

## Energy and Utilities

This section presents statistics on fuel resources, energy production and consumption, electric energy, hydroelectric power, nuclear power, solar energy, wood energy, and the electric and gas utility industries. The principal sources are the U.S. Department of Energy's Energy Information Administration (EIA), the Edison Electric Institute, Washington, DC, and the American Gas Association, Arlington, VA. The Department of Energy was created in October 1977 and assumed and centralized the responsibilities of all or part of several agencies including the Federal Power Commission (FPC), the U.S. Bureau of Mines, the Federal Energy Administration, and the U.S. Energy Research and Development Administration. For additional data on transportation, see Section 23; on fuels, see Section 18; and on energy-related housing characteristics, see Section 20.

The EIA, in its *Annual Energy Review*, provides statistics and trend data on energy supply, demand, and prices. Information is included on petroleum and natural gas, coal, electricity, hydroelectric power, nuclear power, solar, wood, and geothermal energy. Among its annual reports are *Annual Energy Review*, *Electric Power Annual*, *Natural Gas Annual*, *Petroleum Supply Annual*, *State Energy Data Report*, *State Energy Price and Expenditure Report*, *Performance Profiles of Major Energy Producers*, *Annual Energy Outlook*, and *International Energy Annual*. These various publications contain state, national, and international data on production of electricity, net summer capability of generating plants, fuels used in energy production, energy sales and consumption, and hydroelectric power. The EIA also issues the *Monthly Energy Review*, which presents current supply, disposition, and price data and monthly publications on petroleum, coal, natural

gas, and electric power. Data on residential energy consumption, expenditures, and conservation activities are available from EIA's Residential Energy Consumption Survey and are published every 4 years.

The Edison Electric Institute's monthly bulletin and annual *Statistical Year Book of the Electric Utility Industry for the Year* contain data on the distribution of electric energy by public utilities; information on the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment is presented in the annual *Year-End Summary of the Electric Power Situation in the United States*. The American Gas Association, in its monthly and quarterly bulletins and its yearbook, *Gas Facts*, presents data on gas utilities and financial and operating statistics.

**Btu conversion factors**—Various energy sources are converted from original units to the thermal equivalent using British thermal units (Btu). A Btu is the amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (F) at or near 39.2 degrees F. Factors are calculated annually from the latest final annual data available; some are revised as a result. The following list provides conversion factors used in 2002 for production and consumption, in that order, for various fuels: Petroleum, 5,800 and 5,324 mil. Btu per barrel; total coal, 20,620 and 20,814 mil. Btu per short ton; and natural gas (dry), 1,027 Btu per cubic foot for both. The factors for the production of nuclear power and geothermal power were 10,442 and 21,017 Btu per kilowatt-hour, respectively. The fossil fuel steam-electric power plant generation factor of 10,119 Btu per kilowatt-hour was used for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

In the past few years, EIA has restructured the industry categories it once used to gather and report electricity statistics. The electric power industry, previously divided into electric utilities and non-utilities, now consists of electricity only and combined-heat-and-power (CHP) plants that sell electricity, or electric heat, to the public.

Electricity-only plants are composed of traditional electric utilities, and nontraditional participants, including energy service providers, power marketers, independent power producers (IPPs), and the portion of combined-heat-and-power plants (CHPs) that produce only electricity.

A utility is defined as a corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Electric utilities include investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. In total, there are more than 3,100 electric utilities in the United States.

An independent power producer is an entity defined as a corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities whose primary business is to produce electricity for use by the public. They are not generally aligned with distribution facilities and are not considered electric utilities.

Combined-heat-and-power producers are plants designed to produce both heat and electricity from a single heat source. These types of electricity producers can be independent power producers or industrial or commercial establishments. As some independent power producers are combined-heat-and-power producers, their information is included in the data for the combined-heat-and-power sector. There are approximately 2,800 unregulated independent power producers and combined-heat-and-power plants in the United States. For more information, please refer to the Electric Power Annual 2002 website located at <<http://www.eia.doe.gov/cneaf/electricity/epa/review.html>>.

## No. 882. Utilities—Establishments, Revenue, Payroll, and Employees by Kind of Business (NAICS Basis): 1997 and 2002

[41,713 represents \$411,713,000,000. See headnote, Table 728 and Appendix III]

Kind of business	NAICS code <sup>1</sup>	Revenue			Annual payroll		Paid employee for pay period including March 12 (number)
		Establishments (number)	Total (mil. dol.)	Per paid employee (dol.)	Total (mil. dol.)	Per paid employee (dol.)	
<b>Utilities</b> . . . . .	<b>22</b>	<b>15,513</b>	<b>411,713</b>	<b>585,899</b>	<b>36,595</b>	<b>52,077</b>	<b>702,703</b>
Electric power generation, transmission, & distribution . . . . .	2211	7,935	269,095	476,676	30,440	53,921	564,525
Electric power generation . . . . .	22111	1,745	73,375	493,492	8,369	56,289	148,686
Fossil fuel electric power generation . . . . .	221112	1,009	48,324	515,374	5,049	53,843	93,765
Nuclear electric power generation . . . . .	221113	67	13,967	406,231	2,202	64,045	34,381
Other electric power generation . . . . .	221119	316	8,011	608,723	725	55,069	13,160
Electric power transmission, control & distribution . . . . .	22112	6,190	195,720	470,663	22,070	53,074	415,839
Electric bulk power transmission & control . . . . .	221121	120	956	395,361	116	47,852	2,418
Electric power distribution . . . . .	221122	6,070	194,764	471,103	21,955	53,105	413,421
Other combination utilities . . . . .	2211223	30	428	630,811	52	76,771	678
Natural gas distribution . . . . .	2212	2,747	136,995	1,331,629	5,110	49,666	102,878
Natural gas transmission & distribution . . . . .	2212101	713	18,267	629,034	1,534	52,838	29,039
Natural gas distribution . . . . .	2212102	1,682	87,105	1,387,135	2,955	47,059	62,795
Mixed, manu., or LP gas pro &/or dist. . . . .	2212103	86	(D)	(D)	(D)	(D)	( <sup>c</sup> )
Electric & other serv. combined (natural gas distribution) . . . . .	2212104	145	28,110	4,193,063	413	61,565	6,704
Gas & other serv. combined (natural gas distribution) . . . . .	2212105	119	2,853	915,151	149	47,705	3,117
Water, sewage, & other systems . . . . .	2213	4,831	5,623	159,284	1,045	29,614	35,300
Water supply & irrigation systems . . . . .	22131	4,052	4,454	159,447	825	29,550	27,933
Sewage treatment facilities . . . . .	22132	696	596	106,399	139	24,816	5,600
Steam & air-conditioning supply . . . . .	22133	83	573	324,314	81	45,838	1,767
<b>Utilities</b> . . . . .	<b>22</b>	<b>18,594</b>	<b>478,268</b>	<b>647,524</b>	<b>45,111</b>	<b>61,076</b>	<b>738,611</b>

D Withheld to avoid disclosing data of individual companies; data are included in higher level totals. <sup>1</sup> North American Industry Classification System, 1997; see text, Section 15. <sup>2</sup> 1,000 to 2,499 employees.

Source: U.S. Census Bureau, 1997 *Economic Census*, Series EC97T22A-US, issued December 1999; 2002 *Economic Census Advance Report*, published 29 March 2004; <<http://www.census.gov/econ/census02/>>.

## No. 883. Private Utilities—Employees, Annual Payroll, and Establishments by Industry: 2001

[41,942 represents \$41,942,000,000. Excludes government employees, railroad employees, self-employed persons, etc. See "General Explanation" in source for definitions and statement on reliability of data. An *establishment* is a single physical location where business is conducted or where services or industrial operations are performed. See Appendix III]

Year and industry	NAICS code <sup>1</sup>	Number of employ-ees <sup>2</sup>	Annual payroll (mil. dol.)	Average payroll per em- ployee (dol.)	Establishment by employment size-class				
					Total	Under 20 em- ployees	20 to 99 em- ployees	100 to 499 em- ployees	500 and over em- ployees
<b>Utilities, total</b> . . . . .	<b>22</b>	<b>654,484</b>	<b>41,942</b>	<b>64,085</b>	<b>17,702</b>	<b>12,505</b>	<b>3,837</b>	<b>1,168</b>	<b>192</b>
Electric power generation, transmission and distribution . . . . .	2211	515,988	34,338	66,548	9,207	5,202	2,902	933	170
Electric power generation . . . . .	22111	139,254	10,188	73,162	2,208	1,305	582	263	58
Hydroelectric power generation . . . . .	221111	11,650	793	68,028	462	363	71	25	3
Fossil fuel electric power generation . . . . .	221112	80,674	5,683	70,445	1,301	664	412	211	14
Nuclear electric power generation . . . . .	221113	33,064	2,791	84,424	72	18	9	11	34
Other electric power generation . . . . .	221119	13,866	921	66,426	373	260	90	16	7
Electric pwr transmsn, control & distribution . . . . .	22112	376,734	24,150	64,103	6,999	3,897	2,320	670	112
Electric bulk power transmission & control . . . . .	221121	6,233	366	58,683	161	103	45	12	1
Electric power distribution . . . . .	221122	370,501	23,784	64,194	6,838	3,794	2,275	658	111
Natural gas distribution . . . . .	2212	95,348	6,001	62,939	2,831	2,001	616	194	20
Water, sewage & other systems . . . . .	2213	43,148	1,603	37,162	5,664	5,302	319	41	2
Water supply & irrigation systems . . . . .	22131	35,206	1,325	37,634	4,832	4,562	234	34	2
Sewage treatment facilities . . . . .	22132	6,312	198	31,340	748	688	54	6	-
Steam & air-conditioning supply . . . . .	22133	1,630	81	49,506	84	52	31	1	-

- Represents zero. <sup>1</sup> North American Industry Classification System, 1997; see text, section 15. <sup>2</sup> Covers full-and part-time employees who are on the payroll in the pay period including March 12.

Source: U.S. Census Bureau, *County Business Patterns*, annual. See also <<http://www.census.gov/epcd/cbp/view/us01.txt>> (issued April 2003).

## No. 884. Energy Supply and Disposition by Type of Fuel: 1960 to 2002

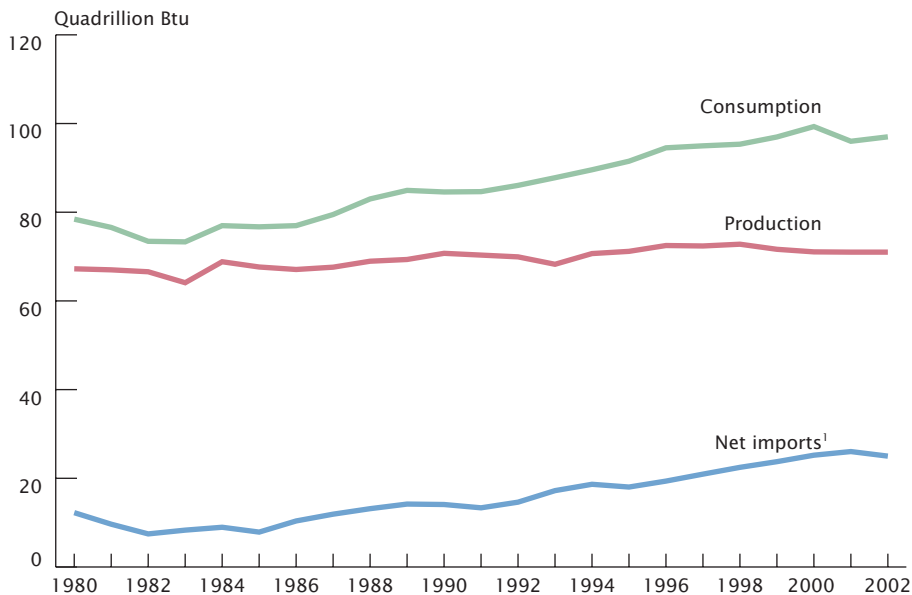
[In quadrillion British thermal units (Btu). (42.80 represents 42,800,000,000,000 Btu). For Btu conversion factors, see source and text, this section]

Year	Production										Consumption					
	Total <sup>1</sup>	Crude oil <sup>2</sup>	Natural gas	Coal	Nuclear power <sup>3</sup>	Renewable energy <sup>4</sup>				Net imports, total <sup>6</sup>	Total <sup>1</sup>	Petroleum <sup>7</sup>	Natural gas <sup>8</sup>	Coal	Nuclear power	Renewable energy <sup>4</sup> , total
						Total <sup>1</sup>	Hydro-electric power	Biofuel <sup>5</sup>	Solar energy							
1960	42.80	14.94	12.66	10.82	(Z)	2.93	1.61	1.32	(NA)	2.71	45.09	19.92	12.39	9.84	(Z)	2.93
1970	63.50	20.40	21.67	14.61	0.24	4.08	2.63	1.43	(NA)	5.71	67.84	29.52	21.80	12.27	0.24	4.08
1972	63.92	20.04	22.21	14.09	0.58	4.40	2.86	1.50	(NA)	9.27	72.70	32.95	22.70	12.08	0.58	4.40
1973	63.59	19.49	22.19	13.99	0.91	4.43	2.86	1.53	(NA)	12.58	75.71	34.84	22.51	12.97	0.91	4.43
1974	62.37	18.58	21.21	14.07	1.27	4.77	3.18	1.54	(NA)	12.10	73.99	33.46	21.73	12.66	1.27	4.77
1975	61.36	17.73	19.64	14.99	1.90	4.72	3.16	1.50	(NA)	11.71	72.00	32.73	19.95	12.66	1.90	4.72
1976	61.60	17.26	19.48	15.65	2.11	4.77	2.98	1.71	(NA)	14.59	76.01	35.18	20.35	13.58	2.11	4.77
1977	62.05	17.45	19.57	15.76	2.70	4.25	2.33	1.84	(NA)	17.90	78.00	37.12	19.93	13.92	2.70	4.25
1978	63.14	18.43	19.49	14.91	3.02	5.04	2.94	2.04	(NA)	17.19	79.99	37.97	20.00	13.77	3.02	5.04
1979	65.95	18.10	20.08	17.54	2.78	5.17	2.93	2.15	(NA)	16.60	80.90	37.12	20.67	15.04	2.78	5.17
1980	67.24	18.25	19.91	18.60	2.74	5.49	2.90	2.49	(NA)	12.10	78.29	34.20	20.39	15.42	2.74	5.49
1981	67.01	18.15	19.70	18.38	3.01	5.47	2.76	2.59	(NA)	9.41	76.34	31.93	19.93	15.91	3.01	5.47
1982	66.57	18.31	18.32	18.64	3.13	5.99	3.27	2.62	(NA)	7.25	73.23	30.23	18.51	15.32	3.13	5.99
1983	64.11	18.39	16.59	17.25	3.20	6.49	3.53	2.83	(NA)	8.06	73.07	30.05	17.36	15.89	3.20	6.49
1984	68.83	18.85	18.01	19.72	3.55	6.43	3.39	2.88	(Z)	8.68	76.69	31.05	18.51	17.07	3.55	6.43
1985	67.65	18.99	16.98	19.33	4.08	6.03	2.97	2.86	(Z)	7.58	76.42	30.92	17.83	17.48	4.08	6.03
1986	67.09	18.38	16.54	19.51	4.38	6.13	3.07	2.84	(Z)	10.13	76.72	32.20	16.71	17.26	4.38	6.13
1987	67.61	17.68	17.14	20.14	4.75	5.69	2.64	2.82	(Z)	11.59	79.16	32.87	17.74	18.01	4.75	5.69
1988	68.95	17.28	17.60	20.74	5.59	5.49	2.33	2.94	(Z)	12.93	82.77	34.22	18.55	18.85	5.59	5.49
1989	69.36	16.12	17.85	21.35	5.60	6.29	2.84	3.06	0.06	14.11	84.89	34.21	19.71	19.07	5.60	6.29
1990	70.73	15.57	18.33	22.46	6.10	6.13	3.05	2.66	0.06	14.06	84.61	33.55	19.73	19.17	6.10	6.13
1991	70.36	15.70	18.23	21.59	6.42	6.16	3.02	2.70	0.06	13.19	84.52	32.85	20.15	18.99	6.42	6.16
1992	69.93	15.22	18.38	21.63	6.48	5.91	2.62	2.85	0.06	14.44	85.87	33.53	20.84	19.12	6.48	5.91
1993	68.26	14.49	18.58	20.25	6.41	6.16	2.89	2.80	0.07	17.01	87.58	33.84	21.35	19.84	6.41	6.16
1994	70.68	14.10	19.35	22.11	6.69	6.07	2.68	2.94	0.07	18.33	89.25	34.67	21.84	19.91	6.69	6.07
1995	71.16	13.89	19.08	22.03	7.08	6.67	3.21	3.07	0.07	17.75	91.22	34.55	22.78	20.09	7.08	6.67
1996	72.47	13.72	19.34	22.68	7.09	7.14	3.59	3.13	0.07	19.07	94.22	35.76	23.20	21.00	7.09	7.14
1997	72.39	13.66	19.39	23.21	6.60	7.08	3.64	3.01	0.07	20.70	94.73	36.27	23.33	21.45	6.60	7.08
1998	72.79	13.24	19.61	23.94	7.07	6.56	3.30	2.84	0.07	22.28	95.15	36.93	22.94	21.66	7.07	6.56
1999	71.65	12.45	19.34	23.19	7.61	6.60	3.27	2.89	0.07	23.54	96.77	37.96	22.01	21.62	7.61	6.60
2000	71.22	12.36	19.66	22.62	7.86	6.16	2.81	2.91	0.07	24.97	98.94	38.40	23.95	22.58	7.86	6.16
2001	71.37	12.28	20.23	23.05	8.03	5.32	2.20	2.68	0.07	26.39	96.32	38.33	22.87	21.90	8.03	5.32
2002	70.95	12.31	19.56	22.55	8.15	5.90	2.67	2.76	0.06	25.38	97.35	38.18	23.06	22.18	8.15	5.90

