 2000	Transalta Co
West Virginia		**4,321**		
Monongahela Power Co				
Fort Martin**	Coal	1,109	August 1, 2000	Allegheny Energy Supply LLC
Harrison**	Coal	1,920	August 1, 2000	Allegheny Energy Supply LLC
Pleasants**	Coal	1,240	August 1, 2000	Allegheny Energy Supply LLC
West Penn Power Co				
Lake Lynn	Water	52	January 1, 2000	Allegheny Energy Supply LLC
	Total	**47,710**		

[a]Net summer capability (megawatts).
[b]Start date for facility to begin reporting as a nonutility generator.
* = The absolute value is less than 0.5.
** = Jointly owned plants. Data shown under operator.
Note: Includes only plants in which 100 percent of capacity was sold.
Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels, U.S. Department of Energy.

Table A26. Generating Capability Additions by State, Company, Plant, and Sector, 2000
(Megawatts)

State/Company	Plant	Capability	Energy Source[a]
	Utilities		
Alabama		**461.4**	
Alabama Power Co	Barry	457.5	Gas
Tennessee Valley Authority	Albertville	3.9	Petroleum
Alaska		**17.3**	
Alaska Village Elec Coop Inc	Alakanuk	0.5	Petroleum
Copper Valley Elec Assn Inc	Valdez Co-Gen	4.3	Petroleum
Cordova Electric Coop Inc	Eyak	2.2	Petroleum
Kodiak Electric Assn Inc	Nymans Plant	7.3	Petroleum
North Slope Borougy of	NSB Kaktovik Utility	2.7	Petroleum
Ouzinkie City of	City of Ouzinkie	0.3	Petroleum
Colorado		**0.4**	
Holly City of	Holly	0.4	Petroleum
Florida		**786.1**	
Florida Power Corp	Intercession City	252.5	Gas
JEA	J D Kennedy	157.3	Gas
Tallahassee City of	S O Purdom	223.4	Gas
Tampa Electric Co	Polk	153.0	Gas
Georgia		**1,246.6**	
Carolina Power & Light Co	Monroe	136.0	Gas
Georgia Power Co	Dahlberg	626.1	Gas
Oglethorpe Power Corp	Sewell Creek Energy	484.5	Gas
Hawaii		**21.5**	
Maui Electric Co Ltd	Maalaea	21.5	Petroleum
Illinois		**181.2**	
Central Illinois Light Co	Hallock	12.5	Petroleum
	Kickapoo	12.5	Petroleum
Corn Belt Energy Corporation	Gillum	3.5	Petroleum
	Parkside	5.3	Petroleum
Midwest Electric Power Inc	MEPI GT Facility	91.8	Gas
Rantoul Village of	Rantoul	10.7	Petroleum
Rochelle Municipal Utilities	NA1	3.6	Gas
Rock Falls City of	Avenue A Gen Sets	3.1	Petroleum
Southwestern Electric Coop Inc	Freedom Power Proj	38.3	Gas
Indiana		**72.5**	
Indianapolis Power & Light Co	Georgetown	72.5	Gas
Iowa		**95.5**	
Anita City of	Anita	0.6	Petroleum
Dayton City of	Dayton	1.8	Petroleum
Independence City of	Independence	5.4	Petroleum
Maquoketa City of	Maquoketa	1.8	Petroleum
MidAmerican Energy Co	Knoxville Industrial	15.6	Petroleum
	Shenandoah	19.5	Petroleum
	Waterloo Lundquist	19.5	Petroleum
Montezuma City of	Montezuma	1.8	Petroleum
Muscatine City of	Muscatine Plant #1	14.9	Coal
Sibley City of	Sibley One	2.9	Petroleum
Waverly Municipal Elec Utility	South Plant	11.7	Petroleum
Kansas		**129.0**	
Iola City of	Iola	4.9	Gas
Kansas Gas & Electric Co	Gordon Evans EC	124.1	Gas
Maryland		**1.8**	
Berlin Town of	Berlin	1.8	Petroleum
Michigan		**250.3**	
Detroit Edison Co	Delray	139.4	Gas
Great Lakes Energy Coop	Beaver Island	2.1	Petroleum
Holland City of	491 E 48th Street	66.3	Gas
Wolverine Pwr Supply Coop Inc	George Johnson	42.5	Gas

See footnotes at end of table.

Table A26. Generating Capability Additions by State, Company, Plant, and Sector, 2000 (Continued)

State/Company	Plant	Capability	Energy Source[a]
Mississippi		**21.5**	
Tennessee Valley Authority	Powell Valley	21.5	Petroleum
Missouri		**274.4**	
Butler City of	Butler	7.8	Petroleum
Kansas City Power & Light Co	Hawthorn	266.6	Gas/Waste Heat
Nebraska		**100.1**	
Omaha Public Power District	Sarpy County	100.1	Petroleum
North Carolina		**900.0**	
Carolina Power & Light Co	Asheville	180.0	Gas
	Wayne County	720.0	Gas
North Dakota		**1.5**	
Otter Tail Power Co	Dakota Magic	1.5	Petroleum
Ohio		**73.3**	
American Mun Power-Ohio Inc	Bowling Green Pkng	27.2	Petroleum
	Edgerton	3.6	Petroleum
	Hamilton Peaking	27.2	Gas
	Montpelier	10.7	Petroleum
	Shelby-North	1.8	Petroleum
	Shelby-South	1.8	Petroleum
	New Knoxville	1.1	Petroleum
Oklahoma		**458.4**	
Associated Electric Coop Inc	Chouteau	458.4	Gas/Waste Heat
Tennessee		**577.1**	
Tennessee Valley Authority	Buffalo Mountain	2.0	Wind
	Gallatin	287.6	Gas
	Johnsonville	287.6	Gas
Texas		**468.7**	
Lubbock City of	J Robert Massengale	34.4	Gas
San Antonio Public Service Bd	A Von Rosenburg	434.3	Gas/Waste Heat
Utah		**6.8**	
Springville City of	Whitehead	6.8	Gas
Virginia		**592.5**	
Virginia Electric & Power Co	Remington	592.5	Gas
Wisconsin		**153.4**	
Madison Gas & Electric Co	West Marinette	70.6	Gas
Northwestern Wisconsin Elec Co	Frederic Diesel	7.3	Petroleum
River Falls City of	Junction	2.9	Petroleum
Wisconsin Electric Power Co	Germantown	72.6	Gas
Wyoming		**35.3**	
Black Hills Corp	Neil Simpson II	34.0	Gas
Platte River Power Authority	Medicine Bow	1.3	Wind
Utility Subtotal		**6,926.5**	
	Nonutilities		
Arizona		**1.5**	
Decisions Investments Corp	Biosphere 2 Center Inc	1.5	Gas
California		**11.2**	
California Institute of Technology	California Institute of Technology	5.2	Gas
EUI Management PH Inc	EUIPH Wind Farm	6.0	Wind
Colorado		**392.7**	
Black Hills Colorado LLC	Arapahoe Combustion Turbine Project	64.6	Gas
Fulton Cogeneration Associates	Manchief Electric Generating Station	328.1	Gas
Delaware		**156.4**	
Motiva Enterprises LLC	Delaware City Plant	156.4	Petroleum
Florida		**2.0**	
Bio Energy Partners	CSL Gas Recovery	2.0	Waste Heat

See footnotes at end of table.

