Section L

Energy and Utilities

Energy Sources, Requirements and Supply

Generation of Electricity

Energy Production and Capacity

Energy Consumption

Gas and Electric Companies: Customers, Usage, Revenues

Retail Energy Prices and Sales

Projected Energy Requirements

Energy Conversion Factors

Oil and Gas Drillings and Reserves

Nuclear Power Plants, Generation and Capability

Figures

Glossary

TABLE L-1

Electric Energy Production — 1990, 1995 and 1999 and Net Summer Capacity — 1995 and 1999(a) United States by State

State	Net Generation (billion Kwh)			Net Summer Capacity (million Kwh)	
	1990(r)	1995	1999	1995	1999
United States	2,808.2	2,994.5	3,173.7	706.1	639.3
Alabama	76.2	99.6	113.9	20.5	21.5
Alaska	4.5	4.8	4.6	1.7	1.7
Arizona	62.3	69.0	83.1	15.2	15.1
Arkansas	37.1	39.5	44.1	9.6	9.3
California	114.5	121.9	87.9	43.3	24.3
Colorado	31.3	32.7	36.2	6.6	7.3
Connecticut	32.2	26.9	20.5	6.7	2.9
Delaware	7.1	8.3	6.2	2.2	2.3
District of Columbia	0.4	0.2	—	0.8	0.8
Florida	123.6	147.2	166.9	35.9	36.5
Georgia	97.6	102.0	110.5	22.3	23.3
Hawaii	8.0	6.2	6.5	1.6	1.6
Idaho	8.6	10.1	12.5	2.6	2.6
Illinois	127.0	145.2	149.8	33.1	17.0
Indiana	97.7	105.2	114.2	20.7	20.4
Iowa	29.0	33.5	37.0	8.2	8.4
Kansas	33.9	38.2	42.0	9.7	10.0
Kentucky	73.8	86.2	81.7	15.4	14.7
Louisiana	58.2	65.6	64.8	17.0	16.3
Maine	9.1	2.7	1.2	2.4	0.1
Maryland	31.5	44.7	49.3	11.0	11.0
Massachusetts	36.5	27.0	4.4	9.3	2.2
Michigan	89.1	92.5	87.9	22.0	22.4
Minnesota	41.6	42.5	44.2	8.9	9.0
Mississippi	22.9	26.4	32.2	7.2	6.8
Missouri	59.0	65.4	73.5	15.7	16.8
Montana	25.7	25.4	27.6	4.9	3.0
Nebraska	21.6	25.3	30.0	5.5	5.8
Nevada	19.3	20.0	26.5	5.6	5.4
New Hampshire	10.8	13.9	13.9	2.5	2.3
New Jersey	36.5	27.1	38.9	13.8	12.1
New Mexico	28.5	29.4	31.7	5.1	5.3
New York	128.7	101.2	97.0	32.1	17.7
North Carolina	79.8	96.1	109.9	20.6	21.2
North Dakota	26.8	28.8	31.3	4.5	4.7
Ohio	126.5	137.9	140.9	27.4	27.1
Oklahoma	45.1	48.0	50.3	12.9	12.9
Oregon	49.2	44.0	51.7	10.4	10.3
Pennsylvania	165.7	168.9	161.6	33.7	25.3
Rhode Island	0.6	0.7	b	0.4	—
South Carolina	69.3	78.4	87.3	16.7	17.7
South Dakota	6.4	8.8	10.6	3.0	2.9
Tennessee	73.9	82.3	89.7	16.1	17.3
Texas	234.0	261.7	292.5	64.4	65.3
Utah	32.3	35.2	36.1	4.9	5.1
Vermont	5.0	4.8	4.7	1.1	0.8
Virginia	47.2	52.7	65.1	14.3	15.3
Washington	100.5	95.7	112.1	24.3	25.2
West Virginia	77.4	77.3	91.7	14.5	14.5
Wisconsin	45.6	51.0	54.7	11.5	12.1
Wyoming	39.4	39.7	43.0	6.0	6.0

NOTE: Data may not add to total due to rounding.

r Revised.

— Represents zero.

a As of December 31 of each year. Covers utilities for public use.

b Represents less than 50 million kWh.

SOURCE: *Statistical Abstract of the United States, 2001;* United States Energy Information Administration, *Electric Power Annual, Electric Power Monthly,* December issues, and *Inventory of Power Plants in the United States,* annual.

TABLE L-2

Production of Primary Energy Resources
New York State — 1985-2000

Year	Hydro Electricity[1] TBtu	Hydro Electricity[1] GWh	Natural Gas TBtu	Natural Gas MMcf	Crude Oil TBtu	Crude Oil Mbbl	Biofuel[2] TBtu	Total Energy Production TBtu
1985	287.2	26,956	34.1	33,061	6.2	1,071	123.2r	450.8r
1986	311.1	29,480	35.8	34,796	4.9	853	118.2r	470.1r
1987	288.5r	27,546	30.5	29,549	4.1	710	110.9r	433.9r
1988	247.5	23,994	28.9	28,125	3.3	567	109.8r	389.5r
1989	250.0r	23,918	26.5	25,673	2.9	496	108.8r	388.2r
1990r	287.2	27,555	25.9	25,112	2.4	417	104.1	419.6
1991r	272.8	26,258	24.1	23,438	2.5	426	105.2	404.6
1992r	287.2	27,281	24.3	23,582	2.4	406	117.7	431.5
1993	302.4	28,479	22.7r	22,145	2.0	341	119.1r	446.2r
1994r	284.0	26,800	22.1	21,543	1.7	299	125.8	433.7
1995r	266.0	24,990	19.8	19,291	1.8	304	135.2	422.8
1996r	300.7	28,055	18.7	18,242	1.8	309	149.7	470.9
1997r	309.2	29,767	16.6	16,194	1.6	276	180.6	508.0
1998r	305.8	28,252	17.1	16,607	1.3	217	142.0	466.2
1999r	241.5	23,643	16.6	16,126	1.1	193	174.9	434.1
2000p	242.9	24,232	17.4	16,900	1.0	181	178.3	439.6

NOTE: See Glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

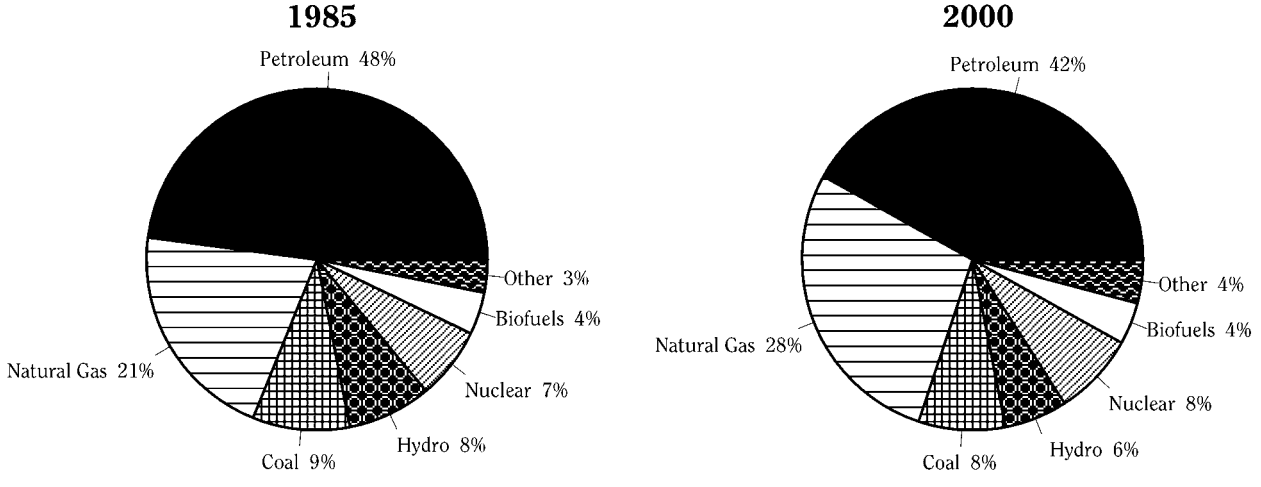
1 Utility and nonutility owned hydroelectric generation facilities.

2 Includes primarily wood, wastes and ethanol.

SOURCE: New York State Department of Environmental Conservation; material compiled by New York State Energy Research and Development Authority.

FIGURE L-1

Primary Consumption of Energy by Type of Fuel
New York State — 1985 and 2000



SOURCE: New York State Energy Research and Development Authority.

TABLE L-3

Oil and Gas Production
New York State — 1966-2000

Year	Production		Number of Wells					
					Shut-In			
	Oil (Mbbls)	Gas (MMcf)	Oil	Gas	Oil and Gas	Storage	P & A[1]	Water Injection
1966	1,728	2,699	7,300	1,164	4,500	450	NA	
1967	1,972	2,230	7,000	1,159	4,600	500	NA	
1968	1,532	2,969	6,400	1,111	4,450	650	NA	
1969	1,256	4,278	5,800	820	1,009	721	NA	
1970	1,193	3,093	5,600	600	1,350	732	NA	
1971	1,097	2,202	5,552	628	1,567	729	418	
1972	1,018	3,362	5,528	750	1,619	734	573	
1973	969	4,588	5,288	789	1,484	736	544	
1974	896	4,918	5,513	1,061	1,862	735	622	
1975	875	7,483	5,231	1,111	1,883	765	553	
					Shut-In			
					Oil	Gas		
1976	857	9,200	5,016	1,195	1,393	432	764	442	
1977	824	10,700	4,913	1,467	1,528	292	764	455	
1978	852	13,900	5,039	1,452e	1,512e	352e	763	352	
1979	855	15,500	5,100	1,620e	1,500e	520e	763	117	2,500e
1980	824	15,650	5,220	2,076	1,400e	500e	765	119	3,500e
1981r	869	19,000	5,176	2,636	1,402	726	822	184	3,038a
1982r	831	18,760	5,272	2,969	1,308	996	831	262	2,924e
1983r	902	20,380	4,705	3,489	1,436	995	839	90	2,093
1984r	952	27,000	4,584	4,279	1,475	821	839	182	1,811
1985r	1,071	33,061	4,814	4,794	1,614	891	841	269	2,037
1986r	853	34,796	4,448	5,088	1,677	791	836	471	1,658
1987r	710	29,549	4,228	5,351	1,582	961	845	417	1,376
1988r	567	28,125	4,368	5,328	1,478	870	854	322	1,382
1989r	496	25,673	4,043	5,411	1,775	845	845	260	1,196
1990r	417	25,112	3,906	5,536	1,752	955	854	961	1,274
1991r	426	23,438	3,619	5,757	1,362	707	869	376	875
1992r	406	23,586	3,761	5,866	939	563	865	244	835
1993r	341	22,145	3,783	5,986	1,137	505	865	263	859
1994r	299	21,537	3,670	6,017	1,326	561	876	234	923
1995r	304	18,799	3,208	6,216	1,108	665	866	191	783
1996r	309	18,238	3,438	5,894	1,648	564	868	184	668
1997r	276	16,194	3,446	5,739	1,265	709	867	141	554
1998r	217	16,607	3,739	5,903	1,590	579	885b	169	471
1999e	193	16,126	3,463	5,756	1,165	583	885b	138	223
2000e	181	17,757	2,802	5,748	1,319	844	885b	131	627

NOTE: See Glossary on page 465 for explanation of abbreviations.

NA Not available.

e Estimated.

r Revised.

a Active injection wells.

b Includes LPG storage wells.

1 Plugged and abandoned during the year.

SOURCE: New York State Department of Environmental Conservation, Division of Mineral Resources.

TABLE L-4

Primary Consumption of Energy by Type of Fuel
New York State — 1985-2000

	Coal		Natural Gas[1]		Petroleum Products		Hydro	
Year	TBtu	MTons	TBtu	MMcf	TBtu	Mbbl	TBtu	GWh
1985	344.6	13,947	778.4	753,777	1,769.9	315,413	287.3	26,956
1986	305.5	12,202	737.3	715,909	1,901.2	336,888	311.1	29,480
1987	348.5	13,795	780.9	757,211	1,946.2	345,557	288.5	27,546
1988	382.5	15,076	796.8	774,455	2,048.1	362,155	247.5	23,994
1989	401.5	15,858	846.7	821,436	2,036.1	360,541	250.0	23,918
1990	394.9r	15,572	878.1r	851,590	1,878.0r	333,350	287.2	27,555
1991r	398.6	15,657	885.7	860,739	1,747.4	311,704	272.8	26,258
1992	416.4	16,272	1,044.4r	1,015,693	1,659.4r	297,712	287.2r	27,281
1993	377.6	14,825	1,070.4r	1,043,198	1,667.1r	299,059	302.4	28,479
1994	367.6	14,378	1,170.3r	1,140,027	1,586.2r	286,020	284.0r	26,800
1995r	353.3	13,665	1,314.8	1,281,342	1,556.4	282,407	266.1	24,990
1996r	359.5	13,967	1,218.0	1,187,283	1,617.7	292,577	300.7	28,055
1997r	384.6	14,819	1,290.3	1,260,406	1,577.9	286,217	309.2	29,767
1998r	416.4	16,108	1,097.8	1,067,308	1,588.2	287,643	305.8	28,252
1999r	296.9	11,558	1,141.8	1,114,537	1,656.7	299,636	241.5	23,643
2000p	311.3	12,110	1,134.4	1,106,760	1,724.9	310,589	242.9	24,232

	Nuclear		Net Imported Electricity		Biofuels[2]	Total[3]
Year	TBtu	GWh	TBtu	GWh	TBtu	TBtu
1985r	256.8	24,092	108.2	10,155	123.2	3,668.4
1986r	233.1	22,084	139.3	13,204	118.2	3,745.7
1987r	240.1	22,926	119.1	11,373	110.9	3,834.1
1988	249.4	24,176	103.1	9,994	109.8r	3,937.2r
1989r	238.8	22,846	57.9	5,539	108.8	3,940.0
1990r	246.2	23,623	14.1	1,352	104.1	3,802.6
1991r	295.5	28,448	65.7	6,323	105.2	3,770.9
1992r	254.3	24,155	107.0	10,167	117.7	3,886.4
1993r	285.5	26,889	151.6	14,280	119.1	3,973.7
1994r	309.7	29,231	121.9	11,504	125.8	3,965.4
1995	280.4	26,336	77.8	7,311	135.2	3,984.1
1996	377.6	35,226	51.5	4,806	149.7	4,074.8
1997r	307.2	29,570	-24.5	-2,356	180.6	4,025.4
1998r	338.9	31,314	11.8	1,090	142.0	3,900.8
1999r	378.2	37,019	116.3	11,385	174.9	4,006.3
2000p	315.8	31,508	186.4	18,593	178.3	4,093.9

NOTE: TBtu totals may not equal to the sum of components due to rounding.
See Glossary on page 465 for explanation of abbreviations.

r Revised.

p Preliminary.

