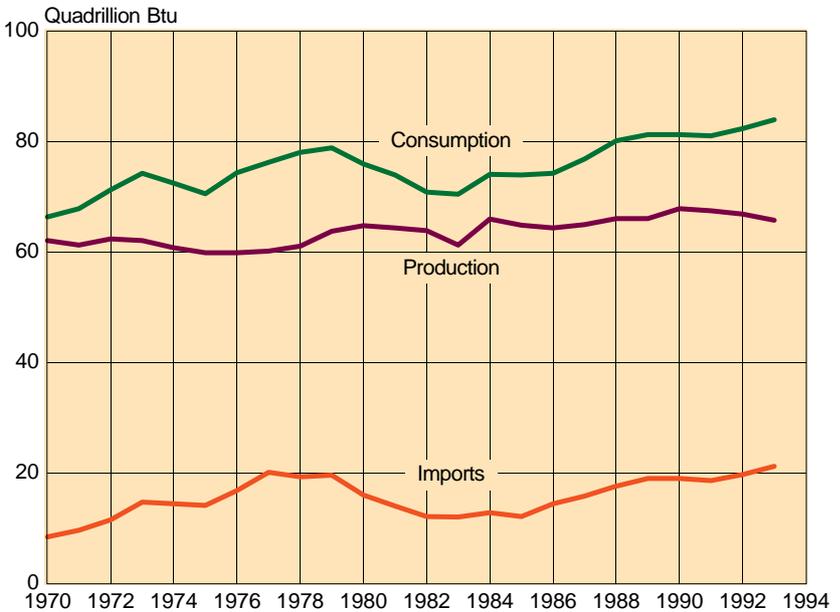
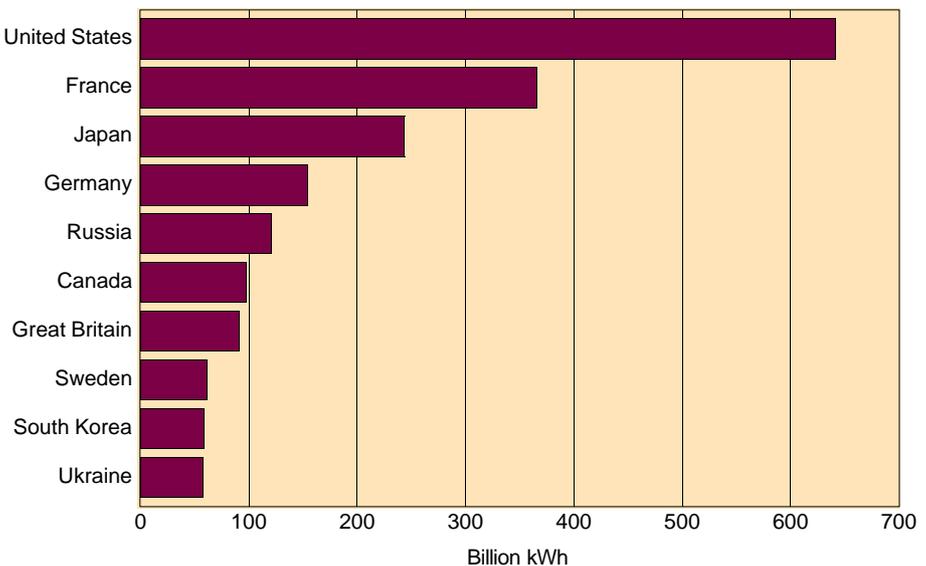


Figure 19.1
Energy Supply and Disposition: 1970 to 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 936.

Figure 19.2
**Commercial Nuclear Power Generation—
 Top 10 Countries: 1993**



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 968.

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. For additional data on transportation, see section 21; on fuels, see section 24; and on energy-related housing characteristics, see section 25.

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*, *Financial Statistics of Selected Electric Utilities*, *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 triennially in *Residential Energy Consumption Survey: Consumption and Expenditures*, and *Residential Energy Consumption Survey: Housing Characteristics*, and several other reports.

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

In Brief

Energy production projected to increase 1.3 percent by the year 2000 while consumption will rise 8.4 percent.

Crude oil imports surpass domestic production in 1994 with 7.0 million barrels per day compared to 6.6 for production.

Net generation of electric energy by utilities reached a record 2.9 trillion kWh in 1993.

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, including sales, revenues, customers, prices, and other financial and operating statistics.

Btu conversion factors.—Various energy sources are converted from original units (e.g., short tons, cubic feet, barrels, kilowatt-hours) 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 1992 for production and consumption, in that order, for various fuels: Petroleum, 5.800 and 5.376 mil. Btu per barrel; total coal, 21.675 and 21.164 mil. Btu per short ton; and natural gas (dry), 1,030 Btu per cubic foot for both. The factors for the production of nuclear power and geothermal power were 10,740 and 20,997 Btu per kilowatt-hour, respectively. The fossil fuel steam-electric power plant generation factor of 10,332 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.

No. 934. Total Horsepower of All Prime Movers: 1960 to 1992

[In millions, except percent. As of January, except as noted. Prime movers are mechanical engines and turbines, and work animals, which originally convert fuels or force (as wind or falling water) into work and power. Electric motors, which obtain their power from prime movers, are excluded to avoid duplication. See also *Historical Statistics, Colonial Times to 1970*, series S 1-14]

YEAR	Total horsepower	AUTOMOTIVE ^{1 2}		NONAUTOMOTIVE							
		Total	Percent of total	Total	Factories ^{3 4}	Mines ^{3 4}	Railroads ⁵	Merchant ships and sailing vessels ⁴	Farms	Electric central stations ²	Aircraft ^{5 6}
1960	11,008	10,367	94.2	641	42	35	47	24	240	217	37
1965	15,096	14,306	94.8	790	48	40	44	24	272	307	55
1970	20,408	19,325	94.7	1,083	54	45	54	22	290	435	183
1975	25,100	23,752	94.6	1,348	60	47	62	22	318	654	185
1980	28,922	27,362	94.6	1,564	64	48	63	28	345	806	210
1981	29,507	27,909	94.6	1,598	64	48	65	29	345	835	212
1982	30,495	28,852	94.6	1,643	64	48	64	29	352	854	232
1983	31,337	29,662	94.7	1,675	64	47	62	29	356	877	240
1984	31,819	30,117	94.7	1,702	65	47	61	30	359	886	254
1985	32,529	30,792	94.7	1,737	65	47	58	29	358	912	268
1986	32,660	30,893	94.6	1,767	65	47	56	29	358	942	270
1987	33,266	31,488	94.7	1,778	65	47	53	29	357	958	269
1988	34,200	32,415	94.8	1,785	65	47	53	28	356	969	267
1989	34,579	32,790	94.8	1,789	65	47	50	28	356	976	267
1990	34,958	33,158	94.7	1,800	67	48	50	28	356	984	267
1991	34,962	33,158	94.8	1,804	67	48	50	27	355	991	266
1992	35,300	33,431	94.7	1,869	68	47	50	29	352	71,057	266

¹ Includes passenger cars, trucks, buses, and motorcycles. ² As of July 1, except beginning 1992, as of January 1. ³ Beginning 1965, data are estimates. ⁴ This is an extension of trends, since government agencies suspended compilation of these power capacity statistics. Beginning 1992, includes vessels on the Great Lakes. ⁵ Beginning 1965, not strictly comparable with earlier years. ⁶ Includes private planes and commercial airlines. ⁷ Includes 57 million horsepower in cogenerating and industrial electric power capacity.

Source: John A. Waring, Arlington, VA, unpublished estimates.

No. 935. Energy Supply and Disposition, by Type of Fuel—Projections: 1993 to 2010

[Quadrillion Btu per year, except percent change. Projections are "reference" or mid-level forecasts. See report for methodology and assumptions used in generating projections]

TYPE OF FUEL	1993	2000	2005	2010	PERCENT CHANGE		
					1993-2000	2000-2005	2005-2010
Production, total	69.62	70.51	72.75	75.86	1.3	3.2	4.3
Crude oil and lease condensate	14.50	11.33	10.92	11.42	-21.9	-3.6	4.6
Natural gas plant liquids	2.41	2.57	2.69	2.81	6.6	4.7	4.5
Natural gas	18.90	19.65	20.53	21.51	4.0	4.5	4.8
Coal	20.23	22.08	23.21	24.51	9.1	5.1	5.6
Nuclear power	6.52	6.96	6.97	6.36	6.7	0.1	-8.8
Renewable energy and other	7.06	7.92	8.43	9.25	12.2	6.4	9.7
Imports, total	21.40	28.20	30.87	32.62	31.8	9.5	5.7
Crude oil	14.79	19.14	19.72	19.53	29.4	3.0	-1.0
Petroleum products	3.79	5.18	7.10	8.12	36.7	37.1	14.4
Natural gas	2.32	3.17	3.33	3.97	36.6	5.0	19.2
Other imports	0.50	0.71	0.73	1.00	42.0	2.8	37.0
Exports, total	4.21	4.40	4.49	4.83	4.5	2.0	7.6
Petroleum	2.11	1.97	1.68	1.64	-6.6	-14.7	-2.4
Natural gas	0.15	0.21	0.27	0.31	40.0	28.6	14.8
Coal	1.96	2.22	2.54	2.89	13.3	14.4	13.8
Consumption, total	87.27	94.61	99.37	103.88	8.4	5.0	4.5
Petroleum products	33.71	36.89	39.30	40.82	9.4	6.5	3.9
Natural gas	20.81	22.78	23.76	25.30	9.5	4.3	6.5
Coal	19.43	20.14	21.01	21.97	3.7	4.3	4.6
Nuclear power	6.52	6.96	6.97	6.36	6.7	0.1	-8.8
Renewable energy/other	6.80	7.83	8.32	9.41	15.1	6.3	13.1

Source: U.S. Energy Information Administration, *Annual Energy Outlook 1995*.

No. 936. Energy Supply and Disposition, by Type of Fuel: 1970 to 1993

[In quadrillion British thermal units (Btu). For Btu conversion factors, see text, section 19]

TYPE OF FUEL	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Production ²	62.1	62.1	59.9	64.8	64.9	64.4	65.0	66.1	66.1	167.9	67.5	66.9	65.81
Crude oil ²	20.4	19.5	17.7	18.3	19.0	18.4	17.7	17.3	16.1	15.6	15.7	15.2	14.48
Natural gas liquids	2.5	2.6	2.4	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.4	2.40
Natural gas ³	21.7	22.2	19.6	19.9	17.0	16.5	17.1	17.6	17.9	18.4	18.2	18.4	18.98
Coal	14.6	14.0	15.0	18.6	19.3	19.5	20.1	20.7	21.4	22.5	21.6	21.6	20.49
Nuclear electric power	0.2	0.9	1.9	2.7	4.2	4.5	4.9	5.7	5.7	6.2	6.6	6.6	6.52
Hydroelectric power	2.6	2.9	3.2	2.9	3.0	3.1	2.6	2.3	2.8	2.9	2.9	2.5	2.76
Geothermal and other	(Z)	(Z)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
Net trade ⁴	-5.7	-12.7	-11.7	-12.3	-7.9	-10.3	-11.9	-13.2	-14.2	-14.1	-13.4	-14.6	-16.9
Exports	2.7	2.1	2.4	3.7	4.2	4.1	3.9	4.4	4.8	4.9	5.2	5.0	4.31
Coal	1.9	1.4	1.8	2.4	2.4	2.3	2.1	2.5	2.6	2.8	2.9	2.7	1.95
Imports	8.4	14.7	14.1	16.0	12.1	14.4	15.8	17.6	19.0	19.0	18.6	19.7	21.19
Crude oil	2.8	6.9	8.7	11.2	6.8	9.0	10.1	11.0	12.6	12.8	12.6	13.3	14.63
Consumption	66.4	74.3	70.6	76.0	74.0	74.3	76.9	80.2	81.3	81.3	81.1	82.1	83.96
Petroleum products	29.5	34.8	32.7	34.2	30.9	32.2	32.9	34.2	34.2	33.6	32.9	33.5	33.77
Natural gas ³	21.8	22.5	20.0	20.4	17.8	16.7	17.7	18.6	19.4	19.3	19.6	20.1	20.79
Coal	12.3	13.0	12.7	15.4	17.5	17.3	18.0	18.9	18.9	19.1	18.8	18.9	19.63
Nuclear power	0.2	0.9	1.9	2.7	4.2	4.5	4.9	5.7	5.7	6.2	6.6	6.6	6.52
Hydroelectric power ⁶	2.7	3.0	3.2	3.1	3.4	3.5	3.1	2.7	2.9	3.0	3.1	2.8	3.06
Geothermal and other	(Z)	(Z)	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.20

Z Less than 50 trillion. ¹ Represents peak year for U.S. energy production. ² Includes lease condensate. ³ Dry marketed gas. ⁴ Exports minus imports. ⁵ Represents peak year for U.S. energy consumption. ⁶ Includes industrial generation of hydropower and net electricity imports.

No. 937. Energy Imports and Exports, by Type of Fuel: 1970 to 1993

[In quadrillion of Btu. For definition of Btu, see text, section 19]

TYPE OF FUEL	1970	1973	1975	1980	1985	1987	1988	1989	1990	1991	1992	1993
Net imports ¹												
Coal	-1.93	-1.42	-1.74	-2.39	-2.39	-2.05	-2.45	-2.57	-2.70	-2.77	-2.59	-1.77
Natural Gas (dry)	0.77	0.98	0.90	0.96	0.90	0.94	1.22	1.28	1.46	1.67	1.94	2.14
Petroleum	6.92	12.98	12.51	13.50	8.95	12.53	14.01	15.33	15.29	14.22	14.96	16.19
Other ²	-0.04	0.14	0.08	0.18	0.41	0.49	0.37	0.14	0.03	0.24	0.32	0.31
Imports												
Coal	(Z)	(Z)	0.02	0.03	0.05	0.04	0.05	0.07	0.07	0.08	0.10	0.18
Natural Gas (dry)	0.85	1.06	0.98	1.01	0.95	0.99	1.30	1.39	1.55	1.80	2.16	2.29
Petroleum	7.47	13.47	12.95	14.66	10.61	14.16	15.75	17.16	17.12	16.35	16.97	18.30
Other ²	0.07	0.20	0.16	0.28	0.49	0.57	0.47	0.33	0.25	0.35	0.43	0.42
Exports												
Coal	1.94	1.43	1.76	2.42	2.44	2.09	2.50	2.64	2.77	2.85	2.68	1.95
Natural Gas (dry)	0.07	0.08	0.07	0.05	0.06	0.05	0.07	0.11	0.09	0.13	0.22	0.14
Petroleum	0.55	0.49	0.44	1.16	1.66	1.63	1.74	1.84	1.82	2.13	2.01	2.11
Other ²	0.11	0.06	0.08	0.09	0.08	0.08	0.10	0.18	0.23	0.11	0.11	0.10

Z Less than .005 quadrillion Btu. ¹ Net imports equals imports minus exports. Minus sign (-) denotes an excess of exports over imports. ² Coal coke and small amounts of electricity transmitted across U.S. borders with Canada and Mexico.