Table A26. Generating Capability Additions by State, Company, Plant, and Sector, 2000 (Continued)

State/Company	Plant	Capability	Energy Source[a]
Georgia		**1,216.5**	
Baconton Power LLC	BACONTON Power	357.0	Gas/Petroleum
Doyle I LLC	Doyle Generating Facility	263.5	Gas
West Georgia Generating Co LP	West Georgia Generating Co	596.0	Gas
Hawaii		**55.9**	
Hamakua Energy Partners LP	Hamakua Energy Plant	55.9	Petroleum/Waste Heat
Illinois		**1,150.1**	
Des Plaines Green Land Dev LLC	Lincoln Energy Center	564.4	Gas
Indeck Rockford LLC	Indeck Rockford Energy Center	298.1	Gas
Jacobs Energy Corp	Jacobs Energy Corp	4.7	Wood/Wood Waste
Reliant Energy Pwr Generation	Reliant Energy Shelby County	278.8	Gas
Resource Technology Corp	Biodyne Congress	4.1	Gas
Indiana		**1,565.1**	
Duke Energy Vermillion LLC	Vermillion Generating Station	580.7	Gas
DPL Energy Inc	Montpelier Electric Generating Station	200.3	Gas
Purdue University	Purdue University	1.8	Petroleum
University of Notre Dame Dulac	University of Notre Dame Power Plant	8.8	Coa
West Fork Land Dvlpmnt Co LLC	Wheatland Power Facility	459.0	Gas
Worthington Generation LLC	Worthington Generation LLC	314.5	Gas
Kentucky		**541.9**	
Calvert City Power I LLC	Calvert City Power I LLC	473.9	Gas
Duke Energy Marshall Cnty LLC	Marshall County Generating Station	68.0	Gas
Louisiana		**1,245.8**	
Calcasieu Power LLC	Calcasieu Power LLC	157.3	Gas
Cleco Evangeline LLC	Evangeline Power Station	918.5	Gas
NRG So Ceneral Generating LLC	NRG Sterlington Power LLC	170.0	Gas
Massachusetts		**321.0**	
Massachusetts Water Res Auth	Deer Island Treatment Plant	2.0	Water
Millennium Power Partners LP	Millennium Power	316.4	Gas
Williams Energy Systems	Williams Energy-Worchester	2.6	Waste
Maine		**686.4**	
Androscoggin Energy LLC	Androscoggin Cogeneration Center	46.4	Gas
Bucksport Enrgy & Intrntal Paper	Champion Clean Energy	158.8	Gas
Casco Bay Energy Co LLC	Maine Independence Station	481.2	Gas
Mississippi		**1,897.2**	
Choctaw Generation LP	Red Hills Generating Facility	477.6	Coal
Cogentrix Energy Inc	Southaven Energy LLC	680.9	Gas
LSP Energy LP	Batesville Generation Facility	738.7	Gas/Waste Heat
Montana		**3.3**	
Berg Lumber Co	Berg Lumber	3.3	Wood/Wood Waste
North Carolina		**416.6**	
Avalon H&H Properties	Avalon H&H Properties	4.8	Water
Rockingham Power LLC	Rockingham Power LLC	411.8	Gas
New Hampshire		**5.3**	
Foss Manufacturing Co Inc	Hampton Facility	4.3	Gas
Velcro USA Inc	Velcro USA Inc	1.0	Gas
New Jersey		**13.0**	
RTC Properties Inc	RTC Properties Inc	13.0	Wood/Wood Waste
Ohio		**749.1**	
Duke Energy Madison LLC	Madison Generating Station	580.7	Gas
PG&E Dispersed Generating Co	Bowling Green Generating Station	42.1	Gas
	Galion Generating Station	42.1	Gas
	Napoleon Peaking Station	42.1	Gas
	Wadsworth Generating Station	42.1	Gas
Oregon		**85.2**	
Willamette Industries Inc	Albany Paper Mill	85.2	Gas

See footnotes at end of table.

Table A26. Generating Capability Additions by State, Company, Plant, and Sector, 2000 (Continued)

State/Company	Plant	Capability	Energy Source[a]
Pennsylvania		**174.5**	
Allegheny Energy Supply Co LLC	Allegheny Energy Unit 8&9	74.5	Gas
	Allegheny Energy Units 1&2	74.5	Gas
Electro-Generators LLC	Electro-Generators Co-generation Plant	25.5	Gas
Rhode Island		**239.6**	
Calpine	Calpine Tiverton Power	239.6	Gas
South Carolina		**502.4**	
Broad River Energy LLC	Broad River Energy Center	502.4	Gas
Tennessee		**462.4**	
Gleason Power I LLC	Gleason Power Facility	462.4	Gas
Texas		**4,197.8**	
BASF Fina Petrochemicals Ltd	NROC Cogeneration Facility	70.9	Gas
Calpine Corp	Pasadena Cogeneration LP	425.0	Gas
Lamar Power Partners	Lamar Power Project	927.2	Gas
Midlothian Energy LP	Midlothian Energy Facility	918.0	Gas
Mirant Corporation	Mirant Texas LP Bosque County Plant	938.2	Gas
Sabine Cogen LP	Sabine Cogen LP	88.5	Gas
Tenaska Frontier Partners Ltd	Tenaska Frontier Generation Station	830.0	Gas
Virginia		**114.8**	
Commonwealth Chesapeake Pwr St	Commonwealth Chesapeake Power Station	114.8	Gas
Wisconsin		**317.2**	
Mirant Neenah LLC	Mirant Neenah Generation Facility	317.2	Gas
Nonutility Subtotal		**16,524.9**	
Industry Total		**23,451.4**	

[a]**Gas** includes gas fueled fuel cell units and waste heat. **Petroleum** includes fuel oil Nos. 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke.
Notes: Capability is net summer. Data are preliminary. Total may not equal the sum of components because of independent rounding.
Sources: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report-Utility," and Form EIA-860B, "Annual Electric Generator Report-Nonutility."

