Electric Power Monthly August 2003

With Data for May 2003

Energy Information Administration

Office of Coal, Nuclear, Electric and Alternate Fuels
U.S. Department of Energy
Washington, DC 20585

This report is available on the Web at: http://www.eia.doe.gov/cneaf/electricity/epm/epm sum.html

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Preface

The Electric Power Monthly (EPM) presents monthly electricity statistics for a wide audience including Congress, Federal and State agencies, the electric power industry, and the general public. The purpose of this publication is to provide energy decision makers with accurate and timely information that may be used in forming various perspectives on electric issues that lie ahead. In order to provide an integrated view of the electric power industry, data in this report have been separated into two major categories: electric power sector and combined heat and power producers. The EIA collected the information in this report to fulfill its data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275) as amended.

Background

The Electric Power Division; Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), Department of Energy prepares the EPM. This publication provides monthly statistics at the State (lowest level of aggregation), Census division, and U.S.

levels for net generation, fossil fuel consumption and stocks, cost, quantity and quality of fossil fuels received, electricity retail sales, associated revenue, and average revenue per kilowatthour of electricity sold. In addition the report contains rolling 12-month totals in the national overviews, as appropriate.

Data Sources

The *EPM* contains information from the following data sources: Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" Form EIA-826, "Monthly Electric Sales and Revenue With State Distributions Report;" Form EIA-860, "Annual Electric Generator Report;" Form EIA-861, "Annual Electric Power Industry Report;" Form EIA-906, "Power Plant Data Report;" and Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." Forms and their instructions may be obtained from the following web url: http://www.eia.doe.gov/cneaf/electricity/page/forms.html. A detailed description of these forms and associated algorithms are found in Appendix B, "Technical Notes."

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Executive Summary

Generation and Consumption of Fuels for Electricity Generation, May 2003

Generation and Consumption of Fuels. Total generation of electric power in May 2003 declined by 1 percent compared to May 2002. Coal and nuclear generation also dropped 1 percent each compared to a year ago, while natural gas generation was down 4 percent and oil-fired generation was up 2 percent.

Year-to-date, nuclear generation is down 3 percent and natural gas generation is down 6 percent compared to 2002. The slack has been taken up by coal generation (a 4 percent increase), petroleum-fired power (a 42 percent jump) and hydroelectric power (a 4 percent increase).

During the month, 68 percent of electric power generation was produced at utility power plants, 28 percent by independent power producers, and the remainder at industrial and commercial combined heat and power plants. Utility-operated power plants consumed 79 percent of the coal for electric power generation in May 2003, compared to 20 percent by independent power producers. While utilities accounted for the largest share of coal consumption, the reverse was true for natural gas, with independent power producers consuming 49 percent of the gas compared to 39 percent by utilities. The balance of coal and gas consumption is attributable to combined heat and power plants.

Fuels Costs and Receipts, April 2003

1

Spot natural gas prices fluctuated around the \$5.00 per million btu (MMBtu) mark in April. This was well below the prices of \$7.00 per MMBtu and higher seen during the past Winter, but nonetheless high by historical standards for the Spring shoulder period (i.e., the period between the end of the heating season and the beginning of the cooling season, during which gas prices are often low). The relatively high natural gas prices reflected the abnormally low levels of gas in storage. At the end of April, working gas in storage stood about 52 percent below end-of-April 2002 levels and 41 percent below the previous 5-year average. The exceptionally large shortfall in natural gas storage relative to normal levels continued to place unusually strong upward pressure on near-term gas prices because companies will need to draw large amounts of natural gas from other uses in order to refill storage for the next heating season.

Average crude oil prices for April fell about \$5 per barrel from March averages. The market reacted positively to prospects for greater oil supplies from Iraq, Nigeria and Venezuela as well as OPEC's unexpected increases in production quotas. For example, West Texas Intermediate (WTI) spot prices averaged about \$28 per barrel in April, \$5 per barrel lower than the March average, and by end-April WTI prices were \$12 per barrel lower than levels reached just two months earlier in anticipation of the start of the war in Iraq.

The easing of market prices described above was reflected in the fuel prices paid by the electric power industry in April 2003. The average price paid for natural gas of \$5.20 per MMBtu was well below the price of \$7.07 per MMBtu in March 2003. The average price paid for fuel oil also declined, from \$5.46 per MMBtu in March to \$4.34 per MMBtu in April.¹

Prices nonetheless remained well above 2002 levels. The average price of natural gas to the electric power industry in April 2003 was 43 percent higher than a year earlier; fuel oil was 37 percent above the April 2002 price. Year to date, natural gas and fuel oil prices were running, respectively, 87 percent and 76 percent above comparable 2002 levels.

Receipts of natural gas in April were down 13 percent compared to the same period in 2002. Three factors likely contributed to this decline:

- The high price of gas compared to fuel oil. Continuing a pattern seen throughout early 2003, the decline in gas demand was accompanied by a large increase in purchases of fuel oil by the electric power industry. In April, fuel oil receipts were up 16 percent versus a year earlier.
- The higher efficiency of new gas-fired combined cycle plants compared to older steam electric units.
- The 2 percent decline in generation in April 2003 compared to 2002. Since many gas units are run at the margin, the decrease in generation would likely have a disproportionate impact on gas receipts.

Coal receipts in April 2003 were 2 percent higher than in the same period in 2002. For year to date compared to 2002, coal receipts were slightly down (-2 percent) and the average price was virtually flat (a 1 percent increase).

¹ For March 2003 price and receipts data, and April generation data, see Energy Information Administration, *Electric Power Monthly*, July 2003, page 3. The document can be accessed at http://tonto.eia.doe.gov/FTPROOT/electricity/epm/02260306.pdf.

Retail Sales, Revenue, and Average Revenue, May 2003

- Sales: May 2003 retail electricity sales decreased by 0.5 percent compared to May 2002. This appeared to be due in part to the weather; heating degree days were down 13 percent in May 2003 compared to a year earlier. While residential sector sales increased by 0.9 percent, the commercial and industrial sectors declined by, respectively, 0.8 percent and 1.9 percent compared to May 2002.
- **Revenue:** Electricity revenues continue to show a steady increase across all sectors during May 2003, compared to May 2002. The residential, commercial, and industrial sector revenues grew by 5.1 percent, 3.6 percent, and 2.0 percent, respectively, over May 2002, accounting for a net change of 4.0 percent across all sectors.
- Average Revenue: The average revenue per kwh (a measure of price calculated by dividing revenue by sales) increased 4.4 percent over May 2002. The residential sector average price increased by 4.2 percent, commercial sector by 4.5 percent, and industrial sector by 4.0 percent over the same period in 2002. The price rise was partly due to higher fuel costs.

² For May 2003 degree day data, see Energy Information Administration, *Monthly Energy Review*, June 2003, page 18. The document can be accessed at http://tonto.eia.doe.gov/FTPROOT/multifuel/mer/00350306.pdf.

Table ES1.A. Total Electric Power Industry Summary Statistics

					May						
			N	et Generatio	n and Consu	nption of Fu	els				
					Electric Po	wer Sector ¹		Combined Heat and Power Producers			
Items	Total (All Sectors)			Electric Utilities		Independent Power Producers		Commercial ²		Industrial ³	
	May 2003	May 2002	% Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
Net Generation (Thousand MWh											
Coal ⁴	149,296	151,011	-1.1	119,945	120,212	27,623	29,096	66	69	1,663	1,634
Petroleum ⁵	7,971	7,826	1.9	5,805	5,532	1,736	1,885	23	24	406	384
Natural Gas ⁶	47,854	50,064	-4.4	16,841	17,993	25,127	25,167	415	309	5,472	6,596
Other Gases ⁷		1,078	-29.7	*	*	105	112	*	*	652	966
Nuclear	62,194	63,032	-1.3	37,483	40,469	24,711	22,564				
Hydroelectric8	29,309	26,491	10.6	26,148	23,521	2,600	2,574	22	14	539	382
Other Renewables9		7,168	-6.4	213	143	4,055	4,497	169	150	2,272	2,378
Other Energy Sources ¹⁰	460	394	16.7			39	17	*		421	378
All Energy Sources	304,550	307,063	8	206,434	207,869	85,997	85,910	694	566	11,425	12,717
Consumption of Fossil Fuels											
Coal (1000 tons) ⁴		77,210	.4	61,206	60,865	15,329	15,410	33	36	937	899
Petroleum (1000 bbls) ⁵	14,299	13,506	5.9	10,039	9,307	3,140	3,400	46	45	1,075	754
Natural Gas (1000 Mcf) ⁶	416,749	454,088	-8.2	160,746	182,382	204,036	208,747	3,293	2,606	48,673	60,353
Fuel Stocks (end-of-month)											
Coal (1000 tons)11	144,860	156,114	-7.2	115,634	126,581	28,250	28,095	139	117	838	1,321
Petroleum (1000 bbls) ⁵	51,544	49,900	3.3	29,429	30,526	20,911	18,143	154	175	1,050	1,056

April
Receipts and Cost of Fossil Fuels

Total pr 2003	Apr 2002	% Change	Electric		Prod	ent Power ucers	Comm	nercial	Indu	strial
pr 2003	Apr 2002	% Change	Ann 2002						Industrial	
			Api 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
68,263	66,940	2.0	51,776	51,499	15,443	14,031	30	35	1,014	1,374
11,870	10,198	16.4	7,444	7,289	4,072	2,473			354	437
357,460	408,912	-12.6	101,409	120,934	178,886	203,040	1,379	1,228	75,787	83,710
131.13	125.48	4.5	129.11	121.11	137.29	139.85	W	W	W	W
434.36	316.62	37.2	411.25	324.42	486.58	297.68			W	W
519.76	364.11	42.7	545.13	379.77	508.49	366.89	500.53	368.12	511.02	332.37
	11,870 357,460 131.13 434.36	11,870 10,198 357,460 408,912 131.13 125.48 434.36 316.62	11,870 10,198 16.4 357,460 408,912 -12.6 131.13 125.48 4.5 434.36 316.62 37.2	11,870 10,198 16.4 7,444 357,460 408,912 -12.6 101,409 131.13 125.48 4.5 129.11 434.36 316.62 37.2 411.25	11,870 10,198 16.4 7,444 7,289 357,460 408,912 -12.6 101,409 120,934 131.13 125.48 4.5 129.11 121.11 434.36 316.62 37.2 411.25 324.42	11,870 10,198 16.4 7,444 7,289 4,072 357,460 408,912 -12.6 101,409 120,934 178,886 131.13 125,48 4.5 129,11 121,11 137,29 434.36 316,62 37.2 411,25 324,42 486,58 519,76 364,11 42,7 545,13 379,77 508,49	11,870 10,198 16.4 7,444 7,289 4,072 2,473 357,460 408,912 -12.6 101,409 120,934 178,886 203,040 131.13 125,48 4.5 129,11 121.11 137.29 139.85 434.36 316.62 37.2 411.25 324.42 486.58 297.68 519.76 364.11 42.7 545.13 379.77 508.49 366.89	11,870 10,198 16.4 7,444 7,289 4,072 2,473 357,460 408,912 -12.6 101,409 120,934 178,886 203,040 1,379 131.13 125.48 4.5 129,11 121.11 137.29 139.85 W 434.36 316.62 37.2 411.25 324.42 486.58 297.68 519.76 364.11 42.7 545.13 379.77 508.49 366.89 500.53	11,870 10,198 16.4 7,444 7,289 4,072 2,473 357,460 408,912 -12.6 101,409 120,934 178,886 203,040 1,379 1,228 131.13 125,48 4.5 129,11 121.11 137.29 139.85 W W 434.36 316.62 37.2 411.25 324.42 486.58 297.68 519.76 364.11 42.7 545.13 379.77 508.49 366.89 500.53 368.12	11,870 10,198 16.4 7,444 7,289 4,072 2,473 354 357,460 408,912 -12.6 101,409 120,934 178,886 203,040 1,379 1,228 75,787 131.13 125,48 4.5 129,11 121.11 137.29 139.85 W W W 434.36 316.62 37.2 411.25 324.42 486.58 297.68 W 519.76 364.11 42.7 545.13 379.77 508.49 366.89 500.53 368.12 511.02

-	Retail Sales, Retail Revenue and Average Revenue per Kilowatthour										
Itoma	Total U.S. Electric Power Industry										
Items	Residential	Commercial	Industrial	Other	All Sectors						
Retail Sales (Million kWh)13											
May 2003	88,340	89,391	82,495	8,581	268,807						
May 2002	87,577	90,154	84,072	8,344	270,147						
Percent Change	.9	8	-1.9	2.8	5						
Retail Revenue (Million Dollars)											
May 2003	7,947	7,285	4,055	616	19,903						
May 2002	7,563	7,030	3,977	571	19,141						
Percent Change	5.1	3.6	2.0	7.9	4.0						
Average Revenue/kWh (Cents)											
May 2003	9.00	8.15	4.92	7.17	7.40						
May 2002	8.64	7.80	4.73	6.84	7.09						
Percent Change	4.2	4.5	4.0	4.8	4.4						

The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat to the public (i.e., NAICS 22 plants.). The Independent Power Producer category includes the NAICS-22 CHP plants.

Notes: •See Glossary for definitions.•Values are estimates based on samples; they are preliminary - see Technical Notes for a discussion of the sample designs for Form EIA-826 and Form EIA-906.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•bls = barrels. kWh = kilowatthours. Mcf = thousand cubic feet. MWh = megawatthours.•Monetary values are expressed in nominal terms.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" Form EIA-826, "Monthly Electric Sales and Revenue With State Distributions Report;" Form EIA-906, "Power Plant Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

² Commercial combined-heat-and-power (CHP) with NAICS other than 22.

³ Industrial combined-heat-and-power (CHP) with NAICS other than 22.

⁴ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

⁵ Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

⁶ Natural gas, including a small amount of supplemental gaseous fuels.

⁷ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁸ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁹ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

¹⁰ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Anthracite, bituminous coal, subbituminous coal, and lignite, excludes waste coal.

¹² Average cost of fuel delivered to electric generating plants; costs are weighted values.

¹³ Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

W = Withheld to avoid disclosure of individual company data.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date

				Jan	uary through	May					
			N	et Generatio	n and Consui	nption of Fu	els				
				Electric Power Sector ¹				Combined Heat and Power Producers			
Items	Total (Total (All Sectors)		Electric Utilities Independent Power Producers		Commercial ²		Industrial ³			
_	2003	2002	% Change	2003	2002	2003	2002	2003	2002	2003	2002
Net Generation (Thousand MWh)											
Coal ⁴	782,358	752,063	4.0	611,158	593,924	161,902	149,573	409	386	8,890	8,180
Petroleum ⁵	49,339	34,639	42.4	27,118	22,791	19,646	9,725	263	134	2,313	1,989
Natural Gas ⁶	229,071	242,830	-5.7	70,934	81,532	125,256	125,844	1,781	1,689	31,100	33,765
Other Gases ⁷	4,029	4,850	-16.9	3	1	532	635	*	*	3,494	4,213
Nuclear	309,056	317,094	-2.5	189,659	209,061	119,396	108,033				
Hydroelectric ⁸	115,118	111,197	3.5	103,629	100,358	9,185	9,116	53	46	2,251	1,676
Other Renewables9	33,533	34,522	-2.9	1,029	784	20,340	20,961	764	694	11,399	12,082
Other Energy Sources ¹⁰	2,091	1,970	6.1			240	157	4	*	1,847	1,813
All Energy Sources	1,524,596	1,499,165	1.7	1,003,530	1,008,452	456,498	424,045	3,275	2,951	61,293	63,718
Consumption of Fossil Fuels											
Coal (1000 tons) ⁴	401,578	383,312	4.8	310,618	300,955	85,879	77,703	198	198	4,884	4,457
Petroleum (1000 bbls) ⁵	87,854	59,848	46.8	46,646	38,099	35,668	17,598	602	253	4,937	3,899
Natural Gas (1000 Mcf) ⁶	1,945,511	2,139,400	-9.1	669,865	800,131	990,699	1,032,217	14,365	14,514	270,583	292,537

January through April

				Receipts	and Cost of	Fossil Fuels					
					Electric Po	wer Sector		Combined Heat and Power Producers			
Items	Total	l (All Sectors	5)	Electric Utilities		Independent Power Producers		Commercial		Industrial	
	2003	2002	% Change	2003	2002	2003	2002	2003	2002	2003	2002
Receipts											
Coal (1000 tons)4	281,472	286,133	-1.6	218,935	225,285	58,612	56,154	136	145	3,789	4,549
Petroleum (1000 bbls) ⁵	61,692	32,625	89.1	39,306	19,975	20,425	10,549	202	32	1,759	2,070
Natural Gas (1000 Mcf) ⁷	1,393,889	1,560,042	-10.7	380,512	435,650	729,950	791,554	3,824	4,178	279,603	328,661
Cost (cents/million Btu) ¹¹											
Coal ⁴	128.11	126.30	1.4	124.80	122.05	139.25	141.26	W	W	W	W
Petroleum ⁵	487.70	276.61	76.3	456.69	273.35	553.08	280.28	W	W	W	W
Natural Gae ⁷	501.14	315 50	87.3	604.97	337 08	580./11	314 83	195.65	338 50	576.78	285 17

January through May

	Retail Sales, Re	tail Revenue and Average	Revenue per Kilowattho	ur		
Items		Total U.S	S. Electric Power Industr	y		
items	Residential	Commercial	Industrial	Other	All Sectors	
(Million kWh) ¹²						
	509,925 485,030	437,941 430,140	400,224 401,023	41,840 40,111	1,389,929 1,356,304	
nge	5.1	1.8	2	4.3	2.5	
nue (Million Dollars)						
	42,653 40,108	34,640 32,964	19,348 19,022	2,939 2,731	99,581 94,825	
nge	6.3	5.1	1.7	7.6	5.0	
venue/kWh (Cents)						
	8.36	7.91	4.83	7.03	7.16	

4.74 1.9

6.81

7.66

Retail Sales (2002 Percent Chang Retail Reven 2003 2002 Percent Chang Average Rev

2002

Percent Change.

8.27

Notes: •See Glossary for definitions. •Values are estimates based on samples; they are preliminary - see Technical Notes for a discussion of the sample designs for Form EIA-826 and Form EIA-906. Values for 2001 have been adjusted to reflect the annual total from the Form EIA-861, and are reflected in the Form EIA-826 monthly values. See Technical Notes for the adjustment methodologies. Totals may not equal sum of components because of independent rounding. Percent difference is calculated before rounding.•bbls = barrels. kWh = kilowatthours. Mcf = thousand cubic feet. MWh = megawatthours.•Monetary values are expressed in nominal terms.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" Form EIA-826, "Monthly Electric Sales and Revenue With State Distributions Report;" Form EIA-906, "Power Plant Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

6.99

2.4

The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat to the public (i.e., NAICS 22 plants.). The Independent Power Producer category includes the NAICS-22 CHP plants. ² Commercial combined-heat-and-power (CHP) with NAICS other than 22...

³ Industrial combined-heat-and-power (CHP) with NAICS other than 22.

Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

⁵ Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

⁶ Natural gas, including a small amount of supplemental gaseous fuels.

⁷ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁸ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁹ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy and wind.

¹⁰ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

¹¹ Average cost of fuel delivered to electric generating plants; cost values are weighted values. 12 Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and

consumption occurring in and outside the calendar month. W = Withheld to avoid disclosure of individual company data.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table ES2. Industry Summary - Combined Heat and Power Producers' Fossil Fuel Consumption and Stocks

	All Combined Heat and Power Producers ¹									
Items	Total Fuel C	tal Fuel Consumption Fuel Consumption Electric Generation		Fuel Consu Useful Ther		Fuel Stocks End-of-Month				
	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002		
Current Month										
Coal (1000 tons) ²	17,554	17,650	16,299	16,345	1,255	1,305	29,226	29,533		
Petroleum (1000 bbls) ³ .,	5,924	5,469	4,260	4,199	1,664	1,271	22,115	19,374		
Natural Gas (1000 Mcf) 4	311,215	340,603	256,003	271,706	55,212	68,897	NA NA	NA		
Year to Date										
Coal (1000 tons) 2	98,355	89,776	90,960	82,357	7,395	7,419	29,226	29,533		
Petroleum (1000 bbls) 3	49,450	28,020	41,207	21,749	8,243	6,271	22,115	19,374		
Natural Gas (1000 Mcf) 4	1,590,834	1,688,967	1,275,647	1,339,269	315,187	349,698	NA	NA		

Independent Power Producer Combined Heat and Power Producers Fuel Consumption for **Fuel Consumption for Total Fuel Consumption** Fuel Stocks End-of-Month Items **Useful Thermal Output Electric Generation** May 2003 May 2003 May 2003 May 2002 May 2002 May 2002 May 2003 May 2002 **Current Month** 15,508 3,210 220,352 15,552 3,510 227,834 28,250 20,911 15,329 15,410 178 28,095 Coal (1000 tons) Petroleum (1000 bbls)³ 3,140 204,036 3,400 208,747 110 18,143 Natural Gas (1000 Mcf) 4

Year to Date 16,316 19.087 NA NA 28,250 20,911 NA Coal (1000 tons) 2 86,805 78,564 85,879 926 861 28,095 Petroleum (1000 bbls) 3. 36,416 1,093,031 18,151 1,127,257 18,143 17,598 748 35.668 554 Natural Gas (1000 Mcf) 4...... 990,699 1,032,217 102,332 95,040 NA

			Commercia	ai Combined H	eat and Power	Producers		
Items	Total Fuel C	onsumption	Fuel Consumption for Electric Generation		Fuel Consu Useful Ther		Fuel Stocks E	nd-of-Month
	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
Current Month								
Coal (1000 tons) ²	94	104	33	36	62	69	139	117
Petroleum (1000 bbls) 3	67	79	46	45	22	34	154	175
Natural Gas (1000 Mcf) 4	5,938	5,518	3,293	2,606	2,645	2,912	NA	NA
Year to Date								
Coal (1000 tons) 2	603	578	198	198	405	381	139	117
Petroleum (1000 bbls) 3	900	415	602	253	298	163	154	175
Natural Gas (1000 Mcf) 4	28,271	30,025	14,365	14,514	13,907	15,511	NA	NA

			Industria	l Combined He	at and Power l	Producers		
Items	Total Fuel C	onsumption	Fuel Consumption for Electric Generation			mption for mal Output	Fuel Stocks E	nd-of-Month
	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
Current Month								
Coal (1000 tons) ²	1,952	1,994	937	899	1,015	1,094	838	1,321
Petroleum (1000 bbls) 3,,,,,	2,647	1,880	1,075	754	1,572	1,127	1,050	1,056
Natural Gas (1000 Mcf) 4	84,924	107,251	48,673	60,353	36,251	46,898	NA	NA
Year to Date								
Coal (1000 tons) 2	10,947	10,634	4,884	4,457	6,064	6,177	838	1,321
Petroleum (1000 bbls) 3	12,134	9,453	4,937	3,899	7,197	5,554	1,050	1,056
Natural Gas (1000 Mcf) 4	469,532	531,685	270,583	292,537	198,949	239,147	NA	NA

Excludes a small amount of combined heat and power plant fuel consumption at electric Utilities.

Notes: Values include only combined heat and power producers in the industrial, commercial, and independent power producer sectors. Values are estimates based on a cutoff model sample - see Technical Notes for a discussion of the sample design for Form EIA-906. Values for 2002 have been adjusted to reflect the annual total from the Form EIA-906. See Technical Notes for the adjustment methodology. Totals may not equal sum of components because of independent rounding. bbls = barrels. Mcf = thousand cubic feet.

² Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

³ Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

⁴ Natural gas, including a small amount of supplemental gaseous fuels.

NA = Not available.