No. 938. Selected Energy Indicators—Summary: 1970 to 1993

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. Minus sign (-) indicates decrease]

ITEM	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
AVERAGE ANNUAL PERCENT CHANGE ¹													
Gross domestic product ²	3.0	1.7	-0.7	-0.1	0.6	2.9	3.0	3.9	2.5	1.2	-0.6	2.3	3.1
Energy production, total ³	4.6	-0.2	-1.8	0.3	-0.3	-0.8	0.9	1.8	(Z)	2.6	-0.5	-0.9	-2.1
Crude oil ⁴	4.2	-0.9	-4.7	0.2	0.2	-3.3	-3.9	-2.3	-6.9	-3.4	0.8	-3.1	-4.9
Natural gas	6.4	-0.0	-6.1	-0.2	-1.2	-2.6	3.5	2.7	1.4	2.8	-0.7	0.8	2.8
Coal	2.2	-0.2	3.4	1.2	-0.4	1.0	3.2	2.9	2.9	5.1	-3.9	(Z)	-6.5
Energy consumption, total ⁵	4.6	1.4	-2.6	-0.8	-0.0	0.4	3.4	4.2	1.4	-0.1	-0.2	1.3	2.1
Petroleum products	4.8	1.9	-3.1	-1.6	-0.1	4.0	2.1	4.1	(Z)	-1.9	-2.1	2.1	0.9
Natural gas (dry)	6.5	-0.3	-6.0	-0.3	-0.7	-6.5	6.0	4.5	4.4	-0.5	1.6	2.6	3.6
Coal	1.1	2.4	-1.2	0.5	0.5	-1.2	4.2	4.6	0.4	0.9	-1.7	0.5	2.9
PER CAPITA ⁵ (mil. Btu)													
Energy production	304	294	278	285	273	268	268	270	268	272	268	262	254
Energy consumption	327	351	327	334	311	309	317	328	329	326	322	322	325
Energy consumption per dollar of GDP ² (1,000 Btu)	23.1	22.7	21.9	20.1	17.3	16.9	16.9	17.0	16.8	16.6	16.7	16.5	16.3

Z Less than .05 percent. ¹ Represents percent change from immediate prior year; for example, 1970, change from 1965. Percent change derived from Btu values. ² Gross domestic product in constant (1987) dollars. ³ Includes types of fuel or power, not shown separately. ⁴ Includes lease condensate. ⁵ Based on resident population estimated as of July 1. Source of tables 936 to 938: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*.

No. 939. Energy Consumption—End-Use Sector and Selected Source, by State: 1992

[In trillions of Btu, except as indicated. For Btu conversion factors, see text, section 19]

REGION, DIVISION, AND STATE	Total ¹	Per capita ² (mil. Btu)	END-USE SECTOR				SOURCE				
			Resi- dential	Com- mercial	Indus- trial	Trans- porta- tion	Petro- leum	Natural gas (dry)	Coal	Hydro- electric power	Nuclear electric power
United States . . .	82,128	322.0	16,193	12,875	30,597	22,464	33,525	20,139	18,846	2,793	6,607
Northeast	12,746	249.3	3,233	2,730	3,366	3,418	5,766	2,784	1,997	455	1,541
New England	3,132	237.4	904	684	673	871	1,712	529	190	138	411
Maine	370	299.5	78	53	135	104	225	5	22	50	57
New Hampshire	244	218.9	71	40	59	74	143	17	35	21	84
Vermont	140	244.9	42	26	27	45	79	8	1	24	40
Massachusetts	1,370	228.5	407	342	236	386	751	306	111	20	51
Rhode Island	247	246.5	66	45	79	57	101	79	-	10	-
Connecticut	762	232.3	240	179	137	206	414	114	22	14	179
Middle Atlantic	9,614	253.5	2,328	2,046	2,694	2,546	4,055	2,254	1,807	317	1,131
New York	3,616	199.7	995	1,021	723	878	1,574	987	337	306	258
New Jersey	2,401	307.0	495	484	614	809	1,213	561	63	-1	231
Pennsylvania	3,597	299.9	838	542	1,357	860	1,268	707	1,408	13	642
Midwest	19,663	324.3	4,411	3,115	7,349	4,788	6,815	4,877	6,487	213	1,693
East North Central	13,816	323.4	3,148	2,164	5,359	3,145	4,482	3,583	4,509	52	1,267
Ohio	3,733	338.7	822	579	1,551	780	1,137	839	1,419	3	158
Indiana	2,408	425.5	426	271	1,154	556	808	489	1,297	6	-
Illinois	3,487	300.3	852	636	1,238	762	1,143	1,011	693	1	787
Michigan	2,784	295.1	700	442	943	699	914	909	702	8	201
Wisconsin	1,404	281.3	348	236	473	348	481	335	399	35	120
West North Central	5,846	326.2	1,263	951	1,991	1,643	2,333	1,294	1,978	161	426
Minnesota	1,369	306.4	307	189	498	376	540	312	300	60	119
Iowa	927	330.6	203	139	361	224	320	232	327	10	36
Missouri	1,499	288.8	369	286	353	492	648	241	523	15	86
North Dakota	327	516.1	51	38	169	70	118	38	399	25	-
South Dakota	205	289.2	48	32	53	72	104	27	34	41	-
Nebraska	506	316.0	116	106	131	152	207	105	141	11	93
Kansas	1,014	402.9	170	162	425	257	396	339	254	-	91
South	34,187	387.7	5,835	4,374	15,033	8,945	14,276	8,667	7,937	509	2,614
South Atlantic	12,670	281.0	2,945	2,315	3,620	3,790	5,243	1,655	3,600	181	1,659
Delaware	241	348.2	47	35	93	65	141	41	46	-	-
Maryland	1,204	244.8	321	185	353	344	498	186	248	19	114
Dist. of Columbia	174	297.3	34	80	33	27	34	33	24	-	-
Virginia	1,853	289.8	429	392	468	565	732	208	344	4	249
West Virginia	794	439.1	131	88	416	159	295	137	705	12	-
North Carolina	2,019	295.3	468	344	666	541	754	186	600	60	243
South Carolina	1,224	339.8	240	165	513	307	405	142	288	28	486
Georgia	2,095	309.3	454	330	640	671	808	352	616	56	299
Florida	3,066	227.4	821	695	438	1,112	1,577	370	653	2	268
East South Central	5,946	382.8	1,106	580	2,650	1,610	2,101	987	2,262	244	462
Kentucky	1,532	408.2	271	180	691	391	539	201	814	39	-
Tennessee	1,793	356.7	382	140	810	461	608	249	591	99	167
Alabama	1,653	399.6	286	159	784	425	538	287	771	106	207
Mississippi	968	370.0	167	102	365	333	415	251	87	-	87
West South Central	15,571	565.0	1,783	1,478	8,764	3,546	6,932	6,024	2,076	85	493
Arkansas	796	332.5	157	101	307	231	286	227	221	35	121
Louisiana	3,558	831.4	288	211	2,314	745	1,508	1,614	224	-	111
Oklahoma	1,302	406.2	224	173	529	377	473	558	307	33	-
Texas	9,915	560.7	1,114	993	5,614	2,194	4,665	3,626	1,324	17	262
West	15,506	281.2	2,716	2,657	4,820	5,313	6,667	3,812	2,425	1,615	759
Mountain	4,605	320.3	849	859	1,501	1,396	1,731	1,034	2,200	275	273
Montana	341	414.1	56	50	145	90	149	47	190	85	-
Idaho	387	362.7	76	75	145	91	123	50	10	67	-
Wyoming	422	908.7	33	38	268	82	120	131	491	7	-
Colorado	959	276.8	213	233	233	280	349	259	332	16	-
New Mexico	584	369.4	78	96	195	215	241	211	268	3	-
Arizona	945	246.5	206	207	194	338	364	134	369	71	273
Utah	557	307.4	100	87	210	159	208	132	363	6	-
Nevada	412	307.9	87	72	112	141	176	71	179	21	-
Pacific	10,901	267.5	1,866	1,798	3,319	3,917	4,936	2,778	225	1,340	486
Washington	1,991	387.2	363	288	698	642	860	175	106	697	61
Oregon	942	317.1	194	162	284	302	369	127	41	388	49
California	7,092	229.6	1,240	1,256	1,915	2,681	3,243	2,090	65	244	376
Alaska	612	1040.4	46	59	358	149	206	38	13	10	-
Hawaii	263	227.6	23	33	64	143	258	3	1	1	-

- Represents zero. ¹ Sources of energy includes geothermal, wood and waste, and net interstate sales of electricity, including losses, not shown separately. ² Based on estimated resident population as of July 1. ³ Includes 27.2 trillion Btu of net imports of coal coke not allocated by State. ⁴ A negative number occurs when more electricity is expended than is created to provide electricity during peak demand periods.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1992*.

No. 940. Energy Consumption, by End-Use Sector: 1970 to 1993

[Btu=British thermal unit. For residential and commercial, industrial, and transportation, represents consumption of fossil fuels only. For Btu conversion factors, see text, section 19]

YEAR	Total consumption (quad. Btu)	Residential and commercial (quad. Btu)	Industrial and miscellaneous (quad. Btu)	Transportation (quad. Btu)	PERCENT OF TOTAL		
					Residential and commercial	Industrial and miscellaneous	Transportation
1970	66.4	21.7	28.6	16.1	32.7	43.1	24.2
1973	74.3	24.1	31.5	18.6	32.5	42.4	25.0
1975	70.6	23.9	28.4	18.3	33.9	40.3	25.9
1976	74.4	25.0	30.2	19.1	33.6	40.7	25.7
1977	76.3	25.4	31.1	19.8	33.3	40.7	26.0
1978	78.1	26.1	31.4	20.6	33.4	40.2	26.4
1979	78.9	25.8	32.6	20.5	32.7	41.3	25.9
1980	76.0	25.7	30.6	19.7	33.8	40.3	25.9
1981	74.0	25.2	29.2	19.5	34.1	39.5	26.4
1982	70.9	25.6	26.1	19.1	36.2	36.9	26.9
1983	70.5	25.6	25.8	19.1	36.3	36.5	27.1
1984	74.1	26.5	27.9	19.8	35.7	37.6	26.7
1985	74.0	26.7	27.2	20.1	36.1	36.8	27.1
1986	74.3	26.9	26.6	20.8	36.1	35.8	28.0
1987	76.9	27.6	27.8	21.5	35.9	36.2	27.9
1988	80.2	28.9	29.0	22.3	36.1	36.1	27.8
1989	81.3	29.4	29.4	22.6	36.1	36.1	27.7
1990	81.3	28.8	29.9	22.5	35.4	36.8	27.7
1991	81.1	29.4	29.6	22.1	36.3	36.5	27.3
1992	82.1	29.1	30.6	22.5	35.4	37.2	27.3
1993	84.0	30.3	30.8	22.8	36.1	36.6	27.2

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 941. Energy Expenditures and Average Fuel Prices, by Source and Sector: 1970 to 1992

[For definition of Btu, see text, section 19. 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	1973	1975	1980	1985	1987	1988	1989	1990	1991	1992
EXPENDITURES (mil. dol.)											
Total ¹	82,579	111,616	171,782	373,900	435,444	393,525	407,597	434,354	469,420	467,029	472,756
Natural gas	10,891	13,933	20,061	51,061	72,938	58,019	61,089	65,383	64,102	64,697	68,401
Petroleum products ²	48,088	65,305	103,859	238,408	223,196	186,413	189,261	206,277	234,461	221,916	221,764
Motor gasoline	31,596	39,667	59,446	124,408	118,044	99,809	103,211	112,585	126,472	123,051	125,158
Coal	4,594	6,229	13,048	22,648	29,719	27,586	28,371	28,106	28,382	27,869	27,411
Electricity sales	23,351	33,780	50,680	98,098	149,242	154,692	162,070	169,340	176,742	184,822	186,956
Residential sector	20,083	27,078	36,844	68,825	98,307	97,552	102,773	108,423	109,265	114,739	115,150
Commercial sector	10,668	15,104	22,835	46,881	70,263	68,777	71,579	75,467	78,922	81,483	82,398
Industrial sector	16,458	23,531	41,169	94,520	105,723	89,975	91,315	93,827	100,903	99,603	102,035
Transportation sector ²	35,370	45,904	70,934	163,674	161,150	137,220	141,930	156,637	180,330	171,204	173,173
Motor gasoline	30,525	38,598	57,992	121,809	115,201	97,527	100,988	110,168	123,775	120,557	122,700
Electric utilities	4,316	7,817	16,396	37,435	42,558	36,692	37,435	38,895	38,443	36,501	35,763
AVERAGE FUEL PRICES (dol. per mil. Btu)											
All sectors	1.65	2.02	3.33	6.91	8.42	7.37	7.30	7.69	8.37	8.32	8.27
Residential sector	2.12	2.73	3.83	7.55	11.14	10.95	10.90	11.26	12.14	12.34	12.27
Commercial sector	1.97	2.56	4.09	7.88	11.71	11.06	10.91	11.40	12.03	12.21	12.32
Industrial sector	0.83	1.08	2.20	4.71	6.09	5.19	5.03	5.11	5.40	5.34	5.29
Transportation sector	2.31	2.57	4.02	8.61	8.26	6.57	6.56	7.16	8.26	7.97	7.93
Electric utilities	0.32	0.46	0.96	1.75	1.85	1.51	1.45	1.48	1.46	1.37	1.34

¹ Includes electricity sales; excludes electricity generation. ² Includes sources or fuel types not shown separately.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

No. 942. Energy Expenditures—End-Use Sector and Selected Source, by State: 1992

[In millions of dollars, except as indicated. End-use sector and electric utilities exclude expenditures 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]