Table A27. Generating Capability Retirements By State, Company, Plant, and Sector, 2000
(Megawatts)

State/Company	Plant	Capability	Energy Source[a]
Utilities			
Alaska			
Ipnatchiaq Electric Co	Ipnatchiaq	0.4	Petroleum
North Slope Borough of	NSB Kaktovik Utility	1.4	Petroleum
Florida			
JEA	JD Kennedy (unit 10)	97.0	Petroleum
Illinois			
Rantoul Village of	Rantoul (unit 6)	1.0	Petroleum
Michigan			
Wolverine Pwr Supply Coop Inc	Advance	40.0	Coal
Utility Total		**139.8**	
Nonutilities			
Alabama			
Gulf States Steel Inc	Gulf States Steel Inc	11.5	Waste Heat
California			
Howden Windpark I	Howden Wind Parks Inc	24.8	Wind
Jackson Valley Energy Partner LP	Jackson Valley Energy LP	17.8	Wood
Koppers Industries Inc	Feather River Plant	7.2	Waste Heat
Marlow Power Steam Inc	O'Brien California Cogen Ltd	30.5	Natural Gas
Qualcomm Inc	Central Plant	2.0	Natural Gas
Strategic Hotel Capital Inc	Loews Santa Monica Beach Hotel	0.9	Natural Gas
Tomen Power	Viking Windfarm II	14.6	Wind
TPC Toyowest 1 Holdings Inc	Toyowest I	5.0	Wind
WindDriven LLC	WindDriven LLC	34.7	Wind
Florida			
Florida Coast Paper Co LLC	Florida Coast Paper Co LLC	66.8	Waste Heat
IMC Agrico Co	IMC Agrico Co Nichols Operations	12.8	Waste Heat
Mulberry Phosphates Inc	Mulberry Phosphates Inc	20.2	Other
Georgia			
Cobb County Water System	Robert L Sulton Jr Water Reclamation Facility	1.1	Natural Gas
Derst Baking Co	Derst Baking Co	1.7	Gas/Petroleum
Ford Motor Co	Ford Motor Co Atlanta Assembly Plant	8.1	Petroleum
Thomaston Mills Inc	Thomaston Mills Cogeneration Facility	5.3	Natural Gas
Hawaii			
AMFAC Sugar Kauai Western Operations	AMFAC Sugar Kauai Western Operations	9.0	Byproducts
Illinois			
New Heights Recovery & Pwr LLC	New Heights Recovery & Pwr LLC	22.6	Natural Gas
Royster Clark Nitrogen Inc	Royster Clark Nitrogen Inc	3.3	Natural Gas
Village of Robbins	Robbins Resource Recovery Facility	53.1	Municipal Waste
Indiana			
St Anthony Medical Center	St Anthony Medical Center	3.0	Petroleum
Maine			
Kimberly Clark Corp	Winslow Maine	22.2	Petroleum/Hydro
Massachusetts			
Massachusetts Paper Co	Massachusetts Paper Co	14.0	Natural Gas
Tewksbury Hospital	Tewksbury Hospital	2.9	Natural Gas/Petroleum
Michigan			
Fletcher Paper Co	Fletcher Paper Co	4.7	Natural Gas
Georgia Pacific Corp	Grand Rapids East	0.9	Natural Gas
Georgia Pacific Corp	Kalamazoo Paper Division	6.8	Coal
Mississippi			
Archer Daniels Midland Co	Clarksdale	2.6	Natural Gas
New Jersey			
Barry Callebart USA Inc	Barry Callebart USA Inc	1.1	Natural Gas
New Mexico			
R J Reynolds Tobacco Co	Whitaker Park Utility Plant	7.9	Coal
Union Oil Co of California	Molycorp Inc Questa Division	16.6	Petroleum

See footnotes at end of table.

Table A27. Generating Capability Retirements By State, Company, Energy Source, and Sector, 2000 (Continued)

State/Company	Plant	Capability	Energy Source[a]
New York			
Hydrocarbon Generation Inc	Hydrocarbon Generation Inc Allegheny	1.9	Petroleum
Lyons Falls Pulp Inc	Lyons Falls Hydroelectric Inc	7.4	Hydro
North Carolina			
Davidson Water Inc	Davidson Water Inc	6.0	Petroleum
FMC Corp Lithium Division	FMC Lithium Division	9.4	Coal
Pennsylvania			
Orion Power Holdings Inc	FR Philips Power Plant	310.0	Coal
Smurfit Stone Container Corp	Smurfit Stone Container Corp	4.0	Natural Gas
Rhode Island			
Ridgewood/Rhode Island Power PLP	The Worcester Co	3.9	Petroleum
Texas			
Amoco Chemical Co	Texas City Plant	35.3	Natural Gas
Western Gas Resources Inc	Edgewood Gas Plant	2.4	Natural Gas
Virginia			
Energy Conversions Inc	Energy Conversions Inc	3.6	Petroleum
Scott Wood Inc	Scott Wood Inc 2	1.2	Wood
Washington			
Quality Veneer & Lumber Inc	QVL Plywood	12.5	Wood
Washington Veneer Division	Washington Veneer Division	12.3	Wood
Nonutility Total		**845.6**	
Industry Total		**985.4**	

[a]**Gas** includes gas fueled fuel cell units and waste heat. **Petroleum** includes fuel oil Nos. 2, 4, 5, and 6, crude oil, kerosene, and petroleum coke.
Note: Capability is net summer. Data are preliminary.
Source: Energy Information Administration, Form EIA-860A, "Annual Electric Generator Report-Utility," and Form EIA-860B, "Annual Electric Generator Report-Nonutility."

Glossary

Acid Rain: Also called acid precipitation or acid deposition, acid rain is precipitation containing harmful amounts of nitric and sulfuric acids formed primarily by nitrogen oxides and sulfur oxides released into the atmosphere when fossil fuels are burned. It can be wet precipitation (rain, snow, or fog) or dry precipitation (absorbed gaseous and particulate matter, aerosol particles or dust). Acid rain has a pH below 5.6. Normal rain has a pH of about 5.6, which is slightly acidic. The term pH is a measure of acidity or alkalinity and ranges from 0 to 14. A pH measurement of 7 is regarded as neutral. Measurements below 7 indicate increased acidity, while those above indicate increased alkalinity.

Adjustment Bid: A bid that is used by the Independent System Operator to adjust supply or demand when congestion on the transmission system is anticipated.

Aggregator: Any marketer, broker, public agency, city, county, or special district that combines the loads of multiple end-use customers in facilitating the sale and purchase of electric energy, transmission, and other services on behalf of these customers.

Ampere: The unit of measurement of electrical current produced in a circuit by 1 volt acting through a resistance of 1 ohm.

Ancillary Services: Necessary services that must be provided in the generation and delivery of electricity. As defined by the Federal Energy Regulatory Commission, they include: coordination and scheduling services (load following, energy imbalance service, control of transmission congestion); automatic generation control (load frequency control and the economic dispatch of plants); contractual agreements (loss compensation service); and support of system integrity and security (reactive power, or spinning and operating reserves).

Anthracite: The highest rank of coal; used primarily for residential and commercial space heating. It is hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). *Note*: Since the 1980's, anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

Ash: Impurities consisting of silica, iron, alumina, and other noncombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect its burning characteristics. Ash content is measured as a percent by weight of coal on an "received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Available but not Needed Capability: Net capability of main generating units that are operable but not considered necessary to carry load, and cannot be connected to load within 30 minutes.