1 Excludes lease, plant and pipeline fuels.

2 Includes primary wood, waste and ethanol.

3 Excludes nonfuel uses and steam.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-5

Primary Consumption of Refined Petroleum Products by Type of Product
New York State — 1985-2000

Year	Distillate		Residual		Kerosene	
	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl
1985	361.2	62,015r	417.0	66,334	30.2r	5,319r
1986	410.9	70,542	500.6	79,618	17.4r	3,061r
1987	425.6	73,069	487.2	77,490	23.6r	4,158r
1988	439.5	75,459	559.4	88,972	29.8r	5,263r
1989	446.2	76,608	537.0	85,411	27.2r	4,797r
1990	386.3	66,310	487.7	77,570	12.9r	2,283r
1991	358.5	61,552	426.8	67,888	15.0r	2,646r
1992	382.8	65,720	324.2	51,560	10.6	1,861
1993	408.2	70,069	302.6r	48,130	13.7	2,422r
1994	394.6	67,740	254.0	40,402	13.0	2,289
1995r	404.2	69,384	191.1	30,392	13.4	2,363
1996r	426.2	73,166	232.5	36,975	16.3	2,883
1997r	424.1	72,805	190.8	30,341	16.5	2,906
1998r	385.6	66,205	239.7	38,127	19.0	3,358
1999r	425.7	73,075	250.0	39,759	17.5	3,086
2000p	449.9	77,234	304.6	48,446	19.5	3,443

Year	LPG[1,2]		Motor Gasoline		Aviation Fuels[3]		Total[2]	
	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl
1985	17.7r	4,923	742.0	141,249	201.7	35,573	1,769.9r	315,413
1986	17.8r	4,878	744.3	141,699	210.3	37,090	1,901.2r	336,888
1987	20.0r	5,475	770.9	146,758	218.9	38,607	1,946.2r	345,557
1988	19.1r	5,238	772.4	147,048	227.8	40,175	2,048.1r	362,155
1989	20.5r	5,579	776.3	147,786	228.8	40,360	2,036.1r	360,541
1990	20.3r	5,606	740.2	140,901	230.7	40,680	1,878.0r	333,350r
1991	26.0r	7,207	712.6	135,661	208.4	36,750	1,747.4r	311,704
1992	25.6r	7,077	707.2	134,624	209.1	36,870	1,659.4r	297,712
1993	22.1r	6,139	711.0	135,349	209.5	36,950	1,667.1r	299,059
1994	23.1r	6,352r	690.3	131,987	211.2	37,250	1,586.2r	286,020
1995r	22.9	6,332	703.6	134,911	221.3	39,025	1,556.4	282,407
1996r	25.6	7,073	698.7	133,947	218.5	38,533	1,617.7	292,577
1997r	24.2	6,687	698.5	133,985	223.9	39,493	1,577.9	286,217
1998r	26.4	7,306	700.1	134,318	217.3	38,329	1,588.2	287,643
1999r	26.5	7,316	715.5	137,298	221.7	39,102	1,656.7	299,636
2000p	28.8	7,991	696.7	133,733	225.3	39,742	1,724.9	310,589

NOTE: TBtu totals may not equal to the sum of components due to rounding.
See Glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Propane.

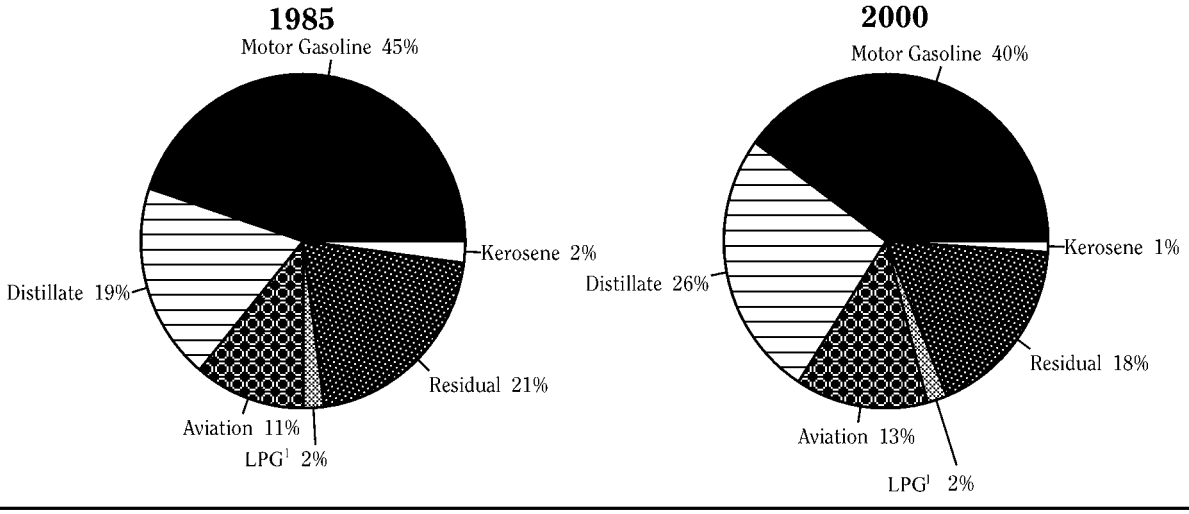
2 Excludes nonfuel uses.

3 Kerosene-type jet fuel and aviation gasoline.

SOURCE: New York State Energy Research and Development Authority.

FIGURE L-2

Primary Consumption of Refined Petroleum Products by Type of Product
New York State — 1985 and 2000



1 Propane.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-6

Primary Consumption of Energy by the Electric Generation Sector by Type of Fuel New York State — 1985-2000

					Petroleum Products					
	Coal[1]		Natural Gas		Distillate[2]		Residual		Total	
Year	TBtu	MTons	TBtu	MMcf	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl
1985	249.6	9,905	179.0	172,631	4.8	821	271.7	43,220	276.5	44,041
1986	214.5	8,430	138.1r	133,532	7.9	1,349	327.6	52,104	335.4	53,453
1987	256.7	10,039	178.9r	173,328	8.4	1,442	321.2	51,096	329.6	52,538
1988	291.7	11,380	152.3r	148,186	12.6	2,162	395.1	62,840	407.7	65,002
1989	318.9	12,432	187.5r	182,002	21.2	3,636	406.4	64,636	427.5	68,272
1990	318.6	12,400	243.9r	235,909	5.9	1,016	338.2	53,800	344.2	54,816
1991	323.8	12,532	247.3r	241,478	5.1	884	279.3	44,432	284.5	45,316
1992	342.2	13,184	319.4r	312,516	2.4	417	181.0	28,784	183.4	29,201
1993	307.4	11,907	343.4r	336,052	3.3	567	147.3	23,430	150.6	23,997
1994	299.4	11,552	407.4r	398,674	5.5	941	111.4	17,724	116.9	18,665
1995	288.1r	11,038	559.8r	546,116	6.7	1,146	77.0	12,251	83.7	13,397
1996	295.6	11,362	440.8r	430,445	6.3	1,079	93.8	14,919	100.1	15,998
1997	315.7	12,047	527.3r	517,446r	6.0	1,031	80.5	12,805	86.5	13,836
1998r	352.4	13,497	443.4	433,872	7.5	1,282	155.1	24,669	162.8	25,951
1999r	238.1	9,134	446.6	438,280	10.3	1,775	134.5	21,390	144.8	23,165
2000p	251.1	9,635	381.2	374,087	11.6	1,983	148.6	23,642	160.2	25,625

	Hydro		Nuclear		Net Imported Electricity		Biofuels[3]		Total[4]
Year	TBtu	GWh	TBtu	GWh	TBtu	GWh	TBtu	GWh	TBtu
1985r	287.3	26,956	256.8	24,092	108.2	10,155	NA	NA	1,357.7
1986r	311.1	29,480	233.1	22,084	139.3	13,204	NA	NA	1,371.5
1987r	288.5	27,546	240.1	22,926	119.1	11,373	NA	NA	1,412.9
1988	247.5	23,994	249.4	24,176	103.1	9,994	NA	NA	1,451.6r
1989r	250.0	23,918	238.8	22,846	57.9	5,539	NA	NA	1,480.7
1990	287.2r	27,555	246.2	23,623r	14.1	1,352	15.7	1,502	1,469.9r
1991r	272.8	26,258	295.5	28,448	65.7	6,323	16.8	1,622	1,506.4
1992r	287.2	27,281	254.3	24,155	107.0	10,167	19.0	1,806	1,512.5
1993r	302.4	28,479	285.5	26,889	151.6	14,280	21.2	1,993	1,562.3
1994r	284.0	26,800	309.7	29,231	121.9	11,504	21.0	1,983	1,560.3
1995r	266.1	24,990	280.4	26,336	77.8	7,311	23.9	2,249	1,579.8
1996r	300.7	28,055	377.6	35,226	51.5	4,806	25.4	2,372	1,591.7
1997r	309.2	29,767	307.2	29,570	-24.5	-2,356	25.2	2,423	1,546.6
1998r	305.8	28,252	338.9	31,314	11.8	1,090	25.0	2,311	1,639.8
1999r	241.5	23,643	378.2	37,019	116.3	11,385	28.4	2,784	1,594.0
2000p	242.9	24,232	315.8	31,508	186.4	18,593	32.3	3,227	1,569.9

NOTE: TBtu totals may not equal to the sum of components due to rounding. See glossary on page 465 for explanation of abbreviations.

NA Not available.

p Preliminary.

r Revised.

1 Bituminous only.

2 Includes small quantities of kerosene-type jet fuel.

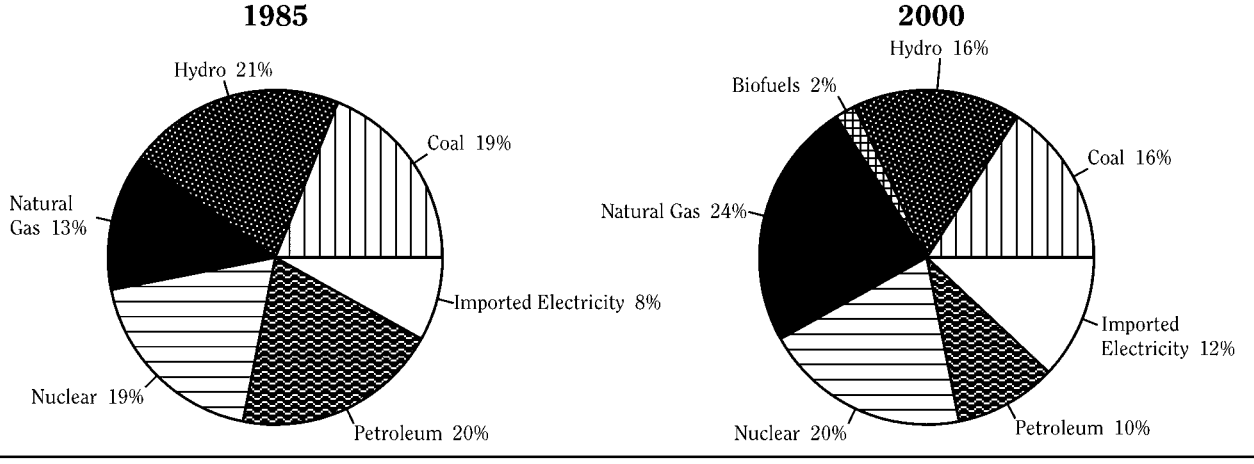
3 Includes renewable and indigenous fuels used by non-utility generators.

4 Excludes utility consumption of fuels used in the production of steam distributed for space heating.

SOURCE: New York State Energy Research and Development Authority.