NA Not available. Z Less than 50 trillion. <sup>1</sup> Includes types of fuel not shown separately. <sup>2</sup> Includes lease condensate. <sup>3</sup> Data on the generation of electricity in the United States represent net generation, which is gross output of electricity (measured at the generator terminals) minus power plant use. <sup>4</sup> Nuclear electricity generation data are gross outputs of electricity. <sup>5</sup> End-use consumption and electricity net generation. <sup>6</sup> Wood, waste, and alcohol (ethanol blended into motor gasoline). <sup>7</sup> Imports minus exports. <sup>8</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. <sup>9</sup> Includes supplemental gaseous fuels. <sup>10</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of nonelectric utility use of renewable energy beginning in 1990. <sup>11</sup> Preliminary.

Source: U.S. Energy Information Administration, *Annual Energy Review* and Internet site <<http://www.eia.doe.gov/emeu/aer/overview.html>>

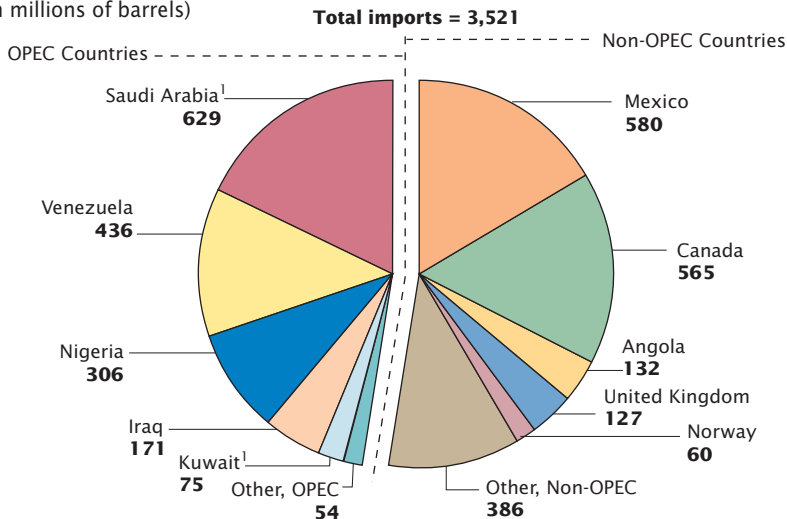
Figure 19.1  
**Energy Production, Trade, and Consumption: 1980 to 2002**



<sup>1</sup>Imports minus exports.

Source: Chart prepared by U.S. Census Bureau. For data, see Table 884.

Figure 19.2  
**Top Suppliers of U.S. Crude Oil Imports: 2003**  
 (In millions of barrels)



<sup>1</sup>Imports from the neutral zone between Kuwait and Saudi Arabia are included in Saudi Arabia.

Source: Chart prepared by U.S. Census Bureau. For data, see Table 897.

## No. 885. Energy Supply and Disposition by Type of Fuel—Estimates, 2001 and 2002, and Projections, 2005 to 2020

[Quadrillion Btu (72.72 represents 72,720,000,000,000) per year. Btu=British thermal unit. Projections are "reference" or mid-level forecasts. See report for methodology and assumptions used in generating projections]

Type of fuel	Projections					
	2001	2002	2005	2010	2015	2020
<b>Production, total</b> . . . . .	<b>72.72</b>	<b>71.85</b>	<b>74.57</b>	<b>78.30</b>	<b>80.36</b>	<b>84.09</b>
Crude oil and lease condensate . . . . .	12.16	11.91	12.41	12.56	11.71	10.49
Natural gas plant liquids . . . . .	2.55	2.56	2.98	3.10	3.20	3.47
Natural gas, dry . . . . .	20.23	19.56	20.11	21.05	22.20	24.43
Coal . . . . .	23.97	22.70	23.51	25.25	26.14	27.92
Nuclear power . . . . .	8.03	8.15	8.26	8.29	8.48	8.53
Renewable energy <sup>1</sup> . . . . .	5.25	5.84	6.54	7.18	7.84	8.45
Other <sup>2</sup> . . . . .	0.53	1.13	0.76	0.88	0.79	0.81
<b>Imports, total</b> . . . . .	<b>29.95</b>	<b>29.21</b>	<b>32.29</b>	<b>37.76</b>	<b>43.72</b>	<b>48.06</b>
Crude oil <sup>3</sup> . . . . .	20.26	19.84	21.35	24.51	29.37	31.55
Petroleum products <sup>4</sup> . . . . .	5.04	4.75	5.39	5.76	6.00	7.83
Natural gas . . . . .	4.06	4.10	4.78	6.54	7.29	7.56
Other imports <sup>5</sup> . . . . .	0.59	0.52	0.77	0.95	1.06	1.12
<b>Exports, total</b> . . . . .	<b>3.65</b>	<b>3.58</b>	<b>3.90</b>	<b>3.95</b>	<b>3.88</b>	<b>3.75</b>
Petroleum <sup>6</sup> . . . . .	2.01	2.03	2.07	2.15	2.18	2.13
Natural gas . . . . .	0.38	0.52	0.82	0.91	0.90	0.93
Coal . . . . .	1.26	1.03	1.02	0.89	0.80	0.69
<b>Consumption, total</b> . . . . .	<b>96.94</b>	<b>97.72</b>	<b>102.75</b>	<b>111.77</b>	<b>119.75</b>	<b>127.92</b>
Petroleum products . . . . .	38.49	38.11	40.52	44.15	48.26	51.35
Natural gas . . . . .	23.05	23.37	24.14	26.82	28.74	31.21
Coal . . . . .	22.04	22.18	23.18	25.23	26.32	28.30
Nuclear power . . . . .	8.03	8.15	8.26	8.29	8.48	8.53
Renewable energy <sup>1</sup> , other <sup>8</sup> . . . . .	5.33	5.91	6.65	7.29	7.95	8.53
<b>Net imports of petroleum</b> . . . . .	<b>23.29</b>	<b>22.56</b>	<b>24.68</b>	<b>28.13</b>	<b>33.20</b>	<b>37.25</b>
<b>Prices (1999 dollars per unit):</b>						
World oil price (dol per bbl) <sup>9</sup> . . . . .	22.25	23.68	23.30	24.17	25.07	26.02
Gas wellhead price (dol. per mcf) . . . . .	4.14	2.95	3.54	3.40	4.19	4.28
Coal minemouth price (dol per ton) . . . . .	17.79	17.90	17.24	16.88	16.47	16.32
Average electric price (cents per kWh) . . . . .	7.40	7.20	6.80	6.60	6.80	6.90

<sup>1</sup> Includes grid-connected electricity from conventional hydroelectric; wood and wood waste; landfill gas; municipal solid waste; other biomass; wind; photovoltaic and solar thermal sources; non-electric energy from renewable sources, such as active and passive solar systems, and wood; and both the ethanol and gasoline components of E85, but not the ethanol components of blends less than 85 percent. Excludes electricity imports using renewable sources and nonmarketed renewable energy. See Table A18 of source for selected nonmarketed residential and commercial renewable energy. <sup>2</sup> Includes liquid hydrogen, methanol, supplemental natural gas, and some domestic inputs to refineries. <sup>3</sup> Includes imports of crude oil for the Strategic Petroleum Reserve. <sup>4</sup> Includes imports of finished petroleum products, imports of unfinished oils, alcohols, ethers, and blending components. <sup>5</sup> Includes coal, coal coke (net), and electricity (net). <sup>6</sup> Includes crude oil and petroleum products. <sup>7</sup> Includes natural gas plant liquids, crude oil consumed as a fuel, and nonpetroleum based liquids for blending, such as ethanol. <sup>8</sup> Includes net electricity imports, methanol, and liquid hydrogen. <sup>9</sup> Average refiner acquisition cost for imported crude oil. <sup>10</sup> Represents lower 48 onshore and offshore supplies.

Source: U.S. Energy Information Administration, *Annual Energy Outlook, 2004*, DOE/EIA-0383(2004). See also <<http://www.eia.doe.gov/oiat/aep/pdf/appa.pdf>>.

## No. 886. Energy Consumption by End-Use Sector: 1970 to 2002

[67.84 represents 67,840,000,000,000 Btu. Btu=British thermal units. For Btu conversion factors, see source and text, this section. See Appendix III]

Year	Total (quad. Btu)	Residential and com- mercial <sup>1</sup> (quad. Btu)	Industrial <sup>2</sup> (quad. Btu)	Transpor- tation (quad. Btu)	Percent of total		
					Residential and com- mercial <sup>1</sup>	Industrial <sup>2</sup>	Transpor- tation
1970 . . . . .	67.84	22.11	29.64	16.10	32.6	43.7	23.7
1975 . . . . .	72.00	24.31	29.45	18.24	33.8	40.9	25.3
1980 . . . . .	78.29	26.44	32.15	19.70	33.8	41.1	25.2
1985 . . . . .	76.42	27.49	28.89	20.04	36.0	37.8	26.2
1990 . . . . .	84.60	30.36	31.89	22.36	35.9	37.7	26.4
1993 . . . . .	87.58	32.13	32.69	22.77	36.7	37.3	26.0
1994 . . . . .	89.25	32.32	33.57	23.37	36.2	37.6	26.2
1995 . . . . .	91.22	33.37	34.00	23.85	36.6	37.3	26.1
1996 . . . . .	94.22	34.81	34.97	24.44	36.9	37.1	25.9
1997 . . . . .	94.73	34.73	35.24	24.75	36.7	37.2	26.1
1998 . . . . .	95.15	35.02	34.88	25.26	36.8	36.7	26.5
1999 . . . . .	96.77	36.03	34.79	25.95	37.2	36.0	26.8
2000 . . . . .	98.94	37.71	34.68	26.55	38.1	35.1	26.8
2001 <sup>3</sup> . . . . .	96.32	37.56	32.48	26.28	39.0	33.7	27.3
2002 . . . . .	97.35	38.33	32.49	26.52	39.4	33.4	27.2

<sup>1</sup> Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. <sup>2</sup> Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants. <sup>3</sup> Preliminary.

Source: U.S. Energy Information Administration, *Annual Energy Review 2002*, DOE/EIA-0384(2003). See also <<http://www.eia.doe.gov/emeu/aer/pdf/pages/sec24.pdf>>.

# No. 887. Energy Consumption—End-Use Sector and Selected Source by State: 2000

[In trillions of Btu (98,216 represents 98,216,000,000,000), except as indicated]

State	Total <sup>1</sup>	Per capita <sup>2</sup> (mil. Btu)	End-use sector <sup>3</sup>				Source				
			Residential	Commercial	Industrial <sup>1</sup>	Transportation	Petroleum	Natural gas (dry) <sup>4</sup>	Coal	Hydro electric power <sup>5</sup>	Nuclear electric power
<b>United States . . . .</b>	<b>98,216</b>	<b>349</b>	<b>18,178</b>	<b>14,931</b>	<b>38,217</b>	<b>26,889</b>	<b>38,402</b>	<b>23,003</b>	<b>22,580</b>	<b>3,020</b>	<b>7,862</b>
Alabama . . . . .	1,977	445	339	219	936	483	581	351	900	59	327
Alaska . . . . .	627	1,001	42	63	310	212	260	334	22	10	-
Arizona . . . . .	1,216	237	283	263	206	463	506	207	433	89	317
Arkansas . . . . .	1,084	405	194	126	466	298	394	259	268	24	122
California . . . . .	8,519	252	1,318	1,189	2,950	3,063	3,558	2,273	70	436	367
Colorado . . . . .	1,200	279	267	247	316	370	455	349	388	15	-
Connecticut . . . . .	863	253	243	191	200	230	376	130	36	16	171
Delaware . . . . .	303	386	54	48	128	73	139	54	50	-	-
District of Columbia . . . . .	166	291	33	102	3	27	34	34	(Z)	-	-
Florida . . . . .	3,944	247	989	795	736	1,425	1,971	561	761	1	337
Georgia . . . . .	2,770	338	589	429	883	869	1,040	408	820	24	339
Hawaii . . . . .	265	219	24	26	89	127	222	3	18	1	-
Idaho . . . . .	511	395	95	88	201	127	175	73	14	113	-
Illinois . . . . .	4,418	356	885	719	1,839	975	1,327	1,043	1,027	2	933
Indiana . . . . .	2,778	457	463	306	1,342	667	910	591	1,595	6	-
Iowa . . . . .	1,099	376	213	154	458	274	417	234	446	9	46
Kansas . . . . .	1,036	385	201	168	384	282	407	324	363	(Z)	95
Kentucky . . . . .	1,868	462	306	214	903	446	713	234	1,002	24	-
Louisiana . . . . .	3,965	887	322	238	2,505	900	1,681	1,605	253	5	165
Maine . . . . .	561	440	92	61	287	122	251	9	10	78	-
Maryland . . . . .	1,520	287	353	325	436	407	553	217	312	18	144
Massachusetts . . . . .	1,723	271	418	329	521	455	677	349	115	15	58
Michigan . . . . .	3,122	314	734	553	1,013	822	1,062	950	779	13	197
Minnesota . . . . .	1,688	343	346	221	604	517	680	360	374	64	135
Mississippi . . . . .	1,144	402	206	141	432	365	469	294	148	-	112
Missouri . . . . .	1,659	297	425	330	343	561	693	290	689	4	104
Montana . . . . .	595	659	63	54	369	108	168	68	177	98	-
Nebraska . . . . .	584	341	129	114	166	175	226	125	207	15	90
Nevada . . . . .	633	317	125	96	207	206	230	188	199	25	-
New Hampshire . . . . .	329	266	79	59	90	102	181	22	44	25	83
New Jersey . . . . .	2,707	322	530	506	744	927	1,262	614	115	-1	298
New Mexico . . . . .	621	341	92	108	192	229	251	227	306	2	-
New York . . . . .	4,620	244	1,132	1,253	1,252	984	1,699	1,292	331	315	329
North Carolina . . . . .	2,502	311	567	434	792	709	976	236	786	33	408
North Dakota . . . . .	365	569	54	43	187	81	120	59	425	23	-
Ohio . . . . .	4,002	353	844	622	1,541	994	1,331	917	1,438	6	175
Oklahoma . . . . .	1,401	406	262	195	514	429	522	539	381	22	-
Oregon . . . . .	1,080	316	225	182	354	319	378	231	39	390	-
Pennsylvania . . . . .	4,780	389	854	609	2,305	1,012	1,416	728	1,507	19	769
Rhode Island . . . . .	250	239	66	51	68	66	97	81	(Z)	10	-
South Carolina . . . . .	1,477	368	285	201	608	383	481	160	432	5	531
South Dakota . . . . .	246	326	54	40	67	86	119	40	51	59	-
Tennessee . . . . .	2,026	356	434	316	687	589	720	276	705	58	269
Texas . . . . .	11,589	556	1,333	1,161	6,483	2,611	5,501	4,253	1,548	12	392
Utah . . . . .	718	322	125	119	251	223	275	173	403	8	-
Vermont . . . . .	165	270	44	29	40	52	88	11	(Z)	38	47
Virginia . . . . .	2,304	325	497	455	658	694	904	282	505	-6	295
Washington . . . . .	2,174	369	410	321	815	627	868	297	106	795	90
West Virginia . . . . .	744	411	136	100	321	187	218	154	980	12	-
Wisconsin . . . . .	1,800	336	369	277	731	423	666	396	499	23	120
Wyoming . . . . .	417	845	36	44	223	114	158	102	506	10	-