Average Revenue per Kilowatthour: The average revenue per kilowatthour of electricity sold by sector (residential, commercial, industrial, or other) and geographic area (State, Census division, and national), is calculated by dividing the total monthly revenue by the corresponding total monthly sales for each sector and geographic area.

Barrel: A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons.

Base Bill: A charge calculated through multiplication of the rate from the appropriate electric rate schedule by the level of consumption.

Baseload: The minimum amount of electric power delivered or required over a given period of time at a steady rate.

Baseload Capacity: The generating equipment normally operated to serve loads on an around-the-clock basis.

Baseload Plant: A plant, usually housing high-efficiency steam-electric units, which is normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially

constant rate and runs continuously. These units are operated to maximize system mechanical and thermal efficiency and minimize system operating costs.

Bbl: The abbreviation for barrel.

Bcf: The abbreviation for 1 billion cubic feet.

Bilateral Agreement: Written statement signed by a pair of communicating parties that specifies what data may be exchanged between them.

Bilateral Contract: A direct contract between the power producer and user or broker outside of a centralized power pool or power exchange.

Bituminous Coal: A dense coal, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less then 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Boiler: A device for generating steam for power, processing, or heating purposes or for producing hot water for heating purposes or hot water supply. Heat from an external combustion source is transmitted to a fluid contained within the tubes in the boiler shell. This fluid is delivered to an end-use at a desired pressure, temperature, and quality.

Broker: An entity that arranges the sale and purchase of electric energy, transmission, and other services between buyers and sellers, but does not take title to any of the power sold.

Btu (British Thermal Unit): A standard unit for measuring the quantity of heat energy equal to the quantity of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

Bundled Utility Service: All generation, transmission, and distribution services provided by one entity for a single charge. This would include ancillary services and retail services.

California Power Exchange: The California Power Exchange Corporation, a State chartered, non-profit corporation charged with providing Day-Ahead and Hour-Ahead markets for energy and ancillary services, if it chooses to self-provide, in accordance with the power exchange tariff. The power exchange is a Scheduling Coordinator and is independent of both the Independent System Operator and all other market participants.

Capability: The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time without exceeding approved limits of temperature and stress.

Capacity: The amount of electric power delivered or required for which a generator, turbine, transformer, transmission circuit, station, or system is rated by the manufacturer.

Capacity (Purchased): The amount of energy and capacity available for purchase from outside the system.

Capacity Charge: An element in a two-part pricing method used in capacity transactions (energy charge is the other element). The capacity charge, sometimes called Demand Charge, is assessed on the amount of capacity being purchased.

Census Divisions: The nine geographic divisions of the United States established by the Bureau of the Census, U.S. Department of Commerce, for the purpose of statistical analysis. The boundaries of Census divisions coincide with State boundaries. The Pacific Division is subdivided into the Pacific Contiguous and Pacific Noncontiguous areas.

Circuit: A conductor or a system of conductors through which electric current flows.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam), used for industrial, commercial, heating, or cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility

Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequential use of energy," and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC). (See the Code of Federal Regulations, Title 18, Part 292.)

Coincidental Demand: The sum of two or more demands that occur in the same time interval.

Coincidental Peak Load: The sum of two or more peakloads that occur in the same time interval.

Coke (Petroleum): A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

Combined Cycle: An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The exiting heat is routed to a conventional boiler or to a heat recovery steam generator for utilization by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit.

Combined Cycle Unit: An electric generating unit that consists of one or more combustion turbines and one or more boilers with a portion of the required energy input to the boiler(s) provided by the exhaust gas of the combustion turbine(s).

Combined Pumped-Storage Plant: A pumped-storage hydroelectric power plant that uses both pumped water and natural streamflow to produce electricity.

Commercial: The commercial sector is generally defined as nonmanufacturing business establishments, including hotels, motels, restaurants, wholesale businesses, retail stores, and health, social, and educational institutions. The utility may classify commercial service as all consumers whose demand or annual use exceeds some specified limit. The limit may be set by the utility based on the rate schedule of the utility.

Commercial Operation: Commercial operation begins when control of the loading of the generator is turned over to the system dispatcher.

Competitive Transition Charge: A non-bypassable charge levied on each customer of a distribution utility, including those who are served under contracts with nonutility suppliers, for recovery of a utility's transition costs.

Congestion: A condition that occurs when insufficient transfer capacity is available to implement all of the preferred schedules for electricity transmission simultaneously.

Consumption (Fuel): The amount of fuel used for gross generation, providing standby service, start-up and/or flame stabilization.

Contract Price: Price of fuels marketed on a contract basis covering a period of 1 or more years. Contract prices reflect market conditions at the time the contract was negotiated and therefore remain constant throughout the life of the contract or are adjusted through escalation clauses. Generally, contract prices do not fluctuate widely.

Contract Receipts: Purchases based on a negotiated agreement that generally covers a period of 1 or more years.

Cooperative Electric Utility: An electric utility legally established to be owned by and operated for the benefit of those using its service. The utility company will generate, transmit, and/or distribute supplies of electric energy to a specified area not being serviced by another utility. Such ventures are generally exempt from Federal income tax laws. Most electric cooperatives have been initially financed by the Rural Electrification Administration, U.S. Department of Agriculture.

Cost: The amount paid to acquire resources, such as plant and equipment, fuel, or labor services.

Cost-of-Service Regulation: Traditional electric utility regulation under which a utility is allowed to set rates based on the cost of providing service to customers and the right to earn a limited profit.

Current (Electric): A flow of electrons in an electrical conductor. The strength or rate of movement of the electricity is measured in amperes.

Customer Choice: Allowing all customers to purchase kilowatthours of electricity from any of a number of companies that compete with each other.

Day-Ahead Market: The forward market for energy and ancillary services to be supplied during the settlement period of a particular trading day that is conducted by the Independent System Operator, the power exchange, and other Scheduling Coordinators. This market closes with the Independent System Operator's acceptance of the final day-ahead schedule.

Day-Ahead Schedule: A schedule prepared by a Scheduling Coordinator or the Independent System Operator before the beginning of a trading day. This schedule indicates the levels of generation and demand scheduled for each settlement period that trading day.

Demand: The rate at which energy is delivered to loads and scheduling points by generation, transmission, and distribution facilities.

Demand (Electric): The rate at which electric energy is delivered to or by a system, part of a system, or piece of equipment, at a given instant or averaged over any designated period of time.

Demand Bid: A bid into the power exchange indicating a quantity of energy or an ancillary service that an eligible customer is willing to purchase and, if relevant, the maximum price that the customer is willing to pay.