REGION, DIVISION, AND STATE	Total ¹	Per capita ² (dol.)	END-USE SECTOR				SOURCE				
			Resi- dential	Com- mercial	Indus- trial	Trans- porta- tion	Petroleum products		Natural gas	Coal	Elec- tricity sales
							Total	Gas- line			
U.S.	472,756	1,853	115,150	82,398	9³102,035	173,173	221,764	125,158	68,401	27,411	186,956
Northeast.	92,317	1,806	27,816	20,802	15,284	28,416	40,167	21,922	14,636	3,159	38,434
N.E.	24,923	1,889	7,879	5,265	3,725	8,055	12,269	6,719	3,108	357	10,094
ME	2,567	2,077	704	375	552	937	1,475	714	28	57	1,039
NH	2,002	1,796	638	322	362	681	1,027	604	15	60	893
VT	1,145	2,005	363	201	164	417	671	339	38	2	436
MA	10,848	1,810	3,434	2,504	1,410	3,500	5,189	2,864	1,721	193	4,347
RI	1,867	1,865	567	359	408	533	777	452	435	-	657
CT	6,494	1,980	2,173	1,504	829	1,988	3,129	1,745	780	44	2,742
M.A.	67,394	1,777	19,937	15,537	11,559	20,361	27,898	15,203	11,528	2,802	28,340
NY	28,751	1,588	9,272	8,150	3,558	7,772	11,162	6,294	5,365	525	13,091
NJ	16,156	2,066	4,161	3,615	2,764	5,616	7,541	3,641	2,758	108	5,975
PA	22,487	1,875	6,504	3,773	5,237	6,973	9,196	5,688	3,405	2,169	9,274
Midwest.	112,265	1,851	28,172	18,171	27,416	38,507	49,002	28,978	20,130	9,126	41,591
E.N.C.	78,919	1,847	20,363	13,114	19,981	25,461	32,205	19,438	15,394	6,757	30,140
OH	21,156	1,920	5,365	3,555	5,653	6,584	8,410	5,128	3,706	2,073	8,718
IN	11,606	2,051	2,597	1,428	3,442	4,140	5,079	2,697	1,977	1,845	4,042
IL	21,273	1,832	5,899	4,070	4,926	6,378	8,061	4,908	4,433	1,180	8,599
MI	16,744	1,775	4,313	2,807	4,268	5,356	6,849	4,344	3,784	1,109	6,009
WI	8,140	1,630	2,189	1,256	1,693	3,003	3,804	2,362	1,495	551	2,772
W.N.C.	33,346	1,861	7,809	5,057	7,434	13,046	16,797	9,540	4,736	2,369	11,452
MN	7,648	1,712	1,829	939	1,783	3,097	3,862	2,380	1,170	371	2,593
IA	5,295	1,889	1,328	752	1,348	1,867	2,472	1,454	953	373	1,807
MO	9,237	1,779	2,345	1,597	1,507	3,788	4,616	2,781	1,099	699	3,489
ND	1,566	2,471	289	192	510	576	792	402	110	474	412
SD	1,287	1,818	302	172	227	586	766	425	110	41	404
NE	3,024	1,889	646	533	543	1,302	1,618	858	419	110	982
KS	5,288	2,103	1,069	872	1,516	1,831	2,673	1,241	875	300	1,765
South	174,910	1,983	39,823	25,702	43,992	65,393	86,374	45,903	21,453	12,249	70,406
S.A.	78,331	1,737	21,243	13,883	13,625	29,580	36,437	22,617	6,672	5,973	35,913
DE	1,379	1,970	368	220	278	514	724	393	154	78	568
MD	8,209	1,670	2,334	1,140	1,644	3,092	3,910	2,509	913	390	3,468
DC	1,143	1,954	234	485	175	249	282	206	213	2	650
VA	11,258	1,761	3,036	2,158	1,548	4,517	5,398	3,400	942	529	4,782
WV	3,761	2,079	773	464	1,218	1,305	1,949	990	478	1,184	1,193
NC	12,886	1,913	3,530	2,063	2,712	4,580	5,787	3,636	769	1,038	6,213
SC	6,733	1,869	1,628	936	1,771	2,399	2,865	1,870	550	451	3,230
GA	12,605	1,861	3,188	2,220	2,526	4,671	5,429	3,377	1,576	1,108	5,530
FL	20,357	1,510	6,154	4,198	1,753	8,253	10,094	6,237	1,078	1,192	10,280
E.S.C.	30,073	1,936	6,416	3,232	8,289	12,136	14,401	8,456	3,096	3,223	12,141
KY	7,263	1,935	1,452	838	1,985	2,989	3,657	2,013	696	991	2,781
TN	9,529	1,896	2,062	780	2,922	3,765	4,422	2,747	939	765	4,040
AL	8,357	2,019	1,840	973	2,305	3,239	3,787	2,313	932	1,328	3,362
MS	4,924	1,883	1,062	641	1,077	2,144	2,535	1,383	529	139	1,958
W.S.C.	66,506	2,413	12,164	8,587	22,078	23,677	35,536	14,829	11,686	3,054	22,352
AR	4,691	1,959	1,125	609	1,089	1,869	2,184	1,343	676	366	1,864
LA	12,378	2,893	1,947	1,334	4,933	4,164	6,584	2,189	2,440	345	3,824
OK	6,048	1,887	1,382	920	1,130	2,617	3,013	1,754	1,282	382	2,207
TX	43,390	2,454	7,711	5,725	14,927	15,027	23,756	9,544	7,289	1,961	14,457
West	93,164	1,690	19,340	17,723	15,245	40,857	46,221	28,355	12,182	2,876	36,525
Mountain	25,922	1,803	5,495	4,819	4,575	11,034	12,900	7,860	2,965	2,511	10,050
MT	1,719	2,091	298	235	394	792	991	529	180	140	542
ID	1,930	1,811	368	319	449	794	1,006	598	170	18	736
WY	1,550	3,334	176	176	574	624	783	341	231	390	488
CO	5,443	1,571	1,217	1,170	695	2,360	2,706	1,798	823	369	1,902
NM	3,004	1,899	535	570	499	1,399	1,698	953	341	354	1,010
AZ	6,884	1,797	1,800	1,529	900	2,656	2,923	2,015	493	515	3,517
UT	2,861	1,580	579	434	575	1,273	1,451	842	475	463	868
NV	2,530	1,894	520	387	488	1,135	1,344	784	253	262	987
Pacific	67,242	1,650	13,845	12,903	10,670	29,824	33,321	20,496	9,217	366	26,475
WA	8,888	1,728	1,603	1,140	1,363	4,782	5,266	2,748	611	154	3,015
OR	5,101	1,716	953	746	915	2,488	2,814	1,682	460	48	1,850
CA	49,418	1,600	10,651	10,358	7,861	20,548	22,619	15,249	7,897	119	20,378
AK	1,867	3,175	337	338	188	1,004	1,255	307	211	43	430
HI	1,968	1,702	302	322	343	1,002	1,367	510	39	2	803

- Represents zero. ¹ Includes sources not shown separately. Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel. ² Based on estimated resident population as of July 1.

³ Includes net imports of coal coke not shown separately by State.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

No. 943. Residential Energy Consumption, Expenditures, and Average Price, 1980 to 1990, and by Region, 1990

[For period April to March for 1980-1985; January to December for 1987 and 1990. 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 Appendix III. For composition of regions, see table 27. Btu=British thermal unit; see text, section 19]

TYPE OF FUEL	Unit	1980	1982	1983	1985	1987	1990				
							Total	North-east	Mid-west	South	West
CONSUMPTION											
Total	Quad. Btu	9.74	9.51	8.62	9.04	9.13	9.22	2.30	2.81	2.60	1.51
Avg. per household	Mil. Btu	126	114	103	105	101	98	120	122	81	78
Natural gas	Quad. Btu	5.31	5.39	4.77	4.98	4.83	4.86	1.03	1.88	1.03	0.92
Electricity	Quad. Btu	2.42	2.48	2.42	2.48	2.76	3.03	0.47	0.66	1.36	0.54
Fuel oil, kerosene	Quad. Btu	1.71	1.33	1.14	1.26	1.22	1.04	0.78	0.13	0.11	0.02
Liquid petroleum gas	Quad. Btu	0.31	0.31	0.29	0.31	0.32	0.28	0.02	0.13	0.10	0.03
EXPENDITURES											
Total	Bil. dol.	63.2	85.0	87.8	97.0	97.7	110.2	28.3	26.9	37.2	17.9
Avg. per household	Dollars	815	1,022	1,048	1,123	1,080	1,172	1,471	1,166	1,151	920
Natural gas	Bil. dol.	17.8	24.5	27.1	29.8	26.1	27.3	7.3	9.2	5.9	4.8
Electricity	Bil. dol.	32.6	45.9	48.4	54.5	61.6	71.5	14.6	15.4	29.1	12.5
Fuel oil, kerosene	Bil. dol.	10.7	11.8	9.6	9.6	7.2	8.3	6.1	1.0	1.0	0.2
Liquid petroleum gas	Bil. dol.	2.1	2.7	2.7	3.1	2.8	3.1	0.3	1.3	1.2	0.4
AVERAGE PRICE											
Total	Dol./mil. Btu.	6.49	8.93	10.18	10.73	10.71	12.0	12.3	9.6	14.3	11.8
Natural gas	Dol./mil. Btu	3.36	4.55	5.67	5.97	5.41	5.6	7.1	4.9	5.7	5.2
Electricity	Dol./mil. Btu	13.46	18.51	19.98	21.94	22.34	23.6	31.2	23.2	21.4	23.2
Fuel oil, kerosene	Dol./mil. Btu	6.29	8.89	8.42	7.64	5.89	7.9	7.9	7.8	8.4	7.9
Liquid petroleum gas	Dol./mil. Btu	6.71	8.74	9.42	9.91	8.91	11.2	14.3	9.7	12.2	12.2

Source: U.S. Energy Information Administration, *Household Energy Consumption and Expenditures, 1990*, and prior reports. Survey not conducted in 1984, 1986, 1988, and 1989.

No. 944. Residential Energy Consumption and Expenditures, by Type of Fuel and Selected Household Characteristic: 1990

[For period January through December 1990. Quad.=quadrillion. See headnote, table 943]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total ¹ (quad.)	Avg. per house- hold ¹ (mil.)	Natural gas (quad.)	Elec- tricity (quad.)	Fuel oil ² (quad.)	Total ¹ (bil. dol.)	Avg. per house- hold ¹ (dol.)	Natural gas (bil. dol.)	Elec- tricity (bil. dol.)	Fuel oil ² (bil. dol.)
Total households	9.22	98	4.86	3.03	1.05	110.2	1,172	27.3	71.5	8.3
Single family detached	6.61	113	3.45	2.20	0.74	78.2	1,340	18.8	51.0	5.9
Single family attached	0.52	87	0.28	0.19	0.06	6.8	1,129	1.7	4.6	0.5
Two-to-four unit building	0.94	95	0.62	0.20	0.11	10.2	1,015	3.8	5.3	0.9
Five-or-more unit building	0.73	51	0.36	0.28	0.08	9.8	677	2.2	7.1	0.5
Mobile home	0.41	78	0.15	0.16	0.04	5.3	1,011	0.8	3.5	0.4
Year house built:										
1939 or earlier	2.57	120	1.57	0.51	0.42	26.1	1,216	9.0	13.0	3.3
1940 to 1949	0.74	105	0.45	0.19	0.07	7.9	1,130	2.5	4.5	0.6
1950 to 1959	1.47	110	0.81	0.41	0.22	16.8	1,254	4.6	10.2	1.7
1960 to 1969	1.41	95	0.77	0.48	0.13	17.1	1,155	4.4	11.4	1.0
1970 to 1979	1.82	85	0.78	0.82	0.17	24.5	1,143	4.2	18.3	1.3
1980 to 1984	0.58	72	0.21	0.32	0.01	9.0	1,120	1.2	7.4	0.1
1985 to 1990	0.63	80	0.28	0.30	(B)	8.8	1,117	1.4	6.8	(B)
Heating and cooling degree day zones: ³										
Less than 2,000 CDD and —										
More than 7,000 HDD	1.12	111	0.53	0.29	0.21	11.5	1,132	2.7	6.3	1.6
5,500 to 7,000 HDD	3.29	123	2.04	0.75	0.43	33.4	1,251	10.8	18.4	3.5
4,000 to 5,499 HDD	2.12	102	1.06	0.67	0.34	25.6	1,222	6.6	15.6	2.7
Less than 4,000 HDD	1.41	73	0.72	0.59	0.04	19.4	1,008	4.2	14.3	0.3
More than 2,000 CDD and less than 4,000 HDD	1.28	75	0.50	0.74	(B)	20.4	1,197	3.0	16.9	(B)
1990 family income:										
Less than \$10,000	1.27	80	0.70	0.36	0.15	14.1	888	4.0	8.2	1.2
\$10,000 to \$19,999	1.66	84	0.88	0.53	0.17	19.4	978	5.0	12.3	1.4
\$20,000 to \$34,999	2.27	93	1.17	0.77	0.25	27.1	1,115	6.4	17.9	2.1
\$35,000 to \$49,999	1.75	105	0.90	0.62	0.19	21.7	1,296	5.1	14.6	1.5
\$50,000 or more	2.27	132	1.21	0.75	0.27	27.9	1,618	6.8	18.6	2.2

B Base figure too small to meet statistical standards for reliability of derived figure. ¹ Includes liquid petroleum gas not shown separately. ² Includes kerosene. ³ CDD=Cooling degree day; HDD=Heating degree day.

Source: U.S. Energy Information Administration, *Household Energy Consumption and Expenditures, 1990*.

No. 945. Manufacturing Primary Energy Consumption for all Purposes, by Type of Fuel and Major Industry Group: 1991

[In trillions of Btu. Estimates represented in this table are for the primary consumption of energy for heat and power and as feedstocks or raw material inputs. Primary consumption is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; woodchips, bark, and woodwaste from wood purchased as a raw material input; and waste materials such as waste paper and packing materials. Primary consumption excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting. Based on the 1991 Manufacturing Energy Consumption Survey and subject to sampling variability]

INDUSTRY	SIC ¹ code	Total	Net electricity ²	Residual fuel oil	Distillate fuel oil ³	Natural gas ⁴	LPG	Coal	Coke and breeze	Other ⁵
All industries	(X)	20,257	2,370	454	146	6,095	1,574	2,006	308	7,304
Food and kindred products	20	956	169	27	17	(D)	5	154	(D)	(D)
Tobacco products	21	24	3	1	(Z)	4	(Z)	15	-	(Z)
Textile mill products	22	274	101	12	6	108	2	31	-	13
Apparel and other textile products	23	44	19	(S)	1	19	1	2	-	1
Lumber and wood products	24	451	61	2	16	41	4	2	-	325
Furniture and fixtures	25	68	17	1	1	19	1	4	-	26
Paper and allied products	26	2,506	201	156	9	(D)	5	296	(D)	(D)
Printing and publishing	27	108	53	(Z)	2	48	1	-	-	4
Chemicals and allied products	28	5,051	440	(D)	14	2,227	(D)	(D)	10	526
Petroleum and coal products	29	5,967	105	65	21	838	(D)	(D)	(D)	4,864
Rubber and misc. plastic products	30	238	116	8	3	96	3	7	-	6
Leather and leather products	31	12	3	1	1	5	(Z)	(S)	-	1
Stone, clay, and glass products	32	880	105	9	20	381	(D)	293	(D)	(D)
Primary metal industries	33	2,467	499	(D)	11	708	(D)	853	278	72
Fabricated metal products	34	307	102	3	6	175	4	5	(D)	(D)
Industrial machinery & equipment	35	237	101	3	4	109	2	11	1	5
Electric and electronic equipment	36	212	102	4	2	79	1	(D)	(D)	(D)
Transportation equipment	37	323	118	12	7	133	2	(D)	(D)	17
Instruments and related products	38	98	42	3	(D)	26	(S)	(D)	-	(D)
Misc. manufacturing industries	39	32	12	1	(D)	15	(Z)	1	-	(S)

- Represents or rounds to zero. D Withheld to avoid disclosing data for individual establishments. S Withheld because Relative Standard Error is greater than 50 percent. X Not applicable. Z Less than 0.5 trillion Btu. ¹ Standard Industrial Classification Code; see text, section 13. ² Net electricity is obtained by aggregating purchases, transfers in, and generation from noncombustible renewable resources minus quantities sold and transferred out. Excludes electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal). ³ Includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels. ⁴ Includes natural gas obtained from utilities, transmission pipelines, and any other supplier such as brokers and producers. ⁵ Includes net steam, and other energy that respondents indicated was used to produce heat and power or as feedstock/raw material inputs.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption 1991*.