Table ES3. Planned and New U.S. Electric Generating Units by Operating Company, Plant and Month, 2003

Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) 1	Energy Source	Prime Mover
January					/		
Basin Electric Power Coop	Elec. Utility	Minot Wind Project	ND	MWP	26	WND	WT
Black Hills Corp	Elec. Utility	WYGEN	WY	1	85	SUB	ST
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN3	52	NG	CT
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN4	52	NG	CT
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN5	52	NG	CT
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN6	52	NG	CT
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN7	24	NG	CA
Black Hills Nevada Ops LLC	IPP	Las Vegas Cogeneration LP II	NV	GEN8	24	NG	CA
Calpine Corp-Yuba City	IPP	Creed Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City	IPP	Feather River -Peaker	CA	CTG1	40	NG	GT
Calpine Corp-Yuba City	IPP	Goose Haven Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City	IPP	Lambie Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City	IPP	Wolfskill Energy Center	CA	CTG1	40	NG	GT
Conectiv Bethlehem Inc	IPP	Bethlehem Power Plant	PA	CTG5	102	NG	CT
Granger Electric Co	IPP	Grand Blanc	MI	4-5	102	LFG	IC
	IPP					NG	GT
La Paloma Generating Co LLC	IPP	La Paloma Generating La Paloma Generating	CA CA	GEN1 GEN3	258 258	NG NG	GT
La Paloma Generating Co LLC	IPP	ē					CT
Mirant Las Vegas LLC	IPP IPP	Apex Generating Station	NV	CTG1	150	NG NG	
Mirant Las Vegas LLC		Apex Generating Station	NV	CTG2	150	NG	CT
Mirant Las Vegas LLC	IPP	Apex Generating Station	NV	STG1	195	NG	CA
Monroe City City of	Elec. Utility	Monroe	MO	11	2	DFO	IC
Monroe City City of	Elec. Utility	Monroe	MO	12	2	DFO	IC
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	CTG7	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	CTG8	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	ST9	237	NG	ST
RS Cogen	CHP	RS Cogen	LA	RS-4	60	NG	GT
RS Cogen	CHP	RS Cogen	LA	RS-5	168	NG	GT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG1	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG2	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	STG1	219	NG	CA
February							
Calpine Corp	IPP	Los Esteros Critical Energy Ct	CA	CTG1	38	NG	GT
Calpine Corp	IPP	Los Esteros Critical Energy Ct	CA	CTG2	38	NG	GT
Calpine Corp	IPP	Los Esteros Critical Energy Ct	CA	CTG3	38	NG	GT
Calpine Corp	IPP	Los Esteros Critical Energy Ct	CA	CTG4	38	NG	GT
Conectiv Bethlehem Inc	IPP	Bethlehem Power Plant	PA	CTG6	120	NG	CT
FPLE Forney LP	IPP	Forney Energy Center	TX	U1	146	NG	CT
FPLE Forney LP	IPP	Forney Energy Center	TX	U2	146	NG	CT
FPLE Forney LP	IPP	Forney Energy Center	TX	U3	146	NG	CT
Oglethorpe Power Corp		Chattahoochee Energy	GA	1	151	NG	CT
Oglethorpe Power Corp		Chattahoochee Energy	GA	2	151	NG	CT
Oglethorpe Power Corp		Chattahoochee Energy	GA	3	161	NG	CA
March	Elec. Culty	Chattanooenee Energy	0.71	3	101	110	CH
AES Granite Ridge	IPP	AES Granite Ridge	NH	CT11	262	NG	CT
AES Granite Ridge	IPP	AES Granite Ridge AES Granite Ridge	NH	CT12	262	NG NG	CT
AES Granite Ridge	IPP	AES Granite Ridge AES Granite Ridge	NH	STG	273	NG NG	CA
	IPP		CA			NG NG	GT
La Paloma Generating Co LLC	IPP IPP	La Paloma Generating		GEN2	258		
La Paloma Generating Co LLC		La Paloma Generating	CA	GEN4	255	NG	GT
Redwood Falls Public Util Comm		South Generation	MN	3	2	DFO	IC
Redwood Falls Public Util Comm	Elec. Utility	South Generation	MN	4	2	DFO	IC IC
Redwood Falls Public Util Comm	Elec. Utility	South Generation	MN	5	2	DFO	IC
Reliant Energy Renewables Inc	IPP	Reliant Atascocita	TX	GEN1	1	LFG	IC
Reliant Energy Renewables Inc	IPP	Reliant Atascocita	TX	GEN2	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Atascocita	TX	GEN3	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Atascocita	TX	GEN4	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Atascocita	TX	GEN5	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Coastal Plains	TX	UNT1	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Coastal Plains	TX	UNT2	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Coastal Plains	TX	UNT3	1	LFG	OT
	IPP	Reliant Coastal Plains	TX	UNT4	1	LFG	OT
Reliant Energy Renewables Inc.							
Reliant Energy Renewables Inc							
Reliant Energy Renewables Inc	CHP Elec. Utility	Aberdeen Pyramid	WA NM	GEN1 1	17 40	WDS NG	ST GT

Table ES3. Planned and New U.S. Electric Generating Units by Operating Company, Plant and Month, 2003 (Continued)

	Producer			Generating	Net Summer	Energy	Prime
Year/Month/Company	Type	Plant	State	Unit ID	Capacity (megawatts) ¹	Source	Mover
Tri-State G & T Assn Inc		Pyramid	NM	2	40	NG	GT
Wood Scott		Scott Wood	VA	ST2	1	WDS	ST
Wood Scott	. IPP	Scott Wood	VA	ST3	3	WDS	ST
April Anita City of	. Elec. Utility	Anita	IA	6	2	DFO	IC
Conectiv Bethlehem Inc		Bethlehem Power Plant	PA	CTG7	120	NG	CT
Front Range Power Co		Front Range	CO	1	132	NG	CT
Front Range Power Co		Front Range	CO	2	132	NG	CT
Front Range Power Co		Front Range	CO	3	200	NG	CA
FPLE Forney LP		Forney Energy Center	TX	ST1	344	NG	CA
Grand Island City of		C W Burdick	NE	GT2	34	NG	GT
Grand Island City of		C W Burdick	NE	GT3	34	NG	GT
GWF Energy LLC		Tracy Peaker	CA	TPP1	85	NG	GT
GWF Energy LLC		Tracy Peaker	CA	TPP2	85	NG	GT
High Desert Power Project LLC		High Desert Power Project LLC	CA	CTG1	149	NG	CT
High Desert Power Project LLC		High Desert Power Project LLC	CA	CTG2 CTG3	149	NG NG	CT CT
High Desert Power Project LLC High Desert Power Project LLC		High Desert Power Project LLC High Desert Power Project LLC	CA CA	STG1	149 284	NG NG	CA
Sithe New England Holdings LLC		Mystic	MA	G81	224	NG	CT
Sithe New England Holdings LLC		Mystic	MA	G82	224	NG	CT
Sithe New England Holdings LLC		Mystic	MA	G85	241	NG	CA
Tri-State G & T Assn Inc		Pyramid	NM	4	40	NG	GT
TPS-Arkansas Operations		Union Power	AR	CTG3	151	NG	CT
TPS-Arkansas Operations		Union Power	AR	CTG4	151	NG	CT
TPS-Arkansas Operations	. IPP	Union Power	AR	STG2	219	NG	CA
May				ame	2-	110	am.
Aquila Services Inc		Goose Creek Energy Center	IL	CT01	97	NG	GT
Aquila Services Inc		Goose Creek Energy Center	IL	CT02	97 97	NG NC	GT
Aquila Services Inc.		Goose Creek Energy Center Goose Creek Energy Center	IL IL	CT03 CT04	97	NG NG	GT GT
Aquila Services Inc		Goose Creek Energy Center	IL	CT05	97	NG	GT
Aquila Services Inc		Goose Creek Energy Center	IL	CT06	97	NG	GT
Attica City of		Attica	KS	4A	7	DFO	IC
Blue Spruce Energy Center LLC		Blue Spruce Energy Center	CO	CT01	199	NG	GT
Blue Spruce Energy Center LLC		Blue Spruce Energy Center	CO	CT02	199	NG	GT
Brazos Valley Energy		Brazos Valley Generating Facil	TX	CTG1	166	NG	GT
Brazos Valley Energy		Brazos Valley Generating Facil	TX	CTG2	166	NG	GT
Brazos Valley Energy		Brazos Valley Generating Facil	TX	STG1	193	NG	CA
Conectiv Bethlehem Inc		Bethlehem Power Plant	PA	STG4	198	NG	CA
Duke Energy Corp		Mill Creek	SC	5	70	NG	GT
Duke Energy Corp		Mill Creek	SC SC	6 7	70 70	NG NG	GT GT
Duke Energy Corp		Mill Creek Mill Creek	SC	8	70 70	NG NG	GT
Duke Energy Corp		Forney Energy Center	TX	o U4	146	NG NG	CT
FPLE Forney LP		Forney Energy Center	TX	U5	146	NG	CT
FPLE Forney LP		Forney Energy Center	TX	U6	146	NG	CT
Granite Falls City of		Granite Falls 2	MN	1	2	DFO	IC
Granite Falls City of	. Elec. Utility	Granite Falls 2	MN	2	2	DFO	IC
Granite Falls City of		Granite Falls 2	MN	3	2	DFO	IC
Kiowa Power Partners LLC		Kiamichi Energy Facility	OK	CTG1	158	NG	CT
Kiowa Power Partners LLC		Kiamichi Energy Facility	OK	CTG2	158	NG	CT
Kiowa Power Partners LLC		Kiamichi Energy Facility	OK	CTG3	158	NG NC	CT
Kiowa Power Partners LLC		Kiamichi Energy Facility	OK	CTG4	158	NG NG	CT CA
Kiowa Power Partners LLC Kiowa Power Partners LLC		Kiamichi Energy Facility Kiamichi Energy Facility	OK OK	STG1 STG2	273 273	NG NG	CA CA
MidAmerican Energy Co		Greater Des Moines	IA	GT1	181	NG NG	GT
MidAmerican Energy Co		Greater Des Moines Greater Des Moines	IA IA	GT2	180	NG NG	GT
MDU Resources Group Inc		Glendive	MT	GT-2	36	NG	GT
Ocean Peaking Power LP		Ocean Peaking Power LP	NJ	OPP3	163	NG	GT
Ocean Peaking Power LP		Ocean Peaking Power LP	NJ	OPP4	163	NG	GT
Oglethorpe Power Corp		Talbot County Energy	GA	5	103	NG	GT
Oglethorpe Power Corp		Talbot County Energy	GA	6	103	NG	GT
Omaha Public Power District		Cass County	NE	CT-1	176	NG	GT

Table ES3. Planned and New U.S. Electric Generating Units by Operating Company, Plant and Month, 2003 (Continued)

Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) ¹	Energy Source	Prime Mover
Omaha Public Power District	Elec. Utility	Cass County	NE	CT-2	176	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	ΑZ	CTG3	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	CTG4	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	CTG5	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	CTG6	150	NG	GT
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	ST11	237	NG	ST
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	ST12	237	NG	GT
Progress Energy Ventures		Washington County	GA	101G	173	NG	GT
Progress Energy Ventures		Washington County	GA	102G	173	NG	GT
Progress Energy Ventures		Washington County	GA	103G	173	NG	GT
Progress Energy Ventures		Washington County	GA	104G	173	NG	GT
Salt River Proj Ag I & P Dist		Arizona Falls	ΑZ	AH1	1	WAT	HY
St Louis City of		St Louis	MI	8	2	DFO	IC
St Louis City of		St Louis	MI	9	1	DFO	IC
Story City City of		Story City	IA	4A	3	DFO	IC
Гатра Electric Co		Bayside Power	FL	1	685	NG	CC
Геnaska Alabama II Partners LP		Tenaska Central Alabama Genera	AL	CTG1	158	NG	CT
Геnaska Alabama II Partners LP		Tenaska Central Alabama Genera	AL	CTG2	158	NG	CT
Геnaska Alabama II Partners LP		Tenaska Central Alabama Genera	AL	CTG3	158	NG	CT
Геnaska Alabama II Partners LP	IPP	Tenaska Central Alabama Genera	AL	ST1	336	NG	CA
Γri-State G & T Assn Inc	Elec. Utility	Pyramid	NM	3	40	NG	GT
ΓPS-Arkansas Operations	IPP	Union Power	AR	CTG5	151	NG	CT
ΓPS-Arkansas Operations	IPP	Union Power	AR	CTG6	151	NG	CT
ΓPS-Arkansas Operations		Union Power	AR	STG3	219	NG	CA
Williams Energy Services	CHP	Williams Refining & Marketing	TN	PO36	72	NG	GT
Wisconsin Public Service Corp		Pulliam	WI	31	7	NG	GT
une							
Alabama Power Co	Elec. Utility	Autaugaville	AL	1CT	159	NG	CT
Alabama Power Co	Elec. Utility	Autaugaville	AL	1CT1	159	NG	CT
Alabama Power Co	Elec. Utility	Autaugaville	AL	1ST	243	NG	CA
Alabama Power Co		Goat Rock	AL	2CT	149	NG	CT
Alabama Power Co	Elec. Utility	Goat Rock	AL	2CT1	149	NG	CT
Alabama Power Co	Elec. Utility	Goat Rock	AL	2ST	243	NG	CA
Alliant Energy Integ Ser-Cogen	IPP	Alliant SBD0201 Penford Produc	IA	1	2	DFO	IC
Alliant Energy Integ Ser-Cogen	IPP	Alliant SBD0201 Penford Produc	IA	2	2	DFO	IC
Alliant Energy Integ Ser-Cogen	IPP	Alliant SBD0201 Penford Produc	IA	3	2	DFO	IC
Alliant Energy Integ Ser-Cogen	IPP	Alliant SBD0201 Penford Produc	IA	4	1	DFO	IC
American Sugar Refining Inc.		Domino Sugar Arabi	LA	TG2	5	NG	ST
Caledonia Operating Serv LLC		Caledonia	MS	CTG1	137	NG	CT
Caledonia Operating Serv LLC		Caledonia	MS	CTG2	137	NG	CT
Caledonia Operating Serv LLC		Caledonia	MS	CTG3	137	NG	CT
Caledonia Operating Serv LLC		Caledonia	MS	STG1	91	NG	CA
Caledonia Operating Serv LLC		Caledonia	MS	STG2	91	NG	CA
Caledonia Operating Serv LLC		Caledonia	MS	STG3	91	NG	CA
Calhoun Power Co LLC		Calhoun Power Co I LLC	AL	CAL1	162	NG	GT
Calhoun Power Co LLC		Calhoun Power Co I LLC	AL	CAL2	162	NG	GT
Calhoun Power Co LLC		Calhoun Power Co I LLC	AL	CAL3	162	NG	GT
Calhoun Power Co LLC		Calhoun Power Co I LLC	AL	CAL4	162	NG	GT
Calpine Central, L.P		Oneta Energy Center	OK	CTG3	151	NG	CT
Calpine Central, L.P		Oneta Energy Center	OK	CTG4	151	NG	CT
Calpine Central, L.P		Oneta Energy Center	OK	STG2	219	NG	CA
Calpine Construction F Corp LP		Morgan Energy Center	AL	CTG1	154	NG	CT
Calpine Construction F Corp LP		Morgan Energy Center	AL	CTG2	154	NG	CT
Calpine Construction F Corp LP		Morgan Energy Center	AL	CTG3	154	NG	CT
Calpine Construction F Corp LP		Morgan Energy Center	AL	STG1	195	NG	CA
Calpine Construction Fin Co LP		Decatur Cogen	AL	CTG3	155	NG	CT
Carville Energy LLC		Carville Energy LLC	LA	CTG1	161	NG	CT
Carville Energy LLC		Carville Energy LLC	LA	CTG2	161	NG	CT
Carville Energy LLC	IPP	Carville Energy LLC	LA	STG	169	NG	CA
Coggon City of		Coggon	IA	IC5	2	DFO	IC
Duke Energy Fayette LLC		Fayette Energy Facility	PA	CTG1	155	NG	CT
Duke Energy Fayette LLC		Fayette Energy Facility	PA	CTG2	155	NG	CT
Duke Energy Fayette LLC		Fayette Energy Facility	PA	STG1	271	NG NG	CA
	11 1	Layout Living Lacinty	111	5101	4/1	.10	C11

Table ES3. Planned and New U.S. Electric Generating Units by Operating Company, Plant and Month, 2003 (Continued)

Year/Month/Company Duke Energy Hanging Rock LLC	Producer Type	Plant	64-4-	Generating	Net Summer	Energy	Prime
Duke Energy Hanging Rock LLC		7 11110	State	Unit ID	Capacity (megawatts) ¹	Source	Mover
	IPP	Hanging Rock Energy Facility	OH	1GT1	146	NG	GT
Duke Energy Hanging Rock LLC	IPP	Hanging Rock Energy Facility	OH	1GT2	146	NG	GT
Duke Energy Hanging Rock LLC	IPP	Hanging Rock Energy Facility	OH	1STG	279	NG	ST
E I Colton LLC	IPP	Agua Mansa Power Project	CA	AMP1	41	NG	GT
Entergy Power Ventures LP	IPP	Harrison County Power Project	TX	GT-1	145	NG	CT
Entergy Power Ventures LP	IPP	Harrison County Power Project	TX	GT-2	145	NG	CT
Entergy Power Ventures LP	IPP	Harrison County Power Project	TX	ST-1	196	NG	CA
Florida Power & Light Co	Elec. Utility	Fort Myers	FL	CT1	154	NG	GT
Florida Power & Light Co	Elec. Utility	Fort Myers	FL	CT2	154	NG	GT
Formosa Plastics Corp	CHP	Formosa Utility Venture Ltd	TX	TBG6	74	NG	CT
Geneseo City of	Elec. Utility	Geneseo	IL	6A	3	NG	IC
Global Common Greenport, LLC	IPP	Global Common Greenport	NY	U-01	46	DFO	GT
Harquahala Generating Co LLC	IPP	Harquahala Generating Project	AZ	CTG1	269	NG	CT
Harquahala Generating Co LLC	IPP	Harquahala Generating Project	AZ	STG1	149	NG	ST
Kansas City Power & Light Co	Elec. Utility	Osawatomie	KS	1	77	NG	GT
Kansas City Power & Light Co	Elec. Utility	West Gardner	KS	1	78	NG	GT
Kansas City Power & Light Co	Elec. Utility	West Gardner	KS	2	78	NG	GT
Kansas City Power & Light Co	Elec. Utility	West Gardner	KS	3	78	NG	GT
Kansas City Power & Light Co	Elec. Utility	West Gardner	KS	4	78	NG	GT
Lakefield City of	Elec. Utility	Lakefield	MN	6	2	DFO	IC
Mirant Sugar Creek LLC	IPP	Mirant Sugar Creek Power Plant	IN	ST1	221	NG	CA
Modesto Irrigation District	Elec. Utility	Woodland	CA	2	99	NG	CC
Old Dominion Electric Coop	Elec. Utility	Rockspring Generating	MD	1	166	NG	GT
Old Dominion Electric Coop	Elec. Utility	Rockspring Generating	MD	2	166	NG	GT
Old Dominion Electric Coop		Rockspring Generating	MD	3	166	NG	GT
Old Dominion Electric Coop	Elec. Utility	Rockspring Generating	MD	4	166	NG	GT
Otter Tail Power Co	Elec. Utility	New CT	MN	1	34	NG	GT
Pella City of		Pella Peaking	IA	1	2	DFO	IC
Pella City of		Pella Peaking	IA	10	2	DFO	IC
Pella City of		Pella Peaking	IA	11	2	DFO	IC
Pella City of		Pella Peaking	IA	12	2	DFO	IC
Pella City of		Pella Peaking	IA	13	2	DFO	IC
Pella City of		Pella Peaking	IA	14	2	DFO	IC
Pella City of		Pella Peaking	IA	2	2	DFO	IC IC
Pella City of		Pella Peaking	IA	3	2 2	DFO DFO	IC IC
Pella City of		Pella Peaking	IA	5	2	DFO	IC IC
Pella City of		Pella Peaking Pella Peaking	IA IA	6	2	DFO	IC IC
Pella City of		Pella Peaking	IA IA	7	2	DFO	IC IC
Pella City of		Pella Peaking	IA IA	8	2	DFO	IC IC
Pella City of		Pella Peaking	IA	9	2	DFO	IC IC
Progress Energy Ventures	IPP	Rowan County Power, Phase I	NC	4	172	NG	CT
Progress Energy Ventures	IPP	Rowan County Power, Phase I	NC	5	172	NG	CT
Sithe New England Holdings LLC	IPP	Mystic	MA	G93	224	NG	CT
Sithe New England Holdings LLC	IPP	Mystic	MA	G94	224	NG	CT
Sithe New England Holdings LLC	IPP	Mystic	MA	G96	241	NG	CA
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	CTG1	139	NG	CT
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	CTG2	139	NG	CT
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	CTG2 CTG3	139	NG	CT
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	STG1	91	NG	CA
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	STG2	91	NG	CA
Southhaven Operating Services, LLC	IPP	Southaven Energy LLC	MS	STG3	91	NG	CA
Trigen-Cinergy Solutions College Park	IPP	UMCP CHP Plant	MD	1	9	NG	GT
Trigen-Cinergy Solutions College Park	IPP	UMCP CHP Plant	MD	2	9	NG	GT
TBS Properties	CHP	CNN Center	GA	D4 3	2	DFO	IC
TBS Properties	CHP	CNN Center	GA	D5 2	2	DFO	IC
TBS Properties	CHP	CNN Center	GA	D5 3	2	DFO	IC
TPS-Arkansas Operations	IPP	Union Power	AR	CTG7	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG8	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	STG4	219	NG	CA
Zion Energy LLC	IPP	Zion Energy Center	IL	CTG3	143	NG	GT
July	-				- 13		
Avista Corporation	Elec. Utility	Coyote Springs II	OR	1	165	NG	CT
		, , ,					

Table ES3. Planned and New U.S. Electric Generating Units by Operating Company, Plant and Month, 2003 (Continued)

Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) ¹	Energy Source	Prime Mover
Avista Corporation	Elec. Utility	Coyote Springs II	OR	2	85	NG	CA
Elk Hills Power LLC	IPP	Elk Hills Power LLC	CA	CTG1	148	NG	CT
Elk Hills Power LLC	IPP	Elk Hills Power LLC	CA	CTG2	148	NG	CT
Elk Hills Power LLC	IPP	Elk Hills Power LLC	CA	STG	118	NG	CA
FPLE Forney LP	IPP	Forney Energy Center	TX	ST2	344	NG	CA
Princeton Public Utils Comm	Elec. Utility	Princeton	MN	7	5	NG	IC
Reliant Energy Power Gen Inc	IPP	Reliant Choctaw County	MS	CTG1	154	NG	CT
Reliant Energy Power Gen Inc	IPP	Reliant Choctaw County	MS	CTG2	154	NG	CT
Reliant Energy Power Gen Inc	IPP	Reliant Choctaw County	MS	CTG3	154	NG	CT
Reliant Energy Power Gen Inc	IPP	Reliant Choctaw County	MS	STG1	311	NG	CA
Trigen-Cinergy Solutions College Park	IPP	UMCP CHP Plant	MD	3	5	NG	ST
Winfield City of	Elec. Utility	Strotherfield Substation	KS	1	2	DFO	IC
Wisconsin River Power Co		Juneau	WI	31	15	DFO	GT
Year-to-Date Capacity of New Units		-			29,966		
Year-to-Date Capacity of Retired Units					´		
Year-to-Date U.S. Capacity		-			932,692		
Planned							
2003							
August					12,495		
September					2,425		
October					5,636		
November					1,535		
December					4,744		
2004							
January					1,983		
February					212		
March					3,332		
April					2,207		
May					5,201		
June					11,182		
July					774		

¹ Net summer capacity is estimated.

Notes: •See Glossary for definitions. •Totals may not equal sum of components because of independent rounding. •Data are preliminary. Final data for the year are to be released in the Form EIA-860 annual databases. •Producer types are: CHP = Combined Heat and Power; Elec. Utility = Electric Utility; and IPP = Independent Power Producer. •For definitions of codes for energy sources and prime movers, access Form EIA-860 at http://www.eia.doe.gov/cneaf/electricity/page/forms.htm.

Source: Energy Information Administration, Form EIA-860, "Annual Electric Generator Report."

Chapter 1. Net Generation

Table 1.1. Net Generation by Energy Source: Total (All Sectors), 1990 through May 2003 (Thousand Megawatthours)

		ĭ	1						
Period	Coal ¹	Petroleum ²	Natural Gas	Other Gases ³	Nuclear	Hydro- electric ⁴	Other Renewables ⁵	Other ⁶	Total
1990	1,594,011	126,621	372,765	10,383	576,862	289,358	64,372	3,616	3,037,988
1991	1,590,623	119,752	381,553	11,336	612,565	284,453	68,779	4,739	3,073,799
1992	1,621,206	100,154	404,074	13,270	618,776	248,911	73,770	3,720	3,083,882
1993	1,690,070	112,788	414,927	12,956	610,291	276,458	76,213	3,487	3,197,191
1994	1,690,694	105,901	460,219	13,319	640,440	256,748	76,535	3,667	3,247,522
1995	1,709,426	74,554	496,058	13,870	673,402	308,108	73,965	4,104	3,353,487
1996	1,795,196	81,411	455,056	14,356	674,729	344.074	75,796	3,571	3,444,188
1997	1,845,016	92,555	479,399	13,351	628,644	352,413	77,183	3,612	3,492,172
	1,873,516	128,800	531,257		,	,	77,088	3,571	
1998				13,492	673,702	318,868		4,024	3,620,295
1999	1,881,087	118,061	556,396	14,126	728,254	313,439	79,423 80,906	4,024 4,794	3,694,810
2000 2001	1,966,265	111,221	601,038	13,955	753,893	270,034	80,906	4,794	3,802,105
	177,287	18,112	42,389	718	68,707	18,263	6,635	381	332,493
January	,	,				,	,		,
February	149,735	10,342	37,967	676	61,272	16,766	5,850	332	282,940
March	155,269	11,733	44,364	769	62,141	19,704	6,386	341	300,707
April	140,671	10,863	45,843	698	56,003	17,217	6,422	362	278,079
May	151,593	10,390	50,934	785	61,512	18,553	6,353	371	300,492
June	162,616	11,823	57,603	733	68,023	19,954	6,580	362	327,694
July	179,060	11,042	73,030	840	69,166	17,208	6,872	394	357,614
August	183,116	14,229	78,410	848	68,389	18,199	6,913	428	370,533
September	154,158	7,342	60,181	767	63,378	14,328	6,356	417	306,929
October	148,931	6,534	56,376	737	60,461	14,619	6,644	431	294,734
November	144,117	5,931	44,491	699	62,342	14,602	6,305	448	278,934
December	157,402	6,539	47,541	770	67,431	18,724	6,667	423	305,496
Total	1,903,956	124,880	639,129	9,039	768,826	208,138	77,985	4,690	3,736,644
2002									
January	164,255	6,079	48,656	995	70,926	20,893	7,168	415	319,385
February	141,769	5,314	44,343	809	61,658	19,552	6,282	391	280,118
March	153,359	7,924	50,975	969	63,041	20,360	6,977	391	303,995
April	141,669	7,497	48,793	1,000	58,437	23,900	6,928	379	288,603
May	151,011	7,826	50,064	1,078	63,032	26,491	7,168	394	307,063
June	164,530	7,473	65,567	1,073	66,372	27,489	7,336	397	340,238
July	182,105	9.395	84,595	1,175	70,421	24,410	7,413	648	380,161
August	178,027	9,186	82,621	1,203	70,778	19,892	7,320	415	369,442
September	165,119	7,625	67,886	1,064	64,481	15,866	6,922	604	329,566
October	158,177	7,829	54,480	972	60,493	16,246	6,853	727	305,777
November	155,625	6,164	43,931	908	61,520	18,940	6,587	366	294,041
December	170,796	7,545	43,928	872	68,905	20,834	6,856	426	320,162
Total	1,926,442	89,856	685,840	12,116	780,064	254,873	83,809	5,552	3,838,552
2003	1,720,772	07,030	005,040	12,110	700,004	234,073	05,007	3,332	3,030,332
January	180,632	12,338	48,684	908	69,211	18,954	6,432	344	337,504
February	156.063	10.560	43,291	730	60,942	18,856	6.038	256	296,735
	154,690	10,380	45,291	900	59,933	,	- ,	533	303,087
March	,	8,148	43,341	734	59,933 56,776	23,552 24,448	7,254 7,100	498	,
April	141,676								282,721
May	149,296	7,971	47,854	757	62,194	29,309	6,709	460	304,550
Total	782,358	49,339	229,071	4,029	309,056	115,118	33,533	2,091	1,524,596
Year to Date	77455	(1.440	221.465	2.646	200.626	00.503	21.645	1 707	1 404 510
2001	774,555	61,440	221,497	3,646	309,636	90,503	31,647	1,787	1,494,710
2002	752,063	34,639	242,830	4,850	317,094	111,197	34,522	1,970	1,499,165
2003	782,358	49,339	229,071	4,029	309,056	115,118	33,533	2,091	1,524,596
Rolling 12 Months End		00.0					20.05		
2002	1,881,464	98,080	660,462	10,243	776,285	228,831	80,860	4,873	3,741,098
2003	1,956,737	104,556	672,081	11,295	772,026	258,794	82,820	5,673	3,863,982

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for 2001 and prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁴ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

⁶ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Table 1.2. Net Generation by Energy Source: Electric Utilities, 1990 through May 2003 (Thousand Megawatthours)