Demand-Side Management: The planning, implementation, and monitoring of utility activities designed to encourage consumers to modify patterns of electricity usage, including the timing and level of electricity demand. It refers only to energy and load-shape modifying activities that are undertaken in response to utility-administered programs. It does not refer to energy and load-shape changes arising from the normal operation of the marketplace or from government-mandated energy-efficiency standards. Demand-Side Management (DSM) covers the complete range of load-shape objectives, including strategic conservation and load management, as well as strategic load growth.

Deregulation: The elimination of regulation from a previously regulated industry or sector of an industry.

Direct Access: The ability of a retail customer to purchase commodity electricity directly from the wholesale market rather than through a local distribution utility.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agriculture machinery), and electric power generation. Included are Fuel Oils No. 1, No. 2, and No. 4; and Diesel Fuels No. 1, No. 2, and No. 4.

Distribution: The delivery of electricity to retail customers (including homes, businesses, etc.).

Distribution System: The portion of an electric system that is dedicated to delivering electric energy to an end user.

Divestiture: The stripping off of one utility function from the others by selling (spinning-off) or in some other way changing the ownership of the assets related to that function. Stripping off is most commonly associated with spinning-off generation assets so they are no longer owned by the shareholders that own the transmission and distribution assets.

Electric Plant (Physical): A facility containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and / or fission energy into electric energy.

Electric Rate Schedule: A statement of the electric rate and the terms and conditions governing its application, including attendant contract terms and conditions that have been accepted by a regulatory body with appropriate oversite authority.

Electric Service Provider: An entity that provides electric service to a retail or end-use customer.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and / or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public and files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act (PURPA) are not considered electric utilities.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Charge: That portion of the charge for electric service based upon the electric energy (kWh) consumed or billed.

Energy Deliveries: Energy generated by one electric utility system and delivered to another system through one or more transmission lines.

Energy Efficiency: Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatthours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

Energy Receipts: Energy generated by one electric utility system and received by another system through one or more transmission lines.

Energy Source: The primary source that provides the power that is converted to electricity through chemical, mechanical, or other means. Energy sources include coal, petroleum and petroleum products, gas, water, uranium, wind, sunlight, geothermal, and other sources.

EPACT: The Energy Policy Act of 1992 addresses a wide variety of energy issues. The legislation creates a new class of power generators, exempt wholesale generators, that are exempt from the provisions of the Public Holding Company Act of 1935 and grants the authority to the Federal Energy Regulatory Commission to order and condition access by eligible parties to the interconnected transmission grid.

Exempt Wholesale Generator: Created under the 1992 Energy Policy Act, these wholesale generators are exempt from certain financial and legal restrictions stipulated in the Public Utilities Holding Company Act of 1935.

Facility: An existing or planned location or site at which prime movers, electric generators, and / or equipment for converting mechanical, chemical, and / or nuclear energy into electric energy are situated, or will be situated. A facility may contain more than one generator of either he same or different prime mover type. For a cogenerator, the facility includes the industrial or commercial process.

Federal Energy Regulatory Commission (FERC): A quasi-independent regulatory agency within the Department of Energy having jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification.

Federal Power Act: Enacted in 1920, and amended in 1935, the Act consists of three parts. The first part incorporated the Federal Water Power Act administered by the former Federal Power Commission, whose activities were confined almost entirely to licensing non-Federal hydroelectric projects. Parts II and III were added with the passage of the Public Utility Act. These parts extended the Act's jurisdiction to include regulating the interstate transmission of electrical energy and rates for its sale as wholesale in interstate commerce. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Federal Power Commission: The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission (FPC) was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. The FPC was abolished on September 20, 1977, when the Department of Energy was created. The functions of the FPC were divided between the Department of Energy and the Federal Energy Regulatory Commission.

FERC: The Federal Energy Regulatory Commission.

Firm Gas: Gas sold on a continuous and generally long-term contract.

Firm Power: Power or power-producing capacity intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.

Flue Gas Desulfurization Unit (Scrubber): Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Chemicals, such as lime, are used as the scrubbing media.

Flue Gas Particulate Collectors: Equipment used to remove fly ash from the combustion gases of a boiler plant before discharge to the atmosphere. Particulate

collectors include electrostatic precipitators, mechanical collectors (cyclones), fabric filters (baghouses), and wet scrubbers.

Fly Ash: Particulate matter from coal ash in which the particle diameter is less than 1 x 10^{-4} meter. This is removed from the flue gas using flue gas particulate collectors such as fabric filters and electrostatic precipitators.

Forced Outage: The shutdown of a generating unit, transmission line or other facility, for emergency reasons or a condition in which the generating equipment is unavailable for load due to unanticipated breakdown.

Fossil Fuel: Any naturally occurring organic fuel, such as petroleum, coal, and natural gas.

Fossil-Fuel Plant: A plant using coal, petroleum, or gas as its source of energy.

Fuel: Any substance that can be burned to produce heat; also, materials that can be fissioned in a chain reaction to produce heat.

Fuel Expenses: These costs include the fuel used in the production of steam or driving another prime mover for the generation of electricity. Other associated expenses include unloading the shipped fuel and all handling of the fuel up to the point where it enters the first bunker, hopper, bucket, tank, or holder in the boiler-house structure.

Full-Forced Outage: The net capability of main generating units that is unavailable for load for emergency reasons.

Futures Market: Arrangement through a contract for the delivery of a commodity at a future time and at a price specified at the time of purchase. The price is based on an auction or market basis. This is a standardized, exchange-traded, and government regulated hedging mechanism.

Gas: A fuel burned under boilers and by internal combustion engines for electric generation. These include natural, manufactured and waste gas.

Gas Turbine Plant: A plant in which the prime mover is a gas turbine. A gas turbine consists typically of an axial-flow air compressor, one or more combustion chambers, where liquid or gaseous fuel is burned and the hot gases are passed to the turbine and where the hot gases expand to drive the generator and are then used to run the compressor.

Generating Unit: Any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.

Generation (Electricity): The process of producing electric energy by transforming other forms of energy; also, the amount of electric energy produced, expressed in watthours (Wh).

Generation Company: A regulated or non-regulated entity (depending upon the industry structure) that operates and maintains existing generating plants. The generation company may own the generation plants or interact with the short-term market on behalf of plant owners. In the context of restructuring the market for electricity, the generation company is sometimes used to describe a specialized "marketer" for the generating plants formerly owned by a vertically-integrated utility.

Gross Generation: The total amount of electric energy produced by the generating units at a generating station or stations, measured at the generator terminals.

Net Generation: Gross generation less the electric energy consumed at the generating station for station use.

Generator: A machine that converts mechanical energy into electrical energy.

Generator Nameplate Capacity: The full-load continuous rating of a generator, prime mover, or other electric power production equipment under specific conditions as designated by the manufacturer. Installed generator nameplate rating is usually indicated on a nameplate physically attached to the generator.

Geothermal Plant: A plant in which the prime mover is a steam turbine. The turbine is driven either by steam produced from hot water or by natural steam that derives its energy from heat found in rocks or fluids at various depths beneath the surface of the earth. The energy is extracted by drilling and / or pumping.