FIGURE L-3

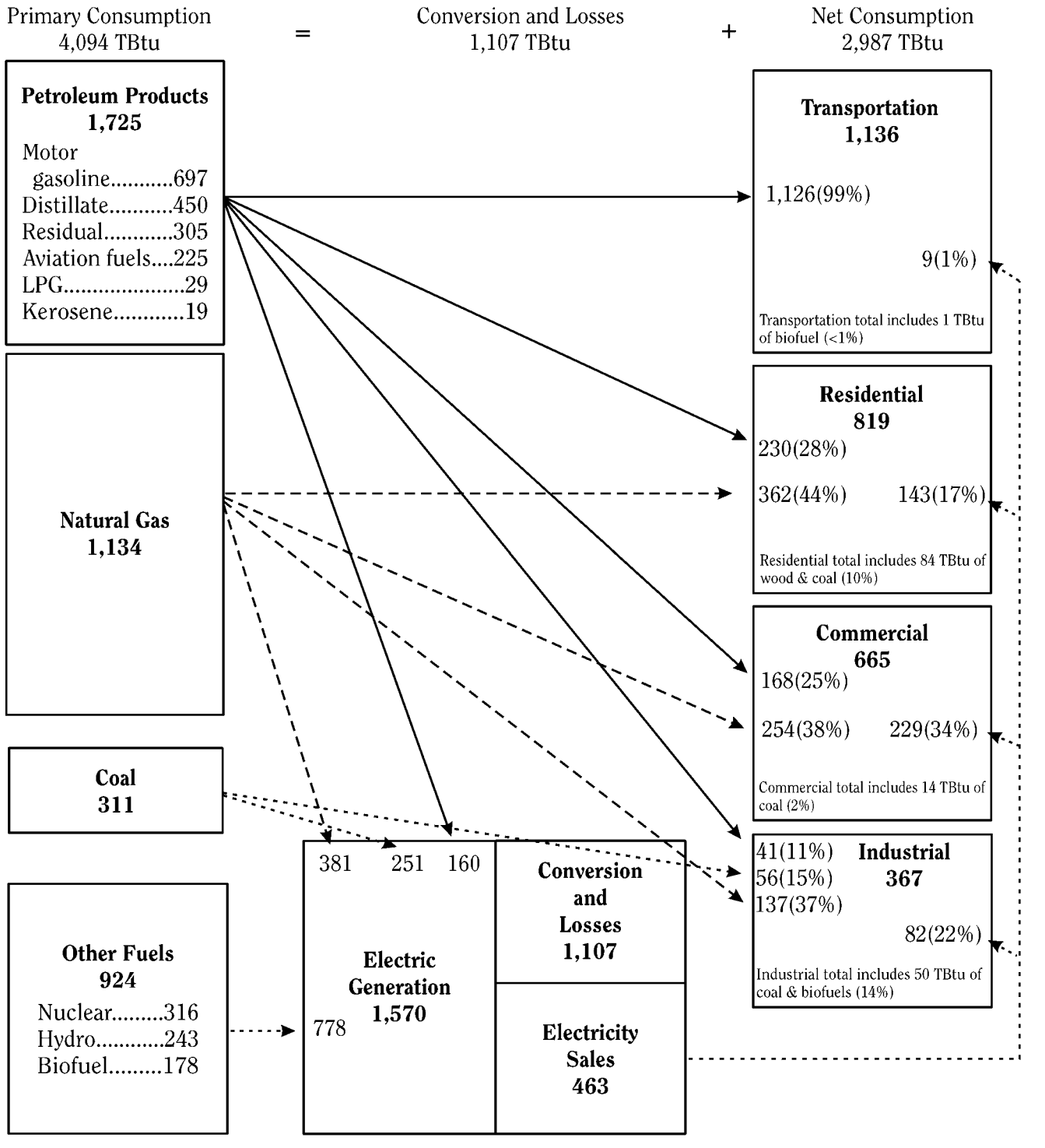
Primary Consumption of Energy by the Electric Utility Sector by Type of Fuel New York State —1985 and 2000



SOURCE: New York State Energy Research and Development Authority.

FIGURE L-4

Energy Flow
New York State — 2000



SOURCE: New York State Energy Research and Development Authority.

TABLE L-7

Net Consumption of Energy by the Residential Sector
New York State — 1985-2000

					Petroleum Products			
	Coal[1]		Natural Gas		Distillate[2]		Kerosene	
Year	TBtu	MTons	TBtu	MMcf	TBtu	Mbbl	TBtu	Mbbl
1985	4.7r	207r	330.3	320,385	180.5	30,992	18.3	3,219
1986	4.8	206	342.2	332,584	198.4	34,065	12.5	2,209
1987	4.3	173	340.8	330,508	211.0	36,220	18.2	3,212
1988	3.4	139	363.1	352,829	212.2	36,422	23.6	4,163
1989	3.5	137	369.7r	358,561	202.6	34,788	15.7	2,771
1990	3.1r	129r	341.1	331,157	154.5	26,529	10.0	1,765
1991	3.1	130r	337.1	326,974	145.7	25,021	11.9	2,098
1992	3.1r	128r	384.4	372,862	163.1	27,997	7.1	1,252
1993	2.9r	120r	385.6r	375,093	167.2	28,707	8.9	1,565
1994	2.1	88r	387.4r	376,444r	155.9	26,760	7.9	1,396
1995r	2.5	106	375.7	365,847	161.4	27,713	7.0	1,240
1996r	3.2	135	402.2	391,617	178.7	30,674	8.2	1,450
1997r	2.7	114	384.9	374,755	176.5	30,303	9.9	1,744
1998r	1.5	66	325.4	315,008	158.2	27,159	10.6	1,866
1999r	1.7	74	346.1	336,634	166.0	28,502	13.2	2,327
2000p	1.7	74	361.9	352,019	196.7	33,769	13.3	2,344

	Petroleum Products (continued)								
	LPG[2]		Total		Biofuels[3]		Electricity		Total
Year	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mcords	TBtu	GWh	TBtu
1985r	11.6	3,227	210.4	37,438	64.8	3,240	111.8	32,757	722.0
1986r	11.9	3,282	222.9	39,556	63.1	3,154	115.2	33,771	748.3
1987r	14.0	3,834	243.2	43,266	59.0	2,952	120.4	35,294	767.7
1988r	13.6	3,718	249.3	44,303	61.3	3,066	127.8	37,460	805.0
1989r	14.5	3,931	232.8	41,490	63.6	3,181	129.2	37,878	798.8
1990	14.8r	4,079	179.3r	32,373	46.5	2,325	131.6	38,574	701.7r
1991	18.3r	5,051	175.9r	32,170	49.0	2,450	133.7	39,177	698.8r
1992	18.0r	4,965	188.2r	34,214	51.5	2,577	132.1	38,720	759.3r
1993	15.5r	4,293	191.6r	34,565	55.2	2,758	136.1	39,897	771.3r
1994	15.8	4,350	179.6	32,506	54.1	2,704	136.8	40,105	760.0
1995r	16.4	4,561	184.8	33,469	60.0	3,001	136.1	39,887	759.2
1996r	17.8	4,937	204.7	37,061	59.9	2,996	137.5	40,285	807.5
1997r	15.8	4,379	202.2	36,426	84.0	4,202	136.7	40,059	810.5
1998r	15.6	4,323	184.4	33,348	74.1	3,705	137.3	40,240	722.8
1999r	17.0	4,691	196.2	35,520	79.4	3,970	146.4	42,919	769.8
2000p	19.5	5,395	229.5	41,508	83.1	4,153	143.2	41,970	819.3

NOTE: TBtu totals may not equal to the sum of components due to rounding. See Glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Anthracite and Bituminous.

2 Propane.

3 Wood.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-8

Net Consumption of Energy by the Commercial Sector New York State — 1985-2000

					Petroleum Products			
	Coal[1]		Natural Gas		Distillate[2]		Residual	
Year	TBtu	MTons	TBtu	MMcf	TBtu	Mbbl	TBtu	Mbbl
1985	5.1	226	161.3	156,457	68.9r	11,835	104.8	16,677
1986	6.0	258	161.9	157,370	95.9r	16,471	125.5	19,955
1987	4.8	198	164.6	159,626	86.1	14,782	119.4	18,987
1988	4.1	170	191.3	185,939	85.7	14,720	114.1	18,154
1989	3.9	162r	185.3	179,759	90.1	15,473	99.8	15,878
1990	3.4r	144r	178.8	173,560	75.6r	12,974	110.9	17,643
1991	3.5	148r	180.8	175,372	74.3	12,758	107.5	17,102
1992	3.4r	147r	204.3	198,189	81.0	13,899	100.3	15,951
1993r	2.6	112	215.1	209,193	88.1	15,123	110.2	17,531
1994r	2.3	97	236.6	229,893	85.0	14,592	102.5	16,301
1995r	2.7	115	239.0	232,709	88.6	15,210	86.5	13,766
1996r	3.5	148	236.3	230,089	91.8	15,754	81.8	13,008
1997r	3.2	139	238.2	231,969	86.2	14,794	64.9	10,315
1998r	1.8	81	207.2	200,610	70.8	12,148	45.2	7,194
1999r	2.4	106	220.0	213,962	81.7	14,023	56.2	8,932
2000p	2.4	106	254.4	247,425	84.2	14,457	75.2	11,957

	Petroleum Products (continued)										
	Kerosene		LPG[2]		Total		Biofuels[3]		Electricity		Total
Year	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mcords	TBtu	GWh	TBtu
1985r	4.9	862	2.1	569	180.7	29,943	1.7	86	166.6	48,816	515.4
1986r	1.3	228	2.1	579	224.8	37,233	2.0	98	172.1	50,430	566.7
1987r	1.8	318	2.5	677	209.8	34,764	2.2	110	178.3	52,256	559.6
1988r	1.2	207	2.4	656	203.4	33,737	2.4	122	188.7	55,305	590.0
1989r	2.9	519	2.6	694	195.5	32,564	2.7	134	191.2	56,051	578.6
1990r	1.5	269	2.6	720	190.6	31,606	3.0	148	191.2	56,025	566.9
1991r	1.2	213	3.2	891	186.3	30,964	3.1	156	192.5	56,408	566.1
1992r	2.3	408	3.2	876	186.7	31,134	3.4	168	191.3	56,079	589.2
1993r	3.5	616	2.7	758	204.5	34,028	4.4	222	195.9	57,410	622.5
1994r	3.1	538	2.8	768	193.3	32,199	4.5	227	200.6	58,802	637.3
1995r	4.0	714	2.9	797	182.1	30,487	4.5	227	213.3	62,509	641.6
1996r	4.3	751	3.1	871	181.0	30,384	4.9	246	213.8	62,663	639.4
1997r	4.5	801	2.8	773	158.4	26,683	9.2	461	218.5	64,029	627.4
1998r	5.6	981	2.8	763	124.3	21,086	9.2	461	215.8	63,253	558.4
1999r	3.9	682	3.0	828	144.7	24,465	11.1	557	231.9	67,969	610.1
2000p	5.4	948	3.1	853	167.8	28,215	11.4	568	228.9	67,075	664.8

NOTE: TBtu totals may not equal to the sum of components due to rounding. See Glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Anthracite and Bituminous.

2 Propane.

3 Wood.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-9

Net Consumption of Energy by the Industrial Sector
New York State — 1985-2000

					Petroleum Products			
	Coal[1]		Natural Gas		Distillate[2]		Residual	
Year	TBtu	MTons	TBtu	MMcf	TBtu	Mbbl	TBtu	Mbbl
1985	85.1	3,609	107.5	104,304	28.1r	4,816	34.9	5,553
1986	80.2	3,308	95.1	92,423	18.3r	3,148	37.9	6,033
1987	82.7	3,385	96.7	93,749	22.5	3,866	32.9	5,232
1988	83.3	3,387	90.0	87,501	21.6r	3,705	30.9	4,919
1989	75.3	3,127	104.2r	101,114	22.4	3,846	27.4	4,366
1990	69.7	2,899	114.3	110,964	20.0r	3,428	29.9	4,750
1991	68.2	2,847	120.5	116,915	17.7	3,043	15.0	2,383
1992	67.7	2,813	136.2	132,126	18.2	3,117	19.5	3,095
1993	64.6	2,686	126.3r	122,860r	23.6	4,047	24.6	3,911
1994	63.8	2,641	138.9r	135,016r	17.9r	3,066	20.2	3,208
1995r	59.9	2,406	140.4	136,670	17.3	2,973	12.7	2,021
1996r	57.2	2,322	138.8	135,132	18.0	3,097	15.7	2,498
1997r	63.1	2,519	139.9	136,236	17.6	3,015	12.6	2,006
1998r	60.6	2,464	121.7	117,818	17.9	3,075	12.5	1,986
1999r	54.7	2,244	129.2	125,661	20.2	3,460	12.3	1,949
2000p	56.1	2,295	137.0	133,229	18.3	3,139	16.0	2,543

	Petroleum Products (continued)									
	Kerosene		LPG[2]		Total		Biofuels[3]	Electricity		Total
Year	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	TBtu	TBtu	GWh	TBtu
1985r	7.0	1,238	3.5	980	73.5	12,587	56.7	97.8	28,659	420.7
1986r	3.5	624	3.3	909	63.1	10,714	53.2	95.9	28,107	387.4
1987r	3.6	628	3.2	877	62.2	10,603	49.6	98.0	28,726	389.2
1988r	5.1	893	2.7	742	60.3	10,259	46.1	102.9	30,155	382.6
1989r	8.5	1,507	2.9	800	61.3	10,519	42.5	107.3	31,448	390.7
1990r	1.4	249	2.4	657	53.6	9,084	39.0	108.9	31,929	385.6
1991r	1.9	335	4.0	1,107	38.6	6,868	36.2	106.2	31,112	369.7
1992r	1.1	201	4.0	1,092	42.7	7,505	43.8	105.9	31,027	396.3
1993	1.4	241	3.5r	961	53.0r	9,160	38.0r	103.0	30,187	384.9r
1994r	2.0	355	3.4	948	43.5	7,577	45.4	100.5	29,467	392.2
1995r	2.3	409	3.2	881	35.5	6,284	44.4	86.4	25,317	366.6
1996r	3.9	682	4.1	1,142	41.7	7,419	57.5	88.5	25,947	383.8
1997r	2.0	361	5.2	1,445	37.4	6,827	60.3	86.3	25,282	387.0
1998r	2.9	511	6.1	1,687	39.4	7,259	32.3	85.6	25,089	339.6
1999r	0.4	77	6.4	1,772	39.3	7,258	54.7	88.1	25,835	366.0
2000p	0.9	151	6.2	1,719	41.3	7,552	50.2	82.3	24,109	366.8

NOTE: TBtu totals may not equal to the sum of components due to rounding. See Glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Anthracite and Bituminous. Includes deliveries to cokeries.