	10 40 4114 1114	gawaiiiiouis	, 						
Period	Coal ¹	Petroleum ²	Natural Gas	Other Gases ³	Nuclear	Hydro- electric ⁴	Other Renewables ⁵	Other ⁶	Total
1990	1,559,606	117,017	264,089		576,862	279,926	10,651	_	2,808,151
1991	1,551,167	111,463	264,172		612,565	275,519	10,137	_	2,825,023
1992	1,575,895	88,916	263,872		618,776	239,559	10,200		2,797,219
1993	1,639,151	99,539	258,915		610,291	265,063	9,565		2,882,525
1994	1,635,493	91,039	291,115		640,440	243,693	8,933		2,910,712
1995	1,652,914	60,844	307,306		673,402	293,653	6,409		2,994,529
1996	1,737,453	67,346	262,730	 	674,729	327,970	7,214		3,077,442
1997	1,787,806	77,753	283,625		628,644	337,234	7,462	 	3,122,523
		110,158			,		7,402		, ,
1998	1,807,480		309,222		673,702	304,403			3,212,171
1999	1,767,679	86,929	296,381		725,036	293,932	3,716		3,173,674
2000	1,696,619	72,180	290,715		705,433	248,195	2,241		3,015,383
2001	143,856	11,374	15,553		48,876	16,591	217		236,467
January	,	,	,		,	,	184		199,802
February	121,453	5,985	13,533		43,547	15,099			
March	127,005	6,742	16,649		43,477	17,865	206		211,942
April	115,801	6,822	20,528		39,042	15,107	199		197,499
May	125,839	6,968	22,552		43,312	16,682	153		215,508
June	134,020	7,753	25,724		47,850	18,097	178		233,622
July	147,094	7,215	34,660		48,447	15,816	168		253,400
August	149,494	8,929	34,997		48,266	17,032	183		258,901
September	126,403	5,204	25,258		43,857	13,343	171		214,236
October	121,985	4,245	23,085		41,177	13,634	181		204,307
November	117,870	3,746	15,778		41,415	13,555	155		192,518
December	129,326	3,925	16,117		44,941	17,278	157		211,742
Total	1,560,146	78,908	264,434		534,207	190,100	2,152	-	2,629,946
2002									
January	131,240	4,005	15,797	*	46,960	19,585	167		217,754
February	112,621	3,140	14,198	*	40,348	17,839	156		188,303
March	119,116	4,960	16,548	*	42,230	18,249	183		201,286
April	110,735	5,155	16,996	*	39,054	21,164	135		193,239
May	120,212	5,532	17,993	*	40,469	23,521	143		207,869
June	130,582	5,055	23,795	*	42,988	25,073	126		227,620
July	143,690	5,696	29,810	*	46,101	22,914	151		248,363
August	140,629	5,663	29,789	*	45,960	18,875	178		241,094
September	129,329	5,174	23,252	*	41,859	14,964	193		214,772
October	123,692	5,003	17,776	*	39,233	15,007	199		200,909
November	120,646	3,695	13,027	*	38,577	17,100	196		193,240
December	132,645	4,318	11,960	*	43,601	18,730	212		211,466
Total	1,515,137	57,394	230,943	3	507,380	233,021	2,039		2,545,917
2003	1,515,157	31,074	230,743	3	307,300	233,021	2,000		2,545,717
January	139,501	6,204	13,994	1	42,871	17,153	209		219,933
February	120,558	4.899	12,299	1	37,995	17,133	189		193.289
	120,338	,	13,460	1	36,786	21.143	220		197,193
March	120,068	5,515 4,694	13,460	1	36,786 34,524	21,143	198		186,681
April				1					
May	119,945	5,805	16,841	3	37,483	26,148	213		206,434
Total	611,158	27,118	70,934	3	189,659	103,629	1,029		1,003,530
Year to Date	(22.05.1	25.001	00.017		210.251	01.245	050		1.061.212
2001	633,954	37,891	88,815		218,254	81,345	959 704	-	1,061,219
2002	593,924	22,791	81,532	1	209,061	100,358	784	_	1,008,452
2003	611,158	27,118	70,934	3	189,659	103,629	1,029	-	1,003,530
Rolling 12 Months En									
2002	1,520,115	63,808	257,151	1	525,014	209,113	1,977	_	2,577,179
2003	1,532,371	61,721	220,344	5	487,978	236,291	2,284		2,540,995

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for 2001 and prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁴ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

⁶ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table 1.3. Net Generation by Energy Source: Independent Power Producers, 1990 through May 2003 (Thousand Megawatthours)

(11)	iousand ivie	gawatthours)						
Period	Coal ¹	Petroleum ²	Natural Gas	Other Gases ³	Nuclear	Hydro- electric ⁴	Other Renewables ⁵	Other ⁶	Total
1990	12,503	1.847	45,397	621		6,319	26,471	12	93,171
1991	17,679	1,335	53,602	719		5,959	30,842	403	110,538
1992	21,818	3,322	70,403	1,212		6,280	33,640	480	137,154
1993	26,313	5,886	83,307	967		8,425	36,067	408	161,372
1994	30,783	7,638	94,574	1.092		6,934	36,753	239	178,013
1995	33,142	7,302	111,873	1,927		9,033	36,213	213	199,702
1996	34,520	7,437	116,028	1,341		10,101	37,072	201	206,699
1997	32,955	8,726	115,971	1,533		9,375	38,228	63	206,852
1998	42,713	12,053	140,070	2,315		8,997	38,937	159	245,245
1999	90,938	24,610	176,615	1,607	3,218	14,635	44,548	139	356,309
2000	246,492	33,012	227,263	2,028	48,460	17,604	47,162	125	622,146
2001	240,492	33,012	227,203	2,020	40,400	17,004	47,102	123	022,140
January	31,447	6,022	19,707	40	19,831	1,431	3,789		82,269
February	26,606	3,832	18,103	42	17,725	1,425	3,436		71,169
March	26,447	4.465	20.804	45	18,664	1,425	3,837		75.758
	23,233	3.594	18,886	43	16,961	1,493	3,820		68,356
April	24,204	2,965	21,731	51		1,570	3,936		72,658
May	,	,	,		18,200	,	,		,
June	26,868	3,660	25,130	51 59	20,173	1,559	4,085		81,526
July	30,047	3,373	30,886		20,719	1,145	4,205		90,434
August	31,559	4,842	35,696	57	20,123	847	4,128		97,251
September	26,047	1,722	27,754	47	19,521	738	3,816		79,646
October	25,234	1,836	26,062	44	19,284	775	3,849		77,084
November	24,603	1,774	21,716	46	20,927	846	3,725		73,637
December	26,386	2,157	24,031	60	22,490	1,176	4,022		80,320
Total	322,681	40,241	290,506	586	234,619	14,826	46,648		950,107
2002									
January	31,190	1,604	25,196	179	23,966	1,024	4,266	45	87,470
February	27,564	1,784	23,271	98	21,310	1,399	3,687	68	79,181
March	32,474	2,518	26,923	141	20,810	1,785	4,289	27	88,968
April	29,249	1,934	25,287	105	19,383	2,335	4,222	*	82,516
May	29,096	1,885	25,167	112	22,564	2,574	4,497	17	85,910
June	32,096	2,015	34,598	95	23,384	2,093	4,601	36	98,918
July	36,386	3,224	46,466	125	24,319	1,222	4,546	88	116,376
August	35,508	3,059	44,695	142	24,818	776	4,511	46	113,556
September	33,972	2,062	37,281	105	22,622	691	4,085	56	100,873
October	32,632	2,367	30,317	154	21,260	916	4,046	21	91,712
November	33,187	2,030	24,625	124	22,943	1,377	3,829	13	88,128
December	36,248	2,739	25,755	73	25,305	1,551	4,169	37	95,878
Total	389,602	27,221	369,581	1,453	272,684	17,742	50,748	454	1,129,486
2003									
January	39,024	5,449	27,064	111	26,340	1,382	3,861	47	103,277
February	33,709	5,122	24,479	96	22,947	1,140	3,678	6	91,177
March	32,733	4,290	25,626	98	23,147	1,876	4,382	80	92,231
April	28,813	3,049	22,961	122	22,251	2,187	4,364	67	83,815
May	27,623	1,736	25,127	105	24,711	2,600	4,055	39	85,997
Total	161,902	19,646	125,256	532	119,396	9,185	20,340	240	456,498
Year to Date									
2001	131,938	20,878	99,231	222	91,382	7,741	18,819		370,210
2002	149,573	9,725	125,844	635	108,033	9,116	20,961	157	424,045
2003	161,902	19,646	125,256	532	119,396	9,185	20,340	240	456,498
Rolling 12 Months En		,0	,0		,	- ,-00	,		100,100
2002	340,316	29,088	317,118	1,000	251,270	16,202	48,791	157	1,003,943
2003	401,931	37,142	368,994	1,349	284,048	17,811	50,127	537	1,161,938
		· · · · · · ·	-00,221	-,,		1.,011	J.,		-,

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for 2001 and prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁴ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

⁶ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table 1.4. Net Generation by Energy Source: Commercial Combined Heat and Power Sector, 1990 through May 2003

(Thousand Megawatthours)

Period	Coal ¹	Petroleum ²	Natural Gas	Other Gases ³	Nuclear	Hydro- electric ⁴	Other Renewables ⁵	Other ⁶	Total
1990	796	589	3,272	121	_	138	922		5,837
1991	775	413	3,213	116		131	1,010	1	5,659
1992	749	302	3,867	105		122	1,082	1	6,228
1993	864	334	4,471	100		100	1,132	*	7,000
1994	850	417	4,929	115		93	1,216		7,619
1995	998	379	5,162			118	1,575	*	8,232
1996	1,051	369	5,249	*		126	2,235	*	9,030
1997	1,040	427	4,725	3		120	2,385	*	8,701
1998	985	383	4,879	7		120	2,373		8,748
1999	995	434	4,607	*		115	2,412	*	8,563
2000	1,097	432	4,262	*		100	2,012	*	7,903
2001	, , ,								,
January	88	61	361			6	112		629
February	86	39	311	*		6	106		548
March	83	38	321			7	104		553
April	65	32	331			7	116	*	550
May	73	33	334			7	129	*	575
June	84	33	344	*		7	130		598
July	101	36	455			5	136		732
August	115	39	525			4	130	*	814
September	84	31	388			4	129		636
October	72	36	384			4	127	*	622
November	68	29	327			4	120	*	548
December	77	32	354			5	144	*	611
Total	995	438	4,434	*		66	1,482	*	7,416
2002	773	430	4,434			00	1,402		7,410
January	88	27	364			5	146		630
February	72	29	307			5	120	*	533
March	90	32	380	*		7	137	*	646
April	66	22	329			14	143	*	575
May	69	24	309	*		14	150		566
June	87	27	406			9	145		674
July	106	43	887			8	156	*	1,200
	107	41	829			7	138	*	1,121
August September	91	29	665			4	164		953
October	81	29	390			3	178		681
November	83	26	267			3	149		528
	83 91	49	309			4	154		607
December	1,031	37 9	5,442	*		84	1,778	*	
Total 2003	1,031	319	5,442		-	04	1,776		8,714
	90	0.0	276	*		6	122	*	703
January	90 86	98 77	376 293	*		6 6	133 122	*	703 584
February	85	42		*		9		2	
March			356	*			168	2	662
April	81	23	341	*		12	172	<i>Z</i>	632
May	66	23	415	*		22	169		694
Total	409	263	1,781	*		53	764	4	3,275
Year to Date	20.5	202	1.650	*		22	F.(.)	*	2.055
2001	395	202	1,658	*		33	566	*	2,855
2002	386	134	1,689	*		46	694		2,951
2003	409	263	1,781	*		53	764	4	3,275
Rolling 12 Months En		250	4.42=	*		00	1.600	*	7.512
2002	987	370	4,465	*		80	1,609		7,512
2003	1,053	507	5,534	*		91	1,848	4	9,038

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: •See Glossary for definitions.•Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Values for 2001 and prior years are final.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁴ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁵ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic

energy, and wind.

⁶ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table 1.5. Net Generation by Energy Source: Industrial Combined Heat and Power Sector, 1990 through May

(Thousand Megawatthours)

Period	Coal ¹	Petroleum ²	Natural Gas	Other Gases ³	Nuclear	Hydro- electric ⁴	Other Renewables ⁵	Other ⁶	Total
1990	21,107	7,169	60,007	9,641	_	2,975	26,328	3,604	130,830
1991	21,002	6,540	60,567	10,501		2,844	26,791	4,336	132,579
1992	22,743	7,615	65,933	11,953		2,950	28,847	3,239	143,280
1993	23,742	7,028	68,234	11,890		2,871	29,450	3,079	146,294
1994	23,568	6,808	69,600	12,112		6,028	29,633	3,428	151,178
1995	22,372	6,030	71,717	11,943		5,304	29,768	3,890	151,025
1996	22,172	6,260	71,049	13,015		5,878	29,274	3,370	151,017
1997	23,214	5,649	75,078	11,814		5,685	29,107	3,549	154,097
1998	22,337	6,206	77,085	11,170		5,349	28,572	3,412	154,132
1999	21,474	6,088	78,793	12,519	<u></u>	4,758	28,747	3,885	156,264
2000	22,056	5,597	78,798	11,927		4,135	29,491	4,669	156,673
2001	22,030	3,371	70,770	11,927		4,133	29,491	4,009	130,073
	1,895	654	6 767	678		234	2,518	381	13,128
January			6,767				,		
February	1,590	486	6,019	633		235	2,124	332	11,421
March	1,734	489	6,590	724		338	2,238	341	12,454
April	1,572	416	6,099	655		283	2,288	362	11,674
May	1,477	424	6,317	734		293	2,135	371	11,751
June	1,644	377	6,405	682		291	2,188	362	11,949
July	1,818	419	7,030	781		242	2,364	394	13,048
August	1,949	419	7,191	791		316	2,472	428	13,566
September	1,625	386	6,782	720		243	2,240	417	12,412
October	1,640	417	6,845	693		206	2,488	431	12,721
November	1,576	381	6,670	653		198	2,305	448	12,230
December	1,614	425	7,040	710		265	2,345	423	12,822
Total	20,135	5,293	79,755	8,454		3,145	27,703	4,690	149,175
2002									
January	1,737	442	7,299	816		279	2,589	370	13,531
February	1,512	361	6,566	710		309	2,319	323	12,100
March	1,679	415	7,124	828		318	2,368	364	13,095
April	1,618	386	6,181	894		387	2,429	379	12,274
May	1,634	384	6,596	966		382	2,378	378	12,717
June	1,765	376	6,768	978		313	2,464	361	13,026
July	1,924	431	7,433	1,049		266	2,561	559	14,222
August	1,783	424	7,307	1,061		234	2,493	370	13,671
September	1,727	361	6,688	959		207	2,480	548	12,968
	1,773	430	5,996	817		320	2,432	706	12,475
October	1,709	413	6,012	784		460	2,432	353	12,144
November			,	798			,		,
December	1,812	438	5,904			550 4.035	2,320	389	12,211
Total	20,672	4,863	79,874	10,659		4,025	29,244	5,098	154,435
2003	2.017	505	7.250	707		410	2.220	207	12.501
January	2,017	587	7,250	797		413	2,229	297	13,591
February	1,710	462	6,220	633		362	2,049	249	11,685
March	1,804	476	6,460	802		524	2,484	451	13,001
April	1,696	381	5,698	610		414	2,365	428	11,593
May	1,663	406	5,472	652		539	2,272	421	11,425
Total	8,890	2,313	31,100	3,494		2,251	11,399	1,847	61,293
Year to Date									
2001	8,268	2,468	31,793	3,424		1,384	11,303	1,787	60,427
2002	8,180	1,989	33,765	4,213		1,676	12,082	1,813	63,718
2003	8,890	2,313	31,100	3,494		2,251	11,399	1,847	61,293
Rolling 12 Months En	ding in May								
2002	20,046	4,814	81,728	9,243		3,437	28,483	4,716	152,465
2003	21,382	5,186	77,208	9,941		4,600	28,561	5,132	152,011

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form ÉIA-906. Values for 2001 and prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁴ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁵ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

⁶ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Table 1.6.A. Net Generation by State, May 2003 and 2002 (Thousand Megawatthours)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	tal (All Sector		Electric	Utilities		ent Power ucers	Comm	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	9,359	9,537	-1.9	484	682	8,281	8,128	NM	NM	536	665
Connecticut	2,478	2,825	-12.3	NM	NM	2,460	2,802	NM	NM	NM	NM
Maine	1,434	1,920	-25.3	NM	NM	929	1,318	16	17	488	584
Massachusetts	3,175	3,298	-3.7	NM 406	NM	3,105	3,208	NM	NM	NM	NM
New Hampshire	1,455 259	618 502	135.3 -48.5	406 NM	397 NM	1,041 256	191 499	NM NM	NM NM	NM NM	NM NM
Vermont	559	374	49.4	66	262	490	109			NM	NM
Middle Atlantic	30,563	31,665	-3.5	6,188	6,108	23,751	24,717	NM	NM	551	757
New Jersey	3,954	4,070	-2.9	60	25	3,778	3,749	NM	NM	NM	NM
New York	10,429	11,368	-8.3	3,303	3,603	6,929	7,566	NM	NM	164	165
Pennsylvania	16,180	16,227	3	2,825	2,481	13,043	13,402	NM	NM	282	309
East North Central	47,022	48,749	-3.5	31,755	32,701	14,535	14,867	NM	NM	652	1,095
Illinois	14,483	14,612	9	1,586	1,233	12,780	13,026	NM	NM	NM	NM 202
Indiana	9,695 7,486	9,140 8,440	6.1 -11.3	9,110 6,448	8,503 7,183	385 872	229 1,084	NM 39	NM 40	184 NM	393 NM
Michigan	10,790	12,014	-11.3	10,328	11,519	432	447	NM	NM	NM	NM
Wisconsin	4,569	4,543	.6	4,284	4,263	66	81	NM	NM	210	188
West North Central	22,686	21,825	3.9	21,941	21,119	302	366	NM	NM	425	309
Iowa	3,049	3,398	-10.3	2,939	3,202	NM	NM	NM	NM	NM	NM
Kansas	3,732	3,415	9.3	3,690	3,363	40	49	NM	NM	NM	NM
Minnesota	4,284	3,912	9.5	3,770	3,547	137	161	NM	NM	369	193
Missouri	6,598	6,071	8.7	6,533	5,994	51	53	NM	NM	NM	NM
Nebraska	2,149	2,131	.8	2,144	2,124	NM	NM	NM	NM	NM	NM
North Dakota	2,201 673	2,322 576	-5.2 16.8	2,192 673	2,313 576					NM 	NM
South Atlantic	62,803	61,797	1.6	52,248	51,986	8,740	8,092	57	51	1,759	1,668
Delaware	297	397	-25.1	7	11	220	352			NM	NM
District of Columbia	2	-1	-362.0			2	-1				
Florida	18,198	17,266	5.4	16,121	15,434	1,710	1,343	NM	NM	359	481
Georgia	10,529	10,386	1.4	9,884	9,774	219	185	NM	NM	426	427
Maryland	3,312	3,318	2	NM	NM	3,263	3,310	NM	NM	43	4
North Carolina	9,967	9,565	4.2	8,888	8,867	661	425	NM	NM	410	267
South Carolina	7,630	7,571	.8	7,481	7,331	17	66 522	NM	NM 20	127	170
Virginia West Virginia	5,059 7,808	5,794 7,500	-12.7 4.1	4,301 5,561	5,073 5,495	552 2,096	533 1,878	33	30	173 150	158 127
East South Central	28,833	30,076	-4.1	26,524	27,855	1,364	1,242	NM	NM	937	972
Alabama	11,641	10,529	10.6	11,064	9,833	135	188			442	508
Kentucky	6,992	7,744	-9.7	6,151	6,771	808	936			NM	NM
Mississippi	4,009	4,211	-4.8	3,435	3,921	418	109	NM	NM	155	179
Tennessee	6,191	7,592	-18.5	5,874	7,331	NM	NM	NM	NM	307	248
West South Central	48,802	48,338	1.0	24,609	24,977	19,212	17,840	182	43	4,798	5,478
Arkansas	3,706	3,488	6.3	3,226	3,221	310	98	NM	NM	169	168
Louisiana	7,632	7,550	1.1	4,037	4,279	1,785	1,683	137	2	1,673	1,585
Oklahoma Texas	4,788 32,676	4,583 32,717	4.5 1	4,302 13,044	4,241 13,235	375 16,742	251 15,807	NM NM	NM NM	108 2,848	88 3,636
Mountain	25,863	26,725	-3.2	22,484	23,170	3,182	3,360	NM	NM	175	172
Arizona	7,435	7,848	-5.3	6,682	7,194	719	634	NM	NM	33	18
Colorado	3,704	3,884	-4.6	3,383	3,571	301	293	NM	NM	NM	NM
Idaho	1,235	1,072	15.2	1,015	880	169	142			NM	NM
Montana	1,988	2,377	-16.4	644	654	1,337	1,718			7	5
Nevada	1,987	2,598	-23.5	1,512	2,145	475	454				
New Mexico	2,921	2,695	8.4	2,859	2,643	46	32	NM	NM	NM	NM
Utah	3,386	2,978	13.7	3,322	2,918	42	37	NM	NM	NM	NM
Wyoming	3,207	3,273	-2.0	3,068	3,166	94 6 255	6 003	195	170	NM 1,468	NM 1 499
Pacific Contiguous California	27,113 15,107	26,924 13,621	.7 10.9	19,205 8,116	18,273 6,072	6,255 5,488	6,993 6,058	185 162	170 154	1,468	1,488 1,338
Oregon	3,797	4,033	-5.9	3,393	3,624	341	336	NM	NM	62	72
Washington	8,210	9,270	-11.4	7,696	8,577	426	599	NM	NM	64	78
Pacific Noncontiguous	1,505	1,427	5.5	996	998	375	306	NM	NM	124	113
Alaska	575	540	6.4	472	441	NM	NM	NM	NM	NM	NM
Hawaii	931	887	4.9	524	557	358	289			NM	NM
U.S. Total	304,550	307,063	8	206,434	207,869	85,997	85,910	694	566	11,425	12,717

 $NM = Not \ meaningful \ due \ to \ large \ relative \ standard \ error \ or \ excessive \ percentage \ change.$

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. •Negative generation denotes that electric power consumed for plant use exceeds gross generation. •Totals may not equal sum of components because of independent rounding. •Percent difference is calculated before rounding. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.6.B. Net Generation by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	Power Producers	
Census Division and State	Tot	al (All Sector		Electric	Utilities	Independe Produ		Comm	ercial	Indu	strial	
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002	
New England	50,320	48,419	3.9	2,784	7,035	44,437	37,901	290	344	2,810	3,138	
Connecticut	12,810	12,339	3.8	NM	NM	12,698	12,222	NM	NM	NM	NM	
Maine	7,979	8,789	-9.2	NM	NM	5,452	5,976	71	77	2,455	2,734	
Massachusetts	17,759	16,162	9.9	124	65	17,294	15,690	168	236	NM	NM	
New Hampshire	7,345	6,110	20.2	2,373	5,131	4,875	846	NM	NM	NM	NM	
Rhode Island	1,833	2,772	-33.9	NM	NM	1,805	2,756	NM	NM	NM	NM	
Vermont	2,595	2,247	15.5	267	1,825	2,313	411	207	410	14	11	
Middle Atlantic	1 60,471 22,765	158,772 22,640	1.1	29,055 749	28,631 410	128,043	125,829 20,735	397 NM	418 NM	2,975 614	3,895	
New York	54,547	56,345	.6 -3.2	16,608	16,323	21,347 36,928	38,945	193	181	819	1,426 896	
Pennsylvania	83,159	79,787	4.2	11,699	11,898	69,769	66,149	149	168	1,543	1,573	
East North Central	252,160	244,050	3.3	169,866	168,301	77,637	70,271	435	433	4,221	5,045	
Illinois	77,646	71,343	8.8	8,211	10,223	68,239	59,771	NM	NM	1,113	1,250	
Indiana	50,096	47,372	5.7	47,229	43,606	1,605	1,782	NM	NM	1,174	1,893	
Michigan	43,344	44,361	-2.3	37,506	37,676	5,002	5,805	202	181	634	699	
Ohio	57,398	58,697	-2.2	54,873	56,070	2,344	2,393	NM	NM	NM	NM	
Wisconsin	23,677	22,277	6.3	22,047	20,724	448	519	NM	NM	1,127	977	
West North Central	119,242	113,662	4.9	115,390	109,996	1,674	1,935	NM	NM	2,032	1,582	
Iowa	16,795	16,955	9	15,906	15,922	459	522	NM	NM	378	460	
Kansas	19,098	17,774	7.4	18,816	17,513	199	246	NM	NM	82	14	
Minnesota	21,886	20,948	4.5	19,647	19,036	779	922	NM	NM	1,415	936	
Missouri	34,007	30,210	12.6	33,656	29,850	234	241	41	37	NM	NM	
Nebraska	11,701	12,291	-4.8	11,671	12,261	NM	NM	NM	NM	NM	NM	
North Dakota	12,712	12,541	1.4	12,652	12,471					NM	NM	
South Dakota	3,043	2,943	3.4	3,043	2,943							
South Atlantic	311,811	296,186	5.3	251,880	243,785	50,741	43,228	388	298	8,802	8,874	
Delaware	3,077	1,908	61.2	39	70	2,799	1,672			239	166	
District of Columbia	38	37	1.3			38	37					
Florida	77,428	75,069	3.1	68,664	66,044	6,887	6,400	NM	NM	1,837	2,582	
Georgia	49,576	47,904	3.5	46,109	44,974	1,376	630	NM	NM	2,090	2,300	
Maryland	20,529	16,806	22.2	NM	NM	20,279	16,771	NM	NM	219	12	
North Carolina	52,758	47,799	10.4	47,860	43,465	2,798	2,745	NM	NM	2,056	1,549	
South Carolina	39,608	38,712	2.3	38,742	37,613	120	343	NM	NM	727	733	
Virginia	28,965	29,495	-1.8	23,321	25,444	4,484	3,039	274	182	886	831	
West Virginia	39,833	38,455	3.6	27,125	26,162	11,960	11,591	 ND4		748	702	
East South Central	144,058	148,379	-2.9	133,019	136,872	6,276	6,429	NM	NM	4,712	4,993	
Alabama	53,465	50,286	6.3 -2.9	50,310	47,291	787	378	9	37	2,369 179	2,617 234	
Kentucky	37,613 17,503	38,736 20,063	-2.9	33,441 15,299	33,753 17,870	3,984 1,474	4,713 1,294	NM	NM	722	891	
Mississippi	35,477	39,293	-12.8 -9.7	33,969	37,959	NM	NM	NM	NM	1,442	1,251	
West South Central	223,808	223,308	.2	107,108	114,628	89,377	81,116	575	207	26,748	27,357	
Arkansas	18,091	18,314	-1.2	15,770	16,896	1,387	559	NM	NM	930	856	
Louisiana	34,388	34,343	.1	16,345	19,165	8,484	7,381	376	9	9,184	7,789	
Oklahoma	22,309	21,880	2.0	19,668	19,668	2,042	1,691	NM	NM	591	511	
Texas	149,019	148,772	.2	55,325	58,900	77,464	71,485	186	185	16,043	18,202	
Mountain	124,834	126,639	-1.4	106,890	108,779	16,936	16,814	NM	NM	897	928	
Arizona	35,278	36,593	-3.6	31,071	33,042	4,052	3,431	NM	NM	147	112	
Colorado	18,113	18,154	2	16,669	16,606	1,337	1,441	NM	NM	NM	NM	
Idaho	4,065	4,195	-3.1	3,381	3,498	407	424			277	273	
Montana	9,655	10,478	-7.9	2,089	2,267	7,533	8,183			33	27	
Nevada	11,345	12,412	-8.6	8,600	9,713	2,745	2,699					
New Mexico	13,399	12,383	8.2	13,114	12,055	203	197	NM	NM	NM	NM	
Utah	15,086	14,755	2.2	14,802	14,476	173	171	NM	NM	NM	NM	
Wyoming	17,894	17,668	1.3	17,165	17,123	485	269			244	277	
Pacific Contiguous	130,565	132,558	-1.5	82,471	85,292	39,802	39,060	812	841	7,481	7,365	
California	69,048	68,842	.3	30,601	30,359	30,939	31,107	743	759	6,766	6,618	
Oregon	21,152	21,169	1	17,708	18,122	3,100	2,702	NM	NM	343	342	
Washington	40,365	42,548	-5.1	34,162	36,812	5,763	5,252	NM	NM	372	405	
Pacific Noncontiguous	7,324	7,192	1.8	5,066	5,132	1,574	1,461	NM	NM	615	541	
Alaska	3,037	2,983	1.8	2,469	2,467	NM	NM	NM	NM	397	365	
Hawaii	4,287	4,208	1.9	2,597	2,665	1,473	1,367	2 275	2.051	NM	NM	
U.S. Total	1,524,596	1,499,165	1.7	1,003,530	1,008,452	456,498	424,045	3,275	2,951	61,293	63,718	

 $[{]m NM}$ = Not meaningful due to large relative standard error or excessive percentage change.