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

Greenhouse Effect: The increasing mean global surface temperature of the earth caused by gases in the atmosphere (including carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbon). The greenhouse effect allows solar radiation to penetrate but absorbs the infrared radiation returning to space.

Grid: The layout of an electrical distribution system.

Gross Generation: The total amount of electric energy produced by a generating facility, as measured at the generator terminals.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam plants is heavy oil.

Hedging Contracts: Contracts which establish future prices and quantities of electricity independent of the short-term market. Derivatives may be used for this purpose.

Hydroelectric Plant: A plant in which the turbine generators are driven by falling water.

Independent Power Producers: Entities that are also considered nonutility power producers in the United States. These facilities are wholesale electricity producers that operate within the franchised service territories of host utilities and are usually authorized to sell at market-based rates. Unlike traditional electric utilities, Independent Power Producers do not possess transmission facilities or sell electricity in the retail market.

Independent System Operators: An independent, Federally-regulated entity that coordinates regional transmission in a non-discriminatory manner and ensures the safety and reliability of the electric system.

Industrial: The industrial sector is generally defined as manufacturing, construction, mining agriculture, fishing and forestry establishments Standard Industrial Classification (SIC) codes 01-39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.

Intermediate Load (Electric System): The range from base load to a point between base load and peak. This point may be the midpoint, a percent of the peakload, or the load over a specified time period.

Internal Combustion Plant: A plant in which the prime mover is an internal combustion engine. An internal combustion engine has one or more cylinders in which the process of combustion takes place, converting energy released from the rapid burning of a fuel-air mixture into mechanical energy. Diesel or gas-fired engines are the principal types used in electric plants. The plant is usually operated during periods of high demand for electricity.

Interruptible Gas: Gas sold to customers with a provision that permits curtailment or cessation of service at the discretion of the distributing company under certain circumstances, as specified in the service contract.

Interruptible Load: Refers to program activities that, in accordance with contractual arrangements, can interrupt consumer load at times of seasonal peak load by direct control of the utility system operator or by action of the consumer at the direct request of the system operator. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load. Interruptible Load as defined here excludes Direct Load Control and Other Load Management. (Interruptible Load, as reported here, is synonymous with Interruptible Demand reported to the North American Electric Reliability Council on the voluntary Form EIA-411, "Coordinated Regional Bulk Power Supply Program Report," with the exception that annual peakload effects are reported on the Form EIA-861 and seasonal (i.e., summer and winter) peakload effects are reported on the EIA-411).

Investor-Owned Utility: A class of utility whose stock is publicly traded and which is organized as a tax-paying business, usually financed by the sale of securities in the capital market. It is regulated and authorized to achieve an allowed rate of return.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Lignite: The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Load (Electric): The amount of electric power delivered or required at any specific point or points on a system. The requirement originates at the energy-consuming equipment of the consumers.

Market-Based Pricing: Electric service prices determined in an open market system of supply and demand under which the price is set solely by agreement as to what a buyer will pay and a seller will accept. Such prices could recover less or more than full costs, depending upon what the buyer and seller see as their relevant opportunities and risks.

Market Clearing Price: The price at which supply equals demand for the Day Ahead and/or Hour Ahead Markets.

Maximum Demand: The greatest of all demands of the load that has occurred within a specified period of time.

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts.

Megawatthour (MWh): One million watthours.

MMcf: One million cubic feet.

Monopoly: One seller of electricity with control over market sales.

Natural Gas: A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in porous geological formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

Net Capability: The maximum load-carrying ability of the equipment, exclusive of station use, under specified conditions for a given time interval, independent of the characteristics of the load. (Capability is determined by design characteristics, physical conditions, adequacy of prime mover, energy supply, and operating limitations such as cooling and circulating water supply and temperature, headwater and tailwater elevations, and electrical use.)

Net Generation: Gross generation minus plant use from all electric utility owned plants. The energy required for pumping at a pumped-storage plant is regarded as plant use and must be deducted from the gross generation.

Net Summer Capability: The steady hourly output, which generating equipment is expected to supply to system load exclusive of auxiliary power, as demonstrated by tests at the time of summer peak demand.

Net Winter Capability: The steady hourly output which generating equipment is expected to supply to system load exclusive of auxiliary power, as demonstrated by tests at the time of winter peak demand.

Noncoincidental Peak Load: The sum of two or more peakloads on individual systems that do not occur in the same time interval. Meaningful only when considering loads within a limited period of time, such as a day, week, month, a heating or cooling season, and usually for not more than 1 year.

Non-Firm Power: Power or power-producing capacity supplied or available under a commitment having limited or no assured availability.

Nonutility Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns electric generating capacity and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated franchised service area, and which do not file forms listed in the Code of Federal Regulations, Title 18, Part 141.

Nuclear Fuel: Fissionable materials that have been enriched to such a composition that, when placed in a nuclear reactor, will support a self-sustaining fission chain reaction, producing heat in a controlled manner for process use.

Nuclear Power Plant: A facility in which heat produced in a reactor by the fissioning of nuclear fuel is used to drive a steam turbine.

Off-Peak Gas: Gas that is to be delivered and taken on demand when demand is not at its peak.

Ohm: The unit of measurement of electrical resistance. The resistance of a circuit in which a potential difference of 1 volt produces a current of 1 ampere.

Open Access: A regulatory mandate to allow others to use a utility's transmission and distribution facilities to move bulk power from one point to another on a nondiscriminatory basis for a cost-based fee.

Operable Nuclear Unit: A nuclear unit is "operable" after it completes low-power testing and is granted

authorization to operate at full power. This occurs when it receives its full power amendment to its operating license from the Nuclear Regulatory Commission.

Outage: The period during which a generating unit, transmission line, or other facility is out of service.

Peak Demand: The maximum load during a specified period of time.

Peak Load Plant: A plant usually housing old, low-efficiency steam units; gas turbines; diesels; or pumped-storage hydroelectric equipment normally used during the peak-load periods.

Peaking Capacity: Capacity of generating equipment normally reserved for operation during the hours of highest daily, weekly, or seasonal loads. Some generating equipment may be operated at certain times as peaking capacity and at other times to serve loads on an around-the-clock basis.

Percent Difference: The relative change in a quantity over a specified time period. It is calculated as follows: the current value has the previous value subtracted from it; this new number is divided by the absolute value of the previous value; then this new number is multiplied by 100.

Petroleum: A mixture of hydrocarbons existing in the liquid state found in natural underground reservoirs, often associated with gas. Petroleum includes fuel oil No. 2, No. 4, No. 5, No. 6; topped crude; Kerosene; and jet fuel.

Petroleum Coke: See Coke (Petroleum).

Petroleum (Crude Oil): A naturally occurring, oily, flammable liquid composed principally of hydrocarbons. Crude oil is occasionally found in springs or pools but usually is drilled from wells beneath the earth's surface.