- Represents zero. Z Less than .5 trillion Btu. <sup>1</sup> U.S. total energy and U.S. industrial sector include 65.4 trillion Btu of net imports of coal coke that is not allocated to the States. State and U.S. totals include 81.8 trillion Btu of net imports of electricity generated from nonrenewable energy sources. <sup>2</sup> Based on estimated resident population as of July 1. <sup>3</sup> End-use sector data include electricity sales and associated electrical system energy losses. <sup>4</sup> Includes supplemental gaseous fuels. <sup>5</sup> Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.

Source: U.S. Energy Information Administration, *State Energy Data Report, 2000* annual. See also <[http://www.eia.doe.gov/emeu/states/sep\\_sum/html/pdf/sum\\_use.all.pdf](http://www.eia.doe.gov/emeu/states/sep_sum/html/pdf/sum_use.all.pdf)> (released May 2003).

## No. 888. Renewable Energy Consumption Estimates by Source : 1995 to 2002

[In quadrillion Btu (6.66 represents 6,660,000,000,000). Renewable energy is obtained from sources that are essentially inexhaustible unlike fossil fuels of which there is a finite supply]

Source and sector	1995	1997	1998	1999	2000	2001	2002 <sup>1</sup>
<b>Consumption, total</b> . . . . .	<b>6.66</b>	<b>7.07</b>	<b>6.55</b>	<b>6.59</b>	<b>6.15</b>	<b>5.31</b>	<b>5.88</b>
Conventional hydroelectric power <sup>2</sup> . . . . .	3.21	3.64	3.30	3.27	2.81	2.20	2.67
Geothermal energy <sup>3</sup> . . . . .	0.29	0.33	0.33	0.33	0.32	0.31	0.30
Biomass <sup>4</sup> . . . . .	3.06	3.00	2.82	2.87	2.89	2.66	2.74
Solar energy <sup>5</sup> . . . . .	0.07	0.07	0.07	0.07	0.07	0.07	0.06
Wind energy <sup>6</sup> . . . . .	0.03	0.03	0.03	0.05	0.06	0.07	0.11
Residential <sup>7</sup> . . . . .	0.67	0.51	0.46	0.49	0.50	0.48	0.42
Biomass <sup>4</sup> . . . . .	0.60	0.43	0.39	0.41	0.43	0.41	0.35
Geothermal <sup>3</sup> . . . . .	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar <sup>5,8</sup> . . . . .	0.07	0.07	0.07	0.06	0.06	0.06	0.06
Commercial <sup>9</sup> . . . . .	0.09	0.11	0.11	0.11	0.11	0.09	0.10
Biomass <sup>4</sup> . . . . .	0.09	0.11	0.10	0.11	0.10	0.08	0.09
Geothermal <sup>3</sup> . . . . .	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Hydroelectric <sup>2</sup> . . . . .	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Industrial <sup>10</sup> . . . . .	1.91	1.98	1.84	1.84	1.83	1.63	1.72
Biomass <sup>4</sup> . . . . .	1.85	1.92	1.78	1.79	1.78	1.59	1.68
Geothermal <sup>3</sup> . . . . .	(Z)	(Z)	(Z)	(Z)	(Z)	0.01	0.01
Hydroelectric <sup>2</sup> . . . . .	0.06	0.06	0.06	0.05	0.04	0.03	0.04
Transportation:							
Alcohol fuels <sup>11</sup> . . . . .	0.11	0.10	0.11	0.11	0.13	0.13	0.16
Electric power <sup>12</sup> . . . . .	3.89	4.38	4.03	4.03	3.58	2.98	3.49
Electric utilities <sup>13</sup> . . . . .	3.17	3.62	3.28	3.12	2.61	2.03	2.46
Biomass <sup>4</sup> . . . . .	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Geothermal <sup>3</sup> . . . . .	0.10	0.12	0.11	0.04	(Z)	(Z)	(Z)
Hydroelectric <sup>2</sup> . . . . .	3.06	3.49	3.15	3.07	2.58	2.01	2.43
Solar <sup>5</sup> . . . . .	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Wind <sup>6</sup> . . . . .	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

Z Less than 5 trillion Btu. <sup>1</sup> Preliminary. <sup>2</sup> Power produced from natural streamflow as regulated by available storage. <sup>3</sup> As used at electric power plants, hot water or steam extracted from geothermal reservoirs in the Earth's crust that is supplied to steam turbines at electric power plants that drive generators to produce electricity. <sup>4</sup> Organic nonfossil material of biological origin constituting a renewable energy source. <sup>5</sup> Includes small amounts of distributed solar thermal and photovoltaic energy. <sup>6</sup> Energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators. <sup>7</sup> Wind pushes against sails, vanes, or blades radiating from a central rotating shaft. <sup>8</sup> Consists of living quarters for private households, but excludes institutional living quarters. <sup>9</sup> The radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity. <sup>10</sup> Consists of service-providing facilities and equipment of businesses, governments, and other private and public organizations. Includes institutional living quarters and sewage treatment facilities. <sup>11</sup> Consists of all facilities and equipment used for producing, processing, or assembling goods. <sup>12</sup> Ethanol primarily derived from corn. <sup>13</sup> Consists of electricity only and combined heat and power plants who sell electricity and heat to the public. <sup>14</sup> A corporation or other legal entity aligned with distribution facilities for delivery of electric energy, primarily for public use.

Source: U.S. Energy Information Administration, *Renewable Energy Annual 2002*, Series DOE/EIA-0603(2002). See also <<http://www.eia.doe.gov/coal/solar.renewables/page/readata/appendixb.html>> (accessed November 2003).

## No. 889. Energy Expenditures and Average Fuel Prices by Source and Sector: 1970 to 2000

[82,898 represents \$82,898,000,000. For definition of Btu, see text, this section. End-use sector and electric utilities exclude expenditures and prices on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

Source and sector	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
<b>EXPENDITURES</b> (mil. dol.)											
<b>Total</b> <sup>1</sup> . . . . .	<b>82,898</b>	<b>171,802</b>	<b>374,319</b>	<b>437,271</b>	<b>472,214</b>	<b>516,207</b>	<b>562,600</b>	<b>569,011</b>	<b>527,028</b>	<b>560,161</b>	<b>703,188</b>
Natural gas . . . . .	10,891	20,061	51,061	72,938	64,102	74,150	85,634	91,736	81,628	83,559	115,910
Petroleum products . . . . .	47,942	103,372	237,628	223,597	235,328	237,110	268,447	267,621	232,367	262,912	362,026
Motor gasoline . . . . .	31,596	59,446	124,408	118,048	126,558	136,647	148,344	149,668	132,730	149,260	193,999
Coal . . . . .	4,630	13,021	22,607	29,673	28,637	27,632	28,168	28,276	28,139	27,621	28,728
Electricity sales . . . . .	23,345	50,680	98,095	149,233	176,737	205,932	211,011	213,645	216,928	216,737	231,653
Residential sector <sup>2</sup> . . . . .	20,213	36,932	69,438	98,899	109,954	128,330	137,931	138,848	134,977	137,300	155,625
Commercial sector <sup>2</sup> . . . . .	10,628	22,869	46,932	70,349	78,942	91,644	95,959	100,362	98,298	98,089	113,030
Industrial sector <sup>1</sup> . . . . .	16,678	41,068	94,268	106,835	102,650	108,484	120,549	120,852	109,104	115,755	152,582
Transportation sector . . . . .	35,379	70,933	163,680	161,188	180,668	187,749	208,161	208,950	184,649	209,017	(NA)
Motor gasoline <sup>3</sup> . . . . .	30,525	57,992	121,809	115,205	123,845	134,641	146,106	147,164	130,709	147,592	(NA)
Electric utilities <sup>1,3</sup> . . . . .	4,316	16,396	37,435	42,507	38,287	34,765	36,635	37,765	37,527	36,490	41,375
<b>AVERAGE FUEL PRICES</b> (dol. per mil. Btu)											
<b>All sectors</b> <sup>1</sup> . . . . .	<b>1.65</b>	<b>3.33</b>	<b>6.89</b>	<b>8.36</b>	<b>8.25</b>	<b>8.24</b>	<b>8.72</b>	<b>8.78</b>	<b>8.15</b>	<b>8.34</b>	<b>9.85</b>
Residential sector <sup>2</sup> . . . . .	2.10	3.81	7.46	10.96	11.94	12.60	12.71	13.28	13.46	13.17	14.28
Commercial sector <sup>2</sup> . . . . .	1.98	4.08	7.85	11.65	11.95	12.69	12.82	13.09	13.08	12.78	13.93
Industrial sector <sup>1</sup> . . . . .	0.98	2.12	5.15	6.27	5.18	4.32	5.11	4.83	4.24	4.38	5.18
Transportation sector . . . . .	2.31	4.02	8.61	8.26	8.28	8.09	8.76	8.70	7.48	8.19	(NA)
Electric utilities <sup>1,3</sup> . . . . .	0.32	0.96	1.75	1.85	1.46	1.23	1.28	1.30	1.24	1.22	1.43

NA Not available. <sup>1</sup> There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. <sup>2</sup> There are no direct fuel costs for geothermal, photovoltaic, or solar thermal energy. <sup>3</sup> Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual. See also <[http://www.eia.doe.gov/emeu/states/sep\\_prices/total/pdf/pr\\_us.pdf](http://www.eia.doe.gov/emeu/states/sep_prices/total/pdf/pr_us.pdf)> (accessed May 2003).



## No. 890. Energy Expenditures—End-Use Sector and Selected Source by State: 2000

[In millions of dollars (703,188 represents \$703,188,000,000). End-use sector and electric utilities exclude expenditures on energy sources such as hydroelectric, photovoltaic, solar thermal, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

State	End-use sector					Source			
	Total <sup>1</sup>	Residential	Commercial	Industrial	Transportation	Petroleum products	Natural gas	Coal	Electricity sales
<b>U.S. . . . .</b>	<b>703,188</b>	<b>155,625</b>	<b>113,030</b>	<b>152,582</b>	<b>281,952</b>	<b>362,026</b>	<b>115,910</b>	<b>28,728</b>	<b>231,653</b>
AL . . . . .	12,094	2,739	1,574	2,863	4,919	5,787	1,550	1,291	4,592
AK . . . . .	2,722	354	368	239	1,759	1,992	247	47	532
AZ . . . . .	10,562	2,520	1,961	1,094	4,987	5,439	1,100	546	4,431
AR . . . . .	7,326	1,571	784	1,939	3,032	3,809	1,254	383	2,349
CA . . . . .	71,058	13,305	11,886	13,084	32,784	35,101	13,512	115	22,915
CO . . . . .	8,690	1,894	1,472	1,189	4,135	4,820	1,458	361	2,508
CT . . . . .	8,275	2,631	1,699	1,012	2,933	4,314	997	83	2,852
DE . . . . .	2,072	494	311	454	811	1,121	294	74	682
DC . . . . .	1,530	312	853	18	347	400	338	(Z)	798
FL . . . . .	31,178	8,220	5,448	3,098	14,412	17,476	2,803	1,240	13,526
GA . . . . .	19,782	4,876	3,047	3,412	8,447	9,827	2,479	1,269	7,368
HI . . . . .	2,634	512	500	525	1,097	1,614	47	31	1,341
ID . . . . .	3,158	599	427	674	1,457	1,838	324	16	953
IL . . . . .	30,122	7,248	5,257	6,671	10,947	13,259	6,682	1,226	9,293
IN . . . . .	17,033	3,321	1,898	4,830	6,984	8,426	3,067	1,689	5,022
IA . . . . .	8,314	1,807	1,052	2,438	3,017	4,457	1,454	408	2,319
KS . . . . .	7,392	1,607	1,149	1,983	2,653	3,941	1,359	359	2,242
KY . . . . .	11,356	1,961	1,201	3,466	4,729	6,495	1,220	1,242	3,248
LA . . . . .	20,726	2,680	1,856	8,999	7,191	11,753	4,986	327	5,117
ME . . . . .	3,772	1,029	579	732	1,433	2,426	43	22	1,179
MD . . . . .	11,796	3,134	2,356	1,437	4,869	5,940	1,731	405	4,089
MA . . . . .	15,459	4,242	3,032	2,677	5,508	7,439	2,829	244	4,914
MI . . . . .	22,704	5,194	3,988	4,462	9,061	11,283	3,975	1,049	7,400
MN . . . . .	12,224	2,684	1,447	2,543	5,549	6,723	1,954	434	3,477
MS . . . . .	7,462	1,628	990	1,545	3,299	4,091	1,148	225	2,606
MO . . . . .	13,277	3,271	2,121	1,850	6,035	7,142	1,870	644	4,370
MT . . . . .	2,852	429	310	901	1,213	1,481	366	279	717
NE . . . . .	4,343	886	679	861	1,897	2,376	668	123	1,292
NV . . . . .	4,834	932	631	907	2,364	2,567	951	253	1,692
NH . . . . .	3,227	919	594	459	1,255	1,906	174	66	1,143
NJ . . . . .	21,639	4,902	4,247	3,307	9,183	11,403	3,565	161	6,599
NM . . . . .	4,109	741	731	587	2,050	2,460	571	421	1,219
NY . . . . .	42,563	12,818	12,854	5,321	11,571	17,030	9,695	487	16,167
NC . . . . .	19,351	5,009	3,023	3,608	7,712	9,884	1,539	1,142	7,767
ND . . . . .	2,077	388	263	615	810	1,187	189	430	509
OH . . . . .	29,645	7,173	4,754	6,675	11,043	13,359	5,544	2,110	10,499
OK . . . . .	9,337	1,990	1,272	1,916	4,159	4,788	2,344	384	2,897
OR . . . . .	7,644	1,488	1,033	1,422	3,701	4,129	1,135	41	2,460
PA . . . . .	30,484	8,076	4,796	6,579	11,033	14,115	4,545	2,001	10,175
RI . . . . .	2,381	690	480	413	798	1,088	544	(Z)	743
SC . . . . .	10,176	2,387	1,398	2,318	4,074	4,810	934	613	4,332
SD . . . . .	1,952	429	264	336	923	1,233	198	54	524
TN . . . . .	13,792	3,059	2,156	2,618	5,959	6,858	1,505	798	5,313
TX . . . . .	74,045	11,356	8,257	29,809	24,623	43,536	15,373	1,902	20,328
UT . . . . .	4,561	799	630	690	2,442	2,725	679	429	1,111
VT . . . . .	1,629	501	287	186	655	996	57	(Z)	579
VA . . . . .	16,791	4,237	2,813	2,305	7,437	9,041	1,867	715	5,722
WA . . . . .	13,180	2,439	1,688	2,378	6,675	7,548	1,476	235	4,131
WV . . . . .	4,434	947	584	1,063	1,841	2,305	595	1,207	1,395
WI . . . . .	13,059	2,962	1,795	3,269	5,032	6,878	2,415	537	3,691
WY . . . . .	2,242	237	235	663	1,107	1,413	260	413	526

Z Less than \$500,000. <sup>1</sup> Includes sources not shown separately. Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report, 2000*, series DOE/EIA-0376(00). See also <<http://www.eia.doe.gov/emeu/states/sepfuel/html/pdf/uelte.pdf>> and <<http://www.eia.doe.gov/emeu/states/sepprices/html/pdf/prall.pdf>> (accessed May 2003).