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Negative generation denotes that electric power consumed for plant use exceeds gross generation. Totals may not equal sum of components because of independent rounding. Percent difference is calculated before rounding. Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.7.A. Net Generation from Coal by State, May 2003 and 2002 (Thousand Megawatthours)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	tal (All Sector	rs) Percent	Electric	Utilities		ent Power ucers	Comm	nercial	Indu	strial
	May 2003	May 2002	Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	1,480	1,132	30.7	191	206	1,254	885			NM	NM
Connecticut	352	197	78.2			352	197				
Maine		59	-16.7			17	21			33	38
Massachusetts		670	32.4			885	667			NM	NM
New Hampshire		206	-7.1	191	206						
Rhode Island											
Vermont Middle Atlantic	10,507	10,505	*	1,709	1,239	8,613	9,090	NM	NM	183	173
New Jersey		426	-17.6	45	16	307	411		14141	105	
New York		1,592	.3	108	105	1,431	1,424	NM	NM	56	60
Pennsylvania		8,487	.8	1,556	1,118	6,875	7,255	NM	NM	NM	NM
East North Central	34,122	34,374	7	28,746	28,125	5,128	5,812	NM	NM	NM	NM
Illinois	6,109	6,654	-8.2	1,561	1,215	4,487	5,194	NM	NM	NM	NM
Indiana		8,531	6.6	8,843	8,357	232	160	NM	NM	NM	NM
Michigan		5,076	2.7	5,122	4,962	26	43	18	17	NM	NM
Ohio		10,923	-2.5	10,256	10,489	382	415	NM	NM	NM	NM
Wisconsin		3,190	-4.3	2,964	3,102	*		NM	NM	NM	NM
West North Central	17,204	16,529	4.1	16,852	16,284	NM	NM	NM	NM	338	222
Iowa		2,827	-13.4	2,412	2,735	NM	NM	NM	NM	NM	NM
Kansas		2,620	2.8	2,694 2,743	2,620					296	127
Minnesota		2,281 4,714	33.2 16.4	2,743 5,477	2,153 4,695			*	6	296 NM	NM
Missouri Nebraska	,	1,632	-27.1	1,186	1,627			· 		NM	NM
North Dakota		2,207	-7.5	2,036	2,204					NM	NM
South Dakota		249	22.2	304	249						
South Atlantic	31,689	32,163	-1.5	26,470	26,895	4,886	4,959	NM	NM	325	303
Delaware		267	-29.7			182	261			NM	NM
District of Columbia											
Florida	5,369	4,911	9.3	4,867	4,621	481	270			21	19
Georgia		6,456	-1.3	6,304	6,382					71	74
Maryland		2,084	-26.2	4.002		1,513	2,084			26	
North Carolina	5,332	5,195	2.6	4,993	4,944	281	183	NM	NM	49	62
South Carolina		3,200	-13.2	2,749	3,159	406	339		*	27 60	40 53
Virginia West Virginia		2,731 7,320	-7.9 3.7	2,050 5,508	2,339 5,449	2,022	1,822			65	48
East South Central	18,071	19,346	- 6.6	17,039	18,242	867	932	NM	NM	162	168
Alabama		5,484	13.2	6,156	5,439	20	17			32	28
Kentucky		7,024	-9.3	5,789	6,109	580	915				
Mississippi		1,604	33.2	1,869	1,604	267				1	
Tennessee		5,235	-35.8	3,225	5,091			NM	NM	129	140
West South Central	19,011	18,616	2.1	13,451	13,045	5,264	5,343			296	227
Arkansas		1,599	-2.1	1,559	1,593					7	6
Louisiana		1,855	13.1	1,066	869	1,028	983			4	3
Oklahoma		2,873	3.5	2,829	2,674	112	166			32	33
Texas		12,288	.7	7,997	7,909	4,124	4,194			252	185
Mountain	16,546	17,281	-4.3	15,455	15,837	1,029	1,398			NM	NM
Arizona		3,254	-7.3	2,983	3,237	 >D.4	 >D/			33	17
Colorado	2,891	3,030	-4.6	2,867	3,010	NM	NM			NIM	NIM
Idaho		NM 1,360	-31.1	30	17	907	1,343			NM 	NM
Montana Nevada		1,387	-31.1 -36.3	884	1,387	907	1,343				
New Mexico		2,375	8.3	2,571	2,375						
Utah		2,758	15.0	3,127	2,717	35	35			NM	NM
Wyoming		3,111	-1.3	2,992	3,094	63				NM	NM
Pacific Contiguous	482	903	-46.6	15	319	421	538	NM	NM	46	45
California		166	26.9			167	123			44	43
Oregon	NM	NM		15	319					NM	NM
Washington		418	-38.7			254	415	NM	NM	1	2
Pacific Noncontiguous		160	14.8	18	18	153	129	NM	NM	NM	NM
Alaska		NM		18	18	NM	NM	NM	NM		
Hawaii	140 149,296	115 151,011	22.3 -1.1	119,945	120,212	137 27,623	112 29,096	66	69	NM 1,663	NM 1,634

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Negative generation denotes that electric power consumed for plant use exceeds gross generation.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Table 1.7.B. Net Generation from Coal by State, Year-to-Date through May (Thousand Megawatthours)

				Electric Po	wer Sector		Combine	ed Heat and	Power Pro	ducers	
Census Division and State	Tota	ıl (All Secto	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	8,277	7,470	10.8	1,368	1,465	6,722	5,765		-	187	239
Connecticut	1,795	1,372	30.9			1,795	1,372				
Maine	249	320	-22.1			79	102			170	218
Massachusetts	4,865	4,313	12.8			4,847	4,292			NM	NM
New Hampshire	1,368	1,465	-6.7	1,368	1,465						
Rhode Island											
Vermont Middle Atlantic	60,250	58,422	3.1	7,696	7,023	51,583	50,457	NM	NM	957	930
New Jersey	3,518	3,136	12.2	685	391	2,832	2,745		14141		
New York	9,910	10,620	-6.7	667	551	8,932	9,744	NM	NM	300	314
Pennsylvania	46,822	44,666	4.8	6,345	6,081	39,819	37,967	NM	NM	657	616
East North Central	180,241	169,252	6.5	148,417	141,860	30,019	25,503	198	187	1,606	1,703
Illinois	35,422	32,715	8.3	8,055	9,947	26,617	21,923	NM	NM	736	832
Indiana	47,629	44,014	8.2	46,322	42,713	1,216	1,213	NM	NM	NM	NM
Michigan	27,164	25,182	7.9	26,649	24,639	154	159	96	86	NM	NM
Ohio	54,044	52,456	3.0	51,911	50,147	2,027	2,207	NM	NM	NM	NM
Wisconsin	15,981	14,886	7.4	15,480	14,413	5 NIM		NM	NM NM	480	455
West North Central Iowa	93,089 14,383	86,817 13,971	7.2 2.9	91,412 13,955	85,649 13,472	NM NM	NM NM	NM NM	NM NM	1,551 340	1,048 413
Kansas	13,888	13,818	.5	13,888	13,472	INIVI	11111	INIVI	11111	340	413
Minnesota	14,372	13,250	8.5	13,285	12,746					1,087	503
Missouri	29,021	24,353	19.2	28,914	24,245			37	33	NM	NM
Nebraska	8,040	7,926	1.4	8,022	7,907					NM	NM
North Dakota	11,916	12,001	7	11,881	11,962					NM	NM
South Dakota	1,468	1,499	-2.1	1,468	1,499						
South Atlantic	166,072	160,333	3.6	132,850	130,432	31,418	28,141	NM	NM	1,764	1,722
Delaware	1,805	1,098	64.4			1,771	1,066			NM	NM
District of Columbia											
Florida	23,561	22,583	4.3	21,508	20,513	1,985	1,964			68	106
Georgia	30,724	31,538	-2.6	30,366	31,153	11 771	10.400			359	384
Maryland North Carolina	11,907 30,147	10,400 28,033	14.5 7.5	28,378	26,457	11,771 1,418	10,400 1,184	NM	NM	135 311	356
South Carolina	14,556	14,668	8	14,362	14,487	1,410	1,164	INIVI		194	180
Virginia	14,500	14,377	.9	11,368	11,891	2,822	2,194		2	310	289
West Virginia	38,872	37,637	3.3	26,869	25,930	11,651	11,333			352	374
East South Central	92,918	91,630	1.4	87,827	86,084	4,225	4,719	NM	NM	844	807
Alabama	29,257	25,257	15.8	29,010	25,034	86	71			162	151
Kentucky	34,937	35,811	-2.4	31,542	31,162	3,396	4,649				
Mississippi	7,915	5,314	48.9	7,160	5,314	744				10	
Tennessee	20,808	25,249	-17.6	20,115	24,574			NM	NM	672	656
West South Central	90,263	86,482	4.4	62,596	62,114	26,231	23,148		-	1,436	1,221
Arkansas	7,619	8,842	-13.8	7,564	8,808	4 9 6 0	4 272			55	33
LouisianaOklahoma	8,965 14,968	8,473 13,788	5.8 8.6	4,053 13,974	4,084	4,869 786	4,372 756			44 208	17 178
Texas	58,711	55,380	8.0 6.0	37,005	12,854 36,367	20,577	18,020			1,129	992
Mountain	84,177	84,720	6	77,360	77,555	6,503	6,892			314	273
Arizona	14,383	15,436	-6.8	14,237	15,326					145	109
Colorado	14,506	14,207	2.1	14,385	14,095	121	112				
Idaho	NM	NM								NM	NM
Montana	6,129	6,726	-8.9	127	106	6,001	6,620				
Nevada	5,790	6,533	-11.4	5,790	6,533						
New Mexico	11,994	10,893	10.1	11,994	10,893						
Utah	14,125	13,978	1.1	13,928	13,776	158	160			NM	NM
Wyoming	17,220	16,919	1.8	16,899	16,826	222	4 204	NIM.	 NM	NM 212	NM
Pacific Contiguous	6,152	6,083	1.1	1,546	1,656	4,390	4,204	NM	NM	213	220
California	895 1,551	926 1,654	-3.4 -6.2	1,546	1,656	698	725			197 NM	201 NM
Washington	3,706	3,502	-6.2 5.8	1,546	1,030	3,692	3,479	NM	NM	11	20
Pacific Noncontiguous	920	853	7.8	84	86	760	696	NM	NM	NM	NM
Alaska	NM	NM	7.6	84	86	NM	NM	NM	NM	14141	11171
Hawaii	679	620	9.6			661	603			NM	NM
	782,358	752,063	4.0	611,158	593,924	161,902	149,573	409	386	8,890	8,180

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Negative generation denotes that electric power consumed for plant use exceeds gross generation.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Table 1.8.A. Net Generation from Petroleum by State, May 2003 and 2002 (Thousand Megawatthours)

	_				Electric Po	wer Sector		Combin	ed Heat and	d Power Pr	oducers
Census Division and State	То	tal (All Sector		Electric	Utilities		ent Power ucers	Comn	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	544	748	-27.3	188	74	286	589	16	16	53	69
Connecticut		122	-90.0	NM	NM	11	120	NM	NM	NM	NM
Maine	83	86	-2.8			39	26	*	*	44	59
Massachusetts	253	463	-45.3	NM	NM	226	442	14	13	NM	NM
New Hampshire Rhode Island	192 NM	73 NM	161.3	180 NM	71 NM	10	*	NM NM	NM NM	NM NM	NM NM
Vermont	NM	NM		NM	NM						
Middle Atlantic	1,125	1,113	1.1	604	656	455	410	NM	NM	63	44
New Jersey	40	33	22.2	2	16	2	11	NM	NM	35	6
New York	949	920	3.1	599	630	335	279	NM	NM	12	8
Pennsylvania	136	160	-14.7	3	10	117	120	NM	NM	16	30
East North Central	161	230	-30.1	125	175	10	8	NM	NM	NM	NM
Illinois	NM 43	NM 80	-45.8	NM 42	NM 61	8 NM	7 NM	NM NM	NM NM	NM NM	NM NM
Indiana Michigan	33	52	-45.8 -36.7	32	51	INIVI *	NM	NM NM	NM NM	NM NM	NM NM
Ohio	37	47	-20.1	36	46	NM	NM	NM	NM	NM	NM
Wisconsin	34	38	-11.2	11	12	1		NM	NM	NM	NM
West North Central	139	117	19.3	134	110	NM	NM	NM	NM	NM	NM
Iowa	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas	38	18	112.3	38	18						*
Minnesota	83	44	86.5	79	40	3	4	NM	NM	NM	NM
Missouri	9	44	-80.4	9	44			NM	NM	NM	NM
Nebraska	NM	NM		NM	NM 2			NM 	NM 	NM	NIM
North Dakota	NM *	NM 1	-64.5	2	3					NM 	NM
South Atlantic	4,087	4,199	-2.7	3,669	3,816	277	260	NM	NM	141	122
Delaware	50	26	92.3	6	11	2	3			43	12
District of Columbia	2	-1	-362.0			2	-1				
Florida	3,581	3,785	-5.4	3,380	3,615	193	149			8	21
Georgia	101	88	14.3	40	28	NM	NM	NM	NM	59	59
Maryland	NM	NM		NM	NM	59	97	NM	NM	NM	NM
North Carolina	62	52	20.3	45	37	NM	NM	NM	NM	16 7	14
South Carolina Virginia	26 181	25 103	.3 76.4	19 158	18 87	16	6	NM NM	NM NM	7	8
West Virginia	22	21	2.9	18	18	4	4			NM	NM
East South Central	336	87	283.6	90	48	228	21	NM	NM	17	18
Alabama	54	46	16.9	36	10	5	21			13	16
Kentucky	235	16	1368.3	11	15	224	1				
Mississippi	12	6	98.0	9	5			NM	NM	NM	NM
Tennessee	34	19	80.1	33	17					1	2
West South Central	557	310	79.7	384	16	151	282	NM	NM	22	12
Arkansas	3 300	12 168	-76.2	2	11	134	165				1
LouisianaOklahoma	6	108	78.8 58.6	162 NM	1 NM	134	103	NM	NM	5 4	2
Texas	248	127	95.8	218	2	17	116	NM	NM	12	8
Mountain	67	59	12.7	24	13	42	43	NM	NM	NM	NM
Arizona	7	5	47.7	7	4			NM	NM	NM	NM
Colorado	NM	NM		1	*	NM	NM			NM	NM
Idaho											
Montana	41	43	-3.7	NM	NM	41	43				
Nevada	3	2	61.7	3	2						
New Mexico	5	4	25.7	4	2	1	*			NM	NM
Utah Wyoming	NM 5	NM 1	254.1	NM 5	NM 1	NM 	NM 			NM	NM
Pacific Contiguous	194	215	-9.9	7	5	122	154	NM	NM	65	56
California	189	213	-10.5	5	4	122	154	NM	NM	62	53
Oregon		1	88.7	2	1			NM	NM		*
Washington		NM		*	*	NM	NM	NM	NM	NM	NM
Pacific Noncontiguous	761	747	2.0	581	619	161	114	NM	NM	NM	NM
Alaska	63	68	-7.0	57	63	NM	NM	NM	NM	NM	NM
Hawaii	698	679	2.9	524	556	161	114			NM	NM 204
U.S. Total	7,971	7,826	1.9	5,805	5,532	1,736	1,885	23	24	406	384

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.8.B. Net Generation from Petroleum by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	oducers
Census Division and State	Tot	al (All Secto	rs)	Electric l	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	6,506	3,913	66.3	1,009	128	4,970	3,305	NM	NM	435	392
Connecticut	1,163	1,017	14.4	NM	NM	1,140	1,006	NM	NM	NM	NM
Maine	1,162	388	199.6			859	71	1	1	302	315
Massachusetts	3,223	2,373	35.8	116	12	2,956	2,227	NM	NM	NM	NM
New Hampshire	910	117	676.7	870	107	10	*	NM	NM	NM	NM
Rhode Island	NM NM	NM NM		NM	NM NM	5	1	NM	NM	NM	NM
Middle Atlantic	NM 11,147	NM 5,050	120.7	NM 4,202	NM 2,684	6,592	2,115	NM	NM	307	234
New Jersey	1,041	140	641.1	90	46	838	64	NM	NM	NM	NM
New York	7,668	4,033	90.1	4,100	2,622	3,442	1,338	NM	NM	84	57
Pennsylvania	2,438	877	178.1	NM	NM	2,311	713	NM	NM	NM	NM
East North Central	1,712	1,089	57.1	770	797	746	65	NM	NM	183	223
Illinois	764	91	738.1	NM	NM	734	64	NM	NM	NM	NM
Indiana	210	331	-36.6	165	231	3		NM	NM	40	100
Michigan	338	323	4.7	330	319	*	*	NM	NM	NM	NM
Ohio	193	167	16.0	182	165	NM	NM	NM	NM	NM	NM
Wisconsin	206	177	16.1	73	65	2	1	NM	NM	125	109
West North Central	827	855	-3.3	796	838	NM	NM	NM	NM	NM	NM
Iowa	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas	331	302	9.4	330	302			 >D/	 ND 4	*	*
Minnesota	340	238	43.2	324	228	10	5	NM	NM	NM	NM
Missouri	66	270	-75.6	64	269			NM	NM	NM	NM
Nebraska North Dakota	NM NM	NM NM		NM 16	NM 12			NM 	NM 	NM	NM
South Dakota	6	1 1	374.8	6	12					INIVI	INIVI
South Atlantic	20,130	16,771	20.0	15,386	14,815	3,960	1,263	87	17	697	676
Delaware	896	278	222.7	32	69	758	143			106	66
District of Columbia	38	37	1.3			38	37				
Florida	13,403	13,519	9	12,686	12,986	658	427			NM	NM
Georgia	550	472	16.6	141	120	NM	NM	NM	NM	332	335
Maryland	1,798	598	200.9	NM	NM	1,776	583	NM	NM	NM	NM
North Carolina	462	319	44.8	274	225	83	5	NM	NM	104	87
South Carolina	199	113	75.7	130	70	11		NM	NM	56	43
Virginia	2,655	1,322	100.9	2,000	1,228	536	44	84	14	NM	NM
West Virginia	128	113	13.7	101	104	24	6			NM	NM
East South Central	1,251	352	255.2	598	258	575	26	NM	NM	78	69
Alabama	170	151	13.1	108	77	NM	NM			NM	NM
Kentucky	654	62	951.4	85	57	569	5	NIM	NIM	NIM	NIM
Mississippi	235 192	19	1148.5	226 179	13 110	NIM	NIM	NM 	NM 	NM 12	NM 10
West South Central	2,822	121 1,610	59.5 75.2	1,302	103	NM 1,336	NM 1,446	NM	NM	182	10 60
Arkansas	111	68	62.9	101	67	1,330	1,440		14141	102	1
Louisiana	1,280	793	61.5	565	21	689	764			26	8
Oklahoma	127	18	625.6	106	5			NM	NM	20	13
Texas	1,303	732	78.0	530	11	646	682	NM	NM	125	38
Mountain	320	385	-16.8	107	97	202	278	NM	NM	NM	NM
Arizona	NM	NM		18	26			NM	NM	NM	NM
Colorado	NM	NM		11	10	NM	NM			NM	NM
Idaho	*	*	-46.2	*	*						
Montana	199	276	-27.9	NM	NM	198	276				
Nevada	10	12	-18.2	10	12						
New Mexico	NM	NM		23	10	1	2			NM	NM
Utah	NM	NM		NM	NM	NM	NM			 >D/	 >D/4
Wyoming	NM	NM 1 020		17	17		742	NM	NM	NM 252	NM 270
Pacific Contiguous	967 894	1,039 997	-6.9 -10.4	53	27	662	742	NM NM	NM NM	252	270
California	894 34	997 6	-10.4 496.3	18 32	21 4	661	737	NM NM	NM NM	215 NM	239 NM
Oregon Washington	NM	NM	490.3	32	2	NM	NM	NM NM	NM NM	NM NM	NM NM
Pacific Noncontiguous	3,658	3,574	2.3	2,895	3,044	592	478	NM	NM	NM	NM
Alaska	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Hawaii	3,288	3,169	3.8	2,596	2,660	590	477			NM	NM
U.S. Total	49,339	34,639	42.4	27,118	22,791	19,646	9,725	263	134	2,313	1,989

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.9.A. Net Generation from Natural Gas by State, May 2003 and 2002 (Thousand Megawatthours)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	tal (All Sector	rs)	Electric	Utilities		ent Power ucers	Comn	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	2,967	3,776	-21.4	1	22	2,770	3,537	NM	NM	173	190
Connecticut		820	-46.7			424	801	NM	NM	NM	NM
Maine		983	-34.0			505	834	NM	NM	143	149
Massachusetts		1,473	10.6	1	18 3	1,594	1,412	NM 	NM	NM NM	NM NM
New Hampshire Rhode Island		NM 491	-49.6		3	247	490	NM	NM	NM 	NM
Vermont		491 *	-23.1	*	*	247	490	11111	11111		
Middle Atlantic		4,007	-20.0	724	698	2,261	2,906	NM	NM	193	367
New Jersey		1,197	-13.3	1	5	962	945	NM	NM	NM	NM
New York		2,505	-26.1	723	693	1,046	1,733	NM	NM	NM	NM
Pennsylvania		305	3.9	NM	NM	254	229	NM	NM	53	62
East North Central		1,760	-20.7	303	253	1,009	1,332	NM	NM	NM	NM
Illinois		387	-62.6	16	9	99	314	NM	NM	NM	NM
Indiana		178	92.8	188	54	145	60	NM	NM	NM	NM
Michigan		1,014	-25.5	46	103	694 NIM	889 NM	NM NM	NM NM	NM NM	NM NM
Ohio Wisconsin		NM 129	-19.6	15 38	32 54	NM NM	NM NM	NM NM	NM NM	NM NM	NM NM
West North Central		434	-19.0	208	306	85	93	NM	NM	NM	NM
Iowa		NM	-27.2	13	29			NM	NM	NM	NM
Kansas		104	-25.6	75	101			NM	NM	NM	NM
Minnesota		NM		16	19	NM	NM	NM	NM	NM	NM
Missouri		185	-24.4	88	128	51	53	NM	NM	NM	NM
Nebraska	NM	NM		16	25	NM	NM	NM	NM	NM	NM
North Dakota		NM		*	*					NM	NM
South Dakota		4	-93.7	*	4						
South Atlantic	7,603	6,824	11.4	5,922	5,255	1,570	1,376	NM	NM	105	184
Delaware		88	-57.8	1	*	36	87				
District of Columbia		5.000	25.0	 5 502	4.245			 >D.4	 ND 6	 ND 6	 ND 4
Florida		5,099 366	25.0 -15.9	5,583 63	4,345	737 215	620 182	NM 	NM	NM NM	NM NM
Georgia Maryland		98	75.5	NM	155 NM	169	94			NM	NM
North Carolina		340	18.1	61	136	339	202	NM	NM	NM	NM
South Carolina		581	-68.5	171	514	12	61	NM	NM	1	5
Virginia		236	-51.8	42	104	53	120	1	2	NM	NM
West Virginia		NM		*	*	9	10			NM	NM
East South Central		2,704	-43.9	1,094	2,218	246	264	NM	NM	175	219
Alabama		1,071	-39.7	454	802	93	130			98	138
Kentucky		NM		20	25	4	21			NM	NM
Mississippi		1,551	-47.0	617	1,391	150	108	NM	NM	NM	NM
Tennessee		NM		2		12 225	5	NM 170	NM	NM 2.540	NM
West South Central	22,246 364	21,370 231	4.1	6,292 36	6,736	12,227 310	10,334 98	178 NM	41 NM	3,549	4,259
Arkansas Louisiana		3,503	57.5 -12.8	1,263	113 1,989	532	417	NM 137	2	NM 1,121	NM 1,095
Oklahoma		1,362	8.2	1,168	1,241	263	85	NM	NM	41	34
Texas	,	16,273	6.6	3,825	3,392	11,122	9,734	NM	NM	2,368	3,111
Mountain		3,100	-3.2	1,500	1,707	1,423	1,302	NM	NM	NM	NM
Arizona		1,071	-4.4	303	436	719	634	NM	NM	NM	NM
Colorado	712	696	2.3	434	418	261	261	NM	NM	NM	NM
Idaho	NM	NM		3	3	NM	NM			NM	NM
Montana		2	-27.8	*	*	*	1			*	1
Nevada		840	-6.8	399	487	383	353				
New Mexico		290	9.7	258	241	44	30	NM	NM	NM	NM
Utah		129	-11.0	98	113	3		NM	NM	NM NM	NM NM
Wyoming		NM 5 760	9 2	4 548	9 560	4 2 524	12	134	138	NM 1,064	NM 1 063
Pacific Contiguous California		5,760 5,348	-8.3 -8.3	512	560 492	3,534 3,232	3,999 3,699	134	138	1,064	1,063 1,022
Oregon		3,348 297	-8.3 -9.2	8	35	231	230	NM	NM	30	32
Washington		116	-9.2 -6.1	29	33	71	70	NM	NM	5	10
Pacific Noncontiguous		329	-2.3	250	238		23			NM	NM
Alaska		306	5.0	250	238					NM	NM
Hawaii		23					23				
	47,854	50,064	-4.4	16,841	17,993	25,127	25,167	415	309	5,472	6,596