Planned Generator: A proposal by a company to install electric generating equipment at an existing or planned facility or site. The proposal is based on the owner having obtained (1) all environmental and regulatory approvals, (2) a signed contract for the electric energy, or (3) financial closure for the facility.

Plant: A facility at which are located prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or nuclear energy into electric energy. A plant may contain more than one type of prime mover. Electric utility plants exclude facilities that satisfy the definition of a qualifying facility under the Public Utility Regulatory Policies Act of 1978.

Plant Use: The electric energy used in the operation of a plant. Included in this definition is the energy required for pumping at pumped-storage plants.

Plant-Use Electricity: The electric energy used in the operation of a plant. This energy total is subtracted from the gross energy production of the plant; for reporting purposes the plant energy production is then reported as a net figure. The energy required for pumping at pumped-storage plants is, by definition, subtracted, and the energy production for these plants is then reported as a net figure.

Power: The rate at which energy is transferred. Electrical energy is usually measured in watts. Also used for a measurement of capacity.

Power Exchange: The entity that will establish a competitive spot market for electric power through day- and/or hour-ahead auction of generation and demand bids.

Power Exchange Generation: Generation being scheduled by the power exchange.

Power Exchange Load: Load that has been scheduled by the power exchange and which is received through the use of transmission or distribution facilities owned by participating transmission owners.

Power Marketers: Business entities engaged in buying, selling, and marketing electricity. Power marketers do not usually own generating or transmission facilities. Power marketers, as opposed to brokers, take ownership of the electricity and are involved in interstate trade. These entities file with the Federal Energy Regulatory Commission for status as a power marketer.

Power Pool: An association of two or more interconnected electric systems having an agreement to coordinate operations and planning for improved reliability and efficiencies.

Price: The amount of money or consideration-in-kind for which a service is bought, sold, or offered for sale.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly (e.g., photovoltaic solar and fuel cell(s)).

Profit: The income remaining after all business expenses are paid.

Public Authority Service to Public Authorities: Public authority service includes electricity supplied and services rendered to municipalities or divisions or agencies of State or Federal governments, under special contracts or agreements or service classifications applicable only to public authorities.

Public Street and Highway Lighting: Public street and highway lighting includes electricity supplied and services rendered for the purposes of lighting streets, highways, parks, and other public places; or for traffic or other signal system service, for municipalities, or other divisions or agencies of State or Federal governments.

Pumped-Storage Hydroelectric Plant: A plant that usually generates electric energy during peak-load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Purchased Power Adjustment: A clause in a rate schedule that provides for adjustments to the bill when energy from another electric system is acquired and it varies from a specified unit base amount.

Pure Pumped-Storage Hydroelectric Plant: A plant that produces power only from water that has previously been pumped to an upper reservoir.

PURPA: The Public Utility Regulatory Policies Act of 1978, passed by the U.S. Congress. This statute requires States to implement utility conservation programs and create special markets for co-generators and small producers who meet certain standards, including the requirement that States set the prices and quantities of power the utilities must buy from such facilities.

Qualifying Facility (QF): A cogeneration or small power production facility that meets certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC) pursuant to the Public Utility Regulatory Policies Act (PURPA).

Railroad and Railway Services: Railroad and railway services include electricity supplied and services rendered to railroads and interurban and street railways, for general railroad use, including the propulsion of cars or locomotives, where such electricity is supplied under separate and distinct rate schedules.

Rate Base: The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash, working capital, materials and supplies, and deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.

Ratemaking Authority: A utility commission's legal authority to fix, modify, approve, or disapprove rates, as determined by the powers given the commission by a State or Federal legislature.

Receipts: Purchases of fuel.

Regional Transmission Group: A utility industry concept that the Federal Energy Regulatory Commission embraced for the certification of voluntary groups that would be responsible for transmission planning and use on a regional basis.

Regulation: The governmental function of controlling or directing economic entities through the process of rulemaking and adjudication.

Reliability: Electric system reliability has two components--adequacy and security. Adequacy is the ability of the electric system to supply to aggregate electrical demand and energy requirements of the customers at all times, taking into account scheduled and unscheduled outages of system facilities. Security is the ability of the electric system to withstand sudden disturbances, such as electric short circuits or unanticipated loss of system facilities. The degree of reliability may be measured by the frequency, duration, and magnitude of adverse effects on consumer services.

Renewable Resources: Naturally, but flow-limited resources that can be replenished. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Some (such as geothermal and biomass) may be stock-limited in that stocks are depleted by use, but on a time scale of decades, or perhaps centuries, they can probably be replenished. Renewable energy resources include: biomass, hydro, geothermal, solar and wind. In the future, they could also include the use of ocean thermal, wave, and tidal action technologies. Utility renewable resource applications include bulk electricity generation,

on-site electricity generation, distributed electricity generation, non-grid-connected generation, and demand-reduction (energy efficiency) technologies.

Reregulation: The design and implementation of regulatory practices to be applied to the remaining regulated entities after restructuring of the vertically-integrated electric utility. The remaining regulated entities would be those that continue to exhibit characteristics of a natural monopoly, where imperfections in the market prevent the realization of more competitive results, and where, in light of other policy considerations, competitive results are unsatisfactory in one or more respects. Regulation could employ the same or different regulatory practices as those used before restructuring.

Reserve Margin (Operating): The amount of unused available capability of an electric power system at peakload for a utility system as a percentage of total capability.

Residential: The residential sector is defined as private household establishments which consume energy primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking and clothes drying. The classification of an individual consumer's account, where the use is both residential and commercial, is based on principal use. For the residential class, do not duplicate consumer accounts due to multiple metering for special services (water, heating, etc.). Apartment houses are also included.

Residual Fuel Oil: The topped crude of refinery operation, includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C; Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77); and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include imported crude oil burned as fuel.

Restricted-Universe Census: This is the complete enumeration of data from a specifically defined subset of entities including, for example, those that exceed a given level of sales or generator nameplate capacity.

Restructuring: The process of replacing a monopoly system of electric utilities with competing sellers, allowing individual retail customers to choose their electricity supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of the vertically-integrated electric utility.

Retail: Sales covering electrical energy supplied for residential, commercial, and industrial end-use purposes. Other small classes, such as agriculture and street lighting, also are included in this category.

Retail Competition: The concept under which multiple sellers of electric power can sell directly to end-use customers and the process and responsibilities necessary to make it occur.

Retail Market: A market in which electricity and other energy services are sold directly to the end-use customer.

Retail Wheeling: The process of moving electric power from a point of generation across one or more utility-owned transmission and distribution systems to a retail customer.

Revenue: The total amount of money received by a firm from sales of its products and/or services, gains from the sales or exchange of assets, interest and dividends earned on investments, and other increases in the owner's equity except those arising from capital adjustments.