2 Excludes lease and plant fuels.

3 Propane.

4 Includes fuels used by industry to generate electricity and process steam; excludes nonfuel uses. Also excludes industrial hydroelectric power.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-10

Net Consumption of Energy by the Transportation Sector
New York State — 1985-2000

Year	Distillate		Residual		Motor Gasoline		Aviation Fuels[1]	
	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl
1985	78.9	13,551	5.6	884	742.0	141,249	201.7	35,573
1986	90.3	15,509	9.6	1,526	744.3	141,699	210.3	37,090
1987	97.6	16,759	13.7	2,175	770.9	146,758	218.9	38,607
1988	107.5	18,450	19.2	3,059	772.4	147,048	227.8	40,175
1989	109.9	18,865	3.3	531	776.3	147,786	228.8	40,360
1990	130.3	22,363	8.7	1,377	740.2	140,901	230.7	40,680
1991	115.6	19,846	25.0	3,971	712.6	135,661	208.4	36,750
1992	118.2	20,290	23.5	3,730	707.2	134,624	209.1	36,870
1993	126.0	21,625	20.5	3,258	711.0	135,349	209.5	36,950
1994	130.4	22,381	19.9	3,169	690.3	131,987	211.2	37,250
1995r	130.1	22,342	14.8	2,354	703.6	134,911	221.3	39,025
1996r	131.4	22,562	41.2	6,550	698.7	133,947	218.5	38,533
1997r	137.8	23,662	32.8	5,215	698.5	133,985	223.9	39,493
1998r	131.3	22,541	26.9	4,278	700.1	134,318	217.3	38,329
1999r	147.5	25,315	47.1	7,488	715.5	137,298	221.7	39,102
2000p	139.1	23,886	64.8	10,304	696.7	133,733	225.3	39,742

Year	LPG[2]		Total Petroleum		Biofuels[3]		Electricity		Total[4]
	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	TBtu	GWh	TBtu
1985r	0.5	147	1,028.7	191,404	NA	NA	8.3	2,442	1,037.0
1986r	0.4	108	1,055.0	195,932	NA	NA	8.9	2,601	1,063.8
1987r	0.3	87	1,101.4	204,386	NA	NA	9.2	2,693	1,110.6
1988r	0.4	122	1,127.4	208,854	NA	NA	9.3	2,722	1,136.7
1989r	0.6	154	1,119.0	207,696	NA	NA	9.6	2,825	1,128.6
1990r	0.5	150	1,110.3	205,471	NA	NA	9.5	2,795	1,119.8
1991r	0.6	158	1,062.1	196,386	NA	NA	9.3	2,714	1,071.4
1992r	0.5	144	1,058.4	195,658	NA	NA	9.0	2,644	1,067.4
1993r	0.5	127	1,067.4	197,309	0.3	83	9.1	2,676	1,076.8
1994r	1.0	286	1,052.8	195,073	0.7	205	9.6	2,803	1,063.1
1995r	0.5	138	1,070.3	198,770	2.3	654	9.4	2,757	1,082.0
1996r	0.4	123	1,090.2	201,715	2.0	552	9.0	2,632	1,101.1
1997r	0.3	90	1,093.3	202,445	1.9	532	8.8	2,567	1,104.0
1998r	1.9	533	1,077.5	199,999	1.4	394	8.8	2,580	1,087.7
1999r	0.1	25	1,131.8	209,228	1.2	341	9.1	2,654	1,142.1
2000p	0.1	24	1,126.1	207,689	1.4	388	8.9	2,600	1,136.3

NOTE: TBtu totals may not equal to the sum of components due to rounding.
See Glossary on page 465 for explanation of abbreviations.

NA Not available.

p Preliminary.

r Revised.

1 Kerosene-type jet fuel and aviation gasoline.

2 Propane.

3 Ethanol blended into motor gasoline.

4 Excludes pipeline fuels.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-11

Net Energy Bill by Sector and Type of Fuel
New York State — 1985, 1990, 1995 and 2000
(millions of current dollars)

Fuel	All Sectors	Residential	Commercial	Industrial	Transportation
			- - - 1985r - - -		
All Fuels	$ 26,338.5	$ 7,866.5	$ 7,134.9	$ 2,640.6	$ 8,696.5
Coal	189.5	17.0	10.0	162.5	X
Petroleum	11,783.0	1,799.4	1,023.9	426.3	8,533.4
Distillate	2,816.6	1,507.2	467.8	172.5	669.1
Residual	671.1	X	486.3	161.9	22.8
Gasoline	6,522.2	X	X	X	6,522.2
Kerosene	255.3	163.2	43.7	48.4	X
Aviation	1,313.1	X	X	X	1,313.1
LPG[1]	204.8	129.0	26.1	43.5	6.2
Natural Gas	4,001.7	2,490.5	959.7	551.5	X
Electricity	10,364.3	3,559.7	5,141.3	1,500.3	163.1
			- - - 1990r - - -		
All Fuels	$ 28,147.8	$ 8,451.7	$ 7,554.3	$ 2,789.2	$ 9,352.7
Coal	138.4	11.1	6.0	121.3	X
Petroleum	11,936.3	1,574.2	948.5	282.5	9,131.1
Distillate	3,105.4	1,304.0	494.4	135.6	1,171.4
Residual	555.2	X	415.9	112.1	27.2
Gasoline	6,536.0	X	X	X	6,536.0
Kerosene	87.6	68.3	10.2	9.0	X
Aviation	1,391.1	X	X	X	1,391.1
LPG[1]	260.9	201.9	27.9	25.8	5.4
Natural Gas	3,962.9	2,452.5	970.9	539.5	X
Electricity	12,110.3	4,413.9	5,628.9	1,845.9	221.6
			- - - 1995r - - -		
All Fuels	$ 30,888.0	$ 10,055.9	$ 9,365.9	$ 2,371.7	$ 9,094.6
Coal	114.2	8.3	4.5	101.4	X
Petroleum	11,219.4	1,427.3	783.6	163.8	8,844.7
Distillate	2,861.2	1,155.6	448.3	83.7	1,173.5
Residual	370.7	X	288.9	42.4	39.4
Gasoline	6,733.5	X	X	X	6,733.5
Kerosene	69.4	37.7	21.5	10.3	X
Aviation	894.1	X	X	X	894.1
LPG[1]	290.6	234.0	24.9	27.4	4.3
Natural Gas	5,134.5	3,077.0	1,417.3	640.2	X
Electricity	14,420.0	5,543.4	7,160.5	1,466.2	249.9
			- - - 2000 - - -		
All Fuels	$ 38,382.7	$ 12,008.3	$ 11,401.8	$ 2,383.9	$ 12,588.7
Coal	95.6	5.5	3.3	86.8	X
Petroleum	16,363.9	2,615.1	1,088.3	298.7	12,361.8
Distillate	4,577.5	2,163.7	658.4	141.8	1,613.6
Residual	665.2	X	336.9	71.7	256.6
Gasoline	8,917.8	X	X	X	8,917.8
Kerosene	195.2	133.4	54.2	7.7	X
Aviation	1,572.6	X	X	X	1,572.6
LPG[1]	435.6	318.0	38.8	77.6	1.3
Natural Gas	6,210.4	3,470.6	1,923.3	816.5	X
Electricity	15,712.7	5,917.0	8,386.9	1,181.8	227.0

NOTE: Detail may not add to totals due to rounding.

X Not applicable.

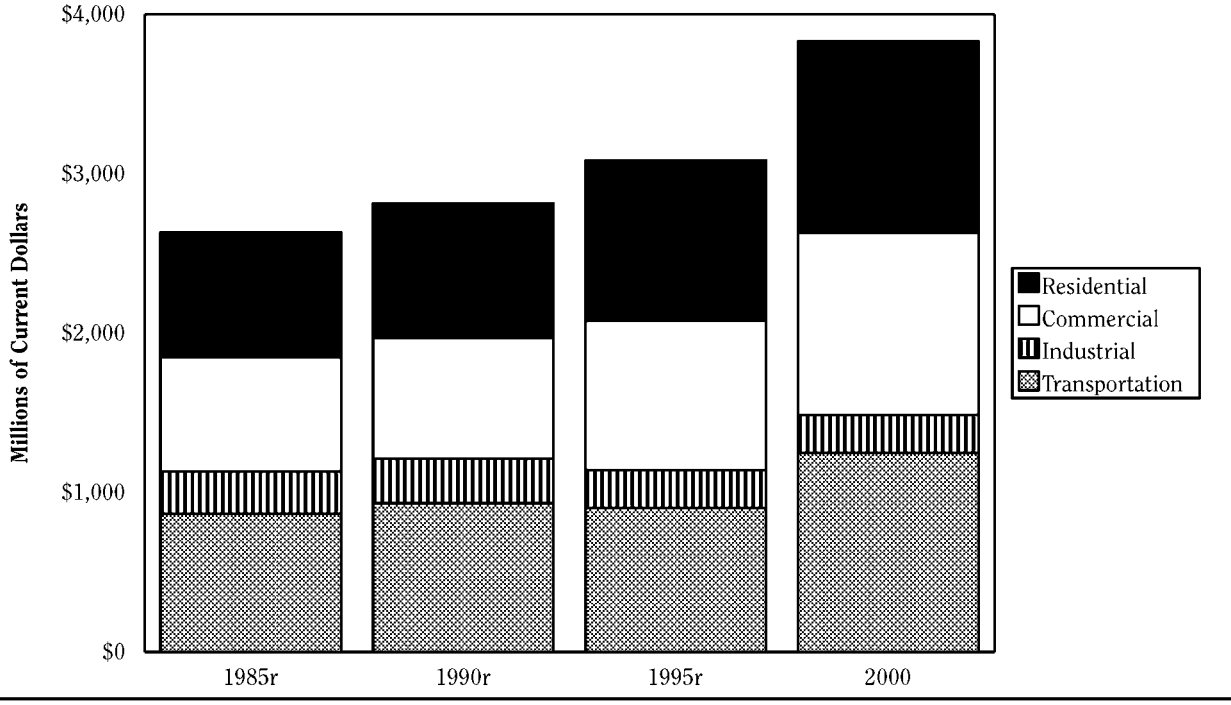
r Revised.

1 Propane.

SOURCE: New York State Energy Research and Development Authority.

FIGURE L-5

Net Energy Costs by Sector
New York State
Selected Years —1985-2000

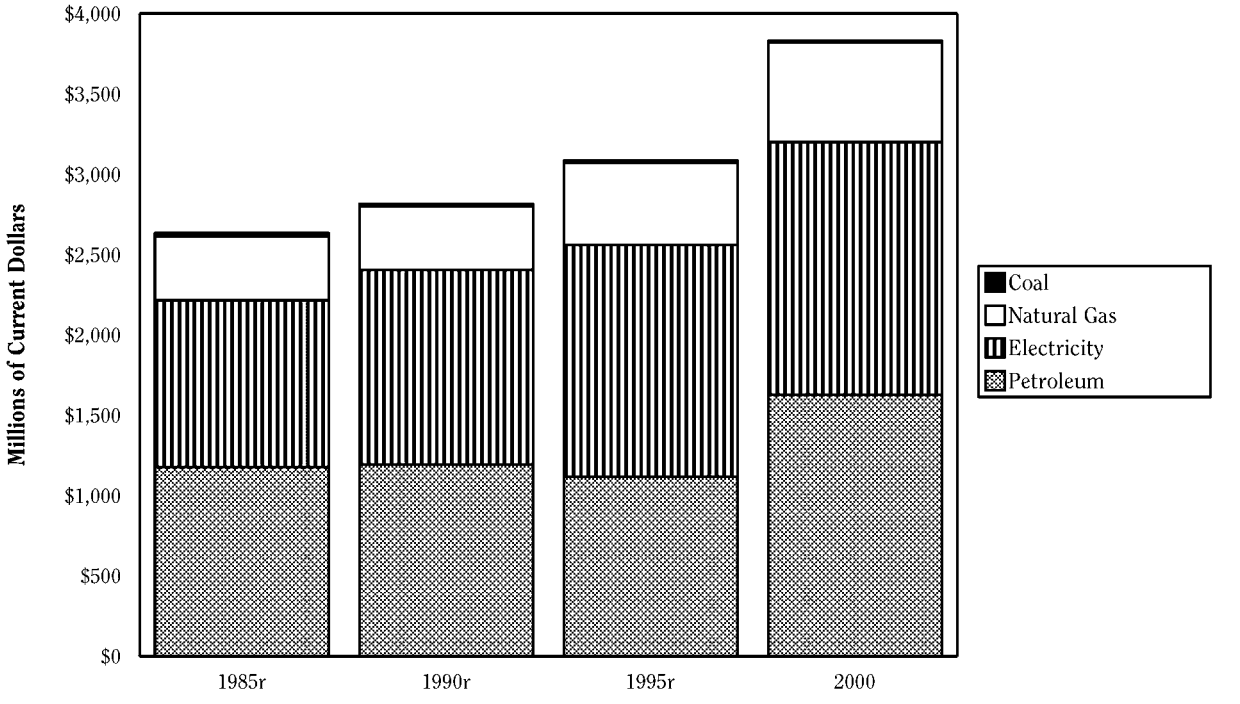


r Revised.