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •Total includes small amount of generation from waste heat •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Negative generation denotes that electric power consumed for plant use exceeds gross generation.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Natural gas includes a small amount of supplemental gaseous fuels.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.9.B. Net Generation from Natural Gas by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	oducers
Census Division and State	Tota	ıl (All Sector	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	14,604	16,781	-13.0	8	61	13,543	15,637	114	170	939	913
Connecticut	2,135	3,112	-31.4			2,057	3,013	NM	NM	NM	NM
Maine	3,689	4,801	-23.2			2,892	4,084	NM	NM	798	716
Massachusetts New Hampshire	6,998 NM	6,116 NM	14.4	8	53 7	6,838	5,827	102	155	NM NM	NM NM
Rhode Island	1,757	2,714	-35.3	<u></u>		1,756	2,713	NM	NM	INIVI	INIVI
Vermont	1,737	2,714	-58.3	1	1	1,750	2,713				
Middle Atlantic	16,428	20,726	-20.7	2,724	3,276	12,428	15,322	167	210	1,109	1,918
New Jersey	4,992	6,341	-21.3	7	25	4,461	5,045	NM	NM	471	1,204
New York	9,942	12,780	-22.2	2,716	3,251	6,859	9,083	NM	NM	314	381
Pennsylvania	1,494	1,606	-7.0	NM	NM	1,107	1,194	NM	NM	325	333
East North Central	8,296	10,539	-21.3	1,705	1,950	5,855	7,683	NM	NM	633	778
Illinois	1,346	2,350	-42.7 20.1	NM 507	NM 524	933	1,800	NM NM	NM	235	228
Indiana Michigan	1,111 4,617	1,390 5,711	-20.1 -19.2	597 464	524 734	351 4,067	531 4,861	NM NM	NM NM	160 NM	329 NM
Ohio	295	290	1.7	86	162	193	110	NM	NM	NM	NM
Wisconsin	926	798	16.0	444	288	310	380	NM	NM	150	103
West North Central	1,959	2,421	-19.1	1,269	1,680	482	537	NM	NM	162	145
Iowa	128	201	-36.1	84	147			NM	NM	NM	NM
Kansas	425	446	-4.8	343	432			NM	NM	82	14
Minnesota	498	501	7	179	83	247	296	NM	NM	NM	NM
Missouri	822	1,160	-29.1	583	912	234	241	2	3	NM	NM
Nebraska North Dakota	75 NM	90 NM	-16.5 	72	85 *	NM 	NM 	NM 	NM 	NM NM	NM NM
South Dakota	9	21	-58.1	9	21					1NIVI	
South Atlantic	30,686	28,305	8.4	23,314	20,964	6,592	6,190	NM	NM	710	1,092
Delaware	277	465	-40.4	7	1	270	464			*	
District of Columbia											
Florida	24,729	21,728	13.8	21,594	18,362	2,725	2,587	NM	NM	386	753
Georgia	1,588	1,158	37.1	152	340	1,291	604			146	214
Maryland	464	396	17.2	NM	NM	449	386			NM	NM
North Carolina	1,405	1,648	-14.7	301	286	1,094	1,353	NM	NM	NM	NM
South Carolina Virginia	830 1,323	1,720 1,093	-51.8 21.0	739 519	1,375 598	87 637	323 412	NM 44	NM 31	3 123	21 51
West Virginia	71	97	-26.8	2	2	40	60			NM	NM
East South Central	9,103	15,716	-42.1	6,849	12,954	1,377	1,573	NM	NM	851	1,129
Alabama	4,169	5,715	-27.1	3,071	4,813	617	197			481	705
Kentucky	185	318	-41.9	94	140	20	59	9	37	NM	NM
Mississippi	4,517	9,548	-52.7	3,541	7,992	724	1,287	NM	NM	245	262
Tennessee	233	134	73.6	143	9	NM	NM	NM	NM	NM	NM
West South Central	96,137	96,985	9	22,681	27,590	52,298	47,438	555	200	20,603	21,758
Arkansas	1,659	1,069	55.2	161	414	1,387	559	NM 276	NM 9	109	95 6 102
LouisianaOklahoma	15,000 6,266	16,208 6,926	-7.4 -9.5	5,173 4,787	8,344 5,783	2,476 1,256	1,753 935	376 NM	NM	6,976 215	6,102 198
Texas	73,211	72,781	.6	12,560	13,048	47,179	44,191	170	180	13,303	15,363
Mountain	14,787	14,878	6	6,646	7,206	7,755	7,187	NM	NM	291	383
Arizona	5,306	4,905	8.2	1,247	1,467	4,052	3,431	NM	NM	NM	NM
Colorado	3,237	3,378	-4.2	2,002	2,019	1,151	1,268	NM	NM	NM	NM
Idaho	NM	NM		6	40	NM	NM			27	45
Montana	7	5	33.4	4	1	*	1			3	4
Nevada	4,032	4,410	-8.6	1,786	2,221	2,246	2,188				
New Mexico	1,276	1,333	-4.3	1,000	1,017	194	189	NM	NM	NM	NM
Utah Wyoming	609 235	433 265	40.6 -11.2	534 68	366 75	4 56	46	NM 	NM 	NM 112	NM 145
Pacific Contiguous	35,350	34,725	1.8	4,355	4,565	24,926	24,156	605	701	5,462	5,303
California	30,001	29,621	1.3	3,342	3,208	20,821	20,698	585	662	5,252	5,053
Oregon	3,203	3,249	-1.4	434	867	2,596	2,218	NM	NM	171	160
Washington	2,145	1,856	15.6	579	490	1,509	1,240	NM	NM	39	90
Pacific Noncontiguous	1,722	1,754	-1.8	1,381	1,287	-	120			341	347
Alaska	1,722	1,634	5.4	1,381	1,287					341	347
Hawaii		120					120				
U.S. Total	229,071	242,830	-5.7	70,934	81,532	125,256	125,844	1,781	1,689	31,100	33,765

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •Total includes small amount of generation from waste heat •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Negative generation denotes that electric power consumed for plant use exceeds gross generation.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Natural gas includes a small amount of supplemental gaseous fuels.

Table 1.10.A. Net Generation from Other Gases by State, May 2003 and 2002 (Thousand Megawatthours)

		egawaunou			Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Sector	rs)	Electric	Utilities		ent Power lucers	Comn	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	*	*	-95.3		_	*	*				
Connecticut		*	-100.0				*				
Maine	*					*					
Massachusetts											
New Hampshire											
Rhode Island											
Vermont											
Middle Atlantic	NM	NM			-	1	*		-	NM	NM
New Jersey		NM					*			NM	NM
New York		NM					*			NM	NM
Pennsylvania		NM	 50.5			1				NM 145	NM 260
East North Central		372 NM	-59.5			NM 	NM 		-	NM	360 NM
Illinois Indiana		309	-60.0			NM	NM			124	309
Michigan		1	-64.2			*	1 1			124	309
Ohio		NM	-04.2			NM	NM			NM	NM
Wisconsin											
West North Central	NM	NM		*						NM	NM
Iowa											
Kansas											
Minnesota											
Missouri	*			*							
Nebraska											
North Dakota	NM	NM								NM	NM
South Dakota											
South Atlantic	30	75	-59.5		-	*	49			30	26
Delaware		15	42.3							22	15
District of Columbia											
Florida		1	-34.5			*	*			1	1
Georgia											
Maryland		49 *	-100.0				49 *				
North Carolina			-100.0								
South Carolina											
Virginia West Virginia		10	-18.9							8	10
East South Central	NM	NM	-18.9							NM	NM
Alabama		NM								NM	NM
Kentucky											
Mississippi											
Tennessee		1	-8.2							1	1
West South Central	354	329	7.4			71	20	-		283	309
Arkansas											
Louisiana		177	6.1							188	177
Oklahoma	NM	NM								NM	NM
Texas		146	8.9			71	20			88	125
Mountain	NM	NM		*	*	1	*			NM	NM
Arizona											
Colorado		*	-69.7	*	*						
Idaho											
Montana		*	400.0			1	*				
Nevada											
New Mexico											
Utah		NIM								NIM	NIM
Wyoming	NM 151	NM 156	-3.2			26	29	NM	NM	NM 125	NM 127
Pacific Contiguous California		156 127	-3.2 -1.8			*	*	NM	NM	125	127
Oregon		127	-1.6					INIVI	INIVI	123	127
Washington		29	-9.1			26	29				
Pacific Noncontiguous	NM	NM	-9.1 							NM	NM
Alaska										14141	14141
Hawaii		NM								NM	NM
U.S. Total	757	1,078	-29.7	*	*	105	112	*	*	652	966
	.01	1,0.9	2717			100				UU-2	700

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Other gases include blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.10.B. Net Generation from Other Gases by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	ed Heat and	l Power Pro	ducers
Census Division and State	Tota	al (All Sector	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	*	9	-99.9			*	9	-	-		-
Connecticut		9	-100.0			 *	9				
Maine	*		-27.8			*	*				
Massachusetts New Hampshire											
Rhode Island											
Vermont											
Middle Atlantic	291	504	-42.2			1	1			290	503
New Jersey	NM	NM					*			NM	NM
New York	NM	NM								NM	NM
Pennsylvania	231	269	-14.0			1	1			230	268
East North Central	958 NM	1,725	-44.5 			NM	NM 			921 NM	1,670
Illinois Indiana	796	NM 1,445	-44.9			NM	NM			NM 795	NM 1,443
Michigan	1	1,443	-62.0			1	4			7,73	1,443
Ohio	NM	NM				NM	NM			NM	NM
Wisconsin											
West North Central	NM	NM	-	1	-	- 1	-	-	-	NM	NM
Iowa											
Kansas											
Minnesota											
Missouri	1			1							
Nebraska North Dakota	NM	NM								NM	NM
South Dakota											
South Atlantic	241	326	-26.0			93	207			149	119
Delaware	99	68	45.6							99	68
District of Columbia											
Florida	8	7	8.9			*	*			7	7
Georgia											
Maryland	92 *	206	-55.3			92	206				
North Carolina South Carolina	*	*	-84.5 -65.7			*	•			*	*
Virginia			-03.7							· 	
West Virginia	42	44	-4.6							42	44
East South Central	59	104	-43.1	-		_	_			59	104
Alabama	57	98	-41.5							57	98
Kentucky											
Mississippi											
Tennessee	2	6	-70.6							2	6
West South Central	1,640	1,371	19.6	-	-	218	230	-		1,421	1,141
ArkansasLouisiana	588	382	53.7							588	382
Oklahoma	NM	NM	33.1							NM	NM
Texas	1,018	958	6.3			218	230			800	728
Mountain	NM	NM		2	1	11	1			NM	NM
Arizona											
Colorado	2	1	68.3	2	1						
Idaho											
Montana	9	1	470.8			9	1				
Nevada New Mexico	2					2					
Utah											
Wyoming	NM	NM								NM	NM
Pacific Contiguous	805	757	6.3			172	131	NM	NM	633	626
California	634	627	1.1			NM	NM	NM	NM	633	626
Oregon											
Washington	171	130	31.5			171	130				
Pacific Noncontiguous	NM	NM								NM	NM
Alaska	 NIM	NM								NM	NIM
Hawaii	NM 4,029	NM 4 850	-16.9	3	 1	532	635	*	*	NM 3,494	NM 4 213
U.S. Total	4,029	4,850	-10.9	3	1	532	035			3,494	4,213

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Negative generation denotes that electric power consumed for plant use exceeds gross generation.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Other gases include blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Table 1.11.A. Net Generation from Nuclear Energy by State, May 2003 and 2002 (Thousand Megawatthours)

(11	10 0000110 111	egawatinou	15)		Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Sector	rs)	Electric	Utilities	Independ	ent Power ucers		nercial		strial
and State	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	2,941	2,275	29.3		285	2,941	1,990	-			
Connecticut	1,510	1,497	.8			1,510	1,497				
Maine											
Massachusetts		493	-63.2			182	493				
New Hampshire		75	1054.1		75	862					
Rhode Island											
Vermont		210	84.5		210	387					
Middle Atlantic	12,780	12,595	1.5	1,540	1,554	11,239	11,041	_	-	-	
New York	,	2,264 3,669	5.4	370	369	2,388 3,315	2,264 3,301				
Pennsylvania	6,707	6,661	.4 .7	1,170	1,185	5,537	5,476				
East North Central	10,245	11,150	-8.1	2,130	3,726	8,115	7,425				
Illinois		7,425	9.3	2,130	3,720	8,115	7,425				
Indiana											
Michigan		1,978	-41.1	1,165	1,978						
Ohio	-12	928	-101.3	-12	928						
Wisconsin		820	19.0	976	820						
West North Central	3,843	3,411	12.7	3,843	3,411		-				
Iowa		363	18.1	428	363						
Kansas		624	41.5	882	624						
Minnesota		1,223	-31.8	834	1,223						
Missouri		823	4.8	863	823						
Nebraska North Dakota		378	120.7	834	378						
South Dakota											
South Atlantic	15,819	16,365	-3.3	14,560	15,725	1,259	639				
Delaware											
District of Columbia											
Florida	2,264	2,826	-19.9	2,264	2,826						
Georgia		3,049	-4.9	2,900	3,049						
Maryland		639	96.9			1,259	639				
North Carolina		3,615	-11.0	3,217	3,615						
South Carolina		3,641	15.0	4,188	3,641						
Virginia		2,594	-23.2	1,992	2,594						
West Virginia East South Central	5,453	5,463	2	5,453	5,463						
Alabama		2,853	-1.2	2,820	2,853						
Kentucky		2,033	-1.2	2,020	2,033						
Mississippi		921	2.1	940	921						
Tennessee	1,694	1,689	.3	1,694	1,689						
West South Central	4,998	5,964	-16.2	3,842	4,496	1,156	1,468				
Arkansas	1,370	1,223	12.0	1,370	1,223						
Louisiana		1,419	8.9	1,545	1,419						
Oklahoma											
Texas		3,321	-37.3	926	1,854	1,156	1,468				
Mountain	2,734 2,734	2,819 2,819	-3.0 -3.0	2,734 2,734	2,819 2,819		-				
Arizona		2,819	-3.0	2,/34	2,819						
ColoradoIdaho											
Montana								 			
Nevada											
New Mexico											
Utah											
Wyoming											
Pacific Contiguous	3,381	2,990	13.1	3,381	2,990						-
California	,	2,182	51.7	3,310	2,182						
Oregon				 71							
Washington		808	-91.3	71	808						
Pacific Noncontiguous	-	-							-		-
Alaska Hawaii											
U.S. Total	62,194	63,032	-1.3	37,483	40,469	24,711	22,564	-	-	-	-

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. *Negative generation denotes that electric power consumed for plant use exceeds gross generation. *Totals may not equal sum of components because of independent rounding. *Percent difference is calculated before rounding. *Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.

Table 1.11.B. Net Generation from Nuclear Energy by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tota	ıl (All Sector	,	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	14,704	13,467	9.2	-	5,044	14,704	8,423				
Connecticut	6,868	6,004	14.4			6,868	6,004				
Maine											
Massachusetts	1,743	2,419	-27.9			1,743	2,419				
New Hampshire	4,195	3,410	23.0		3,410	4,195					
Rhode Island Vermont	1,898	1,634	16.2		1,634	1,898					
Middle Atlantic	59,216	59,533	5	6,570	6,669	52,646	52,864				
New Jersey	12,672	12,340	2.7		0,007	12,672	12,340				
New York	16,362	16,799	-2.6	1,788	1,326	14,575	15,473				
Pennsylvania	30,181	30,395	7	4,782	5,343	25,399	25,051				
East North Central	57,096	57,736	-1.1	17,443	22,127	39,653	35,609				
Illinois	39,653	35,609	11.4			39,653	35,609				
Indiana											
Michigan	9,866	11,752	-16.1	9,866	11,752						
Ohio	2,540	5,398	-52.9	2,540	5,398						
Wisconsin	5,037	4,976	1.2	5,037	4,976						
West North Central	18,281	17,995	1.6	18,281	17,995						
Iowa	1,474	1,928	-23.5	1,474	1,928						
Kansas	4,255	2,962	43.7 -1.4	4,255	2,962						
Minnesota Missouri	5,472 3,879	5,548 3,678	5.5	5,472 3,879	5,548 3,678						
Nebraska	3,201	3,879	-17.5	3,201	3,879						
North Dakota	5,201	3,077	-17.5	5,201	3,677						
South Dakota											
South Atlantic	79,436	79,877	6	74,579	75,822	4,856	4,055				
Delaware											
District of Columbia											
Florida	12,725	14,043	-9.4	12,725	14,043						
Georgia	13,596	12,472	9.0	13,596	12,472						
Maryland	4,856	4,055	19.8	16.710	15.700	4,856	4,055				
North Carolina	16,710	15,722	6.3	16,710	15,722						
South Carolina	22,292	21,503	3.7	22,292	21,503						
Virginia West Virginia	9,256	12,083	-23.4	9,256	12,083						
East South Central	26,317	28,467	-7.6	26,317	28,467						
Alabama	12,325	13,464	-8.5	12,325	13,464						
Kentucky											
Mississippi	4,372	4,551	-3.9	4,372	4,551						
Tennessee	9,619	10,452	-8.0	9,619	10,452						
West South Central	25,692	28,883	-11.0	18,154	21,802	7,538	7,081				-
Arkansas	6,750	5,982	12.8	6,750	5,982						
Louisiana	6,553	6,717	-2.4	6,553	6,717						
Oklahoma											
Texas	12,389	16,184	-23.4	4,851	9,103	7,538	7,081				
Mountain	12,460	12,744	-2.2	12,460	12,744						
Arizona	12,460	12,744	-2.2	12,460	12,744						
Colorado											
Idaho Montana											
Nevada											
New Mexico											
Utah											
Wyoming											
Pacific Contiguous	15,854	18,393	-13.8	15,854	18,393	-	-	-		-	
California	12,989	14,636	-11.3	12,989	14,636						
Oregon											
Washington	2,865	3,757	-23.7	2,865	3,757						
Pacific Noncontiguous		-	-				_				
Alaska											
	309,056	317,094	 -2.5	 189,659	209,061	119,396	108,033	 	 	 	

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. *Negative generation denotes that electric power consumed for plant use exceeds gross generation. *Totals may not equal sum of components because of independent rounding. *Percent difference is calculated before rounding. *Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.

Table 1.12.A. Net Generation from Hydroelectric Power by State, May 2003 and 2002 (Thousand Megawatthours)

Census Division and State	Total (All Sectors)			Electric Power Sector				Combined Heat and Power Producers			
				Electric Utilities		Independent Power Producers		Commercial		Industrial	
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	667	819	-18.6	80	79	508	581	1		79	159
Connecticut		50	-21.5	NM	NM	37	48				
Maine		432	-29.5	NM	NM	229	290			75	141
Massachusetts New Hampshire		20 183	116.9 -20.9	NM 36	NM 42	41 108	19 126	1		NM NM	NM NM
Rhode Island		NM	-20.9		42	NM	NM			INIVI	11111
Vermont		134	.5	41	34	92	97			NM	NM
Middle Atlantic	2,310	2,723	-15.2	1,611	1,962	698	754	NM	NM	NM	NM
New Jersey	15	-9	-264.1	12	-12	NM	NM				
New York	2,121	2,465	-13.9	1,503	1,807	616	650	NM	NM	NM	NM
Pennsylvania		268	-34.9	95	167	79	101				
East North Central	480 17	444 15	8.2 12.1	420 NM	395 NM	27 12	24 11	NM NM	NM NM	32	24
Illinois Indiana		30	19.3	36	30				1N1VI		
Michigan		102	-2.3	82	87	13	11			NM	NM
Ohio	34	23	44.0	34	23						
Wisconsin		273	7.6	263	250	NM	NM	NM	NM	28	20
West North Central	890	996	-10.6	851	963	10	9			29	25
Iowa	79	69	14.1	77	67	NM	NM				
Kansas		NM				NM	NM				
Minnesota		102	-6.3	63	74	NM	NM			29	25
Missouri Nebraska		301 93	-70.8 10.3	88 103	301 93						
North Dakota		105	45.9	154	105						
South Dakota		322	14.0	367	322						
South Atlantic	2,160	752	187.2	1,612	281	263	346	NM	NM	284	125
Delaware											
District of Columbia											
Florida		14	15.8	17	14						
Georgia		165	253.6	578	160	NM	NM			NM	NM
Maryland		291 192	-30.3	572	124	203 NM	291 NM	NIM	NIM	207	56
North Carolina South Carolina		2	306.9 NM	573 353	134 -3	NM NM	NM NM	NM NM	NM NM	207	56
Virginia		-45	-245.2	59	-52	NM	NM	11111	11171	NM	NM
West Virginia		133	15.4	33	27	47	42			73	64
East South Central	2,943	1,916	53.6	2,846	1,884	2	2			95	30
Alabama	1,597	729	119.2	1,597	729						
Kentucky		622	-47.2	328	622						
Mississippi		2	9			2	2				
Tennessee		563	80.2	920	533					95	30
West South Central	734 259	803 281	-8.6 -8.0	641 259	684 281	93 NM	120 NM				
Arkansas Louisiana		281 114	-8.0 -23.1	239	281	NIVI 87	114				
Oklahoma		324	-6.3	304	324						
Texas		84	2	78	78	6	6				
Mountain	3,303	3,236	2.1	2,744	2,768	558	467				
Arizona	650	694	-6.3	650	694						
Colorado	84	144	-41.2	77	139	NM	NM				
Idaho		1,005	16.4	1,012	877	157	127				
Montana		968	3.4	613	637	388 NM	331 NM				
Nevada New Mexico		270 25	-15.2 2.0	226 25	268 25	NM 	NM 				
Utah		70	11.4	75	68	NM	NM				
Wyoming		61	8.3	66	61						
Pacific Contiguous	15,647	14,661	6.7	15,197	14,383	430	265	NM	NM	NM	NM
California		3,550	28.7	4,270	3,378	300	172				
Oregon	3,446	3,327	3.6	3,369	3,270	NM	NM				
Washington		7,784	-2.0	7,558	7,736	NM	NM	NM	NM	NM	NM
Pacific Noncontiguous	175	141	24.0	147	122	NM	NM	-		NM	NM
Alaska	146 NM	121 NM	21.0	146	121	NM	NM			NM	NIM
Hawaii	NM 29,309	NM 26,491	10.6	26,148	23,521	NM 2,600	NM 2,574	22	14	NM 539	NM 382
C.C. I Ottal	27,507	20,771	10.0	20,170	20,021	2,000	2,014		17	337	302

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. •Negative generation denotes that electric power consumed for plant use exceeds gross generation. •Totals may not equal sum of components because of independent rounding. •Percent difference is calculated before rounding. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data. •Hydroelectric power includes conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.12.B. Net Generation from Hydroelectric Power by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	ed Heat and	Power Pro	ducers
Census Division and State	Tota	al (All Secto		Electric	Utilities	Independe Produ		Comm	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	2,531	2,833	-10.6	296	279	1,873	1,978	2		360	576
Connecticut	217	158	37.7	NM	NM	207	150				
Maine	1,189	1,424	-16.5	NM	NM	868	914			319	509
Massachusetts	106	101	4.3	NM	NM	98	95	2		NM	NM
New Hampshire	515	674	-23.6	135	142	352	477			28	55
Rhode Island	NM 502	NM		140	120	NM	NM				
Vermont	502	475	5.8	148	128	346	340		 ND4	8	7
Middle Atlantic	10,510	11,814	-11.0	7,863	8,980	2,626	2,801	NM	NM	21	34
New York	-23 9,633	-41 11,077	-44.3 -13.0	-34 7,337	-51 8,573	11 2,274	10 2,470	NM	NM	21	34
Pennsylvania	9,033	778	15.8	7,337 559	6,373 458	341	320	INIVI	INIVI	21 	34
East North Central	1,604	1,634	-1.8	1,373	1,438	103	95	NM	NM	123	97
Illinois	69	61	12.0	NM	NM	44	42	NM	NM	123	
Indiana	145	139	4.5	145	139						
Michigan	257	282	-8.8	190	221	51	46			16	14
Ohio	154	199	-22.5	154	199						
Wisconsin	980	954	2.7	862	862	NM	NM	NM	NM	108	82
West North Central	3,517	3,772	-6.8	3,379	3,640	40	36			98	96
Iowa	343	348	-1.4	334	340	NM	NM				
Kansas	15	14	10.2			15	14				
Minnesota	338	387	-12.8	224	277	16	14			98	96
Missouri	174	726	-76.1	174	726						
Nebraska	338	382	-11.5	338	382						
North Dakota	752	497	51.5	752	497						
South Dakota	1,558	1,419	9.7	1,558	1,419						
South Atlantic	8,253	3,437	140.1	5,675	1,682	1,339	1,125	NM	NM	1,238	629
Delaware											
District of Columbia											
Florida	98	85	15.2	98	85						
Georgia	1,873	907	106.6	1,854	888	NM	NM			18	17
Maryland	1,088	883	23.1			1,088	883				
North Carolina	3,102	1,148	170.2	2,196	776	NM	NM	NM	NM	899	366
South Carolina	1,230	191	542.6	1,208	171	22	20	NM	NM	 ND 4	 >D/4
Virginia	201	-332	-160.6	177	-356	24	23			NM 220	NM 246
West Virginia	660	555	19.0	141	117	199	192			320	246
East South Central	11,795 5,796	9,323 3,902	26.5 48.5	11,419 5,796	9,109 3,902	6	7			370	207
Alabama Kentucky	1,711	2,393	-28.5	1,711	2,393						
	6	2,393 7	-28.5 -22.5	1,/11	2,393	6	7				
Mississippi Tennessee	4,283	3,020	41.8	3,913	2,813		, 			370	207
West South Central	2,818	3,509	- 19.7	2,373	3,020	445	489				
Arkansas	1,194	1,624	-26.5	1,194	1,624	NM	NM				
Louisiana	427	467	-8.5	1,194	1,024	427	467				
Oklahoma	800	1,025	-22.0	800	1,025						
Texas	397	393	1.1	379	371	18	22				
Mountain	11,874	12,698	-6.5	10,176	11,039	1,698	1,658				
Arizona	3,093	3,456	-10.5	3,093	3,456						
Colorado	257	468	-45.0	240	452	NM	NM				
Idaho	3,717	3,803	-2.3	3,375	3,458	342	345				
Montana	3,281	3,445	-4.8	1,957	2,160	1,324	1,285				
Nevada	1,020	953	7.1	1,013	946	NM	NM				
New Mexico	97	136	-28.2	97	136						
Utah	235	242	-2.7	229	236	NM	NM				
Wyoming	173	196	-11.8	173	196						
Pacific Contiguous	61,446	61,404	.1	60,368	60,458	1,030	903	NM	NM	NM	NM
California	14,842	12,986	14.3	14,164	12,407	678	580				
Oregon	15,924	15,805	.8	15,696	15,594	228	211				
Washington	30,680	32,612	-5.9	30,509	32,457	124	112	NM	NM	NM	NM
Pacific Noncontiguous	770	773	5	705	714	NM	NM			NM	NM
Alaska	705	710	7	705	710						
Hawaii	65 115,118	64 111,197	1.8 3.5	103,629	4 100,358	NM 9,185	NM 9,116	53	46	NM 2,251	NM 1,676
U.S. Total											