No. 946. Manufacturing Energy Consumption for Fuel Purposes, by Type of Fuel and End-Use: 1991

[In trillions of Btu. See headnote, table 945]

END-USE CATEGORIES ¹	Total	Net electricity ²	Residual fuel oil	Distillate fuel oil and diesel fuel ³	Natural gas ⁴	LPG	Coal (excluding coal coke and breeze)	Other ⁵
Total inputs	15,027	2,370	414	139	5,506	105	1,184	5,309
Boiler fuel	(X)	(D)	296	40	2,098	18	859	(X)
Direct process uses	(X)	1,864	109	34	2,578	64	314	(X)
Process heating	(X)	235	107	19	2,382	49	314	(X)
Process cooling and refrigeration	(X)	124	(Z)	(Z)	13	(Z)	-	(X)
Machine drive	(X)	1,187	2	14	127	15	-	(X)
Electro-chemical processes	(X)	304	(X)	(X)	(X)	(X)	(X)	(X)
Other process use	(X)	15	(Z)	1	56	(Z)	(Z)	(X)
Direct nonprocess uses	(X)	396	7	53	702	19	(D)	(X)
Facility heating, ventilation, and air conditioning ⁶	(X)	192	4	8	283	3	(Z)	(X)
Facility lighting	(X)	161	(X)	(X)	(X)	(X)	(X)	(X)
Facility support	(X)	36	(D)	(Z)	23	(Z)	-	(X)
Onsite transportation	(X)	4	(X)	38	(Z)	16	(X)	(X)
Conventional electricity generation	(X)	(X)	2	4	347	(Z)	(D)	(X)
Other nonprocess use	(X)	4	(D)	2	49	(Z)	-	(X)
End-use not reported	5,547	(D)	2	12	128	4	(D)	5,309

- Represents or rounds to zero. D Withheld to avoid disclosing data for individual establishments. X Not applicable. Z Less than .5 trillion. ¹ Allocations to specific end-uses are made on the basis of reasonable approximations by respondents. ² "Net electricity" is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal). ³ Includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels. ⁴ Includes natural gas obtained from utilities, transmission pipelines, and any other supplier(s) such as brokers and producers. ⁵ Includes net steam (the sum of purchases, generation from renewables, and net transfers) and other energy that respondents indicated was used to produce heat and power. ⁶ Excludes steam and hot water.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption 1991*.

No. 947. Commercial Buildings—Energy Consumption and Expenditures, by Major Fuel Type Used: 1992

[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 tables in section 25. Tril. = trillion]

TYPE OF FUEL	MAJOR FUEL CONSUMPTION				MAJOR FUEL EXPENDITURES			
	Total (tril. Btu)	Per building (mil. Btu)	Per square feet (1,000 Btu)	Per worker (mil. Btu)	Total (mil. dol.)	Per building (1,000 dol.)	Per square feet (dollars)	Per mil. Dollars (dollars)
All buildings	5,803	1,207	85.5	81.5	72,599	15.1	1.07	12.51
Energy sources (more than one may apply):								
Electricity	5,802	1,258	87.2	81.5	72,595	15.7	1.09	12.51
Natural gas	4,576	1,722	101.7	89.4	52,563	19.8	1.17	11.49
Fuel oil	1,526	2,727	115.4	84.4	17,972	32.1	1.36	11.78
District heat	839	8,872	160.0	117.5	9,106	96.3	1.74	10.85
District chilled water	292	10,369	152.6	107.8	3,167	112.5	1.65	10.85
Propane	220	653	64.9	76.3	3,561	10.6	1.05	16.18
Other	67	411	43.3	50.9	992	6.1	0.64	14.78

Source: U.S. Energy Information Administration, *Commercial Buildings Energy Consumption and Expenditures, 1992*.

No. 948. Commercial Buildings—Energy Consumption and Expenditures: 1992

[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 tables in section 25. For composition of regions, see table 27]

BUILDING CHARACTERISTIC	ALL BUILDINGS USING ANY MAJOR FUEL		CONSUMPTION (tril. Btu)			EXPENDITURES (mil. dol.)		
	Number (1,000)	Square feet (mil.)	Major fuel, total ¹	Electricity	Natural gas	Major fuel, total ¹	Electricity	Natural gas
All buildings	4,615	66,538	5,803	2,609	2,487	72,599	57,619	10,679
Region:								
Northeast	755	13,235	1,090	419	354	16,226	12,250	2,014
Midwest	1,141	16,909	1,688	622	858	17,204	12,745	3,258
South	1,874	23,979	1,888	1,002	760	22,843	19,097	2,998
West	845	12,415	1,137	566	515	16,326	13,527	2,408
Year constructed:								
1900 or before	169	1,721	118	38	62	1,447	1,029	281
1901 to 1920	244	3,401	213	67	102	2,516	1,711	516
1921 to 1945	681	8,385	878	217	522	9,244	5,263	2,152
1946 to 1960	839	10,135	825	332	380	9,820	7,477	1,688
1961 to 1970	757	12,473	1,200	528	501	14,576	11,617	1,947
1971 to 1979	945	13,781	1,261	629	528	16,459	13,659	2,187
1980 to 1983	855	14,153	1,133	689	345	16,834	14,510	1,668
1984 to 1986	127	2,489	173	109	48	2,702	2,354	239
Principal activity within building:								
Assembly ²	704	9,123	510	233	202	6,460	4,939	995
Education	301	8,470	637	235	291	7,389	5,526	1,271
Food sales/services	390	2,248	584	251	320	7,200	5,609	1,483
Health care	63	1,763	403	138	189	3,733	2,640	666
Lodging	154	2,891	463	189	193	5,459	4,030	922
Mercantile/services	1,270	12,399	892	444	381	12,907	10,583	1,899
Office	749	12,319	1,272	704	413	18,125	15,511	1,641
Public order and safety	24	1,652	(B)	(B)	9	811	743	43
Warehouse	685	11,179	590	253	259	6,750	5,386	939
Other	65	1,124	270	78	(B)	2,178	1,479	(B)
Vacant	210	3,371	131	47	61	1,585	1,172	290
Square footage:								
1,001 to 5,000	2,539	6,995	715	334	333	10,604	8,536	1,761
5,001 to 10,000	954	7,057	682	251	378	8,481	6,336	1,828
10,001 to 25,000	628	10,097	1,038	335	611	10,373	7,758	2,129
25,001 to 50,000	275	9,856	794	347	324	9,864	7,619	1,559
50,001 to 100,000	114	7,926	642	308	255	8,483	6,806	1,184
100,001 to 200,000	70	9,658	640	347	206	8,413	6,935	893
200,001 to 500,000	25	7,678	711	361	215	8,457	6,847	742
500,001 and over	9	7,271	581	325	165	7,924	6,783	582

¹ Base figure too small to meet statistical standards for reliability of a derived figure. ² Includes fuel oil, propane, and purchased steam not shown separately. ³ Includes public assembly, public order and safety, and religious worship.

Source: U.S. Energy Information Administration, *Commercial Buildings Energy Consumption and Expenditures, 1992*.

No. 949. Fossil Fuel Prices in Current and Constant (1987) Dollars: 1970 to 1993

[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, section 19, for explanation of Btu conversions from mineral fuels]

FUEL	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
CURRENT DOLLARS													
Composite ¹	31.7	39.8	82.1	204.2	251.2	165.3	170.0	153.3	167.1	184.3	167.0	165.8	165.1
Crude oil	54.8	67.1	132.2	372.2	415.3	215.7	265.5	216.9	273.4	345.3	285.2	275.7	245.5
Natural gas	15.4	20.1	40.2	144.8	225.7	174.8	150.2	152.4	152.7	154.6	148.0	156.8	177.5
Bituminous coal ²	26.2	36.5	83.9	109.4	114.8	108.2	104.9	100.8	100.0	99.5	98.9	96.9	95.0
Anthracite coal	48.8	61.7	149.5	185.9	204.2	191.1	188.9	189.8	183.6	174.5	161.0	151.7	167.5
CONSTANT (1987) DOLLARS													
Composite ¹	90.1	96.4	166.9	284.8	266.1	170.6	170.0	147.5	154.0	162.7	141.9	136.9	132.9
Crude oil	155.7	162.5	268.7	519.1	439.9	222.6	265.5	208.8	252.0	304.8	242.3	227.7	197.7
Natural gas	43.8	48.7	81.7	202.0	239.1	180.4	150.2	146.7	140.7	136.5	125.7	129.5	142.9
Bituminous coal	74.4	88.4	170.5	152.6	121.6	111.7	104.9	97.0	92.2	87.8	84.0	80.0	76.5
Anthracite coal	138.6	149.4	303.9	259.3	216.3	197.2	188.9	182.7	169.2	154.0	136.8	125.3	134.9
GDP implicit price deflator ³ (1987=100)	35.2	41.3	49.2	71.7	94.4	96.9	100.0	103.9	108.5	113.2	117.8	121.9	123.5

¹ Weighted by relative importance of individual fuels in total fuels production. ² Includes subbituminous and lignite.

³ GDP=Gross domestic product; see text, section 15.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 951. World Primary Energy Production, by Region and Type: 1973 to 1992

[In quadrillion Btu. Btu=British thermal units. For Btu conversion factors, see source]

REGION AND TYPE	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
World, total	244.8	245.0	286.6	302.1	312.1	319.6	332.1	339.6	344.0	340.8	343.1
North America	73.3	71.1	80.5	84.1	82.7	84.1	86.2	86.2	88.2	89.1	88.8
United States	62.0	59.8	64.7	64.6	61.4	64.6	65.8	65.8	67.7	67.4	66.7
Central and South America	12.9	10.6	12.1	13.5	14.3	14.3	15.2	15.7	16.6	17.4	17.6
Western Europe	19.6	21.4	28.7	36.4	37.4	37.9	38.4	37.9	37.8	39.0	39.3
Eastern Europe and Soviet Union	51.4	55.9	69.3	74.5	77.4	79.4	81.8	81.5	79.1	70.8	67.0
Middle East	46.6	43.5	42.2	25.7	30.6	32.1	36.0	39.6	41.0	40.2	43.9
Africa	14.8	13.3	17.3	18.4	18.1	18.5	19.5	20.5	21.5	23.4	23.7
Far East and Oceania	26.2	29.3	36.5	49.5	51.6	53.2	54.9	58.3	59.9	60.9	62.8
Crude oil	117.8	111.6	127.6	115.4	120.2	121.0	125.8	127.8	129.3	128.6	129.2
Natural gas	43.2	43.9	52.8	60.6	61.9	64.9	68.1	70.6	72.0	74.0	74.3
Natural gas liquids	4.2	4.4	5.5	5.7	6.0	6.3	6.6	6.7	7.0	7.3	7.6
Coal	63.8	66.3	75.0	84.2	86.5	88.2	90.3	92.9	92.8	86.7	87.6
Hydroelectric power	13.5	15.0	18.2	20.7	21.1	21.3	22.0	21.8	22.5	22.9	22.9
Nuclear electric power	2.2	3.9	7.6	15.4	16.3	17.8	19.3	19.8	20.3	21.3	21.5

Source: U.S. Energy Information Administration, *International Energy Annual*.

No. 952. U.S. Foreign Trade in Selected Mineral Fuels: 1970 to 1994

[Minus sign (-) indicates an excess of imports over exports. See also *Historical Statistics, Colonial Times to 1970*, series M 100, 101, 127, 128, 140, 141, 178, and 181]

MINERAL FUEL	Unit	1970	1973	1975	1980	1985	1990	1991	1992	1993	1994
NATURAL GAS											
Imports	Bil. cu. ft.	821	1,033	953	985	950	1,532	1,773	2,138	2,350	2,558
Exports	Bil. cu. ft.	70	77	73	49	55	86	129	216	140	144
Net trade	Bil. cu. ft.	-751	-956	-880	-936	-894	-1,446	-1,644	-1,922	-2,210	-2,414
CRUDE OIL											
Imports ¹	Mil. bbl.	483	1,184	1,498	1,926	1,168	2,151	2,110	2,220	2,477	2,565
Exports	Mil. bbl.	5	1	2	105	75	40	42	32	36	36
Net trade	Mil. bbl.	-478	-1,183	-1,496	-1,821	-1,093	-2,112	-2,068	-2,188	-2,441	-2,529
PETROLEUM PRODUCTS											
Imports	Mil. bbl.	765	1,099	712	603	681	775	673	659	669	694
Exports	Mil. bbl.	89	84	74	94	211	273	323	314	330	308
Net trade	Mil. bbl.	-676	-1,015	-638	-509	-470	-502	-350	-345	-339	-387
COAL											
Imports	1,000 sh. tons	36	127	940	1,194	1,952	2,699	3,390	3,803	7,309	7,584
Exports	1,000 sh. tons	71,733	53,587	66,309	91,742	92,680	105,804	108,969	102,516	74,519	71,359
Net trade	1,000 sh. tons	71,697	53,460	65,369	90,548	90,728	103,105	105,579	98,713	67,210	63,775

¹ Beginning 1980, includes strategic petroleum reserve imports.

Source: U.S. Energy Information Administration, *Natural Gas Monthly*, *Petroleum Supply Monthly*, and *Monthly Energy Review*.

No. 953. Daily International Flow of Crude Oil, by Area: 1991

[In thousands of barrels per day]

EXPORTING AREA	Total ¹	IMPORTING AREA							
		North America		Central and South America	Western Europe	Eastern Europe	Middle East and Africa	Japan	Other Far East and Oceania
		U.S.	Canada						
World, total	28,406	5,782	551	1,641	10,245	834	1,143	4,180	4,030
United States	116	(X)	5	² 111	-	-	-	-	-
North America, except U.S.	2,121	1,502	15	58	346	-	32	157	11
Central and South America	1,842	927	35	615	208	-	-	9	48
Western Europe	2,939	183	348	11	2,374	-	23	-	-
Eastern Europe and U.S.S.R.	1,205	1	-	5	637	493	16	2	51
Middle East	12,947	1,770	89	682	3,567	246	731	3,034	2,828
Africa	4,969	1,160	59	147	3,101	95	323	11	73
Far East and Oceania	2,267	239	-	12	12	-	18	967	1,019

- Represents zero. X Not applicable. ¹ Includes stocks at sea, exchanges, transshipments, and other statistical discrepancies not shown separately. ² Includes shipments to Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, *International Energy Annual*.