SOURCE: New York State Energy Research and Development Authority.

FIGURE L-6

Net Energy Costs by Fuel Type
New York State
Selected Years —1985-2000



r Revised.

SOURCE: New York State Energy Research and Development Authority

TABLE L-12
Residential Retail Energy Prices
New York State — 1985-2000

Date	Steam Coal[1] &/ ton	Steam Coal[1] $/ MMBtu	Distillate[2] cents/ gallon	Distillate[2] $/ MMBtu	Kerosene cents/ gallon	Kerosene $/ MMBtu	LPG[3] cents/ gallon	LPG[3] $/ MMBtu	Natural Gas $/ Mcf	Natural Gas $/ MMBtu	Electricity $/ MKWh	Electricity $/ MMBtu
1985	83.22	3.61	115.81	8.35	120.42	8.92	95.39r	11.12	7.77	7.54	108.64	31.84
1986	82.76	3.39	94.73	6.83	106.65	7.90	86.30r	9.96	7.47	7.26	105.31	30.86
1987	86.09	3.27	88.62	6.39	91.80	6.80	84.00r	9.64	6.89	6.68	105.11	30.81
1988	85.57	3.29	89.73	6.47	85.19	6.31	82.88r	9.53	6.50	6.32	104.64	30.67
1989	91.39	3.36	99.58	7.18	73.04	5.41	101.19r	11.54	7.23	7.01	109.30	32.03
1990	90.35	3.59	117.05	8.44	92.21	6.83	117.68r	13.64	7.41	7.19	114.43	33.54
1991	87.00	3.44	115.81	8.35	84.11	6.23	125.55r	14.59	7.38	7.16	119.71	35.09
1992	79.09	3.21	106.93	7.71	78.30	5.80	124.54r	14.43	7.60	7.37	124.30	36.43
1993	78.35	3.25	104.16	7.51	75.06	5.56	114.59r	13.35r	8.15	7.92r	131.74	38.61
1994r	82.37	3.29	100.41	7.24	75.87	5.62	126.01	14.56	8.77	8.52	135.52	39.72
1995r	78.53	3.18	99.30	7.16	72.63	5.38	123.10	14.27	8.41	8.19	138.97	40.73
1996r	83.28	3.38	110.54	7.97	81.41	6.03	128.43	14.93	8.91	8.68	140.37	41.14
1997r	87.45	3.57	110.81	7.99	84.51	6.26	129.32	15.02	9.74	9.48	141.19	41.38
1998r	79.62	3.25	98.61	7.11	59.94	4.44	119.18	13.85	9.64	9.33	136.60	40.03
1999r	78.64	3.21	100.83	7.27	73.58	5.45	121.05	14.06	9.13	8.88	132.30	38.78
2000	79.66	3.25	152.56	11.00	135.39	10.03	140.09	16.31	9.86	9.59	141.00	41.32

NOTE: See glossary on page 465 for explanation of abbreviations.

r Revised.

1 Anthracite only.

2 Home heating oil.

3 Propane.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-13
Commercial Retail Energy Prices[1]
New York State — 1985-2000

Date	Steam Coal &/ ton	Steam Coal $/ MMBtu	Distillate cents/ gallon	Distillate $/ MMBtu	Residual $/ bbl	Residual $/ MMBtu	Kerosene cents/ gallon	Kerosene $/ MMBtu	Natural Gas $/ Mcf	Natural Gas $/ MMBtu	Electricity $/ MKwh	Electricity $/ MMBtu
1985	42.26	1.92	94.17	6.79	29.18	4.64	120.42	8.92	6.13	5.95	105.28	30.86
1986	38.67	1.74	67.68	4.88	18.39	2.92	106.65	7.90	5.78	5.61	101.05	29.62
1987r	39.28	1.76	67.96	4.90	20.22	3.22	91.80	6.80	5.18	5.02	95.41	27.96
1988	38.20	1.71	65.88	4.75	16.82	2.67	85.19	6.31	5.39	5.24	92.57	27.13
1989	39.13	1.75	73.23	5.28	19.61	3.12	73.04	5.41	5.63	5.46	95.51	27.99
1990r	39.43	1.76	90.70	6.54	23.59	3.75	92.21	6.83	5.60	5.43	100.45	29.44
1991r	39.06	1.74	83.35	6.01	17.78	2.83	84.11	6.23	5.49	5.33	103.41	30.31
1992r	38.92	1.75	75.86	5.47	18.17	2.89	78.30	5.80	5.76	5.59	107.40	31.48
1993r	36.91	1.67	73.37	5.29	18.11	2.88	75.06	5.56	6.16	5.99	112.14	32.87
1994r	36.82	1.67	71.43	5.15	19.36	3.08	75.87	5.62	6.52	6.34	112.53	32.98
1995r	36.62	1.67	70.18	5.06	21.00	3.34	72.63	5.38	6.09	5.93	114.54	33.57
1996r	35.34	1.60	83.35	6.01	25.40	4.04	81.41	6.03	6.89	6.71	115.97	33.99
1997r	36.56	1.65	76.28	5.50	21.63	3.44	84.51	6.26	6.51	6.34	116.76	34.22
1998r	32.35	1.46	60.89	4.39	14.96	2.38	59.94	4.44	6.12	5.92	111.90	32.79
1999r	31.46	1.42	65.32	4.71	17.48	2.78	73.58	5.45	5.15	5.01	110.00	32.24
2000p	31.87	1.44	108.44	7.82	28.15	4.48	135.39	10.03	7.77	7.56	125.00	36.64

NOTE: See glossary on page 465 for explanation of abbreviations. Commercial steam coal prices are assumed to equal industrial steam coal prices.

p Preliminary.

r Revised.

1 Commercial includes other public authorities.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-14

Industrial Retail Energy Prices
New York State — 1985-2000

Date	Metallurgical and Steam Coal[1] $/ ton	Metallurgical and Steam Coal[1] $/ MMBtu	Distillate cents/ gallon	Distillate $/ MMBtu	Residual $/ bbl	Residual $/ MMBtu	Kerosene cents/ gallon	Kerosene $/ MMBtu
1985r	46.62	1.91	85.16	6.14	29.18	4.64	93.29	6.91
1986r	42.88	1.75	57.10	4.12	18.39	2.92	65.88	4.88
1987r	41.26	1.68	64.35	4.64	20.22	3.22	62.78	4.65
1988r	40.69	1.66	59.22	4.27	16.82	2.67	59.94	4.44
1989r	42.10	1.71	65.74	4.74	19.61	3.12	71.28	5.28
1990r	42.78	1.74	94.03	6.78	23.59	3.75	87.21	6.46
1991r	42.67	1.73	77.67	5.60	17.78	2.83	78.30	5.80
1992r	42.68	1.74	76.42	5.51	18.17	2.89	65.88	4.88
1993r	41.49	1.70	70.32	5.07	18.11	2.88	65.34	4.84
1994r	41.52	1.70	70.45	5.08	19.36	3.08	69.53	5.15
1995r	41.18	1.69	67.13	4.84	21.00	3.34	60.21	4.46
1996r	40.09	1.64	81.55	5.88	25.40	4.04	77.22	5.72
1997r	41.61	1.70	74.75	5.39	21.63	3.44	70.74	5.24
1998r	37.94	1.55	57.97	4.18	14.96	2.38	54.14	4.01
1999r	37.45	1.53	64.77	4.67	17.48	2.78	62.51	4.63
2000p	37.94	1.55	107.52	7.75	28.15	4.48	115.02	8.52

Year	LPG[2] cents/ gallon	LPG[2] $/ MMBtu	Natural Gas $/ Mcf	Natural Gas $/ MMBtu	Electricity $/ MKwh	Electricity $/ MMBtu
1985	106.63r	12.43r	5.29	5.13	52.35	15.34
1986	104.69r	12.08r	4.91	4.78	49.24	14.43
1987	102.36r	11.75r	4.28	4.16	50.29	14.74
1988	101.39r	11.66r	4.69	4.56	49.38	14.47
1989	88.74r	10.12r	4.84	4.69	52.94	15.52
1990r	92.70	10.74	4.86	4.72	57.83	16.95
1991	99.21r	11.53r	4.74	4.60	61.65	18.07
1992r	85.25	9.88	4.94	4.79	65.03	19.06
1993	83.28r	9.70r	5.17	5.03	66.65	19.53
1994r	74.69	8.63	5.23	5.08	67.76	19.86
1995r	73.93	8.57	4.68	4.56	57.90	16.97
1996r	78.20	9.09	5.04	4.91	56.23	16.48
1997r	86.44	10.04	5.05	4.92	51.96	15.23
1998r	80.37	9.34	4.04	3.91	49.50	14.50
1999r	82.05	9.53	3.90	3.79	47.40	13.89
2000p	107.42	12.51	6.13	5.96	49.00	14.36

NOTE: See glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Weighted average price.

2 Propane.

SOURCE: New York State Energy Research Development Authority.

TABLE L-15
Transportation Retail Energy Prices
New York State — 1985-2000

Date	Gasoline		Distillate[1]		Jet Fuel[2]		Residual[3]		Electricity[4]	
	cents/ gallon	$/ MMBtu	cents/ gallon	$/ MMBtu	cents/ gallon	$/ MMBtu	$/ bbl	$/ MMBtu	$/ MKwh	$/ MMBtu
1985r	109.94	8.79	117.61	8.48	87.90	6.51	25.68	4.08	67.04	19.65
1986r	82.55	6.60	91.40	6.59	59.70	4.42	14.25	2.27	66.58	19.51
1987r	87.42	6.99	93.48	6.74	61.40	4.55	17.87	2.84	77.09	22.59
1988r	89.55	7.16	94.03	6.78	56.00	4.15	13.74	2.18	72.97	21.39
1989r	97.81	7.82	102.08	7.36	63.40	4.70	16.50	2.63	77.30	22.65
1990r	110.44	8.83	124.68	8.99	81.40	6.03	19.70	3.13	79.60	23.33
1991r	118.07	9.44	125.65	9.06	69.90	5.18	14.94	2.38	78.89	23.12
1992r	116.07	9.28	123.30	8.89	65.30	4.84	14.64	2.33	87.14	25.54
1993r	113.06	9.04	125.38	9.04	60.30	4.47	14.41	2.29	91.37	26.78
1994r	114.06	9.16	128.29	9.25	55.89	4.14	15.09	2.40	93.08	27.28
1995r	118.83	9.57	125.10	9.02	54.54	4.04	16.72	2.66	90.73	26.59
1996r	123.32	9.93	134.11	9.67	65.88	4.88	19.80	3.15	91.27	26.75
1997r	124.62	10.04	128.84	9.29	61.16	4.53	17.67	2.81	91.71r	26.88
1998r	106.23	8.56	113.73	8.20	45.90	3.40	12.20	1.94	88.50	25.94
1999r	118.74	9.57	122.05	8.80	57.11	4.23	15.47	2.46	87.40	25.02
2000p	158.80	12.80	160.87	11.60	94.22	6.98	24.90	3.96	87.00	25.50

NOTE: Propane used for transportation is assumed to have the same price as industrial propane.
See glossary on page 465 for explanation of abbreviations.

p Preliminary.

r Revised.

1 Diesel.

2 Kerosene-based.

3 Bunker fuel.

4 Consumed by railroads.

SOURCE: New York State Energy Research and Development Authority.

TABLE L-16
Sources and Disposition of Energy by the New York Power Authority
New York State — 2001

	Megawatt Hours (thousands)
Sources of Energy	
All Purchases and Generation	47,360
Generation (excluding station use)	21,203
Steam	4,013
Hydro	17,190
Purchases from utilities and the NY ISO	26,157
Losses and Unaccounted for	-384
Disposition of Energy	
All Sales	46,976
Direct Sales to Commercial and Industrial Customers[1]	4,919
Sales to Municipal Electric Systems, Rural Electric Cooperatives and Other Public Customers[2]	16,184
Sales to utilities and the NY ISO for resale[3]	25,873

1 Includes sales to 25 companies, primarily industrial.

2 Includes sales to 47 municipal systems, four rural cooperatives and more than 100 public agencies in New York State and to seven neighboring states.

3 Includes sales to the six investor-owned utilities in New York State the New York Independent System Operator and the Long Island Power authority. Portions were designated for resale to residential and farm customers or to business and not-for-profit customers in the state.

SOURCE: Power Authority of the State of New York.