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Hydroelectric power includes conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.13.A. Net Generation from Other Renewables by State, May 2003 and 2002 (Thousand Megawatthours)

		egawaunou			Electric Po	wer Sector		Combin	ed Heat and	l Power Pro	ducers
Census Division and State	То	tal (All Sector	rs)	Electric	Utilities		ent Power ucers	Comn	nercial	Indus	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	761	787	-3.2	24	16	523	546	19	19	195	205
Connecticut		138	-7.9			127	138			104	107
Maine		360 178	-3.2 .9			138 177	147 176	16 2	17 2	194 NM	197 NM
New Hampshire		72	-16.4			60	65			NM	NM
Rhode Island		8	7.3			9	8				
Vermont		30	23.2	24	16	11	12			NM	NM
Middle Atlantic	578	603	-4.2			483	516	41	41	53	46
New Jersey		117	1.2			117	116	NM	NM	NM	NM
New York Pennsylvania		206 280	7.0 -14.6			186 180	179 222	22 19	21 19	12 40	6 39
East North Central	412	418	-14.0 - 1.4	32	27	234	254	26	28	121	108
Illinois		84	-21.0			60	75	NM	NM	6	8
Indiana		11	-3.1			8	8	NM	NM		*
Michigan	218	218	.2	1	3	139	140	20	22	59	53
Ohio		13	-12.3			5	5	NM	NM	NM	NM
Wisconsin		92	14.4	31	25	22	26	NM NM	NM	50	39
West North Central Iowa	289 68	328 95	-11.8 -28.1	54 5	45 3	194 62	251 91	NM NM	NM NM	38 NM	30 NM
Kansas		46	-21.9			36	46	INIVI	INIVI	INIVI	INIVI
Minnesota		182	-6.2	36	38	96	114	NM	NM	37	29
Missouri	10	4	181.4	9	3				*	NM	NM
Nebraska		1	187.1	3	*	NM	NM	NM	NM		
North Dakota				1						NM	NM
South Dakota		1 249	-5.1	1	1	405	462			 (01	727
South Atlantic Delaware	1,223	1,248	-2.0	15	13	485	462	41	36	681	737
District of Columbia											
Florida	417	476	-12.3	11	12	300	305	NM	NM	104	156
Georgia		263	.5			NM	NM			263	262
Maryland		57	34.1			61	55	NM	NM	14	
North Carolina		155 122	2.4 -19.2	2	 1	38	38	NM	NIM	120 93	116 117
South Carolina Virginia		175	-19.2 9.1		1	72	62	32	NM 26	93 87	87
West Virginia		*	6069.7	2	*	14					
East South Central	498	541	-8.0	3		19	23	NM	NM	475	518
Alabama		329	-7.8			16	20			287	309
Kentucky		22	11.3	3						22	22
Mississippi		127	-23.3			NIM	 NIM	NIM	 NIM	98 69	127
West South Central	72 715	63 747	14.9 - 4.3			NM 221	NM 257	NM NM	NM NM	490	60 488
Arkansas		133	.3				257	NM	NM	133	133
Louisiana		247	8.1			4	4			263	242
Oklahoma		13	81.6							24	13
Texas		354	-17.8			218	253	3	1	70	100
Mountain	196	212	-7.6	27	26	126	148	NM	NM	39	35
Arizona		4 13	3.8 15.5	4 4	4	NM	NM	NM 3	NM 3		
ColoradoIdaho		33	6.6		4 	NM	NM		<i>-</i> -	32	30
Montana		4	39.5							6	4
Nevada	87	99	-11.9			87	99				
New Mexico		NM				NM	NM				
Utah		17	6.7	17	16	NM 27	NM				
Pacific Contiguous	28 1,974	39 2,237	-29.1 - 11.8	1 58	1 15	27 1,720	38 2,007	31	19	165	196
California		2,037	-11.8 -11.8	19	15	1,720	1,910	31	19	80	93
Oregon		88	-28.3			32	48			31	40
Washington	114	112	1.4	39		21	49			54	63
Pacific Noncontiguous	64	47	35.1	NM	NM	49	33			NM	NM
Alaska		NM	25.2	NM *	NM *					 ND 4	
U.S. Total	63 6,709	47 7,168	35.2 - 6.4	213	143	49 4,055	33 4,497	169	150	NM 2,272	NM 2,378
		/.100	-0.4	413	143	4.0.7.7	4.47/	107	1.70		

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

^{*=} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. *Negative generation denotes that electric power consumed for plant use exceeds gross generation. *Totals may not equal sum of components because of independent rounding. *Percent difference is calculated before rounding. *Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data. *Other renewables include wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.13.B. Net Generation from Other Renewables by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tota	al (All Sector	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indu	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	3,697	3,946	-6.3	103	58	2,626	2,783	81	86	888	1,019
Connecticut	631	668	-5.5			631	668				
Maine	1,689 823	1,857 840	-9.0 -2.0			754 811	805 830	69 12	76 10	866 NM	976 NM
Massachusetts New Hampshire	333	407	-2.0 -18.2			318	369	12		16	38
Rhode Island	42	40	3.5			42	40				
Vermont	178	133	33.6	103	58	70	70			NM	NM
Middle Atlantic	2,614	2,708	-3.5			2,166	2,268	171	178	277	261
New Jersey	538	537	.2			532	530	NM	NM	NM	NM
New York	999	988	1.1			844	836	87	89	68	63
Pennsylvania	1,077 2,034	1,183 2,073	-9.0 -1.9	157	129	790 1,167	902 1,259	82 119	87 112	205 591	194 573
East North Central	291	367	-20.9		129	257	332	NM	NM	31	32
Indiana	53	53	.1			34	36	12	15	8	2
Michigan	1,101	1,107	6	7	11	728	734	95	84	271	278
Ohio	55	60	-9.1			25	26	NM	NM	30	34
Wisconsin	535	486	10.1	150	119	124	131	9	9	252	227
West North Central	1,533	1,757	-12.7	251	194	1,091	1,308	15 NM	14	176	241
Iowa	433	486	-10.8	31	17	398 184	465	NM	NM	NM	NM
Kansas	184 849	232 1,006	-20.9 -15.6	163	154	506	232 607	 7	 7	173	237
Missouri	44	23	91.4	40	19			1	1	NM	NM
Nebraska	18	7	146.1	13	1	NM	NM	NM	NM		
North Dakota	2	*	551.8	2						NM	NM
South Dakota	3	3	17.1	3	3						
South Atlantic	6,096	6,267	-2.7	76	72	2,484	2,247	189	182	3,348	3,766
Delaware											
District of Columbia Florida	2,094	2,319	 -9.7	 54	 55	1,518	1,421	NM	NM	506	826
Georgia	1,245	1,357	-8.3	J -		NM	NM		14141	1,236	1,349
Maryland	324	268	20.9			247	257	11	11	67	
North Carolina	846	844	.2			198	196			648	648
South Carolina	500	516	-3.2	9	7			NM	NM	474	489
Virginia	1,028	953	7.9			466	365	146	134	417	454
West Virginia	59	2.794	528.5	13	9	46	102	NM.	NM	2 507	2 (7)
Alabama	2,604 1,683	2,784 1,699	-6.5 9	9 		85 72	103 89	NM 	NM 	2,507 1,611	2,676 1,609
Kentucky	126	152	-17.2	9		72				1,011	152
Mississippi	459	624	-26.5							459	624
Tennessee	337	309	8.9			13	14	NM	NM	320	291
West South Central	3,592	3,488	3.0	1	-	1,142	1,127	17	6	2,433	2,354
Arkansas	748	679	10.3					NM	NM	746	676
Louisiana	1,195	1,138	5.1			24	25			1,172	1,112
Oklahoma Texas	113 1,536	92 1,580	23.3 -2.8	 1		1,118	1,102	15	4	113 402	92 474
Mountain	1,131	1,129	.2	138	137	763	797	16	15	214	180
Arizona	17	25	-31.8	15	23			NM	NM		
Colorado	89	87	2.4	29	28	45	45	14	13		
Idaho	198	170	16.5			14	14			184	156
Montana	30	24	26.6							30	24
Nevada	485	504	-3.7			485	504				
New Mexico	NM	NM		 0 <i>5</i>	7.0	NM	NM				
Utah Wyoming	89 216	81 232	9.5 -7.2	85 9	76 9	NM 207	NM 223				
Pacific Contiguous	9,975	10,153	-7.2 - 1.7	293	193	8,620	8,924	154	96	908	940
California	8,776	9,043	-2.9	87	87	8,079	8,366	154	96	456	494
Oregon	441	455	-3.2			276	273			165	182
Washington	758	655	15.8	206	106	266	285			287	264
Pacific Noncontiguous	255	217	17.5	NM	NM	196	144			58	72
Alaska	NM	NM		NM	NM						
Hawaii	254	217	17.5	1 020	* 704	196	144	764		11 200	72
U.S. Total	33,533	34,522	-2.9	1,029	784	20,340	20,961	764	694	11,399	12,082

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Other renewables include wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 1.14.A. Net Generation from Other Energy Sources by State, May 2003 and 2002 (Thousand Megawatthours)

	10 454114 111	egawaunou			Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Sector	rs)	Electric	Utilities		ent Power ucers	Comn	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	*			-	_			-		*	
Connecticut											
Maine											
Massachusetts										*	
New Hampshire											
Rhode Island											
Vermont Middle Atlantic	4	3	10.1			*				3	3
New Jersey										*	
New York						*					
Pennsylvania		3	.2							3	3
East North Central		*	NM	-	-	7	*	*	-	48	
Illinois		*	-59.5			*	*				
Indiana								*		47	
Michigan						7					
Ohio Wisconsin						7				2	
West North Central	1	3	-82.7							1	3
Iowa			-02.7								
Kansas											
Minnesota		3	-82.7							1	3
Missouri											
Nebraska											
North Dakota											
South Dakota		171	12.5							102	171
South Atlantic Delaware	192	171	12.5							192	171
District of Columbia											
Florida		154	14.0							176	154
Georgia		*									*
Maryland											
North Carolina	16	17	-1.0							16	17
South Carolina											
Virginia											
West Virginia East South Central	2	*	492.7			2				*	*
Alabama		*	NM			2				*	*
Kentucky											
Mississippi											
Tennessee	*	*	-58.9							*	*
West South Central	187	199	-6.0			28	17			159	182
Arkansas		8	16.4							10	8
Louisiana		66	38.5							92 *	66
Oklahoma Texas		124	-31.4			28	 17			57	107
Mountain	16	17	-6.9			1				14	17
Arizona											
Colorado											
Idaho	8	9	-16.2							8	9
Montana											
Nevada						1					
New Mexico											
Utah Wyoming		8	-13.9							 7	8
Pacific Contiguous	4	1	202.9			1	-			3	1
California		1	202.9			1				3	1
Oregon											
Washington											
Pacific Noncontiguous							_		-		
Alaska											
Hawaii			167					*			270
U.S. Total	460	394	16.7			39	17	<u> </u>		421	378

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Other energy sources include batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Table 1.14.B. Net Generation from Other Energy Sources by State, Year-to-Date through May (Thousand Megawatthours)

					Electric Po	wer Sector		Combine	ed Heat and	Power Pro	ducers
Census Division and State	Tota	al (All Sector	,	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	2									2	
Connecticut											
Maine											
Massachusetts	2									2	
New Hampshire											
Rhode Island											
Vermont Middle Atlantic						2				1.4	15
New Jersey	16	15	6.4							14	15
New York	2					2					
Pennsylvania	14	15	-4.5							14	15
East North Central	221	1	NM			58	1	*	*	163	
Illinois	*	1	-10.1			*	1				
Indiana	151									151	
Michigan	*	*	20.0					*	*		
Ohio	57					57					
Wisconsin	12									12	
West North Central	17	18	-4.0	-	-		-			17	18
Iowa											
Kansas											
Minnesota	17	18	-4.0							17	18
Missouri											
Nebraska											
North Dakota											
South Dakota											070
South Atlantic Delaware	897	870	3.2							897	870
District of Columbia											
Florida	811	784	3.4			*				811	784
Georgia		1	5.4								1
Maryland											
North Carolina	86	85	1.9							86	85
South Carolina											
Virginia											
West Virginia											
East South Central	10	2	418.4		-	7	-			3	2
Alabama	8	*	NM			7				*	*
Kentucky											
Mississippi											
Tennessee	2	2	38.9							2	2
West South Central	843	981	-14.0			169	157			674	824
Arkansas	10	50	-80.1							10	50
Louisiana	379	167	127.1							379	167
Oklahoma	454	764	 -40.6			169	157			285	607
Mountain	69	80	-13.8			4	137			65	80
Arizona			-13.6								
Colorado											
Idaho	35	44	-20.6							35	44
Montana											
Nevada	4					4					
New Mexico											
Utah											
Wyoming	30	36	-16.3							30	36
Pacific Contiguous	17	5	225.6	-	-	1	-	4		12	5
California	17	5	225.6			1		4		12	5
Oregon											
Washington											
Pacific Noncontiguous					-					-	
Alaska											
Hawaii	2 001	1.070				240	157			1 047	1 012
U.S. Total	2,091	1,970	6.1			240	157	4	*	1,847	1,813

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Negative generation denotes that electric power consumed for plant use exceeds gross generation.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Other energy sources include batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Chapter 2. Consumption of Fossil Fuels

Table 2.1. Consumption of Fossil Fuels for Electricity Generation: Total (All Sectors), 1990 through May 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
990	792,457	218,997	3,691,563
991	793,666	203,669	3,764,778
992	805,140	172,241	3,899,718
993	842,153	192,462	3,928,653
994	848,796	183,618	4,367,148
1995	860,594	132,578	4,737,871
996	907,209	144,626	4,312,458
997	931,949	159,715	4,564,770
	946,295		
1998		222,640	5,081,384
1999	949,802	207,871	5,321,984
2000 2001	994,933	195,228	5,691,481
January	89,136	32,164	380,142
	76,002	18,020	347,939
February	78,613	20,256	402,383
March			· · · · · · · · · · · · · · · · · · ·
April	71,022	19,039	422,486
May	77,344	17,931	473,896
June	82,959	20,555	532,482
July	92,001	18,829	678,341
August	93,954	24,532	732,863
September	79,751	12,659	552,780
October	76,327	11,191	509,011
November	74,073	10,271	389,977
December	81,509	11,224	410,005
Total	972,691	216,672	5,832,305
2002			
January	83,361	11,327	422,849
February	72,770	9,095	379,447
March	77,695	13,492	445,852
April	72,275	12,429	437,164
May	77,210	13,506	454,088
June	84,186	13,032	585,404
July	93.273	16.549	778,760
August	91,758	16,277	741,928
September	84.683	13.083	599.650
October	81,211	13,423	473,243
	79.926	11,456	372,569
November	87,025	13,141	372,369 374,034
December	985,374	156,809	6,064,989
2003	763,374	130,809	0,004,282
January	92.030	21.941	407,786
February	79,659	18,679	364,952
March	79,600	18,203	390,993
April	72,784	14,732	365,031
*	72,784 77.505	14,732	363,031 416,749
May	,	,	
Total	401,578	87,854	1,945,511
Year to Date	202 117	107.411	2 026 846
	392,117	107,411	2,026,846
002	383,312	59,848	2,139,400
	401,578	87,854	1,945,511
Rolling 12 Months Ending in May			
002	963,886	169,109	5,944,859
2003	1,003,640	184,815	5,871,101

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. *Values for prior years are final. *Totals may not equal sum of components because of independent rounding. *Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. *Mcf = thousand cubic feet. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Table 2.2. Consumption of Fossil Fuels for Electricity Generation: Electric Utilities, 1990 through May 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
1990	. 773,549	200,152	2,787,332
1991	. 772,268	188,494	2,789,014
1992	. 779,860	152,329	2,765,608
1993		168,556	2,682,440
1994		155,377	2,987,146
1995		105,956	3,196,507
1996		116,680	2,732,107
1997		132,147	2,968,453
		187,461	3,258,054
1998		,	
1999		151,868	3,113,419
2000	. 859,335	125,788	3,043,094
2001	50.060	20.200	156,002
January		20,280	156,993
February		10,240	143,268
March		11,317	171,278
April		11,512	210,339
May	. 64,936	11,739	233,213
June	. 69,113	13,044	260,189
July	,	11,966	353,858
August	,	15,072	359,381
September	,	8,655	255,222
October	,	7,083	229,563
November		6,112	154,920
		,	
December		6,436	158,063
Γotal	806,269	133,456	2,686,287
2002	66.705	6.762	150.756
January		6,763	150,756
February		5,264	137,136
March		8,248	160,521
April	55,929	8,516	169,337
May	. 60,865	9,307	182,382
June	. 66,370	8,404	232,386
July		9,609	297,947
August	,	9,766	291,080
September	,	8,725	227,475
October		8,396	173,187
		6.195	122,691
November	*	-,	
December		7,326	115,317
Fotal	770,027	96,519	2,260,213
1003	70.475	10.642	121 015
January		10,643	131,815
February		8,559	115,308
March	,	9,347	128,481
April		8,059	133,514
May	. 61,206	10,039	160,746
Total	310,618	46,646	669,865
Year to Date			
2001	. 325,016	65,088	915,090
2002	300,955	38,099	800,131
2003	,	46,646	669,865
Rolling 12 Months Ending in May	,		22,722
2002	. 782,209	106,467	2,571,327

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. *Values for prior years are final. *Totals may not equal sum of components because of independent rounding. *Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. *Mcf = thousand cubic feet. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Consumption of Fossil Fuels for Electricity Generation: Independent Power Producers, 1990 through May 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
1990	7,752	4,593	359,957
1991	10,385	2,316	427,042
1992	13,530	5,390	559,355
1993	16,343	10,478	661,800
1994	18,844	14,010	771,337
1995	18,847	13,707	897,266
1996	19,719	13,489	927,703
1997	18,648	15,056	934,742
1998	23,259	21,986	1,157,759
1999	43,768	42,477	1,530,355
2000	123,378	58,158	1,970,977
2001	,		=,- : -,- : :
January	14,752	10,475	166,646
February	12,549	6,743	153.697
March	12,560	7,912	175,314
April	11,131	6,562	159,562
May	11,582	5,245	185,360
June	12,895	6.654	216,891
July	14.641	5,957	264.141
August	15,229	8,589	309,133
September	12.809	3.186	237,739
October	12,279	3,180	219,151
	11.931	3,320	178.105
November	9		178,103
December	12,895	3,830	
2002	155,254	71,663	2,456,206
January	15,657	3,638	206,837
February	14,541	3,086	184,621
March	16,681	4,353	220,412
	15,413	3,122	211,601
April	15,413	3,122	208.747
May	-, -	-,	
June	16,841	3,847	289,103
July	19,156	5,995	405,769
August	18,697	5,581	379,506 307,430
September	17,814	3,580	307,439
October	17,336	4,106	244,584
November	17,403	4,436	196,349
December	18,726	4,772	205,880
Total	203,676	49,914	3,060,846
2003	20.425	0.050	210.062
January	20,425	9,879	210,863
February	17,414	9,030	193,133
March	17,444	7,828	203,825
April	15,266	5,791	178,841
May	15,329	3,140	204,036
Total	85,879	35,668	990,699
Year to Date			
2001	62,574	36,937	840,579
2002	77,703	17,598	1,032,217
2003	85,879	35,668	990,699
Rolling 12 Months Ending in May			
2002	170,383	52,324	2,647,844
2003	211,853	67,985	3,019,329

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Mcf = thousand cubic feet. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Consumption of Fossil Fuels for Electricity Generation: Commercial Combined Heat and Power Producers, 1990 through May 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
1990	417	953	27,544
1991	403	576	26,806
1992	371	429	32,674
1993	404	672	37,435
1994	404	694	40,828
1995	569	649	42,700
1996	656	645	42,380
1997	630	790	38.975
1998	440	802	40,693
1999	481	931	39,045
2000	514	823	37,029
2001			
January	41	144	2,737
February	46	88	2,471
March	46	89	2,545
April	35	74	2,607
May	40	77	2,739
June	44	75	2,807
July	56	80	3,829
August	65	91	4,463
September	49	72	3,285
October	36	84	3,173
November	35	68	2,681
December	38	82	2,909
Гotal	532	1,023	36,248
2002			200
January	48	51	2,995
February	32	56	2,532
March	45	60	3,540
April	37	41	2,842
May	36	45	2,606
June	46	54	3,429
July	46	88	7,103
August	50	86	6,608
September	48	57	5,284
October	45	62	3,260
November	38	53	2,538
December	41	106	2,687
Fotal 2003	513	758	45,423
***	48	228	3,165
January	48	186	3,163 2,411
February	41	90	2,411
March	36	53	2,808 2,688
May	33	46	3,293
rotal	198	602	3,293 14,365
Year to Date	170	002	14,505
Pear to Date	209	471	13,100
	198	253	13,100
2002	198	602	14,514 14,365
2003	170	002	14,505
2002	520	805	37,662
2002	520 513	1,107	45,273

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Mcf = thousand cubic feet. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Consumption of Fossil Fuels for Electricity Generation: Industrial Combined Heat and Power Producers, 1990 through May 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
1990	10,740	13,299	516,729
1991	10,610	12,283	521,916
1992	11,379	14,093	542,081
1993	11,898	12,755	546,978
1994	12,279	13,537	567,836
1995	12,171	12,265	601,397
1996	12,153	13,813	610,268
1997	12,311	11,723	622,599
1998	11,728	12,392	624,878
1999	11,432	12,595	639,165
2000	11,706	10,459	640,381
2001			
January	980	1,265	53,766
February	809	949	48,503
March	906	937	53,246
April	837	892	49,978
May	786	871	52,583
June	907	782	52,595
July	951	826	56,512
August	947	781	59,886
September	909	746	56,534
October	882	834	57,124
November	840	770	54,271
December	883	876	58,566
Total	10,636	10,530	653,565
2002	,	,	100,000
January	951	875	62,261
February	822	689	55,159
March	888	831	61,380
April	896	751	53,384
May	899	754	60,353
June	928	728	60,487
July	1,014	857	67,941
August	961	844	64,734
September	906	722	59,452
October	967	858	52,213
November	939	772	50,992
December	985	938	50,150
Total	11,157	9,618	698,507
2003	,	- 7,	
January	1,082	1,192	61,943
February	952	904	54,100
March	978	938	55,879
April	934	829	49,988
May	937	1,075	48,673
Total	4,884	4,937	270,583
Year to Date	-,	-32	,
2001	4,318	4,914	258,076
2002	4,457	3,899	292.537
2003	4,884	4,937	270,583
Rolling 12 Months Ending in May	1,001	1,207	270,000
2002	10,774	9,514	688,027
2003	11,584	10.656	676,552

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Mcf = thousand cubic feet. Sources: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Table 2.6.A. Consumption of Coal for Electricity Generation by State, May 2003 and 2002 (Thousand Tons)

	·	4 1 (AP C :			Electric Po	wer Sector		Combin	ed Heat and	d Power Pro	ducers
Census Division and State	То	tal (All Sector		Electric	Utilities	_	ent Power lucers	Comn	nercial	Indus	trial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	633	470	34.8	82	88	531	362			NM	NM
Connecticut	169	87	94.6			169	87				
Maine		25	-4.5			5	7			19	18
Massachusetts		269	32.7			357	268			NM	NM
New Hampshire		88	-6.5	82	88						
Rhode Island											
Vermont							4.056				
Middle Atlantic	4,496	4,654	-3.4	673	523 8	3,740	4,056	NM	NM	82	74
New York		197 635	-20.8 3.8	19 46	8 45	137 593	189 569	NM	NM	 19	20
Pennsylvania		3,822	-3.7	608	470	3,010	3,298	NM	NM	NM	NM
East North Central	17,153	17,189	2	14,094	13,641	2,953	3,331	NM	NM	NM	NM
Illinois	,	3,847	-8.0	855	665	2,655	3,052	NM	NM	NM	NM
Indiana		4,199	9.1	4,454	4,107	121	84	NM	NM	NM	NM
Michigan	,	2,592	1.9	2,600	2,541	121	22	9	7	NM	NM
Ohio	,	4,660	-2.5	4,373	4,478	164	173	NM	NM	NM	NM
Wisconsin	1,846	1,891	-2.4	1,813	1,851	*		NM	NM	NM	NM
West North Central	11,075	10,571	4.8	10,857	10,431	NM	NM	NM	NM	210	128
Iowa	1,560	1,797	-13.2	1,538	1,754	NM	NM	NM	NM	NM	NM
Kansas		1,691	2.5	1,734	1,691						
Minnesota		1,241	46.9	1,646	1,162					178	80
Missouri	3,266	2,814	16.1	3,260	2,804			*	4	NM	NM
Nebraska	728	986	-26.2	726	984					NM	NM
North Dakota	1,772	1,890	-6.2	1,762	1,886					NM	NM
South Dakota	191	152	25.6	191	152						
South Atlantic	13,205	13,300	7	10,978	11,056	2,061	2,074	NM	NM	164	167
Delaware		131	-34.2			84	129			NM	NM
District of Columbia											
Florida	2,274	2,132	6.7	2,054	2,012	196	109			23	11
Georgia		2,763	.3	2,738	2,725					33	38
Maryland		821	-24.5			609	821			11	
North Carolina	2,136	2,077	2.9	1,981	1,947	123	89	NM	NM	30	39
South Carolina		1,270	-11.9	1,101	1,244	100	162		*	18	26
Virginia		1,115	-2.3	876	932	189	162			24	20
West Virginia	3,110 8,425	2,992 8,753	4.0 -3.7	2,228 7,755	2,196 8,238	859 600	764 433	NM	NM	23 69	31 81
East South Central		2,570	13.8	2,895	2,543	10	8	INIVI	INIVI	20	19
Kentucky		3,266	-10.1	2,640	2,841	294	425			20	19
Mississippi	,	712	51.9	786	712	295				*	
Tennessee		2,205	-32.7	1,434	2,142	2/3		NM	NM	49	62
West South Central	12,697	12,401	2.4	8,551	8,287	3,896	3,932			251	182
Arkansas	,	964	2.0	974	962					10	2
Louisiana		1,282	4.9	670	629	674	653			1	1
Oklahoma		1,717	2.8	1,690	1,614	55	84			20	19
Texas		8,438	2.0	5,217	5,082	3,167	3,196			220	160
Mountain	9,068	9,216	-1.6	8,186	8,396	846	791			NM	NM
Arizona	1,552	1,647	-5.8	1,537	1,640					15	7
Colorado	1,567	1,637	-4.3	1,555	1,627	NM	NM				
Idaho	NM	NM								NM	NM
Montana	775	757	2.4	30	18	745	739				
Nevada		629	-43.7	354	629						
New Mexico	1,495	1,335	12.0	1,495	1,335						
Utah		1,257	13.5	1,378	1,212	45	42			NM	NM
Wyoming		1,950	-2.8	1,836	1,934	45				NM	NM
Pacific Contiguous	645	559	15.4	12	187	617	356	NM	NM	15	15
California		77	-8.9			56	62			14	15
Oregon		NM 204		12	187			 ND 4	 >D.4	NM	NM
Washington		294	90.9			561	293	NM	NM	1	1
Pacific Noncontiguous	108	98 NM	10.3	18	18	80 NM	69 NM	NM NM	NM NM	NM	NM
Alaska		NM 40	25.2	18	18	NM	NM	NM	NM	NIM	NIM
Hawaii		49 77 210	25.2	 61 206	 60 96 5	15 320	48	22	36	NM 037	NM
U.S. Total	77,505	77,210	.4	61,206	60,865	15,329	15,410	33	36	937	899