No. 954. Crude Oil Imports Into United States, by Country of Origin: 1970 to 1994

[In millions of barrels. Barrels contain 42 gallons]

COUNTRY OF ORIGIN	1970	1973	1975	1980	1985	1987	1988	1989	1990	1991	1992	1993	1994
Total	483	1,184	1,498	1,921	1,168	1,706	1,864	2,133	2,151	2,110	2,226	2,477	2,565
Canada	245	365	219	73	171	222	249	230	235	271	292	329	345
Mexico	-	(Z)	26	185	261	220	246	261	251	277	288	315	343
Norway	-	-	4	53	11	26	23	46	35	27	43	50	69
Trinidad-Tobago	(Z)	22	42	42	36	27	26	27	28	26	26	20	23
United Kingdom	-	-	(Z)	63	101	111	93	58	57	39	73	114	145
OPEC¹	222	765	1,172	1,410	479	876	984	1,232	1,283	1,233	1,247	1,346	1,307
Algeria	2	44	96	166	31	42	21	22	23	16	9	9	9
Ecuador	-	17	21	6	20	8	12	29	14	19	23	28	(²)
Gabon	-	-	10	9	19	13	5	18	23	31	45	55	71
Indonesia	26	73	138	115	107	96	68	58	36	37	26	24	34
Iran	12	79	101	3	10	36	(Z)	-	-	12	-	-	-
Iraq	-	1	1	10	17	30	125	161	188	-	-	-	-
Kuwait	12	15	1	10	1	26	29	57	29	2	14	126	112
Libya	17	49	81	200	-	-	-	-	-	-	-	-	-
Nigeria	17	164	272	307	102	193	222	292	286	249	243	264	228
Qatar	-	3	7	8	-	-	-	1	1	-	-	-	-
Saudi Arabia	15	169	256	456	48	234	333	407	436	622	585	468	473
United Arab Emirates	23	26	43	63	13	20	8	8	3	1	-	4	4
Venezuela	98	126	144	57	112	178	160	181	243	244	302	369	376
Other	16	32	34	95	108	225	244	279	264	237	257	304	333

- Represents zero. Z Less than 500,000 barrels. ¹ Organization of Petroleum Exporting Countries. ² On December 31, 1992, Ecuador withdrew as a member of OPEC. Effective January 1, 1994, imports from Ecuador appear under imports from "Other."

Source: 1970, U.S. Bureau of Mines, *Minerals Yearbooks, vol. I*; thereafter, U.S. Energy Information Administration, *Petroleum Supply Annual, vol. I*.

No. 955. Crude Oil and Refined Products—Summary: 1973 to 1994

[Barrels 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- (1,000 bbl. per day)	CRUDE OIL STOCKS ³ (mil. bbl.)	
	Input to refin- eries	Domestic produc- tion	Imports		Exports	Domestic demand	Imports	Exports		Total	Strategic reserve
			Total ¹	Strat- egic reserve							
1973	12,431	9,208	3,244	(X)	2	17,308	3,012	229	6,256	242	(X)
1974	12,133	8,774	3,477	(X)	3	16,653	2,635	218	6,112	265	(X)
1975	12,442	8,375	4,105	(X)	6	16,322	1,951	204	6,056	271	(X)
1976	13,416	8,132	5,287	(X)	8	17,461	2,026	215	7,313	285	(X)
1977	14,602	8,245	6,615	21	50	18,431	2,193	193	8,807	348	7
1978	14,739	8,707	6,356	161	158	18,847	2,008	204	8,363	376	67
1979	14,648	8,552	6,519	67	235	18,513	1,937	236	8,456	430	91
1980	13,481	8,597	5,263	44	287	17,056	1,646	258	6,909	466	108
1981	12,470	8,572	4,396	256	228	16,058	1,599	367	5,996	594	230
1982	11,774	8,649	3,488	165	236	15,296	1,625	579	5,113	644	294
1983	11,685	8,688	3,329	234	164	15,231	1,722	575	5,051	723	379
1984	12,044	8,879	3,426	197	181	15,726	2,011	541	5,437	796	451
1985	12,002	8,971	3,201	118	204	15,726	1,866	577	5,067	814	493
1986	12,716	8,680	4,178	48	154	16,281	2,045	631	6,224	843	512
1987	12,854	8,349	4,674	73	151	16,665	2,004	613	6,678	890	541
1988	13,246	8,140	5,107	51	155	17,283	2,295	661	7,402	890	560
1989	13,401	7,613	5,843	56	142	17,325	2,217	717	8,061	921	580
1990	13,409	7,355	5,894	27	109	16,988	2,123	748	8,018	908	586
1991	13,301	7,417	5,782	-	116	16,714	1,844	885	7,627	893	569
1992	13,411	7,171	6,083	10	89	17,033	1,805	861	7,888	893	575
1993	13,613	6,847	6,787	15	98	17,237	1,833	904	8,620	922	587
1994	13,872	6,627	7,027	12	99	17,679	1,902	843	8,929	929	592

- Represents zero. X Not applicable. ¹ Includes Strategic Petroleum Reserve. ² Crude oil (including Strategic Petroleum Reserve imports) plus refined products. ³ End of year.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, February 1995.

No. 956. Strategic Petroleum Reserve: 1977 to 1993

[Million barrels, except as noted. The Strategic Petroleum Reserve is a stock of petroleum maintained by the Federal Government for use during periods of major supply interruption]

YEAR	Crude oil imports	Domestic crude oil deliveries	STOCKS AT YEAR-END			Days of net petroleum imports ³
			Quantity ¹	Percent of crude oil stocks ²	Percent of total petroleum stocks	
1977	7.54	4.037	7.46	2.1	0.6	1
1980	16.07	1.30	107.80	23.1	7.7	17
1985	43.12	0.17	493.32	60.6	32.5	115
1987	26.52	2.69	540.65	60.8	33.6	91
1988	18.76	0.01	559.52	62.9	35.0	85
1989	20.35	-	579.86	62.9	36.7	81
1990	9.77	-	585.69	64.5	36.1	82
1991	-	-	568.51	63.7	35.2	86
1992	3.59	2.60	574.72	64.5	36.1	83
1993	5.37	6.96	587.08	63.6	35.7	78

- Represents zero. ¹ Stocks do not include imported quantities in transit to Strategic Petroleum Reserve terminals, pipeline fill, and above ground storage. ² Including lease condensate stocks. ³ Derived by dividing end-of-year strategic petroleum reserve stocks by annual average daily net imports of all petroleum. Calculated prior to rounding. ⁴ The quantity of domestic fuel oil which was in storage prior to injection of foreign crude oil.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 957. World Petroleum Consumption, by Major Consuming Country: 1983 to 1993

[Million barrels per day]

REGION AND COUNTRY	1983	1985	1986	1987	1988	1989	1990	1991	1992	1993
World, total	58.74	60.10	61.76	63.01	64.83	66.03	66.16	66.71	66.57	66.72
North America, total	18.03	18.70	19.28	19.74	20.53	20.73	20.41	20.14	20.51	20.75
Canada	1.45	1.50	1.51	1.55	1.69	1.73	1.69	1.62	1.64	1.66
Mexico	1.35	1.47	1.49	1.52	1.55	1.66	1.73	1.80	1.83	1.84
United States	15.23	15.73	16.28	16.67	17.28	17.33	16.99	16.71	17.03	17.24
Central & South America, total	3.19	3.19	3.41	3.52	3.57	3.58	3.60	3.65	3.74	3.89
Brazil	0.98	1.08	1.24	1.26	1.30	1.32	1.34	1.35	1.37	1.41
Western Europe, total	12.38	12.39	12.79	12.93	13.08	13.16	13.25	13.66	13.81	13.80
France	1.84	1.78	1.77	1.79	1.80	1.86	1.82	1.94	1.93	1.91
Germany	2.66	2.70	2.86	2.77	2.74	2.58	2.66	2.83	2.84	2.90
Italy	1.75	1.72	1.74	1.86	1.84	1.93	1.87	1.86	1.94	1.88
United Kingdom	1.53	1.63	1.65	1.60	1.70	1.74	1.75	1.80	1.80	1.80
Eastern Europe and former U.S.S.R.	10.47	10.46	10.46	10.51	10.38	10.19	9.73	9.43	7.85	6.81
Middle East, total	2.61	2.85	2.98	3.06	3.15	3.36	3.47	3.40	3.40	3.49
Africa, total	1.70	1.83	1.83	1.84	1.91	1.99	2.10	2.15	2.18	2.17
Far East & Oceania, total	10.36	10.69	11.03	11.42	12.21	13.03	13.61	14.28	15.09	15.82
China	1.73	1.89	2.00	2.12	2.28	2.38	2.30	2.50	2.66	3.11
India	0.77	0.90	0.95	0.99	1.08	1.15	1.17	1.19	1.28	1.29
Japan	4.40	4.38	4.44	4.48	4.75	4.98	5.14	5.28	5.45	5.38

Source: U.S. Energy Information Administration, *Annual Energy Review* and *Monthly Energy Review*, monthly.

No. 958. Energy Producing Companies—Selected Financial and Investment Indicators: 1983 to 1993

[Based on data from major publicly-owned domestic crude oil producing companies which either had at least 1 percent of domestic production or reserves of oil, natural gas, coal, or uranium, or at least 1 percent of refining capacity or petroleum product sales. There were 25 companies in 1983 and 1993; 22 during 1984 through 1987; and 23 in 1988 to 1992]

ITEM	1983	1985	1986	1987	1988	1989	1990	1991	1992	1993
INCOME STATEMENT (bil. dol.)										
Operating revenues	511.0	492.5	378.5	417.4	419.8	433.6	510.4	469.3	472.8	448.1
Operating expenses	462.8	444.2	354.4	383.7	381.6	397.7	470.1	443.3	449.5	423.0
Operating income	48.2	48.3	24.0	33.7	38.2	35.9	40.2	26.0	23.3	25.1
Pretax income	47.4	43.6	20.6	25.0	34.3	32.3	37.5	25.1	22.5	(NA)
Net income	21.9	17.4	9.2	11.3	22.3	19.8	21.6	14.7	1.8	15.5
Funds from operations ¹	60.7	63.5	53.1	51.6	57.8	48.3	54.9	47.8	44.8	(NA)
BALANCE SHEET (bil. dol.)										
Net property, plant, and equipment	278.4	297.7	291.1	297.6	293.6	293.2	302.5	305.5	309.7	307.9
Net investment in place ²	296.3	315.4	310.0	316.4	309.6	309.9	319.7	325.6	331.6	331.5
Total assets	421.8	438.4	427.0	443.6	437.8	434.5	457.2	447.1	453.6	451.3
RATIOS (percent)										
Net income to operating revenues	4.3	3.5	2.4	2.7	5.3	4.6	4.2	3.1	³ 0.4	3.5
Net income to total assets	5.2	4.0	2.2	2.5	5.1	4.6	4.7	3.3	0.4	3.4
Net income to stockholders' equity	11.4	10.5	5.6	6.8	13.5	12.3	12.9	8.8	1.1	9.6
Long-term debt to stockholders' equity ⁴	34.8	54.3	56.0	57.6	56.6	56.4	53.0	54.3	59.4	55.3
Long-term debt to total assets ⁴	15.9	20.5	21.6	21.5	21.3	20.9	19.4	20.3	20.6	19.8

NA Not available. ¹ The sum of net income, depreciation, depletion and amortization, deferred taxes, dry hole expenses, etc. ² Composed of net property, plant and equipment plus investment, and advances to unconsolidated subsidiaries. ³ The implementation of the new "Financial Accounting Standard No. 106" greatly reduced the reported profitability of large publicly traded corporations. Net income without these accounting changes would have been \$12.5 billion. ⁴ Long-term debt includes amounts applicable to capitalized leases.

Source: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers*, annual.

No. 959. Petroleum and Coal Products Corporations—Sales, Net Profit, and Profit Per Dollar of Sales: 1980 to 1993

[Represents SIC group 29. Profit rates are averages of quarterly figures at annual rates. Beginning 1986, excludes estimates for corporations with less than \$250,000 in assets]

ITEM	Unit	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Sales	Bil. dol.	333.2	312.7	338.4	320.9	226.5	248.3	252.2	265.3	318.5	282.2	278.0	266.1
Net profit:													
Before income taxes	Bil. dol.	39.1	27.1	24.5	17.7	9.8	14.2	27.3	23.3	23.3	12.2	2.0	15.0
After income taxes	Bil. dol.	25.5	19.3	17.2	12.7	8.8	10.9	21.2	19.7	18.0	10.9	3.2	13.1
Depreciation ¹	Bil. dol.	11.6	17.5	20.7	22.1	21.9	20.3	20.0	18.5	18.7	18.0	18.3	17.4
Profits per dollar of sales:													
Before income taxes	Cents	11.7	8.7	7.2	5.5	4.1	5.8	10.8	9.0	7.4	4.3	0.4	5.6
After income taxes	Cents	7.7	6.2	5.1	4.0	3.8	4.5	8.5	7.4	5.7	3.9	0.9	4.9
Profits on stockholders' equity:													
Before income taxes	Percent	30.7	17.8	14.3	11.7	6.8	10.1	19.2	17.8	16.6	8.6	1.5	11.9
After income taxes	Percent	20.0	12.7	10.0	8.5	6.1	7.7	14.9	14.6	12.8	7.7	2.4	10.3

¹ Includes depletion and accelerated amortization of emergency facilities.

Source: 1980, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

No. 960. Major Petroleum Companies—Financial Data Summary: 1973 to 1993

[Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated, total company basis]

ITEM	1973	1975	1980	1985	1987	1988	1989	1990	1991	1992	1993
FINANCIAL DATA (bil. dol.)											
Net income	11.8	11.6	32.9	19.4	15.0	24.6	24.7	26.8	18.7	12.1	18.9
Depreciation, depletion, etc	10.5	11.3	32.5	53.0	45.0	34.3	33.7	38.7	36.5	43.3	36.6
Cash flow ²	22.3	22.8	65.4	72.4	60.0	58.9	58.4	65.5	55.2	55.4	55.5
Dividends paid	4.0	4.7	9.3	12.0	12.4	14.0	16.0	15.9	16.3	16.5	15.5
Net internal funds available for investment or debt repayment ³	18.3	18.1	56.1	60.4	47.6	44.9	42.4	49.6	38.9	38.9	40
Capital and exploratory expenditures	16.3	26.9	62.1	58.3	50.1	62.4	55.1	59.6	61.5	53.6	51.8
Long-term capitalization	102.9	121.1	211.4	272.1	282.2	287.8	290.0	300.0	307.4	290.7	291.6
Long-term debt	22.5	28.9	49.8	93.5	88.4	88.5	91.4	90.4	95.9	94.0	91.5
Preferred stock	0.4	0.4	2.0	3.3	4.1	4.5	6.4	5.2	4.1	5.3	5.8
Common stock and retained earnings ³	80.0	91.9	159.6	175.3	189.7	194.8	192.2	204.4	207.4	191.4	194.3
Excess of expenditures over cash income ⁴	-2.0	8.9	6.0	-2.1	-2.5	17.5	12.7	10.0	22.6	14.7	11.8
RATIOS ⁵ (percent)											
Long-term debt to long-term capitalization	22.0	23.8	23.6	34.4	31.3	30.8	31.5	30.1	31.2	32.3	31.4
Net income to total average capital	12.0	10.0	17.0	7.0	4.6	8.6	8.3	9.1	6.2	4.1	6.5
Net income to average common equity	15.6	13.1	22.5	10.8	7.3	12.8	12.4	13.5	9.1	6.1	9.8

¹ Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. ² Cash flow minus dividends paid. ³ Includes common stock, capital surplus, and earned surplus accounts after adjustments. ⁴ Capital and exploratory expenditures plus dividends paid minus cash flow. ⁵ 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, 1993-1992*, and earlier reports.