TABLE L-17

Generation by Major Privately Owned Electric Utilities by Type of Prime Mover Driving the Generator New York State — 1972-2000

(millions of kilowatt-hours)

Year	Total	Hydro	Steam		Other
			Fossil Fuel	Nuclear	
1972	81,660	4,450	64,188	6,726	6,296
1973	83,231	4,276	67,048	7,138	4,769
1974	81,100	4,492	63,950	9,909	2,749
1975	82,669	4,251	65,891	10,939	1,588
1976	79,604	4,614	65,107	8,406	1,477
1977	82,692	4,101	66,528	11,160	903
1978	82,498	3,634	66,471	12,031	362
1979	77,807	3,930	62,668	10,740	469
1980	80,106	3,292	64,404	11,864	546
1981	79,498	3,831	65,442	9,628	597
1982	75,263	3,734	63,555	7,960	14
1983	79,424	3,769	63,917	11,710	28
1984	78,655	4,207	64,131	10,249	68
1985	82,408	3,649	63,563	15,196	—
1986	77,764	4,642	62,283	10,544	295
1987	86,926	3,847	68,936	13,822	321
1988	95,421	3,537	78,334	12,985	565
1989	101,961	4,057	84,711	11,796	1,397
1990	99,790	4,611	81,106	14,036	38
1991	97,410	3,797	75,281	17,745	587
1992	88,987	3,626	65,709	19,389	263
1993	79,897	3,300	55,206	20,940	451
1994	80,440	3,950	51,500	24,400	590
1995	75,870	2,980	52,850	20,030	10
1996	75,959	4,694	46,302	24,053	910
1997	75,973	4,065	53,065	18,578	265
1998a	60,994	3,786	39,170	17,594	444
1999a	45,443	1,948	22,953	20,208	334
2000a	24,908	703	8,181	15,886	138

— Represents zero.

a Excludes sales by Long Island Power Authority (formerly Long Island Lighting Co.).

SOURCE: New York State Department of Public Service, Office of Accounting and Finance.

TABLE L-18

Energy Sales to Ultimate Customers of Major Privately Owned Electric Utilities by Type of Customer New York State — 1972-2000

(millions of kilowatt-hours)

Year	All Sales[1]	Residential	Commercial and Industrial	Other[2]
1972	87,793	26,804	52,152	8,837
1973	93,101	28,497	55,344	9,260
1974	89,207	27,234	52,902	9,071
1975	89,353	28,012	52,179	9,162
1976	91,211	28,733	53,932	8,546
1977	88,902	29,044	55,254	4,604
1978	89,228	29,201	56,715	3,312
1979	90,398	29,451	57,698	3,249
1980	90,604	29,815	57,469	3,320
1981	91,012	29,731	57,958	3,323
1982	89,324	29,660	56,536	3,128
1983	92,498	30,792	58,500	3,206
1984	95,525	31,524	60,790	3,211
1985	96,271	31,424	61,562	3,285
1986	99,003	32,389	63,329	3,285
1987	102,823	33,869	65,569	3,385
1988	109,096	35,946	69,639	3,511
1989	111,441	36,304	71,585	3,552
1990	112,441	36,997	71,821	3,623
1991	112,426	37,504	71,255	3,667
1992	111,478	37,050	70,748	3,680
1993	113,520	38,200	71,125	4,195
1994	113,970	38,353	71,947	3,670
1995	113,389	38,190	71,537	3,662
1996	114,271	38,488	72,139	3,644
1997	114,681	38,289	72,747	3,645
1998a	96,838	30,996	62,585	3,257
1999a	93,947	32,659	58,238	3,050
2000a	88,732	31,864	54,078	2,790

a Excludes sales by Long Island Power Authority (formerly Long Island Lighting Co.).

1 Excluding sales for resale.

2 Other now includes Street and Highway Lighting, Other Public Authorities, Railroads and Railways and Interdepartmental.

SOURCE: New York State Department of Public Service, Office of Accounting and Finance.

TABLE L-19

Energy Sales to Final Customers of Major Privately Owned Gas Utilities by Type of Customer New York State — 1972-2000

(millions of therms)

Year	All Sales[1]	Residential	Commercial and Industrial	Other[2]
1972	6,673	3,852	2,646	175
1973	6,267	3,535	2,543	189
1974	6,598	3,663	2,768	167
1975	6,380	3,646	2,596	138
1976	6,878	3,942	2,780	156
1977	6,311	3,689	2,477	145
1978	6,586	3,756	2,689	141
1979	6,632	3,608	2,848	176
1980	6,838	3,635	2,925	278
1981	7,143	3,665	3,150	328
1982	7,081	3,658	3,060	363
1983	6,739	3,515	2,796	428
1984	7,105	3,687	2,928	490
1985	6,802	3,545	2,860	397
1986	6,332	3,678	2,446	208
1987	6,104	3,657	2,148	299
1988	6,212	3,898	2,070	244
1989	6,172	3,969	1,975	227
1990	5,889	3,664	1,915	310
1991	5,760	3,616	1,811	333
1992	6,438	4,111	1,975	352
1993	6,714	4,133	1,983	598
1994	6,745	4,110	2,286	349
1995	6,786	4,039	2,286	461
1996	6,888	4,285	2,255	349
1997	6,653	4,090	2,132	431
1998a	4,713	3,100	1,338	275
1999a	5,447	3,653	1,553	241
2000a	5,825	3,830	1,776	219

a Does not include former Long Island Lighting Company gas operations (now KeySpan East).

1 Excluding sales for resale.

2 Other now includes Interdepartmental, which was listed separately in earlier years. All figures shown for Other below are revised from earlier editions.

SOURCE: New York State Department of Public Service, Office of Accounting and Finance.

TABLE L-20

Residential Customers of Electric and Gas Utilities
Usage and Bill per Customer and Revenue per Unit Consumed
New York State — Selected Years 1960-2000

Year	Average Usage per Customer (Kwh)	Electricity: Average Annual Bill per Customer, Current Dollars	Electricity: Average Annual Bill per Customer, Constant Dollars[1]	Electricity: Revenue per Kwh, Current Dollars	Electricity: Revenue per Kwh, Constant Dollars[1]
1960	2,598	$ 83.84	$ 303.21	$ 0.0322	$ 0.1165
1965	3,293	99.94	339.37	0.0303	0.1029
1970	4,662	134.43	370.66	0.0288	0.0794
1975	5,120	266.15	711.79	0.0520	0.1391
1976	5,269	286.43	724.96	0.0544	0.1377
1977	5,315	316.67	753.07	0.0596	0.1417
1978	5,329	328.02	728.10	0.0616	0.1367
1979	5,336	361.51	740.80	0.0678	0.1389
1980	5,359	414.27	777.31	0.0773	0.1450
1981	5,312	506.70	869.72	0.0954	0.1637
1982	5,260	529.67	855.77	0.1007	0.1627
1983	5,416	576.89	896.67	0.1065	0.1655
1984	5,491	606.72	909.18	0.1105	0.1656
1985	5,417	604.00	877.38	0.1115	0.1620
1986	5,523	598.53	850.64	0.1084	0.1541
1987	5,709	616.16	850.27	0.1079	0.1489
1988	5,989	642.87	857.93	0.1074	0.1433
1989	5,985	671.72	863.54	0.1122	0.1442
1990	6,046	711.39	880.12	0.1177	0.1456
1991	6,100	751.05	896.71	0.1231	0.1470
1992	5,969	764.41	890.95	0.1281	0.1493
1993	6,119	830.45	945.21	0.1357	0.1545
1994	6,107	853.83	952.04	0.1398	0.1559
1995	6,046	865.94	944.91	0.1432	0.1563
1996	6,069	879.05	941.02	0.1448	0.1550
1997	6,019	876.83	920.72	0.1457	0.1530
1998	5,683	794.38	823.82	0.1398	0.1450
1999a	5,934	816.81	834.57	0.1377	0.1407
2000a	5,843	855.18	855.18	0.1464	0.1464

Year	Average Usage per Customer (Mcf)	Gas: Average Annual Bill per Customer, Current Dollars	Gas: Average Annual Bill per Customer, Constant Dollars[1]	Gas: Revenue per Mcf, Current Dollars	Gas: Revenue per Mcf, Constant Dollars[1]
1960	65.1	$ 90.90	$ 328.74	$ 1.40	$ 5.06
1965	80.0	105.86	359.47	1.32	4.48
1970	92.0	125.54	346.14	1.36	3.75
1975	89.8	221.02	591.10	2.46	6.58
1976	98.9	275.78	698.01	2.79	7.06
1977	94.9	311.91	741.75	3.29	7.82
1978	97.2	342.82	760.95	3.52	7.81
1979	93.4	370.38	758.98	3.96	8.11
1980	104.2	516.49	969.11	4.95	9.29
1981	94.3	509.26	874.11	5.39	9.25
1982	93.9	604.68	976.96	6.44	10.40
1983	87.7	680.52	1,057.75	7.76	12.06
1984	91.5	695.99	1,042.95	7.60	11.39
1985	87.3	667.48	969.59	7.64	11.10
1986	90.2	665.90	946.39	7.39	10.50
1987	88.9	588.16	811.63	6.73	9.29
1988	94.2	614.61	820.22	6.52	8.70
1989	99.5	700.23	900.19	7.04	9.05
1990	87.0	632.18	782.13	7.27	8.99
1991	85.5	634.16	757.15	7.41	8.85
1992	96.2	716.82	835.49	7.45	8.68
1993	96.0	782.53	890.67	8.15	9.28
1994	95.8	828.05	923.30	8.64	9.64
1995	93.3	771.00	841.31	8.26	9.02
1996	98.6	881.55	943.69	8.94	9.57
1997	93.8	872.68	916.36	9.30	9.77
1998	79.0	744.10	771.67	9.42	9.77
1999a	83.9	766.44	783.11	9.14	9.33
2000a	89.3	894.21	894.21	10.01	10.01

NOTE: See Glossary on page 465 for explanation of abbreviations.

a Does not include former Long Island Lighting Company gas operations (now KeySpan East).

1 Base year 2000 = 100.

SOURCE: New York State Department of Public Service, Office of Accounting and Finance.

TABLE L-21

Electric Service Companies[1]
Average Annual Bill Data
New York State — 2000

Company	Average Number of Customers	Sales Revenues (thousands)	Kilowatt-Hours Sold (millions)	Average Annual Bill Per Customer	Average Usage Per Customer (000 KWh)	Average Revenue Per KWh Sold (Cents)
			- - - Total[2] - - -			
Central Hudson	273,520	$ 522,780	6,068	$ 1,911	22	8.62¢
Consolidated Edison	3,078,648	5,485,431	36,081	1,782	12	15.20
New York State E&G	798,233	1,553,366	17,160	1,946	21	9.05
Niagara Mohawk	1,542,131	2,889,904	32,294	1,874	21	8.95
Orange & Rockland	204,984	474,324	5,483	2,314	27	8.65
Rochester G&E	351,058	725,397	8,552	2,066	24	8.48
Composite	6,248,574	$ 11,651,202	105,638	$ 1,865	17	11.03¢
			- - - Residential - - -			
Central Hudson	232,064	$ 196,806	1,713	$ 848	7	11.49¢
Consolidated Edison	2,661,874	2,149,745	11,637	808	4	18.47
New York State E&G	705,822	717,968	5,221	1,017	7	13.75
Niagara Mohawk	1,391,591	1,186,974	9,839	853	7	12.06
Orange & Rockland	177,356	171,355	1,301	966	7	13.17
Rochester G&E	284,467	240,536	2,154	846	8	11.17
Composite	5,453,174	$ 4,663,384	31,865	$ 855	6	14.63¢
			- - - Commercial - - -			
Central Hudson	36,880	$ 114,891	1,332	$ 3,115	36	8.63¢
Consolidated Edison	412,344	3,003,780	19,261	7,285	47	15.60
New York State E&G	79,370	338,283	2,925	4,262	37	11.57
Niagara Mohawk	145,273	1,033,960	10,052	7,117	69	10.29
Orange & Rockland	26,961	142,197	1,520	5,274	56	9.36
Rochester G&E	25,653	165,041	1,680	6,434	65	9.82
Composite	726,481	$ 4,798,152	36,770	$ 6,605	51	13.05¢
			- - - Industrial[3] - - -			
Central Hudson	862	$ 76,912	1,290	$ 89,225	1,497	5.96¢
Consolidated Edison	367	88,014	669	239,820	1,823	13.16
New York State E&G	2,383	199,454	2,916	83,699	1,224	6.84
Niagara Mohawk	1,728	516,235	10,219	298,747	5,914	5.05
Orange & Rockland (includes Power Pick)	135	43,277	657	320,570	4,867	6.59
Rochester G&E	821	104,995	1,557	127,887	1,896	6.74
Composite	6,296	$ 1,028,887	17,308	$ 163,419	2,749	5.94¢
			- - - Sales for Resale - - -			
Central Hudson	8	$ 100,374	1,348			3.30¢
Consolidated Edison	7	199,334	4,160			4.79
New York State E&G	NA	176,834	4,987			3.55
Niagara Mohawk	181	112,970	2,017			5.60
Orange & Rockland	2	107,302	1,622			6.62
Rochester G&E	38,149	173,163	2,771			6.25
Composite	38,347	$ 869,977	16,905			3.49¢
			- - - All Other Sales of Electricity - - -			
Central Hudson	3,706	$ 33,797	386			8.29¢
Consolidated Edison	4,056	44,558	353			12.62
New York State E&G	10,658	120,819	1,110			10.88
Niagara Mohawk	3,358	39,765	167			23.81
Orange & Rockland	530	10,193	382			2.67
Rochester G&E	1,998	41,662	391			10.66
Composite	24,306	$ 290,794	2,789			11.24¢

NA Not available.

1 Excludes sales by Long Island Power Authority (formerly Long Island Lighting Company).

2 Excludes Other Operating Revenue.

3 Excludes Expansion and Replacement sales made by the New York Power Authority.

SOURCE: New York State Department of Public Service.