 $[{]m NM}$ = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Consumption of Coal for Electricity Generation by State, Year-to-Date through May **Table 2.6.B.** (Thousand Tons)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tot	al (All Secto		Electric l	U tilities	Independe Produ		Comm	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	3,472	3,046	14.0	556	597	2,807	2,333			109	116
Connecticut	855	611	39.9			855	611				
Maine	127	144	-11.8			24	34			103	109
Massachusetts	1,934	1,694	14.1			1,928	1,688			NM	NM
New Hampshire	556	597	-6.8	556	597						
Rhode Island											
Middle Atlantic	26,123	25,635	1.9	3,070	2,903	22,616	22,301	NM	NM	432	426
New Jersey	1,440	1,496	-3.8	290	186	1,150	1,310		14141		720
New York	4,046	4,149	-2.5	289	233	3,652	3,808	NM	NM	100	103
Pennsylvania	20,638	19,989	3.2	2,491	2,483	17,814	17,182	NM	NM	331	323
East North Central	90,135	84,624	6.5	71,916	68,835	17,305	14,910	81	77	834	803
Illinois	20,600	19,019	8.3	4,468	5,565	15,686	13,045	NM	NM	440	404
Indiana	23,405	21,609	8.3	22,685	20,705	673	861	NM	NM	NM	NM
Michigan	13,603	12,804	6.2	13,354	12,565	73	80	37	34	NM	NM
Ohio	22,934	22,300	2.8	22,014	21,331	870	923	NM	NM	NM	NM
Wisconsin	9,593	8,891	7.9	9,393	8,669	3	*	NM	NM	190	214
West North Central	60,057	56,013	7.2	59,057	55,290	NM NM	NM	NM NM	NM NIM	937	654
Iowa	9,135	8,862	3.1	8,913	8,625	NM	NM	NM	NM	180	195
Kansas Minnesota	8,938 8,617	8,827 7,802	1.3 10.5	8,938 7,965	8,827 7,465					652	337
Missouri	17,185	14,473	18.7	17,133	14,409			21	28	NM	NM
Nebraska	4,910	4,861	1.0	4,899	4,851					NM	NM
North Dakota	10,365	10,262	1.0	10,302	10,187					NM	NM
South Dakota	907	928	-2.2	907	928						
South Atlantic	68,127	65,620	3.8	54,285	53,172	13,034	11,612	NM	NM	797	824
Delaware	803	512	56.8			791	501			NM	NM
District of Columbia											
Florida	9,995	9,733	2.7	9,166	8,879	784	796			44	59
Georgia	13,017	13,294	-2.1	12,832	13,101					184	193
Maryland	4,849	4,083	18.8			4,790	4,083			60	
North Carolina	11,976	11,058	8.3	11,183	10,304	619	549	NM	NM	163	196
South Carolina	5,755	5,787	6 2.8	5,651	5,674	1 224			 1	104 116	114 110
Virginia West Virginia	6,017 15,715	5,856 15,295	2.8 2.7	4,667 10,785	4,780 10,436	1,234 4,816	966 4,718			113	142
East South Central	42,493	41,087	3.4	39,598	38,503	2,519	2,177	NM	NM	367	399
Alabama	13,610	11,599	17.3	13,444	11,466	45	31		14141	121	102
Kentucky	16,036	16,416	-2.3	14,387	14,270	1,649	2,146				
Mississippi	3,871	2,384	62.4	3,044	2,384	825	-,			2	
Tennessee	8,976	10,688	-16.0	8,723	10,383			NM	NM	244	297
West South Central	60,506	57,221	5.7	39,950	39,460	19,413	16,774			1,142	987
Arkansas	4,724	5,394	-12.4	4,685	5,385					39	10
Louisiana	5,991	5,709	4.9	2,789	2,791	3,187	2,911			16	7
Oklahoma	8,938	8,282	7.9	8,450	7,785	373	378			115	119
Texas	40,852	37,836	8.0	24,026	23,499	15,854	13,484			972	852
Mountain	45,864	45,723	-3.9	41,230	41,153	4,443	4,405		-	191	165
Colorado	7,443 7,777	7,743 7,720	-3.9 .7	7,378 7,719	7,697 7,666	58	 54			64	46
T 1 1	373.6	373.6	./	7,719	7,000	38	34			NM	NM
Montana	NM 4,146	NM 4,245	-2.3	129	105	4,017	4,140				14141
Nevada	2,613	3,156	-17.2	2,613	3,156	4,017					
New Mexico	6,824	6,120	11.5	6,824	6,120						
Utah	6,499	6,263	3.8	6,275	6,031	204	211			NM	NM
Wyoming	10,545	10,462	.8	10,291	10,378	163				NM	NM
Pacific Contiguous	4,243	3,826	10.9	875	959	3,298	2,793	NM	NM	67	72
California	359	434	-17.3			300	371			60	64
Oregon	878	959	-8.5	875	959	2 000		 >D.6	 >D.6	NM	NM
Washington	3,006	2,432	23.6			2,999	2,422	NM	NM	5	8 NIM
Pacific Noncontiguous	558 NIM	514 NM	8.7	80	83	416 NM	372 NM	NM NM	NM NM	NM	NM
Alaska	NM 300	NM 262	14.4	80	83	NM 291	NM 254	NM 	NM 	NM	NM
U.S. Total	401,578	383,312	4.8	310,618	300,955	85,879	77,703	198	198	4,884	4,457
0.5. 10tai	701,570	303,312	7.0	210,010	200,733	03,077	77,703	170	170	7,007	7,737

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions. •Totals may not equal sum of components because of independent rounding. •Percent difference is calculated before rounding. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data. •Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 2.7.A. Consumption of Petroleum for Electricity Generation by State, May 2003 and 2002 (Thousand Barrels)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Secto		Electric	Utilities		ent Power ucers	Comm	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	946	1,271	-25.5	333	138	499	993	33	32	82	108
Connecticut		201	-85.5	NM	NM	26	197	NM	NM	NM	NM
Maine		143	-5.7			71	48	*	1	64	94
Massachusetts		778	-44.2	NM 216	NM	384	747 *	24	20	NM	NM
New Hampshire Rhode Island		138 NM	146.8	316 NM	132 NM	18	1	NM NM	NM NM	NM NM	NM NM
Vermont		NM		NM	NM				11111	11111	11171
Middle Atlantic	2,130	1,953	9.1	1,010	1,099	835	763	NM	NM	279	85
New Jersey	247	77	221.9	4	32	18	33	NM	NM	224	11
New York		1,590	.8	1,001	1,049	573	516	NM	NM	24	20
Pennsylvania		286	-1.8	5	18	244	214	NM	NM	30	54
East North Central	323	420	-23.2	266	333	18	13	NM	NM	NM	NM
Illinois		NM 126	-30.4	NM 86	NM 119	14 NM	12 NM	NM NM	NM NM	NM NM	NM NM
Indiana Michigan		126 104	-30.4 -28.1	86 74	103	INIVI *	NM	NM NM	NM NM	NM NM	NM NM
Ohio		79	-5.6	71	77	NM	NM	NM	NM	NM	NM
Wisconsin		86	-31.6	26	25	2		NM	NM	NM	NM
West North Central	259	226	14.3	248	215	NM	NM	NM	NM	NM	NM
Iowa	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas		33	107.8	69	33						*
Minnesota		79	89.4	142	72	7	6	NM	NM	NM	NM
Missouri		92	-81.1	17	92			NM	NM	NM	NM
Nebraska North Dakota		NM NM		NM 5	NM			NM 	NM 	NM	NM
South Dakota		2	-61.9	1	6 2					INIVI	NM
South Atlantic	7,036	7,048	2	6,201	6,302	496	464	NM	NM	337	278
Delaware	121	52	133.4	9	18	6	7			106	27
District of Columbia						6					
Florida	5,855	6,266	-6.6	5,492	5,966	335	259			28	41
Georgia		193	17.9	90	59	NM	NM	NM	NM	135	132
Maryland		NM		NM	NM	107	179	NM	NM	NM	NM
North Carolina	133	109	22.0	97	69	NM	NM	NM	NM	34	39
South Carolina Virginia		54 159	11.3 202.3	36 438	27 133	31	12	NM NM	NM NM	23 10	26 13
West Virginia		32	202.5	32	25	7	6			NM	NM
East South Central	695	145	380.2	197	76	453	27	NM	NM	44	42
Alabama		77	59.1	79	16	10	25			34	36
Kentucky		27	1634.5	26	26	443	1				
Mississippi		10	197.0	23	7			NM	NM	NM	NM
Tennessee		30	143.3	70	27					4	3
West South Central	1,030	615	67.5	711	40	264	544	NM	NM	55	31
Arkansas		31	-80.6	5	30	220	204			1	1
LouisianaOklahoma		300 8	74.7 30.7	287 NM	3 NM	229	294	NM	NM	7 7	3 5
Texas		8 277	30.7 77.4	416	4	35	251	NM	NM	40	22
Mountain	154	129	19.0	44	25	108	99	NM	NM	NM	NM
Arizona		9	53.9	13	8			NM	NM	NM	NM
Colorado	NM	NM		2	1	NM	NM			NM	NM
Idaho											
Montana		98	8.5	NM	NM	106	98				
Nevada		3	38.2	5	3					NIM	NIM
New Mexico		7 NM	19.0	7 NM	3 NM	2 NM	1 NM			NM	NM
Utah Wyoming		3	246.1	NM 9	2	NIVI	INIVI			NM	NM
Pacific Contiguous	473	417	13.5	20	11	240	294	NM	NM	213	112
California		409	13.2	15	9	238	293	NM	NM	210	106
Oregon	5	2	132.2	5	1			NM	NM		1
Washington		NM		*	*	NM	NM	NM	NM	NM	NM
Pacific Noncontiguous	1,253	1,283	-2.3	1,008	1,069	219	195	NM	NM	NM	NM
Alaska		123	-6.1	107	116	NM 210	NM 104	NM	NM	NM NM	NM NM
Hawaii	1,138 14,299	1,159 13,506	-1.9 5.9	901	953 9 307	218 3 140	194 3 400	46	45	NM 1 075	NM 754
U.S. Total	14,299	13,506	5.9	10,039	9,307	3,140	3,400	46	45	1,075	754

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions. •Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. •Totals may not equal sum of components because of independent rounding. •Percent difference is calculated before rounding. •Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data. •Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Table 2.7.B. Consumption of Petroleum for Electricity Generation by State, Year-to-Date through May (Thousand Barrels)

	_				Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tot	al (All Secto		Electric l	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	11,374	7,343	54.9	1,808	258	8,558	6,237	NM	NM	731	682
Connecticut	1,980	1,709	15.9	NM	NM	1,933	1,688	NM	NM	NM	NM
Maine	1,927	687	180.6			1,436	149	4	4	487	534
Massachusetts	5,698	4,646	22.6	218	23	5,163	4,398	NM	NM	NM	NM
New Hampshire	1,631	241	576.4	1,539	212	18	*	NM	NM	NM	NM
Rhode Island	NM NM	NM NM		NM NM	NM NM	7	1	NM 	NM 	NM 	NM
Wermont Middle Atlantic	19,907	8,589	131.8	7,059	4,599	12,015	3,500	NM	NM	752	459
New Jersey	2,174	322	574.7	182	90	1,619	171	NM	NM	NM	NM
New York	13,084	6,659	96.5	6,857	4,483	6,008	2,009	NM	NM	148	139
Pennsylvania	4,648	1,608	189.1	NM	NM	4,388	1,319	NM	NM	NM	NM
East North Central	3,499	2,039	71.6	1,680	1,596	1,474	151	NM	NM	324	286
Illinois	1,511	203	645.1	NM	NM	1,450	148	NM	NM	NM	NM
Indiana	407	495	-17.7	338	454	6	*	NM	NM	61	39
Michigan	704	702	.3	687	697	*	*	NM	NM	NM	NM
Ohio	456	272	67.6	426	269	NM	NM	NM	NM	NM	NM
Wisconsin	421	367	14.7	187	139	4	2	NM	NM	220	224
West North Central	1,559	1,571	8	1,497	1,536	NM	NM	NM	NM	NM	NM
Iowa	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas	584	541	7.8	583	541					1	*
Minnesota	626	420	48.9	592	399	17	8	NM	NM	NM	NM
Missouri	149	506	-70.6	147	506			NM	NM	NM	NM
Nebraska	NM	NM		NM	NM			NM 	NM	NIM	NIM
North Dakota	NM 16	NM 5	246.7	35 16	23 5					NM 	NM
South Atlantic	34,831	27,723	25.6	25,693	23,942	7,408	2,276	178	32	1,551	1,474
Delaware	1,492	512	191.6	62	115	1,221	253			209	144
District of Columbia	106	92	15.8			106	92				
Florida	22,115	21,856	1.2	20,808	20,933	1,172	729			NM	NM
Georgia	1,198	1,034	15.9	305	251	NM	NM	NM	NM	744	747
Maryland	3,430	1,084	216.5	NM	NM	3,391	1,062	NM	NM	NM	NM
North Carolina	1,074	671	60.2	636	457	171	12	NM	NM	265	200
South Carolina	435	277	57.2	277	141	21		NM	NM	136	136
Virginia	4,748	2,041	132.7	3,395	1,876	1,135	83	170	28	NM	NM
West Virginia	232	158	47.3	175	147	45	11			NM	NM
East South Central	2,632	645	308.3	1,255	448	1,145	35	NM	NM	228	160
Alabama	408	283	44.1	226	133	NM	NM			NM	NM
Kentucky	1,311	112	1069.1	181	104	1,130	9	 ND 4	 ND 4	 ND 4	 >D.4
Mississippi	471	45 204	936.0	442 406	30	NIM	NIM	NM	NM	NM	NM
West South Central	5.299	3,125	116.7 69.6	2,333	182 204	NM 2,485	NM 2,722	NM	NM	32 478	22 197
Arkansas	187	134	39.9	179	131	2,405	2,722	INIVI	INIVI	8	2
Louisiana	2,262	1,390	62.8	964	40	1,247	1,329			52	21
Oklahoma	210	35	493.4	176	9	1,24/	1,329	NM	NM	33	26
Texas	2,640	1,566	68.5	1,015	23	1,238	1,394	NM	NM	385	148
Mountain	709	794	-10.8	201	180	489	595	NM	NM	NM	NM
Arizona	NM	NM		36	46			NM	NM	NM	NM
Colorado	NM	NM		21	23	NM	NM			NM	NM
Idaho	*	*	-13.2	*	*						
Montana	483	592	-18.4	NM	NM	481	592				
Nevada	19	22	-13.8	19	22						
New Mexico	NM	NM		40	17	2	3			NM	NM
Utah	NM	NM		NM 24	NM	NM	NM			NIM	 ND 6
Wyoming	NM 2.011	NM 1 007		34	33	1 272	1 400	NM	NM	NM 611	NM
Pacific Contiguous	2,011	1,997	.7 -2.0	127 43	51 39	1,272 1,267	1,408 1,400	NM NM	NM NM	611	538 477
California	1,877 81	1,916 13	-2.0 534.7	43 78	9	1,207	1,400	NM NM	NM NM	566 NM	NM
Oregon Washington	NM	NM	334.7	78	3	NM	NM	NM	NM	NM	NM
Pacific Noncontiguous	6,034	6,021	.2	4,992	5,283	802	663	NM	NM	NM	NM
Alaska	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM
Hawaii	5,363	5,285	1.5	4,434	4,581	796	662			NM	NM
U.S. Total	87,854	59,848	46.8	46,646	38,099	35,668	17,598	602	253	4,937	3,899

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Table 2.8.A. Consumption of Natural Gas for Electricity Generation by State, May 2003 and 2002 (Thousand Mcf)

					Electric Po	wer Sector		Combine	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Secto	rs	Electric	Utilities		ent Power ucers	Comm	nercial	Indu	strial
	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	22,246	28,578	-22.2	15	232	20,395	26,132	NM	NM	1,656	1,985
Connecticut		5,934	-44.1			3,184	5,751	NM	NM	NM	NM
Maine		7,087	-32.5			3,449	5,589	NM	NM	1,335	1,498
Massachusetts New Hampshire		11,533 NM	6.2	12	190 39	11,914	10,872	NM 	NM 	NM NM	NM NM
Rhode Island		3,925	-52.8	- <u>-</u> -	39 	1,848	3,920	NM	NM	INIVI	INIVI
Vermont		3,723	13.3	3	3	1,040	3,720				
Middle Atlantic		36,753	-24.2	7,524	7,319	18,285	25,611	NM	NM	1,760	3,466
New Jersey	8,407	10,140	-17.1	15	72	7,681	7,739	NM	NM	NM	NM
New York	,	23,921	-28.9	7,508	7,245	8,694	15,884	NM	NM	NM	NM
Pennsylvania		2,691	-9.0	NM	NM	1,911	1,987	NM	NM	431	561
East North Central		20,070	-35.1	3,089	3,658	9,042	12,149	NM	NM	NM	NM
IllinoisIndiana		6,782 1,882	-77.2 53.3	149 1,543	108 499	1,116 1,197	3,638 717	NM NM	NM NM	NM NM	NM NM
Michigan	,	9,261	-27.6	1,543	1,874	5,835	7,137	NM NM	NM NM	NM NM	NM NM
Ohio		NM	-27.0	203	461	NM	NM	NM	NM	NM	NM
Wisconsin		1,425	-13.2	525	715	NM	NM	NM	NM	NM	NM
West North Central		4,843	-24.9	2,530	3,513	674	713	NM	NM	NM	NM
Iowa	. NM	NM		246	486			NM	NM	NM	NM
Kansas		1,317	-28.2	922	1,290			NM	NM	NM	NM
Minnesota		NM		254	286	NM	NM	NM	NM	NM	NM
Missouri	,	1,540	-16.3	904	1,100	380	390	NM	NM	NM	NM
Nebraska		NM NM		193	294	NM 	NM 	NM 	NM 	NM NM	NM NM
North Dakota		58	-82.1	10	58					INIVI	INIVI
South Atlantic		61,384	7	46,716	47,715	13,178	12,057	NM	NM	1,025	1,556
Delaware		1,021	-65.1	15	6	341	1,015				
District of Columbia											
Florida	50,938	45,929	10.9	44,038	39,984	6,474	5,077	NM	NM	NM	NM
Georgia		3,795	-25.8	697	1,566	1,790	1,828			NM	NM
Maryland		918	44.5	NM	NM	1,293	867			NM	NM
North Carolina		2,815	12.1	503	1,292	2,633	1,502	NM	NM	NM	NM
South Carolina Virginia		4,620 2,133	-73.8 -52.1	1,110 349	3,946 919	89 468	585 1,084	NM 11	NM 20	10 NM	87 NM
West Virginia		2,133 NM	-32.1	4	1	90	98			NM	NM
East South Central		26,063	-42.2	11,272	21,296	1,824	1,762	NM	NM	1,932	2,984
Alabama		9,599	-39.8	3,869	6,491	736	953			1,178	2,155
Kentucky		NM		259	319	43	227	*		NM	NM
Mississippi	8,694	15,531	-44.0	7,117	14,486	1,045	523	NM	NM	NM	NM
Tennessee		NM		27			58	NM	NM	NM	NM
West South Central	,	195,273	2.6	66,744	72,668	100,102	85,942	1,406	358	32,149	36,305
Arkansas		2,172	25.7	399	1,323	2,068	634	NM 1 007	NM 27	NM	NM
Louisiana		36,808 13,232	-17.8 8.9	14,467 11,792	22,375 12,212	4,260 2,203	3,841 665	1,007 NM	27 NM	10,508 399	10,565 329
Oklahoma Texas		13,232	8.9 7.0	40,085	36,759	91,572	80,801	NM NM	NM NM	20,982	25,199
Mountain		28,239	-5.8	14,633	17,534	11,099	9,697	NM	NM	NM	NM
Arizona	,	9,152	-5.0	3,281	4,640	5,408	4,500	NM	NM	NM	NM
Colorado	,	5,926	1.2	3,635	3,558	2,254	2,251	NM	NM	NM	NM
Idaho	. NM	NM		42	32	NM	NM			NM	NM
Montana		23	-29.2	8	7	3	6			5	10
Nevada		7,388	-7.0	3,872	4,881	2,997	2,507				
New Mexico		3,352	-6.0	2,682	2,942	285	202	NM	NM	NM	NM
Utah		1,563	-19.1	1,072	1,386	36	120	NM	NM	NM	NM
Wyoming Pacific Contiguous		NM 49,559	-12.3	42 5,610	6,015	40 29,435	129 34,685	960	1,069	NM 7,474	NM 7,791
California		46,072	-12.3	5,234	5,304	27,383	32,543	925	1,045	7,103	7,181
Oregon		2,471	-22.0	90	388	1,525	1,608	NM	NM	309	465
Washington		1,016	-10.9	285	323	527	533	NM	NM	62	145
Pacific Noncontiguous		3,324	4.8	2,615	2,433					NM	NM
Alaska		3,324	4.8	2,615	2,433					NM	NM
Hawaii		454 000	0.2	160 746	102 202	204.026	200 747	2 202	2 606	10 (73	
U.S. Total	416,749	454,088	-8.2	160,746	182,382	204,036	208,747	3,293	2,606	48,673	60,353

 $[{]m NM}$ = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •Total includes small amount of waste heat consumption.•See Glossary for definitions.•Values for 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Values for 2002 have been adjusted to reflect the Form EIA-861 census data and are final.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Mcf = thousand cubic feet. •Natural gas, including a small amount of supplemental gaseous fuels.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Table 2.8.B. Consumption of Natural Gas for Electricity Generation by State, Year-to-Date through May (Thousand Mcf)

					Electric Po	wer Sector		Combine	d Heat and	l Power Pr	oducers
Census Division and State	Tot	al (All Secto		Electric	Utilities	Independe Prod		Comm	ercial	Indu	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	109,665	128,444	-14.6	101	657	100,086	117,207	997	1,428	8,481	9,153
Connecticut	15,954	23,350	-31.7			15,182	22,368	NM	NM	NM	NM
Maine	27,009	35,282	-23.4			19,902	28,100	NM	NM	7,107	7,182
Massachusetts	52,515	47,815	9.8	93	563	51,087	45,168	865	1,261	NM	NM
New Hampshire Rhode Island	NM 13,937	NM 21,597	-35.5	1	80	13,915	21,570	NM	NM	NM 	NM
Vermont	15,757	13	-39.9	8	13	13,913	21,570				
Middle Atlantic	138,216	187,150	-26.1	27,467	34,494	99,296	132,660	1,773	2,182	9,681	17,813
New Jersey	40,582	54,599	-25.7	94	308	35,716	42,315	NM	NM	4,228	11,283
New York	86,223	119,343	-27.8	27,364	34,178	55,112	80,646	NM	NM	3,117	3,790
Pennsylvania	11,411	13,208	-13.6	NM	NM	8,469	9,700	NM	NM	2,336	2,740
East North Central	77,206	103,489	-25.4	18,931	22,523	51,033	69,031	NM	NM	6,404	10,977
IllinoisIndiana	13,496 9,731	25,626 14,054	-47.3 -30.8	NM 4,882	NM 4,322	9,675 3,854	18,179 6,160	NM NM	NM NM	2,353 968	4,753 3,544
Michigan	40,328	51,647	-30.8 -21.9	4,882 6,051	4,322 9,894	3,834	40,445	NM NM	NM NM	968 NM	3,544 NM
Ohio	3,763	3,910	-3.8	1,215	2,295	2,298	1,295	NM	NM	NM	NM
Wisconsin	9,888	8,251	19.8	5,785	3,913	2,574	2,951	NM	NM	1,378	1,205
West North Central	21,828	25,797	-15.4	14,038	17,899	3,841	4,256	NM	NM	3,108	2,553
Iowa	2,620	3,696	-29.1	1,430	2,260			NM	NM	NM	NM
Kansas	5,377	5,509	-2.4	4,295	5,370			NM	NM	1,057	113
Minnesota	5,942	5,541	7.2	2,344	1,297	2,022	2,336	NM	NM	NM	NM
Missouri	6,806	9,613	-29.2	4,935	7,608	1,816	1,920	28	50	NM	NM
Nebraska North Dakota	901 NM	1,084 NM	-16.8	862	1,019 1	NM 	NM 	NM 	NM 	NM NM	NM NM
South Dakota	173	344	-49.8	173	344					INIVI	11111
South Atlantic	244,683	247,256	-1.0	182,247	184,329	55,483	53,866	NM	NM	6,404	8,597
Delaware	3,059	5,250	-41.7	97	28	2,962	5,222			*	
District of Columbia											
Florida	193,059	187,295	3.1	167,440	161,528	23,093	21,358	NM	NM	2,365	4,237
Georgia	13,388	13,042	2.7	1,774	3,839	9,776	6,342			1,838	2,861
Maryland	3,623	4,006	-9.6	NM	NM	3,429	3,878			NM	NM
North Carolina	11,589	12,743	-9.1	2,777	2,867	8,687	9,778	NM NM	NM NM	NM	NM
South Carolina Virginia	6,543 12,365	13,985 9,934	-53.2 24.5	5,716 4,424	10,821 5,229	772 6,367	2,792 3,870	NM 368	NM 268	46 1,206	363 567
West Virginia	1,057	1,000	5.7	17	14	396	628		200	NM	NM
East South Central	88,562	138,598	-36.1	66,783	112,629	10,635	11,631	NM	NM	10,909	13,778
Alabama	35,934	48,790	-26.3	24,980	37,714	4,850	1,626			6,104	9,450
Kentucky	2,155	3,502	-38.5	1,218	1,774	226	647	97	395	NM	NM
Mississippi	47,627	84,712	-43.8	38,745	72,998	5,371	9,004	NM	NM	3,459	2,652
Tennessee	2,846	1,594	78.6	1,841	142	NM	NM	NM	NM	NM	NM
West South Central	837,196	867,122	-3.5	240,549	298,778	412,425	384,601	4,320	1,850	179,902	181,893
Arkansas Louisiana	12,528 143,100	9,260 164,921	35.3 -13.2	1,943 59,592	4,783 93,268	9,085 19,060	3,401 14,238	NM 2,774	NM 137	1,489 61,673	1,064 57,277
Oklahoma	60,073	66,912	-10.2	48,069	57,963	9,798	6,837	2,774 NM	NM	2,104	1,989
Texas	621,495	626,028	7	130,945	142,763	374,483	360,125	1,432	1,577	114,636	121,564
Mountain	125,325	130,412	-3.9	64,346	71,204	56,728	53,384	NM	NM	3,680	5,204
Arizona	40,935	40,013	2.3	13,175	15,938	27,709	24,024	NM	NM	NM	NM
Colorado	26,865	28,556	-5.9	16,401	16,771	9,913	11,188	NM	NM	NM	NM
Idaho	NM	NM	25.4	89	464	NM	NM			750	1,252
Montana	101	75 27.462	35.4	58 17 206	9 21 641	16 772	15 922			40	55
New Mexico	34,079 12,904	37,463 13,920	-9.0 -7.3	17,306 10,738	21,641 11,127	16,773 1,255	15,822 1,309	NM	NM	NM	NM
Utah	6,657	5,257	26.6	5,817	4,520	1,233	1,309	NM	NM	NM	NM
Wyoming	2,514	2,866	-12.3	761	735	589	483			1,164	1,648
Pacific Contiguous	284,323	293,802	-3.2	41,107	44,670	201,172	205,580	4,243	5,364	37,801	38,188
California	244,427	253,531	-3.6	33,116	32,452	171,483	180,641	4,047	4,973	35,781	35,465
Oregon	23,054	25,133	-8.3	3,346	7,899	18,086	15,508	NM	NM	1,600	1,680
Washington	16,842	15,138	11.3	4,644	4,319	11,603	9,431	NM	NM	420	1,043
Pacific Noncontiguous	18,506	17,330	6.8	14,295	12,947		-			4,212	4,382
Alaska Hawaii	18,506	17,330	6.8	14,295	12,947					4,212	4,382
LIAWAII											

 $[{]m NM}$ = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •Total includes small amount of waste heat consumption.•See Glossary for definitions.•Values for 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Values for 2002 have been adjusted to reflect the Form EIA-861 census data and are final.•Totals may not equal sum of components because of independent rounding.•Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Mcf = thousand cubic feet. •Natural gas, including a small amount of supplemental gaseous fuels.