No. 961. Electric Utility Sales and Average Prices, by End-Use Sector: 1970 to 1993

[Prior to 1980, covers Class A and B privately-owned electric utilities; thereafter, Class A utilities whose electric operating revenues were \$100 million or more during the previous year]

YEAR	SALES (bil. kWh)				AVERAGE PRICE OF ELECTRICITY SOLD (cents per kWh)							
	Total ¹	Residential	Commer- cial	Indus- trial	Current dollars				Constant (1987) dollars ²			
					Total ¹	Residential	Commer- cial	Indus- trial	Total ¹	Residential	Commer- cial	Indus- trial
1970	1,392	466	307	571	1.7	2.2	2.1	1.0	4.8	6.3	6.0	2.8
1973	1,713	579	388	686	2.0	2.5	2.4	1.3	4.8	6.1	5.8	3.1
1975	1,747	588	403	688	2.9	3.5	3.5	2.1	5.9	7.1	7.1	4.3
1980	2,094	717	488	815	4.7	5.4	5.5	3.7	6.6	7.5	7.7	5.2
1981	2,147	722	514	826	5.5	6.2	6.3	4.3	7.0	7.9	8.0	5.4
1982	2,086	730	526	745	6.1	6.9	6.9	5.0	7.3	8.2	8.2	6.0
1983	2,151	751	544	776	6.3	7.2	7.0	5.0	7.2	8.3	8.0	5.7
1984	2,286	780	583	838	6.3	7.2	7.1	4.8	6.9	7.9	7.8	5.3
1985	2,324	794	606	837	6.4	7.4	7.3	5.0	6.8	7.8	7.7	5.3
1986	2,369	819	631	831	6.4	7.4	7.2	4.9	6.6	7.6	7.4	5.1
1987	2,457	850	660	858	6.4	7.4	7.1	4.8	6.4	7.4	7.1	4.8
1988	2,578	893	699	896	6.4	7.5	7.0	4.7	6.2	7.2	6.7	4.5
1989	2,647	906	726	926	6.5	7.6	7.2	4.7	6.0	7.0	6.6	4.3
1990	2,713	924	751	946	6.6	7.8	7.3	4.7	5.8	6.9	6.4	4.1
1991	2,762	955	766	947	6.7	8.0	7.5	4.8	5.7	6.8	6.4	4.1
1992	2,763	936	761	973	6.8	8.2	7.7	4.8	5.6	6.8	6.4	4.0
1993	2,865	994	790	983	6.9	8.3	7.7	4.9	5.6	6.7	6.2	3.9

¹ Includes other sectors not shown separately. ² Based on the GDP implicit price deflator.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 962. Electric Utility Industry—Net Generation, Net Summer Capability, Generating Units, and Consumption of Fuels: 1970 to 1993

[Net Generation for **calendar years**; other data as of **December 31**. See also *Historical Statistics, Colonial Times to 1970*, series S 32-52, S 78-82, and S 86-107]

ITEM	Unit	1970	1975	1980	1985	1988	1989	1990	1991	1992	1993
NET GENERATION											
Total	Bil. kWh	1,532	1,918	2,286	2,470	2,704	2,784	2,808	2,825	2,797	2,883
Average annual change ¹	Percent	7.3	4.5	3.5	1.5	3.0	2.9	0.9	0.6	-1.0	3.0
Net generation, kWh per kW of net summer capability ²	Rate	4,560	3,904	3,951	3,770	3,990	4,064	4,064	4,076	4,024	4,130
Investor owned	Bil. kWh	1,183	1,487	1,783	1,918	2,146	2,192	2,203	2,213	2,214	2,271
Percent of total utilities	Percent	77.2	77.5	78.0	77.7	79.4	78.7	78.4	78.4	79.2	78.8
Publicly owned	Bil. kWh	349	431	503	552	559	592	606	610	582	611
Municipal	Bil. kWh	71	82	87	74	97	100	98	97	94	103
Federal	Bil. kWh	186	221	235	233	201	224	235	241	225	232
Cooperatives and other	Bil. kWh	91	128	182	245	261	269	273	272	263	276
Source of energy:											
Coal ³	Percent	46.0	44.6	51.0	57.2	57.4	56.2	55.5	54.9	56.3	56.9
Nuclear	Percent	1.4	9.0	11.0	15.5	19.5	19.0	20.5	21.7	22.1	21.2
Oil	Percent	12.0	15.1	10.8	4.1	5.5	5.7	4.2	3.9	3.2	3.5
Gas	Percent	24.3	15.6	15.1	11.8	9.3	9.6	9.4	9.4	9.4	9.0
Hydro	Percent	16.2	15.6	12.1	11.4	8.2	9.5	10.0	9.8	8.6	9.2
Type of prime mover: ⁴											
Hydro	Bil. kWh	248	300	276	281	223	265	280	276	239	265
Steam conventional ⁵	Bil. kWh	1,240	1,414	1,726	1,778	1,921	1,950	1,919	1,905	1,906	1,973
Gas turbine and internal combustion	Bil. kWh	22	28	28	16	22	29	22	22	21	25
Steam nuclear	Bil. kWh	22	173	251	384	527	529	577	613	619	610
Other	Bil. kWh	1	3	6	11	12	11	11	10	10	10
NET SUMMER CAPABILITY											
Total ⁶	Mil. kW	336	491	579	655	678	685	691	693	695	698
Average annual change ¹	Percent	7.2	7.6	3.3	2.5	1.1	1.1	0.9	0.3	0.3	0.4
Hydro	Mil. kW	64	78	82	89	90	91	91	92	93	94
Steam conventional ⁷	Mil. kW	248	333	397	437	442	444	448	447	447	447
Gas turbine	Mil. kW	13	37	43	44	44	45	46	48	50	52
Steam nuclear	Mil. kW	7	37	52	79	95	98	100	100	99	99
Internal combustion	Mil. kW	4	5	5	5	5	5	5	5	5	5
Geothermal and other	Mil. kW	(Z)	1	1	2	2	2	2	2	2	2
NUMBER OF GENERATING UNITS											
Total ⁸	Number	9,717	(NA)	11,084	(NA)	10,305	10,325	10,296	10,260	10,221	10,105
Hydro	Number	3,108	(NA)	3,275	(NA)	3,496	3,479	3,479	3,476	3,497	3,388
Steam conventional	Number	2,813	(NA)	2,862	(NA)	2,383	2,363	2,354	2,284	2,307	2,221
Gas turbine	Number	658	(NA)	1,447	(NA)	1,397	1,438	1,460	1,485	1,501	1,411
Steam nuclear	Number	16	(NA)	74	(NA)	108	110	111	111	109	109
Internal combustion	Number	3,118	(NA)	3,410	(NA)	2,872	2,889	2,847	2,803	2,807	2,976
CONSUMPTION OF FUELS											
Net generation by fuel ⁹	Bil. kWh	1,284	1,618	2,010	2,189	2,481	2,519	2,525	2,539	2,548	2,608
Average annual change	Percent	(NA)	4.6	4.3	1.7	4.2	1.5	0.2	0.6	0.4	2.3
Coal	Bil. kWh	704	853	1,162	1,402	1,541	1,554	1,560	1,551	1,576	1,639
Percent of total	Percent	54.8	52.7	57.8	64.0	62.1	61.7	61.7	(NA)	(NA)	(NA)
Petroleum	Bil. kWh	184	289	246	100	149	158	117	111	89	100
Gas	Bil. kWh	373	300	346	292	253	267	264	264	264	259
Nuclear	Bil. kWh	22	173	251	384	527	529	577	613	619	610
Fuel consumed:											
Total energy equivalent	Quad. Btu	13.40	15.19	18.57	18.79	20.12	20.54	20.32	20.06	19.99	20.71
Coal	Mil. sh. tons	320	406	569	694	758	767	774	772	780	814
Oil	Mil. bbl.	339	507	421	175	250	270	200	189	152	169
Gas	Bil. cu. ft	3,932	3,158	3,682	3,044	2,636	2,787	2,787	2,789	2,766	2,680

NA Not available. Z Less than 0.5 million kW. ¹ Change from immediate prior year except for 1970, change from 1960. For explanation of average annual percent change, see Guide to Tabular Presentation. ² Net summer capability is the steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power as demonstrated by test at the time of summer peak demand. ³ Includes small percentage (.5 percent) from wood and waste, geothermal, and petroleum coke. ⁴ A prime mover is the engine, turbine, water wheel, or similar machine which drives an electric generator. ⁵ Fossil fuels only. ⁶ Includes wind, solar thermal, and photovoltaic, not shown separately. ⁷ Includes fossil steam, wood, and waste. ⁸ Each prime mover type in combination plants counted separately. Includes geothermal, wind, and solar, not shown separately. ⁹ Includes small amounts of wood, waste, wind, geothermal, solar thermal, and photovoltaic.

Source: 1970, U.S. Federal Power Commission, *Electric Power Statistics*, and press releases; thereafter, U.S. Energy Information Administration, 1975 and 1980, *Power Production, Fuel Consumption, and Installed Capacity Data-Annual*, and unpublished data; thereafter, *Electric Power Annual, Annual Energy Review*, and unpublished data.

No. 963. Electric Utility Industry—Capability, Peak Load, and Capacity Margin: 1970 to 1993

[Excludes Alaska and Hawaii. Capability 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	CAPABILITY AT THE TIME OF—				NONCOINCIDENT PEAK LOAD		CAPACITY MARGIN			
	Summer peak load (1,000 kW)		Winter peak load ¹ (1,000 kW)		Summer	Winter ¹	Summer		Winter ¹	
	Amount	Change from prior year ²	Amount	Change from prior year ²			Amount (1,000 kW)	Percent of capability	Amount (1,000 kW)	Percent of capability
1970	326,900	26,600	339,050	27,600	274,650	248,550	52,250	16.0	90,500	26.7
1975	479,300	34,900	492,450	25,050	356,800	331,100	122,500	25.6	161,350	32.8
1978	545,700	29,700	561,550	23,950	408,050	383,100	137,650	25.2	178,450	31.8
1979 ³	544,506	(X)	554,525	(X)	398,424	368,876	146,082	26.8	185,649	33.5
1980	558,237	13,731	572,195	17,670	427,058	384,567	131,179	23.5	187,628	32.8
1981	572,219	13,982	586,569	14,374	429,349	397,800	142,870	25.0	188,769	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	136,529	20.2	217,777	31.0
1992	695,436	4,521	707,752	4,540	548,707	492,983	149,799	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

X Not applicable. ¹ 1970 is for the month of December. ² For 1970 and 1975, change from 1969 and 1974, respectively. ³ Beginning 1979, data are not entirely comparable with prior years due to change in data source.

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

No. 964. Electric Energy Sales, by Class of Service, 1970 to 1993, and by State, 1993

[In billions of kilowatt-hours]

REGION, DIVISION, AND STATE	Total ¹	Residential	Commercial	Industrial	REGION, DIVISION, AND STATE	Total ¹	Residential	Commercial	Industrial
1970	1,392.3	466.3	306.7	570.9	South	1,220.3	459.5	296.7	424.2
1973	1,712.9	579.2	388.3	686.1	South Atlantic	582.4	236.5	167.5	159.9
1975	1,747.1	588.1	403.0	687.7	Delaware	9.1	3.0	2.6	3.4
1980	2,094.4	717.5	488.2	815.1	Maryland	53.9	21.5	11.3	20.2
1985	2,309.5	791.0	609.0	824.5	Dist. of Columbia	10.4	1.6	5.4	3.0
1988	2,578.1	892.9	699.1	896.5	Virginia	81.4	32.5	22.7	17.4
1989	2,646.8	905.5	725.9	925.7	West Virginia	24.4	8.7	5.5	10.2
1990	2,712.6	924.0	751.0	945.5	North Carolina	99.8	37.7	26.7	33.5
1991	2,762.0	955.4	765.7	946.6	South Carolina	61.5	20.7	13.2	26.9
1992	2,763.3	935.9	761.3	972.7	Georgia	89.2	33.9	25.2	29.1
1993, total ²	2,861.5	994.8	794.6	977.2	Florida	152.7	78.8	54.9	16.3
Northeast	420.6	141.5	147.1	115.9	East South Central	247.8	85.3	32.9	124.6
New England	104.8	38.1	38.7	26.2	Kentucky	68.1	19.2	9.8	36.3
Maine	12.0	3.9	2.9	5.0	Tennessee	79.8	30.2	5.2	43.5
New Hampshire	8.8	3.4	2.1	3.1	Alabama	65.1	22.6	11.3	30.5
Vermont	5.0	2.0	1.6	1.4	Mississippi	34.7	13.2	6.7	14.2
Massachusetts	45.3	15.8	18.9	9.6	West South Central	390.0	137.8	96.3	139.7
Rhode Island	6.5	2.4	2.5	1.4	Arkansas	31.7	11.8	6.7	12.6
Connecticut	27.2	10.6	10.7	5.6	Louisiana	67.8	22.4	14.4	28.4
Middle Atlantic	315.8	103.4	108.5	89.7	Oklahoma	40.5	15.9	10.8	11.7
New York	130.2	39.9	47.7	30.2	Texas	250.1	87.7	64.3	86.9
New Jersey	65.6	22.0	28.5	14.6	West	529.8	173.1	169.0	168.7
Pennsylvania	120.0	41.5	32.3	44.9	Mountain	171.2	54.0	53.8	56.7
Midwest	690.9	220.7	181.7	268.4	Montana	12.9	3.6	3.0	5.8
East North Central	489.0	146.3	127.3	200.5	Idaho	18.7	6.2	5.0	7.2
Ohio	148.6	42.0	33.3	68.8	Wyoming	11.9	1.9	2.5	7.4
Indiana	81.9	25.0	17.0	39.4	Colorado	33.0	10.7	14.4	7.0
Illinois	117.8	35.2	34.4	40.2	New Mexico	14.9	3.9	4.8	4.8
Michigan	87.6	26.8	28.9	30.6	Arizona	44.4	16.7	14.8	11.0
Wisconsin	53.2	17.4	13.7	21.4	Utah	16.9	4.7	5.0	6.2
West North Central	201.8	74.4	54.4	67.9	Nevada	18.5	6.3	4.3	7.2
Minnesota	49.2	15.6	8.5	24.5	Pacific	358.6	119.1	115.2	112.0
Iowa	32.1	11.1	7.3	12.5	Washington	90.5	30.9	19.5	36.6
Missouri	58.6	24.2	19.9	13.6	Oregon	44.6	16.7	12.2	15.0
North Dakota	7.4	3.2	1.8	1.9	California	210.5	67.4	79.1	56.2
South Dakota	6.9	3.1	1.6	1.8	Alaska	4.4	1.6	2.1	0.5
Nebraska	18.7	7.2	5.5	5.0	Hawaii	8.7	2.5	2.4	3.8
Kansas	28.8	10.0	9.8	8.7					

¹ Includes other service not shown separately. ² Preliminary.