## No. 891. Residential Energy Consumption, Expenditures, and Average Price: 1980 to 2001

[9.32 represents 9,320,000,000,000 Btu. For period April to March for 1980; January to December for 1987 to 2001. Excludes Alaska and Hawaii in 1980. Covers occupied units only. Excludes household usage of gasoline for transportation and the use of wood or coal. Based on Residential Energy Consumption Survey; see source. Btu=British thermal unit; see text, this section]

Type of fuel	Unit	1980	1987	1990	1993	1997	2001
<b>CONSUMPTION</b>							
<b>Total</b>	<b>Quad. Btu</b>	<b>9.32</b>	<b>9.13</b>	<b>9.22</b>	<b>10.01</b>	<b>10.25</b>	<b>9.86</b>
Avg. per household	Mil. Btu	114	101	98	104	101	92
Natural gas	Quad. Btu	4.97	4.83	4.86	5.27	5.28	4.84
Electricity, site	Quad. Btu	2.48	2.76	3.03	3.28	3.54	3.89
Fuel oil, kerosene	Quad. Btu	1.52	1.22	1.04	1.07	1.07	0.76
Liquid petroleum gas	Quad. Btu	0.35	0.32	0.28	0.38	0.36	0.38
<b>EXPENDITURES</b>							
<b>Total</b>	<b>Bil. dol.</b>	<b>75.61</b>	<b>97.75</b>	<b>110.18</b>	<b>123.91</b>	<b>135.79</b>	<b>159.74</b>
Avg. per household	Dollars	926	1,080	1,172	1,282	1,338	1,493
Natural gas	Bil. dol.	19.77	26.15	27.26	32.04	35.81	46.98
Electricity	Bil. dol.	40.81	61.58	71.54	81.08	88.33	100.34
Fuel oil, kerosene	Bil. dol.	12.24	7.21	8.25	6.98	7.61	6.83
Liquid petroleum gas	Bil. dol.	2.80	2.81	3.14	3.81	4.04	5.60
<b>AVERAGE PRICE</b>							
<b>Total</b>	<b>Dol./mil. Btu.</b>	<b>8.12</b>	<b>10.71</b>	<b>11.95</b>	<b>12.38</b>	<b>13.25</b>	<b>16.19</b>
Natural gas	Dol./mil. Btu	3.98	5.41	5.61	6.07	6.78	9.70
Electricity	Dol./mil. Btu	16.46	22.34	23.60	24.69	24.97	25.80
Fuel oil, kerosene	Dol./mil. Btu	8.03	5.89	7.92	6.53	7.13	9.05
Liquid petroleum gas	Dol./mil. Btu	8.00	8.91	11.18	10.04	11.23	14.87

NA Not available.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Household Energy Consumption and Expenditures*, 1980, 1987, 1990, 1993, 1997, and 2001. See also <<http://www.eia.gov/emeu/recs/recs2001/detailcetbls.html#total>>.

## No. 892. Residential Energy Consumption and Expenditures, by Type of Fuel and Selected Household Characteristic: 2001

[For period January through December. Quad.=quadrillion. (9.86 represents 9,860,000,000,000 Btu). See headnote, Table 891]

Characteristic	Consumption (Btu's)					Expenditures				
	Total <sup>1</sup> (quad.)	Avg. per household <sup>2</sup> (mil.)	Natural gas (quad.)	Electricity (quad.)	Fuel oil <sup>3</sup> (quad.)	Total <sup>1</sup> (bil. dol.)	Avg. per household <sup>2</sup> (dol.)	Natural gas (bil. dol.)	Electricity (bil. dol.)	Fuel oil <sup>3</sup> (bil. dol.)
<b>Total households</b>	<b>9.86</b>	<b>92.2</b>	<b>4.84</b>	<b>3.89</b>	<b>0.71</b>	<b>159.74</b>	<b>1,493</b>	<b>46.98</b>	<b>100.34</b>	<b>6.83</b>
Single family	7.91	107.3	3.98	3.01	0.59	125.02	1,697	38.04	76.69	5.32
Two-to-four unit building	0.74	78.1	0.45	0.23	0.06	11.97	1,261	4.70	6.68	0.54
Five-or-more unit building	0.70	41.0	0.28	0.36	0.05	13.66	803	2.98	10.29	0.37
Mobile home	0.52	75.9	0.14	0.29	0.01	9.09	1,336	1.26	6.68	0.08
Year house built:										
1949 or earlier	2.92	109.8	1.68	0.76	0.34	42.18	1,586	16.47	20.65	3.04
1950 to 1959	1.39	97.9	0.75	0.46	0.14	21.25	1,500	7.15	12.34	1.29
1960 to 1969	1.19	86.5	0.61	0.45	0.09	19.48	1,414	6.00	12.09	0.77
1970 to 1979	1.48	79.0	0.57	0.77	0.07	26.03	1,388	5.28	18.99	0.61
1980 to 1989	1.45	79.7	0.57	0.78	0.04	26.22	1,438	5.53	19.37	0.40
1990 to 2001 <sup>4</sup>	1.43	92.5	0.66	0.68	0.02	24.59	1,591	6.54	16.90	0.21
2001 family income:										
Less than \$10,000	0.72	65.2	0.38	0.27	0.04	11.47	1,039	3.75	6.93	0.32
\$10,000 to \$29,999	2.42	79.1	1.19	0.93	0.16	38.49	1,260	11.56	23.57	1.45
\$30,000 to \$49,999	2.43	89.8	1.15	0.97	0.19	39.46	1,456	11.10	24.97	1.70
\$50,000 or more	4.30	112.1	2.13	1.72	0.31	70.32	1,836	20.57	44.87	2.84

B Base figure too small to meet statistical standards for reliability of a derived figure. <sup>1</sup> Includes liquid petroleum gas, not shown separately. <sup>2</sup> The averages are over the set of all households; otherwise the averages are over the set of households using a given fuel end use. <sup>3</sup> Includes kerosene. <sup>4</sup> New construction for 2001 includes only those housing units built and occupied between January and the April-August period when the household interviews were conducted.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Household Energy Consumption and Expenditures*, 2001. Also see <<http://www.eia.doe.gov/emeu/recs/contents.html>>.

## No. 893. Commercial Buildings—Energy Consumption and Expenditures: 1999

[4,657 represents 4,657,000. Covers buildings using one or more major fuel. Excludes industrial buildings, predominantly residential buildings, and buildings of less than 1,000 sq. ft. Based on a sample survey of building representatives and energy suppliers; therefore, subject to sampling variability. For characteristics of commercial buildings, see table 970 in Section 20. For composition of regions, see inside front cover]

Building characteristic	All buildings using any major fuel		Consumption (tril. Btu)			Expenditures (mil. dol.)		
	Number (1,000)	Square feet (mil.)	Major fuel total <sup>1</sup>	Electricity	Natural gas	Major fuel <sup>1</sup>	Electricity	Natural gas
<b>All buildings</b> . . . . .	<b>4,657</b>	<b>67,338</b>	<b>5,733</b>	<b>3,098</b>	<b>2,023</b>	<b>81,552</b>	<b>66,424</b>	<b>10,609</b>
Region:								
Northeast . . . . .	686	12,360	1,116	543	299	18,996	15,133	1,895
Midwest . . . . .	1,188	16,761	1,509	662	709	17,258	12,933	3,277
South . . . . .	1,762	23,485	1,961	1,247	618	27,303	23,275	3,294
West . . . . .	1,021	14,731	1,147	645	396	17,995	15,083	2,144
Year constructed:								
1919 or before . . . . .	419	4,034	275	91	120	3,271	2,170	684
1920 to 1945 . . . . .	499	6,445	461	184	195	5,797	4,174	968
1946 to 1959 . . . . .	763	9,127	674	310	256	9,216	6,989	1,390
1960 to 1969 . . . . .	665	10,866	975	468	372	13,237	10,250	1,986
1970 to 1979 . . . . .	774	11,840	1,044	621	326	15,858	13,461	1,726
1980 to 1989 . . . . .	846	13,931	1,214	755	391	18,342	15,777	2,033
1990 to 1999 . . . . .	690	11,094	1,090	669	364	15,832	13,604	1,820
Principal activity within building:								
Education . . . . .	327	8,651	649	257	227	8,018	5,820	1,111
Food sales . . . . .	174	994	201	165	31	3,587	3,359	195
Food service . . . . .	349	1,851	447	216	216	6,380	5,082	1,185
Health care . . . . .	127	2,918	515	232	217	5,653	4,268	881
Inpatient . . . . .	11	1,865	427	172	195	4,151	2,948	757
Outpatient . . . . .	116	1,053	88	60	22	1,503	1,320	124
Lodging . . . . .	153	4,521	450	196	181	5,716	4,266	943
Mercantile . . . . .	667	10,398	724	521	186	13,085	11,851	1,126
Retail (other than mall) . . . . .	534	4,766	344	221	110	5,922	5,166	670
Enclosed and strip malls . . . . .	133	5,631	380	301	76	7,164	6,685	456
Office . . . . .	739	12,044	1,089	767	219	17,775	15,683	1,215
Public assembly . . . . .	305	4,393	359	191	96	5,096	3,983	560
Public order and safety . . . . .	72	1,168	102	40	33	1,222	805	176
Religious worship . . . . .	307	3,405	110	42	62	1,494	1,041	409
Service . . . . .	478	3,388	421	138	260	4,639	3,108	1,371
Warehouse and storage . . . . .	603	10,477	461	220	230	6,029	4,829	1,124
Other . . . . .	102	1,222	176	101	45	2,498	2,063	224
Vacant . . . . .	253	1,908	31	10	19	361	265	89
Square footage:								
1,001 to 5,000 . . . . .	2,348	6,774	772	415	312	12,355	10,262	1,802
5,001 to 10,000 . . . . .	1,110	8,238	608	283	292	9,228	7,146	1,810
10,001 to 25,000 . . . . .	708	11,153	743	370	319	10,873	8,663	1,813
25,001 to 50,000 . . . . .	257	9,311	692	371	234	10,090	8,188	1,274
50,001 to 100,000 . . . . .	145	10,112	865	494	250	12,057	10,023	1,253
100,001 to 200,000 . . . . .	59	8,271	772	451	230	10,344	8,555	1,104
200,001 to 500,000 . . . . .	23	6,851	660	340	237	8,015	6,432	958
500,001 and over . . . . .	7	6,628	621	373	149	8,592	7,155	594

<sup>1</sup> Includes fuel oil, propane, and purchased steam not shown separately.

Source: U.S. Energy Information Administration, *Commercial Buildings Energy Survey: Consumption and Expenditures, 1999*. See also <<http://www.eia.doe.gov/emeu/cbecs/pdf/alltables.pdf>> (accessed May 2003).

## No. 894. Fossil Fuel Prices in Current and Constant (1996) Dollars by Type of Fuel: 1980 to 2002

[In cents per million British thermal units (Btu), except as indicated. All fuel prices taken as close to the point of production as possible. See text, this section, for explanation of Btu conversions from mineral fuels]

Fuel	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002 <sup>1</sup>
<b>CURRENT DOLLARS</b>											
Composite <sup>2</sup> . . . . .	2.04	2.51	1.84	1.47	1.82	1.81	1.41	1.65	2.61	2.56	2.22
Crude oil <sup>3</sup> . . . . .	3.72	4.15	3.45	2.52	3.18	2.97	1.87	2.68	4.61	3.77	3.88
Natural gas <sup>4</sup> . . . . .	1.45	2.26	1.55	1.40	1.96	2.10	1.77	1.98	3.33	3.64	2.67
Bituminous coal <sup>5</sup> . . . . .	1.10	1.15	1.00	0.88	0.87	0.85	0.83	0.79	0.80	0.85	0.86
<b>CONSTANT (1996) DOLLARS</b>											
Composite <sup>2</sup> . . . . .	3.58	3.41	2.13	1.50	1.82	1.77	1.37	1.58	2.44	2.34	2.00
Crude oil <sup>3</sup> . . . . .	6.53	5.64	3.99	2.57	3.18	2.91	1.82	2.56	4.31	3.44	3.51
Natural gas <sup>4</sup> . . . . .	2.54	3.06	1.79	1.43	1.96	2.06	1.71	1.89	3.12	3.33	2.41
Bituminous coal <sup>5</sup> . . . . .	1.93	1.56	1.15	0.90	0.87	0.84	0.80	0.75	0.75	0.78	0.78

<sup>1</sup> Preliminary. <sup>2</sup> Derived by multiplying the price per Btu of each fossil fuel by the total Btu content of the production of each fossil fuel and dividing this accumulated value of total fossil fuel production by the accumulated Btu content of total fossil fuel production. <sup>3</sup> Domestic first purchase prices. <sup>4</sup> Wellhead prices. <sup>5</sup> Includes bituminous coal, subbituminous coal, and lignite.

Source: U.S. Energy Information Administration, *Annual Energy Review*. See also <<http://www.eia.doe.gov/emeu/aer/finan.html>>.



## No. 898. Crude Oil and Refined Products—Summary: 1980 to 2003

[13,481 represents 13,481,000 bbl. Barrels (bbl.) of 42 gallons. Data are averages]

Year	Crude oil (1,000 bbl. per day)					Refined oil products (1,000 bbl. per day)			Total oil imports <sup>2</sup> (1,000 bbl. per day)	Crude oil stocks <sup>3</sup> (mil. bbl.)	
	Input to refiner- ies	Domestic produc- tion	Imports		Exports	Domestic demand	Imports	Exports		Total	Strategic reserve <sup>4</sup>
			Total <sup>1</sup>	Strategic reserve							
1980	13,481	8,597	5,263	44	287	17,056	1,646	258	6,909	<sup>5</sup> 466	108
1985	12,002	8,971	3,201	118	204	15,726	1,866	577	5,067	814	493
1990	13,409	7,355	5,894	27	109	16,988	2,123	748	8,018	908	586
1993	13,613	6,847	6,787	15	98	17,237	1,833	904	8,620	922	587
1994	13,866	6,662	7,063	12	99	17,718	1,933	843	8,996	929	592
1995	13,973	6,560	7,230	-	95	17,725	1,605	855	8,835	895	592
1996	14,195	6,465	7,508	-	110	18,309	1,971	871	9,478	850	566
1997	14,662	6,452	8,225	-	108	18,620	1,936	896	10,162	868	563
1998	14,889	6,252	8,706	-	110	18,917	2,002	835	10,708	895	571
1999	14,804	5,881	8,731	8	118	19,519	2,122	822	10,852	852	567
2000	15,067	5,822	9,071	8	50	19,701	2,389	990	11,459	826	541
2001	15,128	5,801	9,328	11	20	19,649	2,543	951	11,871	862	550
2002	14,947	5,746	9,140	16	9	19,761	2,390	975	11,530	877	599
2003	15,303	5,737	9,646	-	12	20,044	2,608	1,005	12,254	906	638

- Represents zero. <sup>1</sup> Includes Strategic Petroleum Reserve. <sup>2</sup> Crude oil (including Strategic Petroleum Reserve imports) plus refined products. <sup>3</sup> End of year. <sup>4</sup> Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements. <sup>5</sup> Stocks of Alaskan crude oil in transit are included from January 1985 forward.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, March 2004 issue.