Running and Quick-Start Capability: The net capability of generating units that carry load or have quick-start capability. In general, quick-start capability refers to generating units that can be available for load within a 30-minute period.

Sales: The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. Other sales include public street and highway lighting, other sales to public authorities and railways, and interdepartmental sales.

Sales for Resale: Energy supplied to other electric utilities, cooperatives, municipalities, and Federal and State electric agencies for resale to ultimate consumers.

Scheduling Coordinators: Entities certified by the Federal Energy Regulatory Commission that act as a go-between with the Independent System Operator on behalf of generators, supply aggregators (wholesale marketers), retailers, and customers to schedule the distribution of electricity.

Scheduled Outage: The shutdown of a generating unit, transmission line, or other facility, for inspection or maintenance, in accordance with an advance schedule.

Securitization: A proposal for issuing bonds that would be used to buy down existing power contracts or other obligations. The bonds would be repaid by designating a portion of future customer bill payments. Customer bills would be lowered, since the cost of bond payments would be less than the power contract costs that would be avoided.

Securitize: The aggregation of contracts for the purchase of the power output from various energy projects into one pool which then offers shares for sale in the investment market. This strategy diversifies project risks from what they would be if each project were financed individually, thereby reducing the cost of financing. Fannie Mae performs such a function in the home mortgage market.

Short Ton: A unit of weight equal to 2,000 pounds.

Small Power Producer (SPP): Under the Public Utility Regulatory Policies Act (PURPA), a small power production facility (or small power producer) generates electricity using waste, renewable (water, wind and solar), or geothermal energy as a primary energy source. Fossil fuels can be used, but renewable resource must provide at least 75 percent of the total energy input. (See Code of Federal Regulations, Title 18, Part 292.)

Spinning Reserve: That reserve generating capacity running at a zero load and synchronized to the electric system.

Spot Purchases: A single shipment of fuel or volumes of fuel, purchased for delivery within 1 year. Spot purchases are often made by a user to fulfill a certain portion of energy requirements, to meet unanticipated energy needs, or to take advantage of low-fuel prices.

Stability: The property of a system or element by virtue of which its output will ultimately attain a steady state. The amount of power that can be transferred from one machine to another following a disturbance. The stability of a power system is its ability to develop restoring forces equal to or greater than the disturbing forces so as to maintain a state of equilibrium.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget, which categorizes business into groups with similar economic activities.

Standby Facility: A facility that supports a utility system and is generally running under no-load. It is available to replace or supplement a facility normally in service.

Standby Service: Support service that is available, as needed, to supplement a consumer, a utility system, or to another utility if a schedule or an agreement authorizes the transaction. The service is not regularly used.

Steam-Electric Plant (Conventional): A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Stocks: A supply of fuel accumulated for future use. This includes coal and fuel oil stocks at the plant site, in coal cars, tanks, or barges at the plant site, or at separate storage sites.

Stranded Benefits: Benefits associated with regulated retail electric service which may be at risk under open market retail competition. Examples are conservation programs, fuel diversity, reliability of supply, and tax revenues based on utility revenues.

Stranded Costs: Prudent costs incurred by a utility which may not be recoverable under market-based retail competition. Examples are undepreciated generating facilities, deferred costs, and long-term contract costs.

Subbituminous Coal: A coal whose properties range from those of lignite to those of bituminous coal and are used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly at the lower end of the range, to bright, jet black, hard, and relatively strong at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Substation: Facility equipment that switches, changes, or regulates electric voltage.

Sulfur: One of the elements present in varying quantities in coal which contributes to environmental degradation when coal is burned. In terms of sulfur content by weight, coal is generally classified as low (less than or equal to 1 percent), medium (greater than 1 percent and less than or equal to 3 percent), and high (greater than 3 percent). Sulfur content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Switching Station: Facility equipment used to tie together two or more electric circuits through switches. The switches are selectively arranged to permit a circuit to be disconnected, or to change the electric connection between the circuits.

System (Electric): Physically connected generation, transmission, and distribution facilities operated as an integrated unit under one central management, or operating supervision.

Transformer: An electrical device for changing the voltage of alternating current.

Transmission: The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to consumers, or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.

Transmission System (Electric): An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers, or is delivered to other electric systems.

Transmitting Utility: This is a regulated entity which owns, and may construct and maintain, wires used to transmit wholesale power. It may or may not handle the power dispatch and coordination functions. It is regulated to provide non-discriminatory connections, comparable service, and cost recovery. According to EPACT, this includes any electric utility, qualifying cogeneration facility, qualifying small power production facility, or Federal power marketing agency which owns or operates electric power transmission facilities which are used for the sale of electric energy at wholesale.

Turbine: A machine for generating rotary mechanical power from the energy of a stream of fluid (such as water, steam, or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction, or a mixture of the two.

Unbundling: The separating of the total process of electric power service from generation to metering into its component parts for the purpose of separate pricing or service offerings.

Uniform System of Accounts: Prescribed financial rules and regulations established by the Federal Energy Regulatory Commission for utilities subject to its jurisdiction under the authority granted by the Federal Power Act.

Useful Thermal Output: The thermal energy made available for use in any industrial or commercial process, or used in any heating or cooling application, i.e., total thermal energy made available for processes and applications other than electrical generation.

Utility Distribution Companies: The entities that will continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access. Regardless of where a consumer chooses to purchase power, the customer's current utility, also known as the utility distribution company, will deliver the power to the consumer's home, business, or farm.

Vertical Integration: An arrangement whereby the same company owns all the different aspects of making, selling, and delivering a product or service. In the electric industry, it refers to the historically common arrangement whereby a utility would own its own generating plants, transmission system, and distribution lines to provide all aspects of electric service.

Voltage Reduction: Any intentional reduction of system voltage by 3 percent or greater for reasons of maintaining the continuity of service of the bulk electric power supply system.

Volumetric Wires Charge: A type of charge for using the transmission and/or distribution system that is based on the volume of electricity that is transmitted.

Watt: The electrical unit of power. The rate of energy transfer equivalent to 1 ampere flowing under a pressure of 1 volt at unity power factor.

Watthour (Wh): An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.

Wheeling Service: The movement of electricity from one system to another over transmission facilities of intervening systems. Wheeling service contracts can be established between two or more systems.

Wholesale Competition: A system whereby a distributor of power would have the option to buy its power from a variety of power producers, and the

power producers would be able to compete to sell their power to a variety of distribution companies.

Wholesale Sales: Energy supplied to other electric utilities, cooperatives, municipals, and Federal and State electric agencies for resale to ultimate consumers.

Wholesale Power Market: The purchase and sale of electricity from generators to resellers (who sell to retail customers), along with the ancillary services needed to maintain reliability and power quality at the transmission level.

Wholesale Transmission Services: The transmission of electric energy sold, or to be sold, at wholesale in interstate commerce (from EPACT).

Wires Charge: A broad term which refers to charges levied on power suppliers or their customers for the use of the transmission or distribution wires.