Source: U.S. Energy Information Administration, *Electric Power Annual*.

No. 965. Electric Energy—Net Generation and Net Summer Capability, by State:
1990 to 1993

[Capacity as of Dec. 31. Covers utilities for public use]

DIVISION AND STATE	NET GENERATION (bil. kWh)				NET SUMMER CAPABILITY (mil. kW)		DIVISION AND STATE	NET GENERATION (bil. kWh)				NET SUMMER CAPABILITY (mil. kW)	
	1990	1992	1993		1990	1993		1990	1992	1993		1990	1993
			Total	Percent from coal						Total	Percent from coal		
U.S.	2,808.2	2,797.2	2,882.5	56.9	690.5	700.0	VA	47.2	49.0	52.2	47.4	13.7	14.1
N.E.	94.1	84.6	83.9	17.9	23.4	22.4	WV	77.4	72.3	71.1	99.2	14.4	14.4
ME	9.1	8.3	8.1	-	2.4	2.4	NC	79.8	83.0	88.8	66.9	20.2	20.2
NH	10.8	13.5	14.6	22.4	2.6	2.5	SC	69.3	71.5	75.6	35.1	14.9	16.1
VT	5.0	4.7	4.3	-	1.1	1.1	GA	97.6	91.8	95.7	66.1	20.7	21.5
MA	36.5	32.8	28.2	34.9	9.9	9.5	FL	123.6	134.0	140.1	44.2	32.7	34.8
RI	0.6	0.1	0.1	-	0.3	0.2	E.S.C.	246.9	264.0	274.0	79.2	59.5	58.5
CT	32.2	25.2	28.7	6.6	7.1	6.8	KY	73.8	77.4	85.0	96.1	15.3	15.3
M.A.	330.8	309.4	306.8	41.6	78.4	80.0	TN	73.9	75.4	71.6	83.2	17.0	16.2
NY	128.7	112.2	106.3	20.5	31.2	32.7	AL	76.2	90.8	94.1	70.9	20.0	20.0
NJ	36.5	31.2	34.3	15.9	13.7	13.9	MS	22.9	20.5	23.2	38.0	7.0	7.0
PA	165.7	166.0	166.2	60.4	33.4	33.4	W.S.C.	374.3	378.5	394.4	49.4	101.2	103.3
E.N.C.	485.8	487.6	513.8	73.3	113.1	114.2	AR	37.1	37.4	38.0	47.4	9.6	9.7
OH	126.5	136.3	133.7	92.0	27.0	27.2	LA	58.2	55.2	59.4	32.6	16.8	16.9
IN	97.7	97.3	100.0	98.8	20.6	20.9	OK	45.1	45.9	48.8	59.4	12.8	12.9
IL	127.0	124.8	140.1	42.7	32.6	32.4	TX	234.0	240.0	248.2	51.7	62.0	63.9
MI	89.1	82.7	92.3	66.7	22.3	22.4	Mountain	247.4	257.2	255.0	75.9	49.3	49.8
WI	45.6	46.5	47.8	70.3	10.6	10.9	MT	25.7	25.5	23.4	58.7	4.9	4.9
W.N.C.	218.4	212.8	218.4	75.9	54.2	54.8	ID	8.6	6.3	9.0	-	2.3	2.3
MN	41.6	37.8	41.3	65.7	8.8	8.9	WY	39.4	41.9	40.2	97.9	5.8	5.9
IA	29.0	29.4	31.0	86.0	8.0	8.1	CO	31.3	31.9	32.7	93.2	6.6	6.6
MO	59.0	56.6	53.2	76.5	15.2	15.4	NM	28.5	27.7	28.8	89.9	5.0	5.1
ND	26.8	28.6	28.5	94.9	4.5	4.5	AZ	62.3	70.1	68.0	54.4	14.9	15.0
SD	6.4	6.2	5.3	50.3	2.7	2.7	UT	32.3	32.9	33.5	95.4	4.8	4.8
NE	21.6	22.4	22.7	64.9	5.5	5.5	NV	19.3	21.0	19.8	78.8	6.9	5.2
KS	33.9	31.8	36.4	73.6	9.6	9.7	Pacific	276.7	255.7	261.0	4.8	82.1	82.0
S.A.	533.8	547.5	575.4	58.5	129.2	134.9	WA	100.5	84.1	83.8	10.5	24.2	24.3
DE	7.1	6.3	8.3	62.4	2.0	2.3	OR	49.2	41.2	40.7	8.6	11.2	10.1
MD	31.5	39.6	43.5	57.2	9.8	10.7	CA	114.5	119.3	125.8	-	43.7	44.3
DC	0.4	0.1	0.2	-	0.8	0.8	AK	4.5	4.2	4.6	7.1	1.5	1.7
							HI	8.0	6.9	6.1	-	1.5	1.6

- Represents zero.

Source: U.S. Energy Information Administration, *Electric Power Annual*, *Electric Power Monthly*, December issues, and *Inventory of Power Plants in the United States*, annual.

No. 966. Nuclear Power Plants—Number of Units, Net Generation, and Net Summer Capability, by State: 1993

REGION, DIVISION, AND STATE	Number of units	NET GENERATION		NET SUMMER CAPABILITY		REGION, DIVISION, AND STATE	Number of units	NET GENERATION		NET SUMMER CAPABILITY	
		Total (mil. kWh)	Percent of total ¹	Total (mil. kW)	Percent of total ¹			Total (mil. kWh)	Percent of total ¹	Total (mil. kW)	Percent of total ¹
U.S.	109	610,291	21.2	99.04	14.1	South	43	227,417	18.3	40.34	13.6
Northeast	27	155,451	39.8	23.79	23.2	S.A.	27	158,058	27.5	23.66	17.5
N.E.	8	44,299	52.8	6.39	28.6	MD	2	12,301	28.3	1.66	15.5
ME	1	5,740	71.1	0.87	36.2	VA	4	22,689	43.5	3.35	23.8
NH	1	3,047	62.0	1.15	45.9	NC	5	23,759	26.8	4.64	23.0
VT	1	3,372	78.4	0.50	45.3	SC	7	46,189	61.1	6.36	39.5
MA	1	4,339	15.4	0.67	7.0	GA	5	27,233	28.4	3.93	17.8
RI	4	21,802	75.9	3.21	47.5	FL	7	25,887	18.5	3.83	11.0
M.A.	19	111,152	36.2	17.39	21.7	E.S.C.	8	29,032	10.6	8.20	14.0
NY	6	26,889	25.3	4.83	14.8	TN	2	3,305	4.6	2.22	13.7
NJ	4	24,932	72.7	3.85	27.8	AL	5	17,823	18.9	4.94	24.2
PA	9	59,331	35.7	8.71	26.1	MS	2	7,904	34.0	1.14	16.2
Midwest	31	166,881	22.8	25.70	15.2	W.S.C.	8	40,327	10.2	8.48	8.2
E.N.C.	23	128,374	25.0	20.11	17.6	AR	2	13,522	35.5	1.69	17.5
OH	2	10,011	7.5	2.04	7.5	LA	2	14,398	24.3	2.01	11.9
IN	13	78,373	55.9	12.61	38.5	TX	4	12,407	5.0	4.78	7.5
IL	5	28,525	30.9	3.97	17.7	West	8	60,743	11.8	9.22	7.0
MI	3	11,465	24.0	1.50	13.7	Mountain	3	22,049	8.6	3.81	7.6
WI	8	38,307	17.5	5.58	10.2	AZ	3	22,049	32.4	3.81	25.3
W.N.C.	3	11,986	29.1	1.55	17.5	Pacific	5	38,694	14.8	5.41	6.6
MN	1	3,235	10.4	0.52	6.4	WA	1	7,135	8.5	1.10	4.5
IA	1	8,381	15.8	1.13	7.3	OR	1	-	0.1	-	-
MO	2	6,805	29.9	1.25	22.8	CA	4	31,581	25.1	4.31	9.7
NE	1	7,900	21.7	1.13	11.7						
KS	1										

- Represents zero.

¹ For total capability and generation, see table 965.

Source: U.S. Energy Information Administration, *Electric Power Annual* and *Electric Power Monthly*, December issues.

No. 967. Nuclear Power Plants—Number, Capacity, and Generation: 1965 to 1993

ITEM	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992	1993
Operable generating units ¹	6	18	54	70	95	107	108	110	111	111	109	109
Net summer capability ² (mil. kW) . . .	0.8	7.0	37.3	51.8	79.4	93.6	94.7	98.2	99.6	99.6	99.0	99.1
Net generation (bil. kWh)	3.7	21.8	172.5	251.1	383.7	455.3	527.0	529.4	576.9	612.6	618.8	610.3
Percent of total electric utility generation	0.3	1.4	9.0	11.0	15.5	17.7	19.5	19.0	20.5	21.7	22.1	21.2
Capacity factor ³	(NA)	(NA)	55.9	56.3	58.0	57.4	63.5	62.2	66.0	70.2	70.9	70.5

NA Not available. ¹ As of yearend. ² Net summer capability is the peak steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary and other powerplant, as demonstrated by test at the time of summer peak demand. ³ Weighted average of monthly capacity factors. Monthly factors are derived by dividing actual monthly generation by the maximum possible generation for the month (hours in month times net maximum dependable capacity).

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 969. Uranium Supply, Enrichment, and Discharged Commercial Reactor Fuel: 1980 to 1994

[Years ending Dec. 31, except as noted. For additional data on uranium, see section 25 on mining. For explanation of kilogram, see weights and measures]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992	1993	1994
URANIUM CONCENTRATE										
Production	Mil. lb	43.70	11.31	13.13	13.84	8.89	7.95	5.65	3.07	(NA)
Exports	Mil. lb	5.80	5.30	3.30	2.10	2.00	3.50	2.80	2.80	(NA)
Imports	Mil. lb	3.60	11.70	15.80	13.10	23.70	16.30	23.30	17.70	(NA)
Avg price of domestic purchases	Dol./lb	(NA)	31.43	26.15	19.56	15.70	13.66	13.45	(NA)	(NA)
ENRICHMENT¹										
Enriched product ²	Mil. Swu ³ . .	10.69	10.2	9.9	11.9	10.2	10.3	(NA)	(NA)	(NA)
For domestic customers	Mil. Swu ³ . .	6.89	6.0	6.3	7.6	6.8	6.7	(NA)	(NA)	(NA)
For foreign customers	Mil. Swu ³ . .	3.80	4.2	3.6	4.3	3.4	3.6	(NA)	(NA)	(NA)
Sales	Mil. dol	1,379	1,403	1,094	1,320	1,148	1,156	(NA)	(NA)	(NA)
DISCHARGED COMMERCIAL REACTOR FUEL⁴										
Annual discharge	Metric tons .	1,193	1,330	1,672	1,914	2,028	1,794	2,255	2,082	1,925
Inventory, year-end ⁵	Metric tons .	6,434	12,481	17,178	19,092	21,120	22,914	25,169	27,251	29,176

NA Not available. ¹ Beginning 1985, represents fiscal years. ² Based on sales. ³ Separative work units. The standard measure of enrichment services is based on operating tails assay in effect at the time the enriched product was placed in inventory. ⁴ Uranium content. Source: Nuclear Assurance Corporation, Atlanta, GA. ⁵ Reprocessed fuel not included as inventory.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, Uranium Industry Annual* and unpublished data.

No. 970. Electric Utilities—Generation, Sales, Revenue, and Customers: 1970 to 1993

[Sales and revenue are to and from ultimate customers]

CLASS	Unit	1970	1975	1980	1985	1988	1989	1990	1991	1992	1993, prel.
Generation ¹	Bil. kWh	1,532	1,918	2,286	2,470	2,704	2,784	2,808	2,825	2,797	2,883
Sales ²	Bil. kWh	1,391	1,733	2,126	2,306	2,554	2,621	2,684	2,737	2,735	2,836
Residential or domestic	Bil. kWh	448	586	734	793	886	899	916	949	929	990
Percent of total	Percent	32.2	33.8	34.5	34.4	34.7	34.3	34.1	34.7	34.0	34.9
Commercial ³	Bil. kWh	313	418	524	606	698	716	739	753	756	782
Industrial ⁴	Bil. kWh	573	662	794	820	882	913	932	935	949	964
Revenue ⁵	Bil. dol.	22.1	46.9	95.5	149.2	162.4	169.6	176.5	185.1	187.3	196.4
Residential or domestic	Bil. dol.	9.4	18.8	37.6	58.6	66.4	68.8	71.7	76.4	76.4	82.3
Percent of total	Percent	42.7	40.1	39.4	39.3	40.9	40.5	40.7	41.2	40.8	41.9
Commercial ³	Bil. dol.	6.3	13.5	27.4	44.1	49.1	51.6	54.2	56.8	58.0	60.3
Industrial ⁴	Bil. dol.	5.4	12.7	27.3	41.4	41.6	43.7	44.9	45.9	46.8	47.5
Ultimate customers, Dec. 31 ²	Million	72.5	81.8	92.7	101.6	106.4	108.5	110.1	111.4	113.1	114.8
Residential or domestic	Million	64.0	72.6	82.2	89.8	93.9	95.6	97.0	98.2	99.6	101.1
Commercial ³	Million	7.9	8.6	9.7	10.9	11.6	12.0	12.1	12.3	12.5	12.7
Industrial ⁴	Million	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Avg. kWh used per customer	1,000 . . .	19.4	21.4	23.2	22.9	24.2	24.4	24.6	24.7	24.4	24.9
Residential	1,000 . . .	7.1	8.2	9.0	8.9	9.5	9.5	9.5	9.7	9.4	9.9
Commercial ³	1,000 . . .	40.0	49.0	54.5	56.1	60.4	60.6	61.3	61.6	61.0	62.4
Avg. annual bill per customer	Dollar . . .	307	579	1,040	1,482	1,536	1,576	1,614	1,670	1,667	1,726
Residential	Dollar	149	262	462	658	712	725	744	782	772	821
Commercial ³	Dollar	804	1,580	2,848	4,080	4,256	4,363	4,494	4,646	4,681	4,814
Avg. revenue per kWh sold	Cents . . .	1.59	2.70	4.49	6.47	6.36	6.47	6.57	6.76	6.85	6.93
Residential	Cents	2.10	3.21	5.12	7.39	7.49	7.65	7.83	8.05	8.22	8.32
Commercial ³	Cents	2.01	3.23	5.22	7.27	7.04	7.20	7.33	7.55	7.67	7.72
Industrial ⁴	Cents	0.95	1.92	3.44	5.04	4.71	4.79	4.81	4.91	4.93	4.93

¹ Source: 1970 and 1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, monthly. ² Includes other types not shown separately. ³ Small light and power. ⁴ Large light and power. ⁵ Source: Except as noted, Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry*, annual.