## No. 899. Petroleum and Coal Products Corporations—Sales, Net Profit, and Profit Per Dollar of Sales: 1990 to 2003

[318.5 represents \$318,500,000. Represents SIC group 29 (NAICS group 324). Through 2000 based on Standard Industrial Classification code; beginning 2001 based on North American Industry Classification System, 1997 (NAICS). Profit rates are averages of quarterly figures at annual rates. Beginning 1990, excludes estimates for corporations with less than \$250,000 in assets]

Item	Unit	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sales	Bil. dol.	318.5	268.2	283.1	323.5	320.0	250.4	277.0	455.2	472.5	474.9	590.8
Net profit:												
Before income taxes	Bil. dol.	23.1	17.2	16.5	32.6	36.8	9.7	20.3	55.5	47.2	22.4	51.4
After income taxes	Bil. dol.	17.8	14.9	13.9	26.6	29.4	8.3	17.2	42.6	35.8	19.5	42.5
Depreciation <sup>1</sup>	Bil. dol.	18.7	17.1	16.7	15.9	15.6	14.7	13.5	15.5	17.2	17.8	20.0
Profits per dollar of sales:												
Before income taxes	Cents	7.3	6.3	5.8	10.1	11.5	3.5	7.1	12.2	9.7	4.6	8.5
After income taxes	Cents	5.6	5.5	4.9	8.2	9.2	3.1	6.0	9.4	7.4	4.2	7.2
Profits on stockholders' equity:												
Before income taxes	Percent	16.4	13.2	12.6	23.2	23.5	6.0	13.0	29.4	21.8	9.7	20.6
After income taxes	Percent	12.7	11.4	10.6	18.9	18.9	5.2	11.0	22.6	16.5	8.4	17.7

<sup>1</sup> Includes depletion and accelerated amortization of emergency facilities.

Source: U.S. Census Bureau, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

## No. 900. Major Petroleum Companies—Financial Summary: 1980 to 2003

[32.9 represents \$32,900,000. Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated total company basis]

Item	1980	1985	1990	1995	1998	1999	2000	2001	2002	2003
FINANCIAL DATA (bil. dol.)										
Net income	32.9	19.4	26.8	24.3	14.5	35.3	76.4	62.0	44.3	85.5
Depreciation, depletion, etc.	32.5	53.0	38.7	43.1	61.0	45.0	53.3	63.4	61.2	68.0
Cash flow <sup>1</sup>	65.4	72.4	65.5	67.4	75.5	75.3	129.7	140.0	118.0	157.7
Dividends paid	9.3	12.0	15.9	17.6	20.9	21.7	23.0	29.7	27.3	27.5
Net internal funds available for investment or debt repayment <sup>2</sup>	56.1	60.4	49.6	49.8	54.6	54.1	106.7	110.4	90.7	130.3
Capital and exploratory expenditures	62.1	58.3	59.6	59.8	83.9	67.7	72.8	99.9	88.7	90.7
Long-term capitalization	211.4	272.1	300.0	304.3	382.0	456.2	516.9	543.8	548.1	606.1
Long-term debt	49.8	93.5	90.4	85.4	103.9	105.4	112.8	143.2	153.5	142.1
Preferred stock	2.0	3.3	5.2	5.7	3.9	4.8	5.4	6.7	2.5	2.2
Common stock and retained earnings <sup>3</sup>	159.6	175.3	204.4	213.2	274.2	346.0	398.7	393.9	392.1	461.8
Excess of expenditures over cash income <sup>4</sup>	6.0	-2.1	10.0	10.0	29.3	13.6	-33.9	-10.5	-2.0	-39.5
RATIOS <sup>5</sup> (percent)										
Long-term debt to long-term capitalization	23.6	34.4	30.1	28.1	27.2	23.1	21.8	26.7	28.3	26.5
Net income to total average capital	17.0	7.0	9.1	8.1	3.8	8.9	15.7	12.3	8.7	15.2
Net income to average common equity	22.5	10.8	13.5	11.6	5.2	12.4	20.5	16.3	11.5	20.1

<sup>1</sup> Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. <sup>2</sup> Cash flow minus dividends paid. <sup>3</sup> Includes common stock, capital surplus, and earned surplus accounts after adjustments. <sup>4</sup> Capital and exploratory expenditures plus dividends paid minus cash flow. <sup>5</sup> Represents approximate year-to-year comparisons because of changes in the makeup of the group due to mergers and other corporate changes.

Source: Carl H. Pforzheimer & Co., New York, NY, *Comparative Oil Company Statements*, annual.



# No. 902. Electric Power Industry—Net Generation and Net Summer Capacity by State: 1995 to 2002

[Capacity as of Dec. 31. (3,353.5 represents 3,353,500,000) Covers utilities for public use]

State	Net generation (bil. kWh)					Net summer capacity (mil. kW)			
	2002					1995	2000	2001	2002
	1995	2000	2001	Total	Percent from coal				
<b>United States. . . . .</b>	<b>3,353.5</b>	<b>3,802.1</b>	<b>3,736.6</b>	<b>3,858.5</b>	<b>50.1</b>	<b>767.8</b>	<b>809.4</b>	<b>846.6</b>	<b>905.3</b>
Alabama . . . . .	105.2	124.4	125.3	132.9	54.2	21.3	23.5	23.8	26.6
Alaska . . . . .	6.0	6.2	6.7	6.8	8.5	2.0	2.1	2.1	2.0
Arizona . . . . .	69.8	88.9	89.9	94.1	40.6	15.4	15.3	16.7	19.4
Arkansas . . . . .	42.0	43.9	47.2	47.6	48.5	10.1	9.7	10.1	11.3
California . . . . .	181.5	208.1	198.6	184.2	1.3	53.3	51.9	54.2	56.7
Colorado . . . . .	35.6	44.2	46.9	45.6	77.6	7.3	8.4	8.9	9.4
Connecticut . . . . .	31.5	33.0	30.5	31.3	10.3	7.4	6.4	7.9	7.4
Delaware . . . . .	9.0	6.0	6.8	6.0	57.7	2.4	2.1	2.7	3.4
District of Columbia . . . . .	0.2	0.1	0.1	0.3	-	0.8	0.8	0.8	0.8
Florida . . . . .	167.4	191.8	190.9	203.4	32.4	39.7	41.5	42.8	47.1
Georgia . . . . .	107.9	123.9	118.3	126.5	62.3	23.7	27.8	29.5	34.6
Hawaii . . . . .	10.3	10.6	10.6	11.7	13.3	2.4	2.4	2.3	2.3
Idaho . . . . .	11.8	11.9	9.3	9.8	0.9	3.0	3.0	3.2	3.3
Illinois . . . . .	148.7	178.5	179.2	188.1	46.1	33.8	36.3	40.0	44.7
Indiana . . . . .	109.2	127.8	122.6	125.6	93.7	21.0	23.3	23.6	25.3
Iowa . . . . .	34.8	41.5	40.7	42.5	83.2	8.6	9.1	9.2	9.3
Kansas . . . . .	38.4	44.8	44.7	47.2	75.0	9.7	10.1	10.4	10.4
Kentucky . . . . .	86.2	93.0	95.4	92.1	90.4	15.4	16.8	17.6	19.1
Louisiana . . . . .	84.6	92.9	87.9	95.0	23.2	19.7	21.0	21.7	25.6
Maine . . . . .	9.8	14.0	19.6	22.5	2.7	3.8	4.2	4.2	4.3
Maryland . . . . .	46.4	51.1	49.1	48.3	59.5	11.3	10.4	11.8	11.9
Massachusetts . . . . .	37.7	38.7	38.5	42.0	27.4	11.0	12.4	11.8	12.2
Michigan . . . . .	107.4	104.2	111.8	117.9	56.6	24.9	25.8	26.9	29.3
Minnesota . . . . .	45.2	51.4	48.5	52.8	64.3	9.6	10.3	11.1	11.3
Mississippi . . . . .	29.0	37.6	53.4	42.9	34.6	7.5	9.0	11.1	13.7
Missouri . . . . .	65.7	76.6	79.5	81.2	83.1	15.8	17.3	18.9	19.8
Montana . . . . .	26.0	26.5	24.2	25.2	60.2	5.1	5.2	5.1	5.2
Nebraska . . . . .	25.3	29.1	30.5	31.6	63.1	5.5	6.0	6.0	6.1
Nevada . . . . .	24.0	35.5	33.9	32.1	51.1	6.3	6.7	6.9	6.9
New Hampshire . . . . .	15.4	15.0	15.1	16.0	23.3	2.8	2.9	2.8	3.4
New Jersey . . . . .	45.1	58.1	59.4	61.6	15.6	16.9	16.5	16.1	18.4
New Mexico . . . . .	29.8	34.0	33.6	30.7	87.7	5.3	5.6	5.7	5.9
New York . . . . .	133.4	138.1	143.9	139.6	16.6	37.5	35.6	35.7	36.0
North Carolina . . . . .	106.3	122.3	117.5	124.5	60.4	22.4	24.5	26.1	26.7
North Dakota . . . . .	29.0	31.3	30.3	31.3	94.6	4.5	4.7	4.7	4.7
Ohio . . . . .	139.3	149.1	142.3	147.1	90.4	27.6	28.4	29.5	31.5
Oklahoma . . . . .	52.7	55.6	55.2	59.2	60.8	13.6	14.1	14.9	16.2
Oregon . . . . .	45.3	51.8	45.1	47.1	8.0	10.8	11.3	11.8	12.5
Pennsylvania . . . . .	185.5	201.7	196.6	204.3	55.7	36.2	36.7	37.6	39.8
Rhode Island . . . . .	4.5	6.0	7.5	7.1	-	1.0	1.2	1.2	1.7
South Carolina . . . . .	80.9	93.3	89.2	96.6	38.3	17.1	18.7	19.4	20.4
South Dakota . . . . .	8.8	9.7	7.4	7.7	42.4	2.9	2.8	2.8	2.9
Tennessee . . . . .	85.7	95.8	96.2	96.1	62.1	16.8	19.5	20.2	20.7
Texas . . . . .	317.6	377.7	372.6	385.6	36.8	72.5	81.7	87.8	94.5
Utah . . . . .	32.8	36.6	35.9	36.6	94.2	5.0	5.2	5.3	5.8
Vermont . . . . .	5.2	6.3	5.5	5.5	-	1.2	1.0	1.0	1.0
Virginia . . . . .	63.0	77.2	74.1	75.0	50.8	17.7	19.4	20.1	20.2
Washington . . . . .	102.2	108.2	83.0	102.8	8.4	25.3	26.1	26.6	27.1
West Virginia . . . . .	80.5	92.9	81.8	94.8	98.1	15.0	15.0	15.7	16.2
Wisconsin . . . . .	53.9	59.6	58.8	58.4	68.1	12.1	13.6	14.1	14.2
Wyoming . . . . .	40.3	45.5	44.8	43.8	95.8	6.1	6.2	6.3	6.3

- Represents zero.

Source: U.S. Energy Information Administration, *Electric Power Annual 2002* and *Inventory of Electric Utility Power Plants in the United States 2000*. Also see <<http://www.eia.doe.gov/fuelelectric.html>> (accessed August 4, 2003).

## No. 903. Electric Utility Industry—Capacity, Peak Load, and Capacity Margin: 1980 to 2002

[558,237 represents 558,237,000 kW. Excludes Alaska and Hawaii. Capacity represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions, allowing for maintenance, emergency outages, and system operating requirements. Capacity margin is the difference between capability and peak load]

Year	Capacity at the time of—				Noncoincident peak load		Capacity margin			
	Summer peak load (1,000 kW)		Winter peak load (1,000 kW)		Summer (1,000 kW)	Winter (1,000 kW)	Summer		Winter	
	Amount	Change from prior year	Amount	Change from prior year			Amount (1,000 kW)	Percent of capability	Amount (1,000 kW)	Percent of capability
		Amount		Amount						
1980	558,237	13,731	572,195	17,670	427,058	384,567	131,179	23.5	187,628	32.8
1982	586,142	13,923	598,066	11,497	415,618	373,985	170,524	29.1	224,081	37.5
1983	596,449	10,307	612,453	14,387	447,526	410,779	148,923	25.0	201,674	32.9
1984	604,240	7,791	622,125	9,672	451,150	436,374	153,090	25.3	185,751	29.9
1985	621,597	17,357	636,475	14,350	460,503	423,660	161,094	25.9	212,815	33.4
1986	633,291	11,694	646,721	10,246	476,320	422,857	156,971	24.8	223,864	34.6
1987	648,118	14,827	662,977	16,256	496,185	448,277	151,933	23.4	214,700	32.4
1988	661,580	13,462	676,940	13,963	529,460	466,533	132,120	20.0	210,407	31.1
1989	673,316	11,736	685,249	8,309	523,432	496,378	149,884	22.3	188,871	27.6
1990	685,091	11,775	696,757	11,508	545,537	484,014	139,554	20.4	212,743	30.5
1991	690,915	5,824	703,212	6,455	551,320	485,435	139,595	20.2	217,777	31.0
1992	695,436	4,521	707,752	4,540	548,707	492,983	146,729	21.1	214,769	30.3
1993	694,250	-1,186	711,957	4,205	575,356	521,733	118,894	17.1	190,224	26.7
1994	702,985	8,735	715,090	3,133	585,320	518,253	117,665	16.7	196,837	27.5
1995	714,222	11,237	727,679	12,589	620,249	544,684	93,973	13.2	182,995	25.1
1996	723,571	9,349	740,526	12,847	615,529	545,061	108,042	14.9	195,465	26.4
1997	729,079	5,508	743,774	3,248	631,355	560,228	97,724	13.4	183,546	24.7
1998	724,193	-4,886	735,090	-8,684	660,293	567,558	63,900	8.8	167,532	22.8
1999	733,481	9,288	748,036	12,946	681,449	570,915	52,032	7.1	177,121	23.7
2000	750,771	17,290	767,505	19,469	678,413	588,426	72,358	9.6	179,079	23.3
2001	783,737	32,966	806,598	39,093	687,812	576,312	95,925	12.2	230,286	28.6
2002 <sup>1</sup>	825,145	41,408	850,984	44,386	714,565	604,986	110,580	13.4	245,998	29.9

<sup>1</sup> Preliminary.

Source: Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry*, annual.