TABLE L-22

Gas Service Companies
Average Annual Bill Data
New York State — 2000

Company	Average Number of Customers	Sales Revenues (thousands)	Mcf Sold (thousands)	Average Annual Bill Per Customer	Average Usage Per Customer (Mcf)	Average Revenue Per Mcf Sold
			- - - Total[1] - - -			
Brooklyn Union Gas	1,150,904	$ 1,321,282	136,631	$ 1,148	119	$ 9.67
Central Hudson	63,535	100,686	13,561	1,585	213	7.42
Consolidated Edison	1,051,555	991,301	117,050	943	111	8.47
Corning Natural Gas	14,340	16,077	2,182	1,121	152	7.37
Key Span Gas East	474,187	726,748	83,477	1,533	176	8.71
National Fuel Gas Dist. (NY & PA)	657,128	868,146	103,034	1,321	157	8.43
New York State E&G	240,630	288,224	43,348	1,198	180	6.65
Niagara Mohawk	540,988	502,473	69,016	929	128	7.28
Orange & Rockland	116,259	153,881	24,097	1,324	207	6.39
Rochester G&E	275,416	256,398	31,852	931	116	8.05
St. Lawrence	14,924	24,905	4,334	1,669	290	5.75
NUI Waverly[2]	1,359	1,461	236	1,075	174	6.19
Composite	4,601,225	$ 5,251,582	628,818	$ 1,141	137	$ 8.35
			- - - Residential - - -			
Brooklyn Union Gas	1,105,747	$ 991,107	89,801	$ 896	81	$ 11.04
Central Hudson	54,674	44,881	4,801	821	88	9.35
Consolidated Edison	934,132	546,383	47,603	585	51	11.48
Corning Natural Gas	12,940	11,685	1,531	903	118	7.63
Key Span Gas East	426,918	477,372	41,702	1,118	98	11.45
National Fuel Gas Dist. (NY & PA)	618,538	667,533	71,731	1,079	116	9.31
New York State E&G	214,754	181,235	22,723	844	106	7.98
Niagara Mohawk	502,071	390,208	50,614	777	101	7.71
Orange & Rockland	104,579	105,684	12,907	1,011	123	8.19
Rochester G&E	257,418	218,566	26,607	849	103	8.21
St. Lawrence	13,346	11,203	1,802	839	135	6.22
NUI Waverly[2]	1,222	926	136	758	111	6.81
Composite	4,246,339	$ 3,646,782	371,957	$ 859	88	$ 9.13
			- - - Commercial[3] - - -			
Brooklyn Union Gas	18,786	$ 230,853	16,789	$ 12,289	894	$ 13.75
Central Hudson	7,873	27,009	3,711	3,431	471	7.28
Consolidated Edison	110,664	275,892	39,829	2,493	360	6.93
Corning Natural Gas	858	1,899	266	2,213	310	7.14
Key Span Gas East	42,735	187,195	23,682	4,380	554	7.90
National Fuel Gas Dist. (NY & PA)	37,515	110,574	13,085	2,947	349	8.45
New York State E&G	23,910	62,596	7,989	2,618	334	7.84
Niagara Mohawk	38,754	104,509	16,075	2,697	415	6.50
Orange & Rockland	11,224	31,681	5,511	2,823	491	5.75
Rochester G&E	16,485	30,965	4,225	1,878	256	7.33
St. Lawrence	1,567	5,331	908	3,402	579	5.87
NUI Waverly[2]	137	534	101	3,898	737	5.29
Composite	310,371	$ 1,068,503	132,071	$ 3,443	426	$ 8.09
			- - - Industrial[3] - - -			
Brooklyn Union Gas	21,925	$ 24,094	19,332	$ 1,099	882	$ 1.25
Central Hudson	293	10,366	1,802	35,379	6,150	5.75
Consolidated Edison	48	929	3,743	19,354	77,979	0.25
Corning Natural Gas	5	141	15	28,200	3,000	9.40
Key Span Gas East	4,528	19,833	2,509	4,380	554	7.90
National Fuel Gas Dist. (NY & PA)	1,063	28,456	4,964	26,770	4,670	5.73
New York State E&G	338	7,851	1,628	23,227	4,817	4.82
Niagara Mohawk	162	2,340	444	14,443	2,743	5.27
Orange & Rockland	453	15,721	5,530	34,704	12,207	2.84
Rochester G&E	648	3,016	449	4,654	692	6.72
St. Lawrence	11	8,370	1,624	760,909	147,636	5.15
Composite	29,474	$ 121,116	42,040	$ 4,109	1,426	$ 2.88
			- - - Sales for Resale - - -			
Central Hudson	1	$ 5,184	1,178			$ 2.57
Consolidated Edison	15	92,971	23,068			2.62
Corning Natural Gas	1	2,220	351			4.68
Key Span Gas East	6	42,347	15,585			2.33
National Fuel Gas Dist. (NY & PA)	12	61,583	13,254			2.47
New York State E&G	—	21,831	8,405			2.60
Orange & Rockland	2	759	142			5.36
Composite	37	$ 226,894	61,982			$ 2.55
			- - - All Other Sales - - -			
Brooklyn Union Gas	4,446	$ 76,747	10,710			$ 4.82
Central Hudson	695	13,245	2,068			6.02
Consolidated Edison	3,530	72,311	5,622			6.72
Corning Natural Gas	536	131	19			6.57
New York State E&G	1,628	14,712	2,603			5.65
Niagara Mohawk	1	5,417	1,882			2.88
Orange & Rockland	1	37	9			4.34
St. Lawrence	865	3,851	572			6.73
Composite	11,702	$ 186,451	23,485			$ 5.36

— Represents zero.

1 Excludes Other Operating Revenues (including Transportation).

2 NUI Waverly is a subsidiary of NUI Corporation.

3 Excludes transportation and off-system sales that were reported as commercial or industrial sales of gas.

SOURCE: New York State Department of Public Service, Office of Accounting and Finance.

TABLE L-23

Annual Electric Energy Requirements, Actual and Projected, by Service Provider New York State —1990-2020

(Gigawatt hours)

Year	New York State Total[1]	Central Hudson Gas & Electric Corporation	Consolidated Edison Company[2]	Long Island Power Authority	New York Power Authority[3]	New York State Electric & Gas Corporation	Niagara Mohawk Power Corporation	Orange and Rockland Utilities	Rochester Gas and Electric Corporation
					- - - ACTUAL - - -				
1990	140,919	5,200	38,109	16,971	17,746	14,523	36,656	4,374	6,802
1991	145,019	5,246	38,686	17,208	17,834	14,547	36,602	4,535	6,929
1992r	143,431	5,206	38,020	16,803	17,969	14,821	36,591	4,498	6,908
1993	146,909	5,083	39,197	17,233	18,529	14,678	37,194	4,668	7,047
1994	147,760	4,941	39,488	17,302	18,680	14,682	37,880	4,752	7,048
1995r	148,391	4,872	39,990	17,267	18,456	14,631	37,471	4,836	7,174
1996	148,470	4,926	39,582	17,180	18,168	14,787	37,421	4,893	7,238
1997	148,882	4,901	39,869	17,198	17,924	14,706	37,263	4,969	7,207
1998	151,420	4,957	41,649	17,888	20,122	14,609	37,736	5,181	7,285
1999	156,029	5,053	44,237	18,789	20,190	15,133	37,042	5,327	7,408
2000	156,632	5,031	55,639	19,146	19,214	14,412	39,411	5,500	7,412
					- - - FORECAST - - -				
2001	156,000	5,380	55,697	19,896	9,094	15,026	37,818	5,449	7,639
2002	157,650	5,471	56,607	20,332	9,138	15,067	38,033	5,519	7,484
2003	159,430	5,555	57,539	20,743	9,219	15,067	38,163	5,586	7,555
2004	161,400	5,598	58,484	21,137	9,286	15,167	38,452	5,655	7,624
2005	162,490	5,636	58,971	21,439	9,369	15,182	38,475	5,724	7,693
2006	163,980	5,725	59,655	21,806	9,449	15,235	38,574	5,780	7,755
2007	165,510	5,817	60,335	22,182	9,519	15,283	38,672	5,840	7,863
2008	167,350	5,905	61,015	22,627	9,585	15,369	38,972	5,900	7,981
2009	168,750	6,001	61,700	22,952	9,656	15,372	39,001	5,965	8,100
2010	170,530	6,092	62,380	23,348	9,733	15,414	39,297	6,045	8,222
2011	172,290	6,184	63,080	23,750	9,813	15,452	39,568	6,104	8,337
2012	174,130	6,278	63,780	24,227	9,874	15,530	39,831	6,165	8,443
2013	175,560	6,367	64,480	24,577	9,941	15,522	39,895	6,226	8,549
2014	177,220	6,457	65,180	25,000	10,009	15,547	40,078	6,287	8,657
2015	178,870	6,549	65,880	25,432	10,083	15,571	40,238	6,347	8,768
2016	180,670	6,641	66,580	25,943	10,166	15,633	40,399	6,408	8,903
2017	182,150	6,735	67,280	26,317	10,166	15,608	40,560	6,469	9,013
2018	183,770	6,833	67,980	26,771	10,166	15,646	40,723	6,530	9,122
2019	185,360	6,885	68,680	27,234	10,166	15,684	40,886	6,591	9,234
2020	187,120	6,985	69,380	27,781	10,166	15,763	41,049	6,652	9,347

r Revised.

1 Forecast New York State Total is the sum of the member systems, adjusted for diversity and certain transmission losses. Forecasts are rounded to the nearest 10 GWh.

2 The NYPA loads located in Con Edison service territory previously reported under NYPA are now reported under Con Edison.

3 The loads previously served by the Long Island Lighting Company are now served by the Long Island Power Authority.

SOURCE: The New York Independent System Operator 2001 Load and Capacity Data, New York Independent System Operator.

TABLE L-24
Energy Conversion Factors
New York State — 1996-2000

Fuel Type	Units		Approximate Heat Content of Various Fuels				
			1996(r)	1997(r)	1998(r)	1999(r)	2000
Wood	Btu/cord		20,000,000	20,000,000	20,000,000	20,000,000	20,000,000
Anthracite							
Nonutility Consumption	Btu/Short ton		24,638,000	24,497,000	24,497,000	24,497,000	24,497,000
Bituminous Coal							
Electric Utility Consumption	Btu/Short ton		26,015,000	26,208,000	26,109,000	26,066,000	26,066,000
Residential/Commercial	Btu/Short ton		22,649,000	22,408,000	22,048,000	22,048,000	22,048,000
Industrial	Btu/Short ton		22,087,000	22,157,000	22,157,000	22,157,000	22,157,000
Metallurgical	Btu/Short ton		26,800,000	26,800,000	26,800,000	26,800,000	26,800,000
Natural Gas							
Electric Utility Consumption	Btu/Cubic Foot		1,024	1,019	1,022	1,019	1,019
Nonutility Consumption	Btu/Cubic Foot		1,027	1,027	1,033	1,028	1,028
Hydro Power	Btu/Kwh		10,719	10,388	10,823	10,216	10,023
Nuclear Power	Btu/Kwh		10,719	10,388	10,823	10,216	10,023
Electricity Consumption	Btu/Kwh		3,412	3,412	3,412	3,412	3,412
Petroleum Products	Btu/barrel	All Years					
Distillate Fuel Oil		5,825,000					
Ethanol		3,208,800					
Jet Fuel, Kerosene Type		5,670,000					
Kerosene		5,670,000					
Motor Gasoline		5,253,000					
LPG (propane)		3,614,000					
Residual Fuel Oil		6,287,000					

NOTE: See Glossary on page 465 for explanation of abbreviations.
SOURCE: New York State Energy Research and Development Authority.
r Revised.

TABLE L-25
Oil and Gas Drillings and Completions
New York State — 1966-2000

	Drillings		Completions									
Total	Total Started	Waiting on Completion	Total[1]	Oil	Gas	Dry Holes	Service	Disposal	Injection	Solution Mining	Storage	Stratigraphic
1966	66		25	6	19	41	—					
1967	238		203	163	13	35	27					
1968	120		107	83	10	13	14					
1969	139		126	88	13	13	25					
1970	112		102	60	8	10	24			10		
1971	125		114	79	10	11	24			1		
1972	140		131	91	20	9	15			5		
1973	204		182	123	39	22	20				—	
1974	495		450	140	253	45	57				—	
1975	496		460	149	267	36	44				—	
1976	537		490	126	324	47	40				—	
1977	538		470	119	256	68	95				—	
1978	482		456	161	224	26	71				—	
1979	623e		593	172e	410e	30	11e				—	
1980	589		579	120	456	10	—			3	—	
1981	724		705	123	560	19	13			9	—	
1982	703		690	89	590	13	2			9	—	
1983r	776		722	55	635	20	1	1	—	8	2	—
1984r	739	127	791	148	605	29	—	1	—	7	1	—
1985r	556	155	544	119	392	25	1	—	—	7	—	—
1986r	311	106a	345	45	278	13	—	—	—	7	1	1
1987r	217	55a	318	20	242	17	—	1	1	25	12	—
1988r	211	25	205	15	164	18	1	—	—	6	—	1
1989r	217	80	245	28	181	12	—	—	14	8	—	2
1990r	221	38	223	43	148	16	—	—	1	12	—	3
1991r	213	12	215	51	133	17	1	—	—	1	12	—
1992r	205	31	192	71	75	17	1	—	—	15	13	—
1993	134	b	165	26	96	19	4	—	2	12	5	2
1994r	133	b	139	34	51	7	—	—	—	6	—	41
1995	111	b	110	20	31	2	2	—	14	14	7	20
1996r	146	b	123	70	35	4	—	2	—	4	8	—
1997r	91	b	66	29	21	3	—	—	—	12	1	—
1998r	74	b	90	7	41	20	—	—	—	19	3	—
1999e	101	b	87	25	28	21	—	—	—	7	—	6
2000e	119	b	111	26	54	11	—	—	—	17	—	3

— Represents zero.
e Estimated.
r Revised.
a Includes wells started to be drilled in previous years.
b This statistic has been discontinued.
1 Completions Totals do not include the numbers in "Dry Holes."
SOURCE: New York State Department of Environmental Conservation, Division of Mineral Resources.