No. 971. Major Investor-Owned Electric Utilities—Balance Sheet and Income Account of Privately Owned Companies: 1982 to 1993

[In billions of dollars. As of Dec. 31. As of 1990, 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. megawatthours of total sales; 100 megawatthours of sales for resale, 500 megawatthours of gross interchange out, and 500 megawatthours of wheeling for other. See also *Historical Statistics, Colonial Times to 1970*, series S 133-146 and V 197-212]

ITEM	1982	1985	1986	1987	1988	1989	1990	1991	1992	1993
COMPOSITE BALANCE SHEET										
Total assets and other debits	315.0	404.7	426.1	446.3	454.3	465.7	477.9	487.5	506.4	566.6
Total electric utility plant	321.2	396.9	419.5	434.6	449.4	462.4	480.6	497.9	518.8	537.3
Electric depreciation and amortization	67.6	85.1	93.9	103.2	113.5	125.0	135.7	148.3	160.5	173.4
Net electric utility plant	253.6	311.8	325.6	331.4	335.9	337.5	344.9	349.6	358.3	363.8
Total other utility plant	16.7	19.9	21.2	23.1	24.6	26.3	28.5	31.0	33.4	36.4
Other utility depreciation and amortization	5.3	6.5	7.2	7.8	8.5	9.2	10.0	10.8	11.7	12.4
Net other utility plant	11.4	13.4	14.0	15.2	16.1	17.1	18.6	20.2	21.7	24.0
Total all utility plant	337.9	431.1	455.9	475.7	493.0	507.9	528.7	548.4	571.9	593.6
All utility plant depreciation and amortization	72.9	97.4	107.7	118.7	131.3	144.6	157.4	171.7	185.1	199.8
Net all utility plant	265.0	333.8	348.2	357.0	361.6	363.2	371.3	376.8	386.9	393.8
Other property and investments	9.1	12.1	13.5	15.6	15.2	16.1	17.7	17.4	18.0	20.1
Current and accrued assets	31.7	39.4	38.4	40.9	39.1	41.5	41.5	43.4	43.4	42.4
Deferred debits	9.3	19.4	26.1	32.9	38.3	44.8	47.3	50.0	58.0	110.3
Liabilities and other credits	315.0	404.7	426.1	446.3	454.3	465.7	477.9	487.5	506.4	566.6
Capital stock ¹	70.3	82.8	81.6	79.9	80.7	82.9	83.2	83.6	86.1	87.1
Other paid-in capital ²	27.7	36.3	38.4	40.3	40.4	39.1	40.5	42.9	44.7	47.2
Retained earnings	27.9	41.1	46.0	48.0	47.1	47.7	48.1	49.0	49.7	49.9
Subsidiary earnings	1.6	2.2	2.3	2.6	2.5	2.8	2.9	3.0	2.7	2.9
Long-term debt	124.0	152.7	157.2	158.4	160.7	162.9	167.9	171.9	174.1	174.9
Current and accrued liabilities	28.6	32.0	34.0	39.3	38.4	42.0	44.3	43.4	45.6	48.0
Deferred credits and operating reserves ³	15.1	20.9	22.4	25.6	28.1	28.5	28.8	29.2	31.1	40.9
Deferred income taxes as deferred credits	19.4	32.7	39.6	45.9	50.2	53.3	56.5	59.2	65.0	105.0
COMPOSITE INCOME ACCOUNTS										
Electric operating revenues	109.3	135.3	136.3	138.5	143.9	150.9	157.3	166.8	169.5	176.4
Electric operating expenses	91.1	111.1	110.2	111.6	115.3	121.6	127.9	135.9	139.0	146.1
Net electric utility operating income	18.1	24.1	26.1	27.0	28.6	29.4	29.4	30.9	30.5	30.2
Other than electric utility operating income	0.9	1.2	1.1	1.1	1.2	1.2	1.1	1.2	1.3	1.5
Net utility operating income	19.1	25.3	27.2	28.1	29.8	30.6	30.5	32.1	31.8	31.7
Total other income	5.3	7.4	7.2	6.6	5.0	5.2	4.1	3.9	2.9	2.8
Total income ⁴	24.4	32.7	34.4	34.6	34.8	35.8	34.6	36.0	34.7	34.6
Income deductions ⁵	9.4	14.0	14.0	15.6	18.8	18.5	17.7	19.1	18.3	16.7
Net income	15.0	18.7	20.4	19.0	16.0	17.3	16.9	16.9	16.4	17.9

¹ Composed of Common Stock Issued and Preferred Stock Issued. ² Composed of Capital Stock Subscribed, Liability and Premium and Other Paid-in Capital. ³ Composed of Total Deferred Credits less Accumulated Deferred Income Taxes as Deferred Credits. ⁴ Composed of Net Utility Operating Income plus Total Other Income. ⁵ Composed of the difference between Total Income less Net Income.

Source: U.S. Energy Information Administration, 1982, *Financial Statistics of Selected Electric Utilities*, annual; thereafter, *Financial Statistics of Major U.S. Investor-Owned Electric Utilities*, annual.

No. 972. Nonutility Electric Power Producers—Summary, by Type of Fuel: 1989 to 1993

TYPE OF FUEL	INSTALLED CAPACITY OF 5 MEGAWATT OR MORE					INSTALLED CAPACITY OF 1 MEGAWATT OR MORE	
	1989	1990	1991	1992	1993	1992	1993
Installed capacity (megawatts)	36,645	42,869	48,171	55,163	59,055	56,814	60,778
Coal ²	6,229	6,712	7,291	8,443	9,712	8,503	9,772
Petroleum ²	917	811	1,207	1,579	1,869	1,730	2,043
Natural gas ³	13,999	16,682	20,259	21,104	23,009	21,542	23,463
Petroleum/natural gas (combined)	4,439	6,167	5,049	6,354	8,377	8,478	8,505
Hydroelectric	1,386	1,477	1,587	2,133	2,173	2,684	2,741
Geothermal	944	1,031	1,048	1,243	1,307	1,254	1,318
Solar	200	360	360	360	360	360	360
Wind ⁴	1,339	1,405	1,652	1,786	1,775	1,822	1,813
Wood ⁵	5,254	5,786	6,580	6,735	6,983	6,805	7,046
Waste ⁵	1,742	2,230	2,627	2,805	2,910	3,006	3,131
Nuclear ⁶	20	20	20	20	20	20	20
Other ⁷	176	187	491	602	562	611	566
Gross generation (mil. kWh)	187,356	217,241	248,448	289,856	318,843	296,001	325,226
Coal ²	31,511	32,131	40,587	47,160	53,166	47,363	53,367
Petroleum ²	5,742	7,330	7,814	10,692	13,089	10,963	13,364
Natural gas ³	98,875	116,706	131,340	156,317	171,765	158,798	174,282
Hydroelectric	5,931	6,235	6,243	7,611	9,583	9,446	11,511
Geothermal	5,046	6,872	7,651	8,533	9,704	8,578	9,749
Solar	489	663	779	746	897	746	897
Wind ⁴	1,833	2,251	2,606	2,872	2,999	2,916	3,052
Wood ⁵	27,835	30,812	33,785	36,024	37,206	36,255	37,421
Waste ⁵	8,296	11,415	13,956	16,330	17,187	17,352	18,325
Nuclear ⁶	49	116	80	67	78	67	78
Other ⁷	1,750	2,710	3,609	3,504	3,169	3,516	3,181

¹ Includes coal, anthracite, culm and coal waste. ² Includes petroleum, petroleum coke, diesel, kerosene, and petroleum sludge and tar. ³ Includes natural gas, butane, ethane, propane, waste heat and waste gases. ⁴ Includes wood, wood waste, peat, wood liquors, railroad ties, pitch and wood sludge. ⁵ Includes municipal solid waste, agricultural waste, straw, tires, landfill gases and other waste. ⁶ Nuclear reactor and generator at Argonne National Laboratory used primarily for research and development in testing reactor fuels as well as for training. The generation from the unit is used for internal consumption. ⁷ Includes hydrogen, sulfur, batteries, chemicals, and spent sulfite liquor. Data previously published for other energy sources in 1989 and 1990 have been reclassified and are included in the category that best reflects its characteristics. Source: Energy Information Administration, *Electric Power Annual*.

No. 973. Water Power—Developed and Undeveloped Capacity, by Division: 1950 to 1993

[In millions of kilowatts. As of Dec. 31. Excludes Alaska and Hawaii for 1950 and all capacity of reversible equipment at pumped storage projects. Also excludes capacity precluded from development due to wild and scenic river legislation. For composition of divisions, see table 27. See also *Historical Statistics, Colonial Times to 1970*, series S 160-175.]

DIVISION	DEVELOPED INSTALLED CAPACITY							ESTIMATED UNDEVELOPED CAPACITY						
	1950	1960	1970	1980	1990	1992	1993	1950	1960	1970	1980	1990	1992	1993
United States	18.7	33.2	52.0	64.4	73.0	74.1	73.8	87.6	114.2	128.0	129.9	73.9	73.6	73.6
New England	1.2	1.5	1.5	1.5	1.9	1.9	2.0	3.3	2.9	3.3	4.7	4.4	4.4	4.4
Middle Atlantic . . .	1.7	2.5	4.3	4.3	4.9	4.9	4.9	6.6	7.6	4.5	5.1	5.1	4.9	4.9
East North Central .	0.9	0.9	0.9	0.9	1.1	1.2	1.2	2.3	3.0	1.6	2.0	1.7	1.7	1.7
West North Central .	0.6	1.6	2.7	2.8	3.1	3.1	3.1	5.8	6.4	4.4	3.4	3.1	3.1	3.1
South Atlantic . . .	2.8	3.8	5.3	5.9	6.7	6.7	6.7	8.2	8.4	9.6	9.6	7.0	7.2	7.2
East South Central .	2.7	3.8	5.2	5.6	5.9	5.9	5.9	4.7	4.6	3.8	3.3	2.4	2.4	2.4
West South Central .	0.5	0.9	1.9	2.3	2.7	2.7	2.7	3.6	3.9	3.3	4.7	4.6	4.6	4.6
Mountain	2.3	4.6	6.2	7.4	9.2	9.5	9.5	23.4	23.6	26.7	34.2	19.4	19.1	19.1
Pacific	6.0	13.6	23.9	33.7	37.5	38.2	37.8	29.8	53.8	70.9	62.9	26.2	26.2	26.2

Source: U.S. Federal Energy Regulatory Commission (formerly U.S. Federal Power Commission), *Hydroelectric Power Resources of the United States, Developed and Undeveloped*, January 1, 1988; and unpublished data.

No. 974. Solar Collector Shipments, by Type, End Use, and Market Sector: 1980 to 1993

[In thousands of square feet, except number of manufacturers. 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.]

YEAR	Number of manufacturers	Total shipments ¹	COLLECTOR TYPE		END USE			MARKET SECTOR		
			Low temperature	Medium temperature, special, other	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
1981	203	20,133	8,677	11,456	9,781	7,204	2,017	15,773	2,561	1,518
1982	265	18,621	7,476	11,145	7,035	7,444	2,367	13,729	3,789	560
1983	203	16,828	4,853	11,975	4,839	9,323	2,082	11,780	3,039	1,665
1984	225	17,191	4,479	11,939	4,427	8,930	2,370	13,980	2,091	289
1986	98	9,360	3,751	1,111	3,494	1,181	127	4,131	703	13
1987	59	7,269	3,157	957	3,111	964	23	3,775	305	11
1988	51	8,174	3,326	732	3,304	726	7	3,796	255	7
1989	44	11,482	4,283	1,989	4,688	1,374	205	5,804	424	42
1990	51	11,409	3,645	2,527	5,016	1,091	2	5,835	294	22
1991	48	6,574	5,585	989	5,535	989	24	6,322	225	13
1992	45	7,086	6,187	897	6,210	801	35	6,832	204	27
1993	41	6,968	6,025	931	6,040	880	15	6,694	215	31

¹ Includes high temperature collectors, end uses such as process heating, and utility and other market sectors not shown separately. ² Declines between 1984 and 1989 are primarily due to the expiration of the Federal energy tax credit and industry consolidation.

Source: U.S. Energy Information Administration, *Solar Collector Manufacturing Activity*, annual.

No. 975. Renewable Energy Consumption Estimates, by Type: 1990 to 1992

[Renewable energy is obtained from sources that are essentially inexhaustible unlike fossil fuels of which there is a finite supply]

SOURCE AND SECTOR	QUANTITY (quadrillion Btu)			PERCENT CHANGE	
	1990	1991	1992	1990-91	1991-92
SOURCES					
Total	6.01	6.20	6.04	3.2	-2.6
Consumption for electricity	3.77	4.01	3.77	6.4	-6.0
Electric utilities	3.13	3.09	2.70	-1.3	-12.6
Hydroelectric power	2.93	2.90	2.51	-1.0	-13.4
Geothermal energy	0.18	0.17	0.17	-5.6	0.0
Biofuels ¹	0.02	0.02	0.02	0.0	0.0
Wind energy ²	(Z)	(Z)	(Z)	(X)	(X)
Nonutility power generators	0.62	0.69	0.78	11.3	13.0
Hydroelectric power	0.08	0.08	0.10	1.2	19.0
Geothermal, solar, and wind energy ..	0.10	0.11	0.13	10.0	18.2
Biofuels ¹	0.44	0.49	0.55	13.0	11.3
Net imported electricity	0.02	0.23	0.29	1,050.0	26.1
Consumption for other uses ³	2.23	2.19	2.27	-1.8	3.7
Biofuels ¹	2.17	2.13	2.21	-1.8	3.8
Solar and photovoltaic energy	0.06	0.06	0.06	0.0	0.0
SECTORS					
Total	6.01	6.20	6.04	3.2	-2.6
Residential and commercial	0.64	0.67	0.71	4.7	6.0
Industrial	2.13	2.14	2.26	0.5	5.6
Transportation	0.08	0.07	0.08	-12.5	14.3
Electric utilities	3.15	3.32	3.00	5.4	-9.6

Z Less than 0.005 quadrillion Btu. X Not applicable. ¹ Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels. ² Also includes photovoltaic and solar thermal energy. ³ Included are nonutility thermal energy uses, such as space heating and industrial process heat production. Excluded are estimates for mechanical energy, such as shaft power from dams, wind machines, and solar-powered motors and activators.

Source: U.S. Energy Information Administration, *Annual Energy Review*.