## No. 904. Electric Energy Retail Sales by Class of Service and State: 2001

[In billions of kilowatt-hours (3,369.8 represents 3,369,800,000)]

State	Total <sup>1</sup>	Residential	Commercial	Industrial	State	Total <sup>1</sup>	Residential	Commercial	Industrial
<b>United States . . . .</b>	<b>3,369.8</b>	<b>1,202.6</b>	<b>1,089.2</b>	<b>964.2</b>	Missouri . . . . .	73.2	30.2	26.0	15.8
Alabama . . . . .	79.2	27.8	18.9	31.8	Montana . . . . .	11.2	3.9	3.6	3.3
Alaska . . . . .	5.4	1.9	2.3	1.1	Nebraska . . . . .	24.7	8.6	7.2	7.3
Arizona . . . . .	62.3	26.2	22.1	11.4	Nevada . . . . .	28.2	9.6	6.7	11.2
Arkansas . . . . .	41.7	15.1	9.2	16.7	New Hampshire . . . . .	10.3	3.8	3.9	2.5
California . . . . .	235.4	77.3	100.2	46.5	New Jersey . . . . .	72.3	25.4	34.0	12.4
Colorado . . . . .	44.2	14.5	17.9	10.9	New Mexico . . . . .	18.7	5.0	6.8	5.3
Connecticut . . . . .	30.5	12.0	12.4	5.6	New York . . . . .	141.4	44.0	59.4	24.7
Delaware . . . . .	10.7	3.7	3.6	3.2	North Carolina . . . . .	117.6	46.2	37.7	31.5
District of Columbia . . . . .	9.4	1.7	7.3	0.3	North Dakota . . . . .	9.8	3.5	3.1	2.8
Florida . . . . .	199.7	101.4	74.0	18.8	Ohio . . . . .	154.5	47.3	39.5	63.8
Georgia . . . . .	117.8	44.4	37.8	33.9	Oklahoma . . . . .	49.7	19.8	13.6	13.4
Hawaii . . . . .	9.8	2.8	3.1	3.8	Oregon . . . . .	45.9	17.5	14.8	13.1
Idaho . . . . .	21.1	6.9	6.5	7.3	Pennsylvania . . . . .	137.9	46.3	44.0	46.4
Illinois . . . . .	135.7	41.8	43.8	37.9	Rhode Island . . . . .	7.8	2.7	3.7	1.3
Indiana . . . . .	97.7	29.4	25.6	42.1	South Carolina . . . . .	74.8	24.9	17.5	31.5
Iowa . . . . .	39.2	12.4	8.5	16.2	South Dakota . . . . .	8.6	3.6	2.9	1.7
Kansas . . . . .	35.8	12.1	12.8	10.6	Tennessee . . . . .	95.3	36.9	26.0	31.3
Kentucky . . . . .	80.0	23.7	14.3	38.7	Texas . . . . .	316.1	117.3	88.2	95.8
Louisiana . . . . .	74.7	25.8	17.7	28.6	Utah . . . . .	23.2	6.7	8.3	7.4
Maine . . . . .	11.8	4.7	4.5	2.6	Vermont . . . . .	5.6	2.0	2.0	1.6
Maryland . . . . .	59.8	24.0	25.4	9.7	Virginia . . . . .	96.1	37.3	29.0	19.5
Massachusetts . . . . .	52.7	18.0	25.0	9.0	Washington . . . . .	79.7	31.6	23.8	20.5
Michigan . . . . .	102.0	32.3	34.9	33.9	West Virginia . . . . .	27.7	9.8	6.8	11.0
Minnesota . . . . .	60.3	19.4	19.8	20.4	Wisconsin . . . . .	65.2	20.4	18.7	25.3
Mississippi . . . . .	44.3	16.9	11.4	15.3	Wyoming . . . . .	13.0	2.1	2.9	7.7

<sup>1</sup> Includes "other service" not shown separately.

Source: U.S. Energy Information Administration, *Electric Sales and Revenue 2002*. Also see <<http://www.eia.doe.gov/creat/electricity/esr/esrsum.html>> (issued January 2003).



## No. 905. Electric Energy Price by Class of Service and State: 2002

[Revenue (in cents) per kilowatt-hour. Data include both bundled and unbundled consumers]

State	Total <sup>1</sup>	Residential	Commercial	Industrial	State	Total <sup>1</sup>	Residential	Commercial	Industrial
<b>United States . . . . .</b>	<b>7.21</b>	<b>8.46</b>	<b>7.86</b>	<b>4.88</b>	Montana . . . . .	5.75	7.23	6.53	3.70
Alabama . . . . .	5.71	7.12	6.63	3.82	Nebraska . . . . .	5.55	6.73	5.62	3.89
Alaska . . . . .	10.46	12.05	10.13	7.65	Nevada . . . . .	8.42	9.43	9.06	7.25
Arizona . . . . .	7.21	8.27	7.28	5.20	New Hampshire . . . . .	10.49	11.77	10.09	8.83
Arkansas . . . . .	5.61	7.25	5.68	4.01	New Jersey . . . . .	9.31	10.38	8.87	7.83
California . . . . .	12.50	12.90	13.22	10.83	New Mexico . . . . .	6.73	8.50	7.22	4.48
Colorado . . . . .	6.00	7.37	5.67	4.52	New York . . . . .	11.29	13.58	12.46	5.16
Connecticut . . . . .	9.73	10.96	9.35	7.68	North Carolina . . . . .	6.74	8.19	6.51	4.70
Delaware . . . . .	7.05	8.70	6.98	5.11	North Dakota . . . . .	5.45	6.39	5.85	3.98
District of Columbia . . . . .	7.37	7.82	7.38	4.95	Ohio . . . . .	6.66	8.29	7.68	4.68
Florida . . . . .	7.31	8.16	6.64	5.23	Oklahoma . . . . .	5.59	6.73	5.75	3.81
Georgia . . . . .	6.24	7.63	6.46	3.95	Oregon . . . . .	6.32	7.12	6.59	4.72
Hawaii . . . . .	13.39	15.63	14.11	11.02	Pennsylvania . . . . .	8.01	9.71	8.03	6.06
Idaho . . . . .	5.58	6.59	5.71	4.34	Rhode Island . . . . .	9.19	10.21	8.84	8.04
Illinois . . . . .	6.97	8.39	7.49	5.01	South Carolina . . . . .	5.83	7.72	6.48	3.85
Indiana . . . . .	5.34	6.91	5.98	3.95	South Dakota . . . . .	5.26	7.40	6.24	4.54
Iowa . . . . .	6.01	8.35	6.56	4.06	Tennessee . . . . .	6.72	6.41	6.45	4.15
Kansas . . . . .	6.31	7.67	6.28	4.53	Texas . . . . .	6.62	8.05	6.95	4.66
Kentucky . . . . .	4.26	5.65	5.30	3.09	Utah . . . . .	5.39	6.79	5.60	3.84
Louisiana . . . . .	5.99	7.10	6.64	4.42	Vermont . . . . .	10.87	12.78	11.10	7.90
Maine . . . . .	11.36	11.98	10.47	11.24	Virginia . . . . .	6.23	7.79	5.87	4.13
Maryland . . . . .	6.21	7.71	6.09	3.88	Washington . . . . .	5.80	6.29	6.11	4.56
Massachusetts . . . . .	10.18	10.97	10.14	8.77	West Virginia . . . . .	5.11	6.23	5.41	3.81
Michigan . . . . .	6.92	8.28	7.36	4.95	Wisconsin . . . . .	6.28	8.18	6.54	4.43
Minnesota . . . . .	5.84	7.49	5.88	4.19	Wyoming . . . . .	4.68	6.97	5.71	3.55
Mississippi . . . . .	6.24	7.28	6.83	4.40					
Missouri . . . . .	6.09	7.06	5.88	4.42					

<sup>1</sup> Includes "other service" not shown separately.

Source: U.S. Energy Information Administration, *Electric Sales and Revenue 2002*. Also see <<http://www.eia.doe.gov/cneaf/electricity/esr/esrsum.html>>

## No. 906. Electric Utilities—Generation, Sales, Revenue, and Customers: 1980 to 2003

[2,286 represents 2,286,000,000 kWh. Sales and revenue are to and from ultimate customers]

Class	Unit. . . .	1980	1990	1995	1998	1999	2000	2001	2002	2003
Generation <sup>1</sup> . . . . .	Bil. kWh.	2,286	2,808	2,995	3,212	3,174	3,015	2,630	2,549	2,527
<b>Sales <sup>2</sup> . . . . .</b>	<b>Bil. kWh.</b>	<b>2,094</b>	<b>2,713</b>	<b>3,013</b>	<b>3,264</b>	<b>3,312</b>	<b>3,421</b>	<b>3,370</b>	<b>3,463</b>	<b>3,500</b>
Residential or domestic . . . . .	Bil. kWh.	717	924	1,043	1,130	1,145	1,192	1,203	1,267	1,280
Percent of total . . . . .	Percent	34.2	34.1	34.6	34.6	34.6	34.9	35.7	36.6	36.6
Commercial <sup>3</sup> . . . . .	Bil. kWh.	488	751	863	979	1,002	1,055	1,089	1,116	1,119
Industrial <sup>4</sup> . . . . .	Bil. kWh.	815	946	1,013	1,051	1,058	1,064	964	972	991
<b>Revenue <sup>2</sup> . . . . .</b>	<b>Bil. dol .</b>	<b>98.4</b>	<b>178.2</b>	<b>207.7</b>	<b>219.8</b>	<b>219.9</b>	<b>233.2</b>	<b>246.6</b>	<b>249.6</b>	<b>259.1</b>
Residential or domestic . . . . .	Bil. dol .	38.7	72.4	87.6	93.4	93.5	98.2	103.7	107.2	111.4
Percent of total . . . . .	Percent	39.3	40.6	42.2	42.5	42.5	42.1	42.0	43.0	43.0
Commercial <sup>3</sup> . . . . .	Bil. dol .	26.8	55.1	66.4	72.6	72.8	78.4	86.4	87.7	91.0
Industrial <sup>4</sup> . . . . .	Bil. dol .	30.2	44.9	47.2	47.0	46.8	49.4	48.6	47.5	49.1
<b>Ultimate customers, Dec. 31 <sup>2</sup> .</b>	<b>Million .</b>	<b>92.7</b>	<b>110.1</b>	<b>118.3</b>	<b>124.4</b>	<b>125.9</b>	<b>127.6</b>	<b>130.8</b>	<b>133.4</b>	<b>(NA)</b>
Residential or domestic . . . . .	Million	82.2	97.0	103.9	109.0	110.4	111.7	114.3	116.4	(NA)
Commercial <sup>3</sup> . . . . .	Million	9.7	12.1	12.9	13.9	14.1	14.3	14.9	15.3	(NA)
Industrial <sup>4</sup> . . . . .	Million	0.5	0.5	0.6	0.5	0.6	0.5	0.6	0.6	(NA)
<b>Avg. kWh used per customer . . . . .</b>	<b>1,000 . .</b>	<b>22.6</b>	<b>24.6</b>	<b>25.5</b>	<b>26.2</b>	<b>26.3</b>	<b>26.8</b>	<b>25.8</b>	<b>26.0</b>	<b>(NA)</b>
Residential . . . . .	1,000 . .	8.7	9.5	10.0	10.4	10.4	10.7	10.5	10.9	(NA)
Commercial <sup>3</sup> . . . . .	1,000 . .	50.3	62.0	66.6	70.5	71.2	73.5	72.9	73.1	(NA)
<b>Avg. annual bill per customer .</b>	<b>Dollar . .</b>	<b>1,062</b>	<b>1,619</b>	<b>1,756</b>	<b>1,767</b>	<b>1,746</b>	<b>1,828</b>	<b>1,885</b>	<b>1,872</b>	<b>(NA)</b>
Residential . . . . .	Dollar	471	746	843	856	847	879	907	921	(NA)
Commercial <sup>3</sup> . . . . .	Dollar	2,767	4,553	5,124	5,226	5,171	5,464	5,780	5,741	(NA)
<b>Avg. revenue per kWh sold . . . .</b>	<b>Cents . .</b>	<b>4.70</b>	<b>6.57</b>	<b>6.89</b>	<b>6.74</b>	<b>6.64</b>	<b>6.81</b>	<b>7.32</b>	<b>7.21</b>	<b>7.40</b>
Residential . . . . .	Cents	5.40	7.83	8.40	8.26	8.17	8.24	8.62	8.46	8.71
Commercial <sup>3</sup> . . . . .	Cents	5.50	7.34	7.69	7.41	7.26	7.43	7.93	7.86	8.13
Industrial <sup>4</sup> . . . . .	Cents	3.70	4.74	4.66	4.48	4.43	4.64	5.04	4.88	4.95

NA Not available. <sup>1</sup> "Generation" includes batteries, chemicals, hydrogen, pitch, sulfur, and purchased steam. <sup>2</sup> Includes other types not shown separately. <sup>3</sup> Small light and power. <sup>4</sup> Large light and power.

Source: Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry, annual*.

## No. 907. Revenue and Expense Statistics for Major U.S. Investor-Owned Electric Utilities: 1995 to 2002

[In millions of nominal dollars (199,967 represents \$199,967,000,000). Covers approximately 180 investor-owned electric utilities that during each of the last 3 years met any one or more of the following conditions—1 mil. megawatt-hours of total sales; 100 megawatt-hours of sales for resale, 500 megawatt-hours of gross interchange out, and 500 megawatt-hours of wheeling for other]

Item	1995	1997	1998	1999	2000	2001	2002
Utility operating revenues . . . . .	199,967	215,083	218,175	214,160	235,336	267,525	219,389
Electric utility . . . . .	183,655	195,898	201,970	197,578	214,707	244,219	200,135
Other utility . . . . .	16,312	19,185	16,205	16,583	20,630	23,306	19,254
Utility operating expenses . . . . .	165,321	182,796	186,498	182,258	210,324	235,198	188,745
Electric utility . . . . .	150,599	165,443	171,689	167,266	191,329	213,733	171,291
Operation . . . . .	91,881	104,337	110,759	108,461	132,662	159,929	116,374
Production . . . . .	68,983	80,153	85,956	83,555	107,352	136,089	90,649
Cost of fuel . . . . .	29,122	31,861	31,252	29,826	32,555	29,490	24,132
Purchased power . . . . .	29,981	37,991	42,612	43,258	61,969	98,231	58,828
Other . . . . .	9,880	10,301	12,092	10,470	12,828	8,368	7,688
Transmission . . . . .	1,425	1,915	2,197	2,423	2,699	2,365	3,494
Distribution . . . . .	2,561	2,700	2,804	2,956	3,115	3,217	3,113
Customer accounts . . . . .	3,613	3,767	4,021	4,195	4,246	4,434	4,165
Customer service . . . . .	1,922	1,197	1,955	1,889	1,839	1,856	1,821
Sales . . . . .	348	501	514	492	403	282	261
Administrative and general . . . . .	13,028	13,384	13,311	12,951	13,009	11,686	12,872
Maintenance . . . . .	11,767	12,368	12,486	12,276	12,185	11,167	10,843
Depreciation . . . . .	19,885	23,072	24,122	23,968	22,761	20,845	17,319
Taxes and other . . . . .	27,065	25,667	24,322	22,561	23,721	21,792	26,755
Other utility . . . . .	14,722	17,353	14,809	14,992	18,995	21,465	17,454
Net utility operating income . . . . .	34,646	32,286	31,677	31,902	25,012	32,327	30,644

Source: U.S. Energy Information Administration, *Electric Power Annual*, 2002. Also see <<http://www.eia.doe.gov/cneaf/electricity/epa/epat8p1.html>> (released November 2003).