TABLE L-26

Oil and Gas Reserves
New York State — 1966-2000

Year	Gas Reserves[1] (MMcf)			Oil Reserves[1]
	Total	In Situ	In Storage Reservoirs	(Mbbl)
1966	120,781	NA	NA	10,182
1967	121,086	NA	NA	14,578
1968	124,087	NA	NA	13,046
1969	121,000	NA	NA	11,790
1970	117,907	26,104	91,803	10,596
1971	115,705	42,116	73,589	9,772
1972	139,184	51,240	87,944	9,246
1973	136,842	37,851	98,991	8,288
1974	165,546	67,355	98,191	10,898
1975	215,843	99,755	116,088	10,024
1976	236,029	126,541	109,488	9,168
1977	247,303	133,199	114,104	9,094
1978	262,711	147,323	115,388	8,996
1979	282,520	159,806	122,714	9,642
1980	281,000	170,431	110,569	9,419
1981	277,000	157,402	119,598	9,070
1982	330,472	186,180	144,292	8,739
1983	363,895	229,406	134,489	11,788
1984	395,845	251,880	143,965	11,200
1985	398,906	260,431	138,475	10,707
1986r	404,420	263,479	140,941	9,854
1987	406,871	266,508	140,363	10,425
1988	407,337	262,518	144,819	2,000
1989r	401,859	270,074	131,785	2,441
1990r	408,310	266,410	141,900	2,001
1991r	416,014	265,320	150,694	2,100
1992r	403,788	252,988	150,800	2,962
1993r	399,243	245,843	153,400	2,900
1994r	387,067	232,867	154,200	2,800
1995	378,584	219,084	159,500	2,850
1996	376,622	205,522	171,100	2,900
1997	347,042	192,546	154,496	2,645
1998r	354,454	189,342	165,112	2,428
1999e,a	222,370	65,160	157,210	846
2000e	243,586	96,273	147,313	783

NOTE: See Glossary on page 465 for explanation of abbreviations.

NA Not available.

e Estimated.

r Revised.

a Reserves revised based on updated estimation methods.

1 Proven reserves at year end.

SOURCE: New York State Department of Environmental Conservation, Division of Mineral Resources.

TABLE L-27

Nuclear Power Plants — Net Generation and Summer Capability United States by State — 1999

State	Units	Net Nuclear Generation (million KWh)	Net Summer Capability (million KWh)
United States	104	725,036	97.07
Alabama	5	30,892	4.95
Alaska	—	—	—
Arizona	3	30,416	3.73
Arkansas	2	12,920	1.69
California	4	33,372	4.31
Colorado	—	—	—
Connecticut	2	12,675	2.01
Delaware	—	—	—
District of Columbia	—	—	—
Florida	5	31,526	3.87
Georgia	4	31,478	3.95
Hawaii	—	—	—
Idaho	—	—	—
Illinois	11	81,356	10.53
Indiana	—	—	—
Iowa	1	3,640	0.52
Kansas	1	9,157	1.16
Kentucky	—	—	—
Louisiana	2	13,112	2.01
Maine	—	—	—
Maryland	2	13,312	1.68
Massachusetts	1	1,931	0.67
Michigan	4	14,591	3.92
Minnesota	3	13,316	1.63
Mississippi	1	8,428	1.20
Missouri	1	8,587	1.14
Montana	—	—	—
Nebraska	2	10,091	1.25
Nevada	—	—	—
New Hampshire	1	8,676	1.16
New Jersey	4	28,971	3.86
New Mexico	—	—	—
New York	6	37,019	4.97
North Carolina	5	37,524	4.69
North Dakota	—	—	—
Ohio	2	16,422	2.04
Oklahoma	—	—	—
Oregon	—	—	—
Pennsylvania	9	70,885	9.04
Rhode Island	—	—	—
South Carolina	7	50,814	6.43
South Dakota	—	—	—
Tennessee	3	27,227	3.36
Texas	4	36,760	4.80
Vermont	1	4,059	0.50
Virginia	4	28,301	3.39
Washington	1	6,086	1.12
West Virginia	—	—	—
Wisconsin	3	11,495	1.49
Wyoming	—	—	—

NOTE: Detail may not add to totals due to rounding.
— Represents zero.

SOURCE: *Statistical Abstract of the United States, 2001;* United States Energy Information Administration, *Electric Power Annual* and *Electric Power Monthly,* December issues.

Barrel. Liquid volume measure equal to 42 gallons, commonly used in expressing quantities of petroleum or petroleum products.

Biofuels. Nonfossil biomass energy sources that are essentially unprocessed; they are burned or gasified to produce thermal energy or electricity. Examples are fuelwood, waste wood, garbage, and crop waste. Different mixes of biofuels are used by each consuming sector. The residential sector burns wood for space heating. The transportation sector uses ethanol as an additive to motor gasoline. Some electric generation uses wood or municipal waste as co-firing or primary fuels.

Bituminous Coal. Often referred to as "soft coal." It is more volatile than anthracite and has a higher heat content than lignite. It is the most predominantly used coal and has a heating value of 11,450 to 13,010 Btu's per pound.

British Thermal Unit (Btu). The quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit. Because different energy types use different standards of measurement, they are often converted to Btu to enable comparison. One Btu is equal to 252 calories of heat.

Coke. Primarily used in the steel-making process, a porous, solid residue resulting from the incomplete combustion of coal in a closed chamber or oven with a limited supply of air.

Commercial Sector. That sector of the economy which engages primarily in the sale of services and needs energy for uses other than those involving industrial uses, electric utilities and residential uses. Included are apartment buildings, office buildings, governmental units, schools, institutions and churches.

Crude Oil. A mixture of hydrocarbons that exist in the liquid phase in natural underground reservoirs. Refined crude oil produces a number of different fuels, such as residual fuel, motor gasoline and distillate.

Degree Days, Cooling. This statistic is a measure of temperature as it affects energy demand for space cooling. It is similar to heating degree-days although the relationship is not as precise. If the average of a day's high and low temperature extremes are below 65F, then the degree-days for that day are taken to be zero; otherwise, they are equal to the difference between the average and 65F. A larger number of cooling degree-days implies hotter temperatures.

Degree Days, Heating. This statistic is a measure of temperature as it affects energy demand for space heating. It is based on the fact that most buildings require no heat to maintain an inside temperature of at least 70F when the daily mean is 65F or higher. If the average of a day's high and low temperature extremes are above 65F, the degree-days for that day are taken to be zero; otherwise, they are equal to the difference between the average and 65F. A larger number of heating degree-days implies colder temperatures.

Distillate Fuel Oil. Usually means "home heating oil." Its products are actually No. 1 and No. 2 heating oils, diesel fuels and No. 4 fuel oil. These products are used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel) and electric power generation.

Electricity Generated With Nonfossil Fuels. Includes all electrical generation produced by nuclear, hydro and other sources such as wood, waste products, geothermal and solar sources.

Energy Requirements. There are nearly 18 million New Yorkers and we consumed 145 billion kilowatt hours of electricity in 1991. It is projected that we will demand 167 billion kilowatt hours in the year 2008. This projection of future energy requirements considers energy conservation, regulatory influences, population, weather, societal and economic influences.

Energy Sources. Electrical power is provided by converting the energy of an energy resource (e.g., coal, oil, etc.) into electricity. There are a variety of raw energy resources, which utilities select to use for conversion to electricity. The selection is made based on many factors such as: geographical location, source, availability and cost of energy source, environmental criteria, and population density.

Fossil Fuels. Any naturally occurring fuel of an organic nature such as coal, oil and natural gas derived from the remains of ancient plants and animals. These sometimes are called conventional fuels or conventional energy sources (as compared with solar power, wind energy, etc.) because the bulk of today's energy is derived from them and most of the industrial economy is based upon them.

Gallon (gal). A unit of volume, the U.S. gallon contains 3.785 liters and is .083 times the imperial gallon. One U.S. gallon of water weighs 8.3 pounds.

Generating Capacity. This is the total output measured in watts that all the generators installed in the system can produce. Therefore, a reserve, the difference between the total installed generating capacity and the peak load, is required. The desired reserve is based on reliability and economic considerations.

Gigawatt (GW). 1,000,000 kilowatts, or 1 billion watts.

Gigawatt-hour (GWh). One billion watthours.

Hydro-. A prefix used to identify a type of generating station, power or energy output in which the prime mover is water.

Industrial Sector. That section of the economy involved in mining, construction or manufacturing.

Jet Fuel. Includes both naphtha-type and kerosene-type jet fuel meeting standards for use in aircraft turbine engines. Some jet fuel is used for generating electricity in gas turbines.

Kerosene. A petroleum middle distillate having burning properties suitable for use as an illuminant when burned in wick lamps. Kerosene is also used in space heaters, cooking stoves and water heaters.

Kilowatt (KW). One thousand watts, usually the yardstick for measurement of generator capacity, (e.g., a 500,000 KW generator). One KW (Kilowatt) equals 1,000 watts. The NYPP generating capacity is approximately 33,300,000 KW.

Kilowatt Hour (KWh). One thousand watt-hours. The electric energy needed to operate a 100-watt bulb for 10 hours.

Liquefied petroleum gases (LPG). Propane, propylene, butane and propane-butane mixtures produced at a refinery or natural gas-processing plant, including plants that fractionate raw natural gas-processing plant liquids. These are derived by refining and processing natural gas, crude oil or unfinished oil.

Megawatt (MW). One megawatt equals 1,000 Kw or 1,000,000 watts. It is the generating capacity needed to light 10,000 one-

hundred watt light bulbs or to satisfy the varied electrical needs of about 1,000 people. Three megawatts is approximately the capacity required to satisfy the electrical needs of a large suburban shopping mall. An office building the size of the United Nations in New York City requires 7 megawatts, the World Trade Center about 32 megawatts per tower. On a typical weekday, a city the size of Albany, NY, requires about 440 megawatts of capacity to meet the industrial, commercial and residential needs of her citizens.

Megawatt-hour (MWh). One million watthours.

Motor gasoline. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives that have been blended to form a fuel suitable for use in spark-ignition engines. Included are leaded and unleaded and refinery products.

Natural Gas. A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase ("gas well" gas) or in solution with crude oil ("oil well" gas) in natural underground reservoir conditions. It comes from the ground with or without accompanying crude oil and is generally much higher in heat content than manufactured gas. It is used as the raw material in the petrochemical industry for the manufacturing of fertilizer and cellophane.

Natural Gas Liquids. Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants and fractionators. Products obtained include ethane, liquefied petroleum gases (propane, butane and propane-butane mixtures), isopentane, natural gasoline, plant condensate and other minor quantities of finished products such as motor gasoline, special naphthas, jet fuel, kerosene and distillate fuel oil.

Nuclear. The energy liberated by fission, fusion or radioactive decay.

Peak Load. Peak load is a measurement of the greatest amount of electrical power in watts demanded during a specific period, e.g., hourly, daily, monthly and yearly. It is comparable to the "Rush Hour" demands on our transportation systems.

Petroleum. A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oil, refined petroleum products, natural gas plants, liquids and nonhydrocarbon compounds blended into finished petroleum products.

Propane. A colorless, highly volatile hydrocarbon that is readily recovered as a liquefied gas at natural gas processing plants and refineries. It is used primarily for residential and commercial heating and cooling and also as a fuel for transportation and industrial uses, including petrochemical feedstocks. Propane is the first product refined from crude petroleum.

Refined Petroleum. Products obtained from processing crude oil, unfinished oils, natural gas liquid and miscellaneous hydrocarbon compounds. Includes aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt, road oil, still gas and miscellaneous products.

Residential Sector. Includes private households. Specifically included are the following end-uses: space heating, space cooling, water heating, cooking, lighting, clothes drying and refrigeration.

Residual Fuel. The heavier oils that remain after distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as No. 5 and No. 6 fuel oil, heavy diesel oil, Navy Special Fuel Oil, Bunker C Oil and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for production of electric power, space heating, vessel bunkering and various industrial purposes.

Therm. One therm is equal to 100,000 Btu's (see British Thermal Units).

Ton. In the United States, Canada and Union of South Africa, a unit of weight is equal to 2,000 pounds. The American ton is often called the short ton. The metric ton equals 2,204.62 pounds.

Transmission Lines. To transport electricity from the generating stations to the consumer, a vast network of high and low voltage wires and cables is required along with supporting towers, switchgear, transformers, lightning and grounding cables, ground rods, etc. Some conductors are placed underground but most transmission is accomplished by overhead wire conductors.

Watt. The unit of measure for electric power or rate of doing work. It is the rate of energy transfer equivalent to one ampere flowing under a pressure of one volt at unity power factor. It is analogous to horsepower or foot-pounds per minute of mechanical power. One horsepower is equivalent to approximately 746 watts.

Abbreviations

M	**Thousand or 10^3**
MM	**Million or 10^6**
B	**Billion or 10^9**
T	**Trillion or 10^{12}**
KWh	**Kilowatt-hour**
MWh	**Megawatt-hour or thousand Kwh**
GWh	**Gigawatt-hour or million Kwh**
cf	**Cubic feet**
Mcf	**Thousand cubic feet**
MMcf	**Million cubic feet**
bbl	**Barrel**
Mbbl	**Thousand barrels**
MTons	**Thousand tons**
Btu	**British Thermal Unit**
LPG	**Liquefied petroleum gas**
MGD	**Million gallons per day**