## No. 908. Uranium Concentrate—Supply, Inventories, and Average Prices: 1980 to 2002

[43.70 represents 43,700,000 pounds. Years ending Dec. 31. For additional data on uranium, see Section 18]

Item	Unit	1980	1990	1995	1997	1998	1999	2000	2001	2002
Production . . . . .	Mil. lb. . . . .	43.70	8.89	6.04	5.64	4.71	4.61	3.96	2.64	2.34
Exports . . . . .	Mil. lb. . . . .	5.8	2.0	9.8	17.0	15.1	8.5	13.6	11.7	15.4
Imports . . . . .	Mil. lb. . . . .	3.6	23.7	41.3	43.0	43.7	47.6	44.9	46.7	52.7
Utility purchases from domestic suppliers . . . . .	Mil. lb. . . . .	(NA)	20.5	22.3	19.4	21.6	21.4	24.3	27.5	22.7
Loaded into U.S. nuclear reactors <sup>1</sup>	Mil. lb. . . . .	(NA)	(NA)	51.1	48.2	38.2	58.8	51.5	52.7	57.3
Inventories, total . . . . .	Mil. lb. . . . .	(NA)	129.1	72.5	106.2	136.5	127.1	111.3	103.8	101.1
At domestic suppliers . . . . .	Mil. lb. . . . .	(NA)	26.4	13.7	40.4	70.7	68.8	56.5	48.1	47.9
At electric utilities . . . . .	Mil. lb. . . . .	(NA)	102.7	58.7	65.9	65.8	58.3	54.8	55.6	53.3
Average price per pound:										
Purchased imports . . . . .	Dollars . . . . .	(NA)	12.55	10.20	11.81	11.19	10.55	9.84	9.51	10.05
Domestic purchases . . . . .	Dollars . . . . .	(NA)	15.70	11.11	12.87	12.31	11.88	11.45	10.45	10.35

NA Not available. <sup>1</sup> Does not include any fuel rods removed from reactors and later reloaded into the reactor.

Source: Through 2000, U.S. Energy Information Administration, *Annual Energy Review 2001*, thereafter, U.S. Energy Information Administration, *Uranium Industry Annual 2002*. Also see <<http://www.eia.doe.gov/emeu/aer/nuclear.html>>.

## No. 909. Nuclear Power Plants—Number, Capacity, and Generation: 1980 to 2003

[51.8 represents 51,800,000 kW]

Item	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Operable generating units <sup>1, 2</sup>	71	96	112	109	109	107	104	104	104	104	104	104
Net summer capacity <sup>2, 3</sup> (mil. kW)	51.8	79.4	99.6	99.5	100.8	99.7	97.1	97.4	97.9	98.2	98.6	98.7
Net generation (bil. kWh)	251.1	383.7	576.9	673.4	674.7	628.6	673.7	728.3	753.9	768.8	780.1	763.7
Percent of total electricity net generation	11.0	15.5	19.0	20.1	19.6	18.0	18.6	19.7	19.8	20.6	20.2	19.8
Capacity factor <sup>4</sup> (percent)	56.3	58.0	66.0	77.4	76.2	71.1	78.2	85.3	88.1	89.4	90.4	88.4

<sup>1</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at the end of the year. Although Browns Ferry 1 was shut down in 1985, the unit has remained fully licensed and thus has continued to be counted as operable during the shutdown. <sup>2</sup> As of year-end. <sup>3</sup> Net summer capacity is the peak steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary and other power plant, as demonstrated by test at the time of summer peak demand. <sup>4</sup> Weighted average of monthly capacity factors. Monthly factors are derived by dividing actual monthly generation by the maximum possible generation for the month (number of hours in the month multiplied by the net summer capacity at the end of the month).

Source: U.S. Energy Information Administration, *Monthly Energy Review*, 2004. See also <<http://www.eia.doe.gov/emeu/mer/nuclear.html>> (accessed June 14, 2004).

## No. 910. Nuclear Power Plants—Number of Units, Net Generation, and Net Summer Capacity by State: 2002

[780,064 represents 780,064,000,000 kWh]

State	Net generation			Net summer capacity		State	Net generation			Net summer capacity		
	Number of units	Total (mil. kWh)	Percent of total <sup>1</sup>	Total (mil. kW)	Percent of total <sup>1</sup>		Number of units	Total (mil. kWh)	Percent of total <sup>1</sup>	Total (mil. kW)	Percent of total <sup>1</sup>	
<b>U.S. . . .</b>	<b>104</b>	<b>780,064</b>	<b>20.2</b>	<b>98.66</b>	<b>10.9</b>							
AL . . . . .	5	31,857	24.0	4.97	18.7	MS . . . . .	1	10,059	23.4	1.23	9.0	
AZ . . . . .	3	30,862	32.8	3.73	19.2	MO . . . . .	1	8,390	10.3	1.14	5.8	
AR . . . . .	2	14,559	30.6	1.78	15.7	NE . . . . .	2	10,122	32.0	1.23	20.3	
CA . . . . .	4	34,352	18.6	4.32	7.6	NH . . . . .	1	9,295	58.3	1.16	33.9	
CT . . . . .	2	14,918	47.6	2.01	27.1	NJ . . . . .	4	30,866	50.1	3.88	21.1	
FL . . . . .	5	33,704	16.6	3.91	8.3	NY . . . . .	6	39,617	28.4	5.05	14.0	
GA . . . . .	4	31,108	24.6	4.02	11.6	NC . . . . .	5	39,627	31.8	4.73	17.7	
IL . . . . .	11	90,860	48.3	11.31	25.3	OH . . . . .	2	10,865	7.4	2.11	6.7	
IA . . . . .	1	4,574	10.8	0.57	6.1	PA . . . . .	9	76,089	37.2	9.13	22.9	
KS . . . . .	1	9,042	19.2	1.17	11.3	SC . . . . .	7	53,326	55.2	6.49	31.9	
LA . . . . .	2	17,305	18.2	2.07	8.1	TN . . . . .	3	27,574	28.7	3.39	16.4	
MD . . . . .	2	12,128	25.1	1.69	14.2	TX . . . . .	4	35,618	9.2	4.74	5.0	
MA . . . . .	1	5,769	13.7	0.67	5.5	VT . . . . .	1	3,963	72.6	0.51	50.9	
MI . . . . .	4	31,087	26.4	3.94	13.4	VA . . . . .	4	27,346	36.5	3.47	17.2	
MN . . . . .	3	13,685	25.9	1.65	14.6	WA . . . . .	1	9,048	8.8	1.11	4.1	
						WI . . . . .	3	12,449	21.3	1.51	10.6	

<sup>1</sup> For total generation and capacity, see Table 902.

Source: U.S. Energy Information Administration, *Electric Power Annual 2002*. See also <[http://www.eia.doe.gov/cneaf/electricity/epa/epa\\_sprdshts.html](http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html)>.

## No. 911. Solar Collector Shipments by Type, End Use, and Market Sector: 1980 to 2002

[Shipments in thousands of square feet (19,398 represents 19,398,000)]. Solar collector is a device for intercepting sunlight, converting the light to heat, and carrying the heat to where it will be either used or stored. 1985 data are not available. Based on the Annual Solar Thermal Collector Manufacturers Survey]

Year	Collector type				End use			Market sector		
	Number of manufacturers	Total shipments <sup>1, 2, 3</sup>	Low temperature <sup>1, 2</sup>	Medium temperature, special, other <sup>2</sup>	Pool heating	Hot water	Space heating	Residential	Commercial	Industrial
1980 . . . . .	233	19,398	12,233	7,165	12,029	4,790	1,688	16,077	2,417	488
1986 <sup>4</sup> . . . . .	98	9,360	3,751	1,111	3,494	1,181	127	4,131	703	13
1990 <sup>4</sup> . . . . .	51	11,409	3,645	2,527	5,016	1,091	2	5,835	294	22
1995 . . . . .	36	7,666	6,813	840	6,763	755	132	6,966	604	82
1999 . . . . .	29	8,583	8,152	427	8,141	373	42	7,774	785	18
2000 . . . . .	26	8,354	7,948	400	7,863	367	99	7,473	810	57
2001 . . . . .	26	11,189	10,919	268	10,797	274	70	10,125	1,012	17
2002 . . . . .	27	11,663	11,046	615	11,073	423	146	11,000	595	62

<sup>1</sup> Includes shipments of high temperature collectors to the government, including some military, but excluding space applications. Also includes end uses such as process heating, utility, and other market sectors not shown separately. <sup>2</sup> Includes imputation of shipment data to account for nonrespondents. <sup>3</sup> Total shipments include all domestic and export shipments and may include imported collectors that subsequently were shipped to domestic or foreign customers. <sup>4</sup> Declines between 1986 and 1990 are primarily due to the expiration of the Federal energy tax credit and industry consolidation.

Source: U.S. Energy Information Administration, 1980-1990, *Solar Collector Manufacturing Activity*, annual reports; thereafter, *Renewable Energy Annual*. See also <<http://www.eia.doe.gov/cneaf/solar.renewables/page/readata/rea.pdf>> (released November 2003).

## No. 912. Total Renewable Net Generation by Source and State: 2001

[In millions of kilowatthours (294,946 represents 294,946,000,000) MSW=municipal solid waste]

State	Total <sup>1</sup>	Hydro-electric	MSW/landfill gas	Other Bio-mass <sup>2</sup>	Wood/Wood Waste	State	Total <sup>1</sup>	Hydro-electric	MSW/landfill gas	Other Bio-mass <sup>2</sup>	Wood/Wood Waste
<b>U.S.</b>	<b>294,946</b>	<b>216,961</b>	<b>19,931</b>	<b>1,834</b>	<b>35,200</b>	MO . . . .	1,167	1,104	(X)	62	(X)
AL . . . .	12,553	8,356	3	21	4,172	MT . . . .	6,679	6,613	(X)	(X)	65
AK . . . .	1,347	1,346	(X)	(X)	(X)	NE . . . .	1,143	1,124	(X)	17	(X)
AZ . . . .	7,663	7,624	34	5	(X)	NV . . . .	3,714	2,514	(X)	(X)	(X)
AR . . . .	4,060	2,548	(X)	7	1,505	NH . . . .	2,075	991	226	(X)	859
CA . . . .	47,359	25,542	1,861	410	3,324	NJ . . . .	1,321	18	1,290	13	(X)
CO . . . .	1,608	1,495	(X)	64	(X)	NM . . . .	256	237	(X)	19	(X)
CT . . . .	2,064	286	1,567	211	(X)	NY . . . .	25,694	23,084	2,087	(X)	503
DE . . . .	(X)	(X)	(X)	(X)	(X)	NC . . . .	4,376	2,596	129	9	1,642
DC . . . .	(X)	(X)	(X)	(X)	(X)	ND . . . .	1,340	1,332	(X)	8	(X)
FL . . . .	5,191	148	2,990	225	1,828	OH . . . .	942	511	28	(X)	403
GA . . . .	5,606	2,596	29	6	2,974	OK . . . .	2,575	2,345	(X)	(X)	231
HI . . . .	767	101	402	56	(X)	OR . . . .	29,522	28,645	87	(X)	701
ID . . . .	7,756	7,223	(X)	(X)	533	PA . . . .	4,312	1,650	2,020	34	597
IL . . . .	872	144	641	87	(X)	RI . . . .	107	3	104	(X)	(X)
IN . . . .	701	571	126	4	(X)	SC . . . .	2,141	1,225	49	1	866
IA . . . .	1,445	845	97	15	(X)	SD . . . .	3,433	3,432	(X)	(X)	(X)
KS . . . .	65	26	(X)	(X)	(X)	TN . . . .	7,775	6,947	49	(X)	779
KY . . . .	3,865	3,856	(X)	(X)	(X)	TX . . . .	3,395	1,200	51	59	898
LA . . . .	3,480	732	(X)	107	2,641	UT . . . .	671	508	10	(X)	(X)
ME . . . .	6,734	2,645	400	158	3,530	VT . . . .	1,267	884	(X)	(X)	370
MD . . . .	1,804	1,184	609	-	12	VA . . . .	3,158	1,014	991	5	1,148
MA . . . .	2,786	703	1,929	24	130	WA . . . .	56,021	54,734	175	47	1,065
MI . . . .	4,069	1,562	743	64	1,700	WV . . . .	978	952	25	(X)	1
MN . . . .	3,090	832	780	7	575	WI . . . .	3,321	2,056	401	86	705
MS . . . .	1,432	(X)	(X)	-	1,432	WY . . . .	1,244	879	(X)	(X)	(X)

X Not applicable. - Represents zero. <sup>1</sup> Includes types not shown separately. <sup>2</sup> Agriculture byproducts/crops, sludge waste, tires and other biomass solids, liquids and gases.

Source: Energy Information Administration, *Renewable Energy Annual 2002*. Also see <<http://www.eia.doe.gov/cneaf/solar/renewables/page/readata/tablec6.html>> (released November 2003).

## No. 913. Privately Owned Gas Utility Industry—Balance Sheet and Income Account: 1980 to 2002

[In millions of dollars (75,851 represents \$75,851,000,000). The gas utility industry consists of pipeline and distribution companies. Excludes operations of companies distributing gas in bottles or tanks]

Item	1980	1990	1995	1997	1998	1999	2000	2001	2002
<b>COMPOSITE BALANCE SHEET</b>									
<b>Assets, total</b> . . . . .	<b>75,851</b>	<b>121,686</b>	<b>141,965</b>	<b>134,715</b>	<b>119,715</b>	<b>155,413</b>	<b>165,709</b>	<b>171,681</b>	<b>185,064</b>
Total utility plant . . . . .	67,071	112,863	143,636	140,268	135,092	166,134	162,206	175,530	197,717
Depreciation and amortization . . . . .	26,162	49,483	62,723	62,554	61,226	73,823	69,366	73,753	85,038
Utility plant (net) . . . . .	40,909	63,380	80,912	77,714	73,866	92,311	92,839	101,777	112,679
Investment and fund accounts . . . . .	15,530	23,872	26,489	22,812	12,337	17,344	10,846	10,237	13,000
Current and accrued assets . . . . .	17,243	23,268	18,564	19,084	17,348	22,443	35,691	29,345	25,786
Deferred debits <sup>1</sup> . . . . .	2,169	9,576	13,923	12,844	13,721	20,922	24,279	28,553	31,928
<b>Liabilities, total</b> . . . . .	<b>75,851</b>	<b>121,686</b>	<b>141,965</b>	<b>134,775</b>	<b>119,715</b>	<b>155,413</b>	<b>165,709</b>	<b>171,681</b>	<b>185,064</b>
Capitalization, total . . . . .	51,382	74,958	90,581	78,887	71,718	95,244	96,079	107,310	117,362
Capital stock . . . . .	29,315	43,810	54,402	42,530	37,977	58,959	760	701	333
Long-term debts . . . . .	22,067	31,148	35,548	35,971	33,386	46,906	48,267	49,739	58,962
Current and accrued liabilities . . . . .	18,119	29,550	28,272	33,507	26,953	32,683	42,312	34,962	30,856
Deferred income taxes <sup>3</sup> . . . . .	4,149	11,360	14,393	13,636	13,239	17,120	17,157	20,445	24,612
Other liabilities and credits . . . . .	2,201	5,818	8,715	8,745	7,806	10,365	10,161	8,964	12,135
<b>COMPOSITE INCOME ACCOUNT</b>									
<b>Operating revenues, total</b> . . . . .	<b>85,918</b>	<b>66,027</b>	<b>58,390</b>	<b>62,617</b>	<b>57,117</b>	<b>59,142</b>	<b>72,042</b>	<b>79,231</b>	<b>68,544</b>
Minus: Operating expenses <sup>4</sup> . . . . .	81,789	60,137	50,760	59,375	50,896	38,752	64,988	57,151	47,002
Operation and maintenance . . . . .	74,508	51,627	37,966	46,070	41,026	41,415	54,602	58,873	48,638
Federal, state, and local taxes . . . . .	4,847	4,957	6,182	7,182	5,429	5,605	6,163	7,394	6,302
Equals: Operating income . . . . .	4,129	5,890	7,630	3,242	6,220	20,390	7,053	8,064	8,312
Utility operating income . . . . .	4,471	6,077	7,848	3,337	6,361	16,614	7,166	8,192	8,573
Income before interest charges . . . . .	6,929	8,081	9,484	4,193	7,779	17,531	7,589	8,266	9,319
Net income . . . . .	4,194	4,410	5,139	48	4,379	10,420	4,245	4,038	4,776
Dividends . . . . .	2,564	3,191	4,037	6,258	2,263	5,595	3,239	3,560	3,933

<sup>1</sup> Includes capital stock discount and expense and reacquired securities. <sup>2</sup> Data not comparable to prior years. <sup>3</sup> Includes reserves for deferred income taxes. <sup>4</sup> Includes expenses not shown separately.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual (copyright).

## No. 914. Gas Utility Industry—Summary: 1980 to 2002

[47,223 represents 47,223,000. Covers natural, manufactured, mixed, and liquid petroleum gas. Based on a questionnaire mailed to all privately and municipally owned gas utilities in United States, except those with annual revenues less than \$25,000]

Item	Unit	1980	1990	1995	1998	1999	2000	2001	2002
<b>End users</b> <sup>1</sup>	<b>1,000</b>	<b>47,223</b>	<b>54,261</b>	<b>58,728</b>	<b>61,528</b>	<b>60,778</b>	<b>61,262</b>	<b>61,385</b>	<b>62,034</b>
Residential	1,000	43,489	49,802	53,955	56,517	56,017	56,494	56,680	57,293
Commercial	1,000	3,498	4,246	4,530	4,825	4,599	4,610	4,546	4,590
Industrial and other	1,000	187	166	181	183	159	157	156	149
<b>Sales</b> <sup>2</sup>	<b>Tril. Btu</b> <sup>3</sup>	<b>15,413</b>	<b>9,842</b>	<b>9,221</b>	<b>8,781</b>	<b>8,975</b>	<b>9,232</b>	<b>8,667</b>	<b>8,864</b>
Residential	Tril. Btu	4,826	4,468	4,803	4,534	4,622	4,741	4,525	4,589
Percent of total	Percent	31	45	52	52	51	51	52	52
Commercial	Tril. Btu	2,453	2,192	2,281	2,063	2,067	2,077	2,053	2,055
Industrial	Tril. Btu	7,957	3,010	1,919	1,370	1,553	1,698	1,461	1,748
Other	Tril. Btu	177	171	218	814	734	715	627	472
<b>Revenues</b> <sup>2</sup>	<b>Mil. dol.</b>	<b>48,303</b>	<b>45,153</b>	<b>46,436</b>	<b>47,084</b>	<b>47,202</b>	<b>59,243</b>	<b>69,150</b>	<b>57,112</b>
Residential	Mil. dol.	17,432	25,000	28,742	30,130	30,095	35,828	42,454	35,062
Percent of total	Percent	36	55	62	64	64	60	61	61
Commercial	Mil. dol.	8,183	10,604	11,573	11,020	10,731	13,339	16,848	13,512
Industrial	Mil. dol.	22,215	8,996	5,571	4,189	4,715	7,432	7,513	6,841
Other	Mil. dol.	473	553	549	1,745	1,662	2,645	2,335	1,698
<b>Prices per mil. Btu</b> <sup>3</sup>	<b>Dollars</b>	<b>3.13</b>	<b>4.59</b>	<b>5.05</b>	<b>5.36</b>	<b>5.26</b>	<b>6.42</b>	<b>7.98</b>	<b>6.44</b>
Residential	Dollars	3.61	5.60	6.00	6.66	6.51	7.56	9.38	7.64
Commercial	Dollars	3.34	4.84	5.07	5.34	5.19	6.42	8.20	6.57
Industrial	Dollars	2.79	2.99	2.98	3.06	3.04	4.38	5.14	3.91
<b>Gas mains mileage</b>	<b>1,000</b>	<b>1,052</b>	<b>1,189</b>	<b>1,278</b>	<b>1,351</b>	<b>1,340</b>	<b>1,369</b>	<b>1,374</b>	<b>1,411</b>
Field and gathering	1,000	84	32	31	29	32	27	20	22
Transmission	1,000	266	292	297	300	301	297	287	310
Distribution	1,000	702	865	950	1,022	1,008	1,046	1,066	1,080
<b>Construction expenditures</b> <sup>4</sup>	<b>Mil. dol.</b>	<b>5,350</b>	<b>7,899</b>	<b>10,760</b>	<b>10,978</b>	<b>8,320</b>	<b>8,624</b>	<b>9,516</b>	<b>11,674</b>
Transmission	Mil. dol.	1,583	2,886	3,380	3,656	1,785	1,590	3,212	5,281
Distribution	Mil. dol.	1,869	3,714	5,394	5,035	4,180	5,437	4,546	4,897
Production and storage	Mil. dol.	1,150	309	367	598	161	138	113	74
General	Mil. dol.	352	770	1,441	1,389	1,974	1,273	1,457	1,667
Underground storage	Mil. dol.	396	219	177	299	220	185	187	254

<sup>1</sup> Annual average. <sup>2</sup> Excludes sales for resale. <sup>3</sup> For definition of Btu, see text, this section. <sup>4</sup> Includes general.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual (copyright).

## No. 915. Gas Utility Industry—Customers, Sales, and Revenues by State: 2002

[62,034 represents 62,034,000. See headnote, Table 914. For definition of Btu, see text, this section]

State	Customers <sup>1</sup> (1,000)		Sales <sup>2</sup> (tril. Btu)		Revenues <sup>2</sup> (mil. dol.)		State	Customers <sup>1</sup> (1,000)		Sales <sup>2</sup> (tril. Btu)		Revenues <sup>2</sup> (mil. dol.)	
	Total	Residential	Total	Residential	Total	Residential		Total	Residential	Total	Residential	Total	Residential
<b>U.S.</b>	<b>62,034</b>	<b>57,293</b>	<b>8,864</b>	<b>4,589</b>	<b>57,112</b>	<b>35,062</b>	MO	1,481	1,341	180	117	1,345	913
AL	869	801	104	48	849	487	MT	259	229	34	22	176	115
AK	110	97	113	17	260	71	NE	450	413	64	37	348	222
AZ	981	925	88	36	770	426	NV	614	580	82	33	574	310
AR	626	553	74	40	571	350	NH	102	87	15	7	137	70
CA	10,149	9,701	757	521	4,924	3,610	NJ	2,523	2,323	363	209	2,261	1,469
CO	1,550	1,413	213	132	1,076	724	NM	533	488	61	35	418	265
CT	509	462	86	41	727	444	NY	4,307	3,983	513	328	4,544	3,251
DE	138	126	19	10	173	101	NC	1,011	906	139	60	1,013	552
DC	125	117	15	11	161	117	ND	125	109	25	12	116	60
FL	647	604	45	15	425	204	OH	2,346	2,164	286	210	2,051	1,544
GA	347	316	57	18	380	167	OK	957	875	115	69	786	522
HI	34	31	3	1	48	12	OR	634	564	78	40	696	410
ID	293	261	34	21	266	172	PA	2,527	2,321	319	218	2,816	2,014
IL	3,801	3,567	545	426	3,442	2,662	RI	242	220	27	18	289	207
IN	1,756	1,606	248	158	1,747	1,185	SC	566	509	143	28	840	269
IA	922	824	121	73	760	507	SD	167	147	24	13	143	89
KS	928	843	109	73	705	513	TN	1,132	1,009	165	71	1,153	565
KY	793	714	104	57	698	414	TX	4,130	3,806	1,497	216	6,164	1,529
LA	1,021	957	197	50	999	396	UT	712	661	94	61	543	380
ME	25	18	5	1	46	12	VT	35	30	8	3	59	29
MD	867	812	86	64	788	607	VA	987	905	121	69	991	661
MA	1,414	1,296	169	112	1,557	1,098	WA	951	862	139	75	1,129	685
MI	3,244	3,000	501	361	3,007	2,224	WV	1,672	1,515	250	141	1,608	1,009
MN	1,406	1,283	280	139	1,583	893	WI	395	361	52	32	389	260
MS	487	435	75	27	456	205	WY	137	122	19	10	103	59

<sup>1</sup> Averages for the year. <sup>2</sup> Excludes sales for resale.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual (copyright).

## No. 916. Public Drinking Water Systems by Size of Community Served and Source of Water: 2003

[As of September. Covers systems that provide water for human consumption through pipes and other constructed conveyances to at least 15 service connections or serve an average of at least 25 persons for at least 60 days a year. Based on reported data in the Safe Drinking Water Information System maintained by the Environmental Protection Agency]

Type of system	Size of community served						Water source	
	Total	500 or fewer persons	501 to 3,300 persons	3,301 to 10,000 persons	10,001 to 100,000	100,000 persons or more	Ground water	Surface water
<b>Total systems</b> . . . . .	<b>161,201</b>	<b>132,568</b>	<b>19,837</b>	<b>4,879</b>	<b>3,550</b>	<b>367</b>	<b>146,468</b>	<b>14,733</b>
<b>COMMUNITY WATER SYSTEMS <sup>1</sup></b>								
Number of systems . . . . .	53,363	30,417	14,394	4,686	3,505	361	41,499	11,864
Percent of systems . . . . .	100	57	27	9	7	1	78	22
Population served (1,000) . . . . .	273,329	5,011	20,262	27,201	98,706	122,149	86,348	186,981
Percent of population . . . . .	100	2	7	10	36	45	32	68
<b>NON-TRANSIENT NON-COMMUNITY WATER SYSTEM <sup>2</sup></b>								
Number of systems . . . . .	19,686	16,785	2,786	97	16	2	18,908	778
Percent of systems . . . . .	100	85	14	-	-	-	96	4
Population served (1,000) . . . . .	6,298	2,328	2,772	506	412	280	5,568	730
Percent of population . . . . .	100	37	44	8	7	4	88	12
<b>TRANSIENT NON-COMMUNITY WATER SYSTEM <sup>3</sup></b>								
Number of systems . . . . .	88,152	85,366	2,657	96	29	4	86,061	2,091
Percent of systems . . . . .	100	97	3	-	-	-	98	2
Population served (1,000) . . . . .	23,335	7,316	2,603	529	619	12,269	10,527	12,808
Percent of population . . . . .	100	31	11	2	3	53	45	55

- Represents zero. <sup>1</sup> A public water system that supplies water to the same population year-round. <sup>2</sup> A public water system that regularly supplies water to at least 25 of the same people at least 6 months per year, but not year-round. Some examples are schools, factories, and office buildings which have their own water systems. <sup>3</sup> A public water system that provides water in a place such as a gas station or campground where people do not remain for long periods of time.

Source: U.S. Environmental Protection Agency, *Factoids: Drinking Water and Ground Water Statistics for 2003*, annual reports. See also <<http://www.epa.gov/safewater/data/pdfs/factoids2003.pdf>> (accessed January 2004).

## No. 917. Water and Sewage Treatment Facilities: 1997

[Based on the North American Industry Classification System (NAICS), 1997; see text, Section 15]

State	Water Supply (NAICS 2213101)		Sewage Treatment Facilities (NAICS 22132)		State	Water Supply (NAICS 2213101)		Sewage Treatment Facilities (NAICS 22132)	
	Number of establishments	Paid employees	Number of establishments	Paid employees		Number of establishments	Paid employees	Number of establishments	Paid employees
<b>U.S.</b> . . . . .	<b>3,721</b>	<b>26,597</b>	<b>696</b>	<b>5,600</b>	MO . . . . .	57	( <sup>4</sup> )	15	( <sup>5</sup> )
AL . . . . .	96	( <sup>1</sup> )	13	( <sup>2</sup> )	MT . . . . .	35	113	6	( <sup>3</sup> )
AK . . . . .	6	( <sup>3</sup> )	(NA)	(NA)	NE . . . . .	(NA)	(NA)	(NA)	(NA)
AZ . . . . .	129	1,131	8	40	NV . . . . .	23	( <sup>5</sup> )	(NA)	(NA)
AR . . . . .	140	( <sup>4</sup> )	9	( <sup>5</sup> )	NH . . . . .	10	( <sup>2</sup> )	(NA)	(NA)
CA . . . . .	374	2,848	27	116	NJ . . . . .	49	( <sup>6</sup> )	24	( <sup>1</sup> )
CO . . . . .	71	314	14	51	NM . . . . .	90	323	(NA)	(NA)
CT . . . . .	32	( <sup>6</sup> )	9	( <sup>5</sup> )	NY . . . . .	41	( <sup>1</sup> )	28	( <sup>2</sup> )
DE . . . . .	9	( <sup>1</sup> )	(NA)	(NA)	NC . . . . .	81	577	18	( <sup>5</sup> )
DC . . . . .	(NA)	(NA)	(NA)	(NA)	ND . . . . .	24	( <sup>6</sup> )	(NA)	(NA)
FL . . . . .	129	1,393	88	( <sup>2</sup> )	OH . . . . .	60	686	19	( <sup>2</sup> )
GA . . . . .	34	130	10	( <sup>2</sup> )	OK . . . . .	105	( <sup>1</sup> )	9	( <sup>2</sup> )
HI . . . . .	9	24	13	( <sup>2</sup> )	OR . . . . .	63	( <sup>2</sup> )	7	( <sup>1</sup> )
ID . . . . .	35	( <sup>2</sup> )	6	20	PA . . . . .	125	2,568	59	( <sup>1</sup> )
IL . . . . .	82	( <sup>2</sup> )	27	( <sup>2</sup> )	RI . . . . .	(NA)	(NA)	(NA)	(NA)
IN . . . . .	114	( <sup>2</sup> )	30	( <sup>2</sup> )	SC . . . . .	48	( <sup>1</sup> )	12	( <sup>2</sup> )
IA . . . . .	25	( <sup>2</sup> )	7	( <sup>2</sup> )	SD . . . . .	29	( <sup>1</sup> )	(NA)	(NA)
KS . . . . .	38	( <sup>2</sup> )	(NA)	(NA)	TN . . . . .	30	( <sup>1</sup> )	11	( <sup>1</sup> )
KY . . . . .	42	( <sup>1</sup> )	13	116	TX . . . . .	601	2,514	38	( <sup>1</sup> )
LA . . . . .	192	( <sup>2</sup> )	21	( <sup>2</sup> )	UT . . . . .	23	71	(NA)	(NA)
ME . . . . .	22	( <sup>2</sup> )	(NA)	(NA)	VT . . . . .	7	( <sup>1</sup> )	(NA)	(NA)
MD . . . . .	8	( <sup>2</sup> )	9	107	VA . . . . .	48	( <sup>1</sup> )	12	( <sup>2</sup> )
MA . . . . .	18	( <sup>2</sup> )	21	( <sup>1</sup> )	WA . . . . .	148	( <sup>1</sup> )	8	( <sup>2</sup> )
MI . . . . .	16	66	10	24	WV . . . . .	40	523	20	94
MN . . . . .	6	( <sup>2</sup> )	13	( <sup>2</sup> )	WI . . . . .	(NA)	(NA)	13	47
MS . . . . .	332	1,001	14	( <sup>2</sup> )	WY . . . . .	16	( <sup>2</sup> )	(NA)	(NA)

NA Not available. <sup>1</sup> 250-499 employees. <sup>2</sup> 100-249 employees. <sup>3</sup> 1-19 employees. <sup>4</sup> 500-999 employees. <sup>5</sup> 20-99 employees. <sup>6</sup> 1000-2499 employees.

Source: U.S. Census Bureau, *1997 Economic Census, Utilities*. See also <<http://www.census.gov/epcd/www/97EC22.htm>> (accessed May 2002).