Chapter 3. Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal and Petroleum: Electric Power Sector, 1990 through May 2003

	Electric Po	ower Sector ¹	Electric	Utilities	Independent Power	er Producers
Period	Coal (Thousand Tons) ²	Petroleum (Thousand Barrels) ³	Coal (Thousand Tons) ²	Petroleum (Thousand Barrels) ³	Coal (Thousand Tons) ²	Petroleum (Thousand Barrels) ³
1990	156,166	83,970	156,166	83,970	NA	NA
1991		75,343	157,876	75,343	NA	NA
1992	154,130	72,183	154,130	72,183	NA	NA
1993	111,341	62,890	111,341	62,890	NA	NA
1994	126,897	63,333	126,897	63,333	NA	NA
1995		50,821	126,304	50,821	NA	NA
1996		48,146	114,623	48,146	NA	NA
1997		51,138	98,826	51,138	NA	NA
1998		56,591	120,501	56,591	NA	NA
1999		54,109	129,041	46,169	NA	NA
2000		40,932	90,115	30,502	12,180	10,430
2001	,	17,772	7 1,222		,	
January	96,545	43,775	84,903	30,795	11,642	12,980
February	-	48,775	85,978	33,129	12,242	15,646
March	-	46,450	94,153	32,362	15,000	14,088
April	-	47,365	102,133	31,896	16,390	15,469
May	· ·	53,681	108,452	35,068	19,069	18,613
June	· · · · · · · · · · · · · · · · · · ·	53,707	106,987	35,436	19,696	18,270
July		55,374	101,131	36,415	17,874	18,958
August		48,209	95,495	32,447	17,571	15,762
September	· ·	51,369	98,028	33,640	17,722	17,729
October	-	53,675	107,154	34,488	19,593	19,187
November		55,161	114,684	35,237	20,744	19,924
December		57,031	117,147	37,308	21,349	19,723
2002	150,470	57,051	117,147	37,300	21,547	17,723
January	140,236	55,641	116,501	33,516	23,735	22,125
February		53,279	118,994	32,501	25,079	20,779
March	· · · · · · · · · · · · · · · · · · ·	49,495	121,854	29,702	25,548	19,792
April		48,301	124,147	29,729	26,945	18,572
May		48,669	126,581	30,526	28,095	18,143
June	-	50,347	123,424	31,086	28,102	19,261
July		45,111	115,886	28,688	26,220	16,422
August	· · · · · · · · · · · · · · · · · · ·	44,503	111,934	29,294	21,078	15,209
September		41,916	109,678	27,003	25,743	14,913
October		43,226	115,101	28,112	26,657	15,114
November		43,944	118,482	29,040	26,496	14,905
December		44,837	116,409	30,641	25,617	14,196
2003	112,020	11,057	110,107	50,011	23,017	11,170
January	135,771	38,051	113,149	26,778	22,622	11,272
February	-	36,713	105,537	26,027	23,291	10,686
March	· ·	42,385	107,941	26,132	23,222	16,253
April		45,681	113,077	29,077	25,818	16,604
May	· ·	50,339	115,634	29,429	28,250	20,911

¹ The electric power sector comprises electricity only and combined-heat-and-power plants with the NAICS 22 category whose primary business is to sell electricity or electricity and heat to the public. ² Anthracite, bituminous coal, subbituminous coal, and lignite.

³ Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil. NA = Not available.

Notes: •See Glossary for definitions.•Prior to 2001 values represent December end-of-month stocks. For 2001 forward values represent end-of-month stocks.•Values for 2002 and 2003 are estimates based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906. Values for 2001 and prior years are final. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report," and predecessor forms.

Table 3.2. Stocks of Coal: Electric Power Sector, by State, May 2003 (Thousand Tons)

And State New England Connecticut, Maine, New Hampshire, Rhode Island, Vermont ² Massachusetts Middle Atlantic New Jersey New York Pennsylvania East North Central	May 2003 1,523 936 587 7,365 920 969 5,476 38,846	334 708 8,862 797 1,168	Percent Change 22.7 75.3 -17.1 -16.9	May 2003 286 W W	May 2002 311	May 2003 1,237	May 2002 930
Connecticut, Maine, New Hampshire, Rhode Island, Vermont ² Massachusetts Middle Atlantic New Jersey New York Pennsylvania	936 587 7,365 920 969 5,476 38,846	534 708 8,862 797	75.3 -17.1 - 16.9	W W	W	,	930
New Hampshire, Rhode Island, Vermont ²	587 7,365 920 969 5,476 38,846	708 8,862 797	-17.1 - 16.9	W		W	
Vermont ²	587 7,365 920 969 5,476 38,846	708 8,862 797	-17.1 - 16.9	W		W	
Massachusetts	587 7,365 920 969 5,476 38,846	708 8,862 797	-17.1 - 16.9	W		W	
Massachusetts	7,365 920 969 5,476 38,846	8,862 797	-16.9			**	W
New Jersey New York Pennsylvania	920 969 5,476 38,846	797			W	W	W
New YorkPennsylvania	969 5,476 38,846		1 7 4	1,590	1,665	5,775	7,197
Pennsylvania	5,476 38,846	1,168	15.4	W	W	W	W
	38,846		-17.1	W	W	W	W
East North Central		6,896	-20.6	W	W	W	W
		40,078	-3.1	29,690	33,328	9,156	6,750
Illinois	10,623	8,056	31.9	W	W	W	W
Indiana	9,652	10,130	-4.7	W	W	W	W
Michigan	7,920	10,050	-21.2	W	W	W	W
Ohio	6,288	6,996	-10.1	W	W	W	W
Wisconsin	4,363	4,846	-10.0	W	W	W	W
West North Central	23,286	22,836	2.0	23,286	22,836	0	0
Iowa	4,109	4,113	1	W	W	W	W
Kansas	5,174	5,177	1	W	W	W	W
Minnesota	2,164	1,841	17.5	W	W	W	W
Missouri	7,348	7,327	.3	W	W	W	W
Nebraska	2,714	2,598	4.5	W	W	W	W
North Dakota, South Dakota ²	1,777	1,780	2	W	W	W	W
South Atlantic	23,792	30,819	-22.8	19,411	26,196	4,381	4,623
Delaware, District of Columbia,							
Maryland ²	1,848	2,021	-8.6	W	W	W	W
Florida	4,258	5.111	-16.7	W	W	W	W
Georgia	2.891	6.045	-52.2	W	W	W	W
North Carolina	5.129	6.220	-17.5	W	W	W	W
South Carolina	3,044	3,445	-11.6	W	W	W	W
Virginia	2.008	2,930	-31.5	W	W	W	W
West Virginia	4.613	5.047	-8.6	W	W	W	W
East South Central	13,705	14,672	-6.6	12,885	13.021	820	1,650
Alabama	2.789	3,096	-9.9	W	W	W	W
Kentucky	6,961	7,557	-7.9	W	W	W	W
Mississippi	1.104	1.798	-38.6	W	W	W	W
Tennessee	2.851	2.220	28.4	W	W	W	W
West South Central	21,205	21,673	-2.2	15,954	16,234	5,251	5,439
Arkansas	2,577	2,524	2.1	W	W	W	W
Louisiana	3,438	3,894	-11.7	W	W	W	W
Oklahoma	4,171	4,701	-11.3	W	W	W	W
Texas	11,018	10,556	4.4	W	W	W	W
Mountain	12,812	13,116	-2.3	12,249	12,537	562	579
Arizona	2,966	3,085	-3.9	W	W	W	W
Colorado	2,665	3,040	-12.3	W	W	W	W
Idaho							
Montana, New Mexico ²	1,373	1,381	6	W	W	W	W
Nevada	904	663	36.3	W	W	W	W
Utah	3.188	3.510	-9.2	W	W	W	W
Wyoming	1.716	1.437	19.4	w	w	w	w
Pacific ³	1,351	1,379	-2.0	283	452	1,068	927
California, Oregon, Washington,	-,002	1,0.,				-,000	
Hawaii, Alaska ²	1,351	1,379	-2.0	W	W	W	W
U.S. Total	143,884	154.676	-7.0	115,634	126,581	28,250	28,095

¹ The electric power sector comprises electricity only and combined-heat-and-power plants with the NAICS 22 category whose primary business is to sell electricity or electricity and heat to the public

Notes: *See Glossary for definitions.*Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.*Totals may not equal sum of components because of independent rounding.*Percent difference is calculated before rounding.*Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.*Anthracite, bituminous coal, subbituminous coal, and lignite.

electricity and heat to the public. ² Individual states' data cannot be provided in order to protect confidentiality.

³ Pacific Contiguous and Pacific Non-Contiguous were aggregated to Pacific to protect Census Division proprietary information.

W = Withheld to avoid disclosure of individual company data.

Table 3.3. Stocks of Petroleum: Electric Power Sector, by State, May 2003 (Thousand Barrels)

Census Division and State	Elec	tric Power Sector	1	Electric	Utilities	Independent Po	wer Producer
and State	May 2003	May 2002	Percent Change	May 2003	May 2002	May 2003	May 2002
New England	3,275	4,020	-18.6	535	643	2,739	3,378
Connecticut, Maine,							
New Hampshire, Rhode Island,							
Vermont ²	2,211	2,274	-2.8	W	W	W	W
Massachusetts	1.063	1,746	-39.1	W	W	W	W
Middle Atlantic	8,927	8,901	.3	3,324	3,144	5,603	5,757
New Jersey	745	1,899	-60.8	W	W	W	W
New York	5,746	6,223	-7.7	W	W	W	W
Pennsylvania	2,436	779	212.7	W	W	W	W
East North Central	3,035	4,625	-34.4	1,874	2,778	1,161	1,847
Illinois	1.070	1.859	-42.4	W	W	W	W
Indiana	252	352	-28.6	W	W	W	w
Michigan	1,015	1,697	-40.2	W	W	W	w
Ohio	391	409	-4.3	W	W	W	W
Wisconsin	307	309	5	W	w	W	W
West North Central	1.834	2,016	-9.0	1,825	2,007	8	9
Iowa	92	105	-13.1	W	2,00 7	W	w
Kansas	771	836	-7.7	W	W	W	w
Minnesota	320	263	21.7	W	W	W	W
Missouri	310	402	-23.0	W	W	W	W
Nebraska	214	240	-10.9	W	W	W	W
North Dakota, South Dakota ²	127	170	-25.0	W	W	W	W
South Atlantic	17,280	17.415	-23.0 8	13,867	13,483	3,413	3,932
Delaware, District of Columbia,	17,200	17,413	0	13,007	13,403	3,413	3,732
	2 205	2.512	12.2	***	***	***	117
Maryland ²	2,205	2,512	-12.2	W	W	W	W
Florida	10,602	9,982	6.2	W	W	W	W
Georgia	779	1,018	-23.5	W	W	W	W
North Carolina	807	922	-12.5	W	W	W	W
South Carolina	736	616	19.5	W	W	W	W
Virginia	2,032	2,282	-11.0	W	W	W	W
West Virginia	119	82	44.8	W	W	W	W
East South Central	8,343	2,256	269.9	1,892	1,679	6,451	577
Alabama	94	203	-53.6	W	W	W	W
Kentucky	6,632	759	773.5	W	W	W	W
Mississippi	982	600	63.7	W	W	W	W
Tennessee	635	694	-8.5	W	W	W	W
West South Central	3,527	4,595	-23.2	2,741	3,409	786	1,186
Arkansas	158	332	-52.5	W	W	W	W
Louisiana	1,245	1,416	-12.1	W	W	W	W
Oklahoma	415	519	-20.1	W	W	W	W
Texas	1,710	2,328	-26.6	W	W	W	W
Mountain	1,198	1,307	-8.4	1,089	1,235	108	72
Arizona	442	481	-8.1	W	W	W	W
Colorado	166	214	-22.3	W	W	W	W
Idaho	*	*	-34.9	W	W	W	W
Montana, New Mexico ²	158	143	10.9	W	W	W	W
Nevada	376	389	-3.5	W	W	W	W
Utah	33	39	-13.8	W	W	W	W
Wyoming	21	41	-48.2	W	W	W	W
Pacific ³	2,921	3,533	-17.3	2,282	2,147	639	1,386
California, Oregon, Washington,					•		
Hawaii, Alaska ²	2,921	3,533	-17.3	W	W	W	W
U.S. Total	50,339	48,669	3.4	29,429	30,526	20,911	18,143

¹ The electric power sector comprises electricity only and combined-heat-and-power plants with the NAICS 22 category whose primary business is to sell electricity or electricity and heat to the public

Notes: •See Glossary for definitions.•Values for 2002 and 2003 are estimated based on a sample; they are preliminary data - see Technical Notes for a discussion of the sample design for the Form EIA-906.•Totals may not equal sum of components because of independent rounding. Percent difference is calculated before rounding.•Due to restructuring of the electric power industry, electric utilities are selling plants to the nonutility sector. This will affect comparisons of current and historical data.•Distillate fuel oil, residual fuel oil, jet fuel, kerosene, and petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology).

electricity and heat to the public.
² Individual states' data cannot be provided in order to protect confidentiality.

³ Pacific Contiguous and Pacific Non-Contiguous were aggregated to Pacific to protect Census Division proprietary information.

W = Withheld to avoid disclosure of individual company data.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Chapter 4. Receipts and Cost of Fossil Fuels

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2001 through April 2003

		Co	oal ¹			Petro	leum ²		Natura		All Fossil Fuels
Period	Receipts	Avera	ge Cost	Avg. Sulfur	Receipts	Averaş	ge Cost	Avg. Sulfur	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars/ ton)	%	(1000 barrels)	(cents/ 10 ⁶ Btu)	(dollars/ barrel)	%	(1000 Mcf)	(cents/ 10 ⁶ Btu)	(cents/ 10 ⁶ Btu)
2001											
January	67,470	122.33	24.73	.92	17,891	457.74	28.61	1.10	134,549	920.74	214.12
February	57,397	123.88	25.10	.98	10,225	441.42	27.71	1.24	114,039	694.66	189.05
March	64,359	122.63	24.64	.88	10,242	401.07	25.18	1.33	141,653	573.82	178.28
April	60,277	123.94	24.73	.85	10,740	388.63	24.55	1.33	178,222	563.74	191.91
May		124.47	25.02	.89	13,424	378.61	24.00	1.42	203,724	514.15	186.33
June	63,667	124.78	25.04	.89	12,107	369.68	23.17	1.36	212,536	425.10	178.34
July		122.50	24.42	.86	12,169	349.15	22.12	1.49	282,929	374.31	176.41
August		123.28	24.71	.90	10,049	331.23	20.84	1.67	277,039	355.79	169.55
September		123.44	24.53	.86	8,454	316.00	19.73	1.85	207,491	295.47	156.39
October		121.00	24.15	.90	5,906	287.54	18.00	1.66	165,688	271.49	142.20
November	,	123.68	25.00	.89	7,019	268.78	16.85	1.51	111,201	324.05	145.11
December		122.04	24.11	.87	6,390	256.08	15.92	1.62	123,295	307.63	141.71
Total		123.15	24.68	.89	124,618	369.27	23.20	1.42	2,152,366	448.65	173.04
20024									, , , , , , ,		
January	76,163	126.20	25.75	.98	8,933	254.10	15.75	1.72	375,673	299.90	162.77
February		128.19	26.31	1.01	5,342	244.87	15.03	1.85	360,544	272.85	158.60
March		125.32	25.70	.98	8,152	271.61	16.76	1.90	414,914	318.99	170.60
April		125.48	25.46	.92	10,198	316.62	19.70	1.64	408,912	364.11	185.69
May		126.01	25.58	.92	11,718	335.05	20.95	1.61	409,681	366.37	187.73
June		126.33	25.55	.90	10.926	335.52	21.04	1.48	499.160	347.65	190.64
July		124.76	25.35	.91	9,537	328.68	20.35	1.70	628,944	337.98	193.03
August		127.34	26.25	.94	13,601	349.95	21.73	1.64	633,874	330.31	192.17
September		125.74	25.72	.94	7,321	342.11	21.07	1.70	515,731	359.33	188.57
October		122.17	28.28	.94	12,538	377.25	23.49	1.58	456,099	404.00	185.10
November	,	125.07	25.51	.96	10,629	396.40	24.71	1.39	352,266	424.80	187.96
December		121.96	24.46	.93	12,188	389.37	24.27	1.50	377,857	454.07	198.67
Total		125.32	25.85	.94	121,084	336.27	20.90	1.62	5,433,655	354.69	183.83
2003	000,000	123.32	25.65	•24	121,004	330.27	20.50	1.02	3,433,033	334.07	105.05
January	73,639	125.30	25.49	1.08	11,257	437.39	27.07	1.53	354,531	522.83	209.00
February	,	127.59	26.36	1.10	18,783	489.53	30.64	.91	326,428	614.20	237.55
March	,	127.59	26.33	.98	19,781	546.20	34.25	1.16	355,470	706.93	260.96
April	,	131.13	27.11	1.01	11,870	434.36	27.22	1.10	357,460	519.76	218.22
Total		131.13 128.11	26.31	1.01	61,692	434.30 487.70	30.49	1.37 1.19	1,393,889	591.14	231.67
Year to Date	401,4/4	140.11	20.31	1.04	01,092	70/./0	30.47	1.17	1,373,009	371.14	231.07
	240 502	122 15	24.70	01	40.000	427 30	26.92	1 22	569 462	676.09	102.86
2001 2002	249,502	123.15	24.79	.91 .97	49,099	427.30	26.82	1.23 1.76	568,462	676.98 315.59	193.86
	286,133	126.30	25.81		32,625	276.61	17.12		1,560,042		169.28
2003	281,472	128.11	26.31	1.04	61,692	487.70	30.49	1.19	1,393,889	591.14	231.67
Rolling 12 Months En		12120	25.05	00	100 111	217.10	10.50		2.1.12.0.15	241.24	167.11
2002	799,446	124.29	25.05	.92	108,144	315.19	19.72	1.61	3,143,946	341.34	165.44
2003	875,399	125.90	26.01	.97	150,150	411.51	25.66	1.41	5,267,502	427.40	203.20

Notes: *See Glossary for definitions.*Data for 2002 are preliminary; data for 2001 are final.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Price data on the Form EIA-423 are proprietary and are only reported at an aggregated level. Mcf = thousand cubic feet. Monetary values are expressed in nominal terms.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Beginning in 2002, data from the Form E1A-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" for independent power producers and combined heat and power producers are included in this data dissemination. Prior to 2002 these data were not collected; the data for 2001 and previous years include only data collected from electric utilities via the FERC Form 423.

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2001 through April 2003

		Co	oal¹			Petro	leum ²		Natura	al Gas³	All Fossil Fuels
Period	Receipts	Avera	ge Cost	Avg. Sulfur	Receipts	Avera	ge Cost	Avg.	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars/ ton)	%	(1000 barrels)	(cents/ 10 ⁶ Btu)	(dollars/ barrel)	Sulfur %	(1000 Mcf)	(cents/ 10 ⁶ Btu)	(cents/ 10 ⁶ Btu)
2001			, ,,		,						,
January	67,470	122.33	24.73	.92	17,891	457.74	28.61	1.10	134,549	920.74	214.12
February		123.88	25.10	.98	10,225	441.42	27.71	1.24	114,039	694.66	189.05
March	,	122.63	24.64	.88	10,242	401.07	25.18	1.33	141,653	573.82	178.28
April		123.94	24.73	.85	10,740	388.63	24.55	1.33	178,222	563.74	191.91
May		124.47	25.02	.89	13,424	378.61	24.00	1.42	203,724	514.15	186.33
		124.47	25.04	.89	12,107	369.68	23.17	1.42	212,536	425.10	178.34
June					,						
July		122.50	24.42	.86	12,169	349.15	22.12	1.49	282,929	374.31	176.41
August	67,986	123.28	24.71	.90	10,049	331.23	20.84	1.67	277,039	355.79	169.55
September		123.44	24.53	.86	8,454	316.00	19.73	1.85	207,491	295.47	156.39
October	,	121.00	24.15	.90	5,906	287.54	18.00	1.66	165,688	271.49	142.20
November		123.68	25.00	.89	7,019	268.78	16.85	1.51	111,201	324.05	145.11
December		122.04	24.11	.87	6,390	256.08	15.92	1.62	123,295	307.63	141.71
Total	762,815	123.15	24.68	.89	124,618	369.27	23.20	1.42	2,152,366	448.65	173.04
2002											
January	60,026	121.90	24.72	.92	5,098	237.49	14.78	1.86	98,478	321.17	139.56
February		123.99	25.33	.93	2,927	231.50	14.27	1.87	97,866	296.98	139.15
March	57,216	121.13	24.75	.91	4,661	258.29	15.98	2.05	118,372	343.22	144.45
April		121.11	24.61	.86	7,289	324.42	20.29	1.56	120,934	379.77	155.12
May		121.37	24.60	.84	7,706	332.79	21.02	1.59	130,691	378.29	157.78
June		121.61	24.59	.82	7,328	340.56	21.55	1.37	165,341	357.90	161.25
July		120.77	24.51	.84	6,093	316.63	19.84	1.77	205,575	343.64	157.61
August		123.36	25.20	.87	8,770	326.12	20.46	1.82	205,148	338.41	160.47
		123.30	25.20	.86	,	320.12	19.88	1.75	165,108		157.31
September					5,124					367.62	
October		122.41	24.87	.87	8,479	359.67	22.42	1.71	134,776	414.73	158.74
November		122.22	24.85	.87	6,276	369.51	23.20	1.44	95,352	428.91	151.78
December		118.43	23.64	.85	7,443	372.34	23.31	1.68	103,009	471.47	157.18
Total	687,747	121.81	24.74	.87	77,194	325.13	20.35	1.68	1,640,650	367.02	153.50
2003											
January		123.26	25.11	1.06	6,520	402.30	25.03	1.77	99,142	530.69	161.04
February		123.31	25.59	1.02	12,012	445.83	28.12	.80	85,983	620.80	177.65
March	55,723	123.78	25.27	.91	13,329	517.90	32.67	1.19	93,978	728.35	193.44
April		129.11	26.84	.93	7,444	411.25	25.75	1.48	101,409	545.13	175.34
Total		124.80	25.68	.98	39,306	456.69	28.70	1.22	380,512	604.97	176.85
Year to Date											
2001	249,502	123.15	24.79	.91	49,099	427.30	26.82	1.23	568,462	676.98	193.86
2002	225,285	122.05	24.86	.91	19,975	273.35	17.00	1.80	435,650	337.98	144.38
2002	218,935	124.80	25.68	.98	39,306	456.69	28.70	1.22	380,512	604.97	176.85
		124.00	23.00	.70	39,300	430.07	40.70	1.44	300,312	004.77	170.03
Rolling 12 Months Er		122.01	24.60	90	05.404	210.52	20.04	1.60	2.010.552	260.12	157 57
2002	738,598	122.81	24.69	.89	95,494	319.53	20.04	1.60	2,019,553	360.12	157.57
2003	681,397	122.70	25.00	.89	96,525	389.38	24.44	1.47	1,585,513	431.57	163.86

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions.*Data for 2002 are preliminary; data for 2001 are final.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.*Mcf = thousand cubic feet.*Monetary values are expressed in nominal terms.

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

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, January 2002 through April 2003

· · ·	Jugn Apr	11 2000									,
		Co	oal ¹			Petro	leum ²		Natura	al Gas³	All Fossil Fuels
Period	Receipts	Avera	ge Cost	Avg.	Receipts	Avera	ge Cost	Avg.	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars /ton)	Sulfur %	(1000 barrels)	(cents/ 10 ⁶ Btu)	(dollars / barrel)	Sulfur %	(1000 Mcf)	(cents/ 10 ⁶ Btu)	(cents/ 10 ⁶ Btu)
2002											
January	14,957	140.93	29.31	1.2	3,305	276.92	17.09	1.5	192,296	294.76	203.42
February	13,205	143.78	29.88	1.2	1,928	260.13	15.84	1.8	184,809	270.35	196.91
March	13,961	140.59	29.14	1.2	2,843	282.67	17.33	1.8	211,409	321.99	220.12
April	14,031	139.85	28.13	1.1	2,473	297.68	18.24 ^R	1.8	203,040	366.89	237.78
May	14,789	140.19	28.43	1.2	3,681	342.58	20.99	1.6	192,323	366.20	234.63
June	15,392	140.49	28.26	1.1	3,249	324.51	19.94	1.7	254,983	346.85	237.84
July	15,287	138.52	28.10	1.1	3,003	353.16	21.40	1.5	339,476	335.14	250.96
August	15,606	140.74	29.95	1.2	4,501	399.89	24.36	1.3	339,224	331.13	244.28
September	15,145	134.48	27.66	1.2	1,826	396.56	23.87	1.5	269,842	359.77	243.02
October	15,720	116.82	40.37	1.2	3,661	417.90	25.98	1.2	242,728	405.60	213.06
November	14,921	135.11	27.88	1.3	3,900	443.61	27.37	1.3	181,542	426.33	253.61
December	14,906	132.46	26.86	1.2	4,246	420.69	26.03	1.1	192,039	458.84	268.57
Total	177,921	135.70	29.55	1.2	38,615	360.15	22.10	1.5	2,803,711	354.61	233.94
2003											
January	14,030	132.10	26.63	1.1	4,281	488.30	29.95	1.2	188,005	528.83	302.20
February	13,934	142.72	28.88	1.4	6,186	580.05	35.91	1.0	171,338	635.12	350.20
March		144.53	29.86	1.2	5,885	618.01	38.39	1.0	191,721	683.27	369.23
April	15,443	137.29	27.85	1.3	4,072	486.58	30.64	1.0	178,886	508.49	284.55
Total	58,612	139.25	28.32	1.2	20,425	553.08	34.32	1.1	729,950	589.41	327.00
Year to Date											
2002	56,154	141.26	29.11	1.2	10,549	280.28	17.20	1.7	791,554	314.83	214.74
2003	58,612	139.25	28.32	1.2	20,425	553.08	34.32	1.1	729,950	589.41	327.00

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Price data on the Form EIA-423 are proprietary and are only reported at an aggregated level. Morf = thousand cubic feet. Monetary values are expressed in nominal terms. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.
³ Natural gas, including a small amount of supplemental gaseous fuels.

R = Revised.

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Combined Heat and Power Producers, January 2002 through April 2003

110	uucci 5, 5	andary 2	JUZ tili Uu	Surrbin	-000						
		Co	oal ¹			Petro	leum ²		Natura	al Gas³	All Fossil Fuels
Period	Receipts	Avera	ge Cost	Avg.	Receipts	Averaş	ge Cost	Avg.	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars /ton)	Sulfur %	(1000 barrels)	(cents/ 10 ⁶ Btu)	(dollars / barrel)	Sulfur %	(1000 Mcf)	(cents/ 10 ⁶ Btu)	(cents/ 10 ⁶ Btu)
2002										-	
January	41	W	W	2.2	19	W	W	*	588	327.67	318.17
February		W	W	2.2	8	W	W	*	646	283.36	290.32
March	35	W	W	2.2	5	W	W		1,715	342.11	314.27
April	35	W	W	2.5	0				1,228	368.12	303.53
May	32	W	W	2.5	11	W	W	*	593	379.26	294.56
June	28	W	W	2.4	3	W	W		887	362.48	301.26
July	32	W	W	3.8	4	W	W	*	3,281	174.93	182.94
August	36	W	W	4.3	13	W	W		3,595	151.99	168.08
September	31	W	W	2.0	0				2,692	126.17	144.49
October	30	W	W	2.0	0				609	386.59	291.76
November	34	W	W	2.4	10	W	W	*	524	382.74	287.98
December	31	W	W	2.5	19	W	W		531	420.43	321.27
Total	399	\mathbf{W}	\mathbf{W}	2.6	91	\mathbf{W}	\mathbf{W}	*	16,889	240.99	241.81
2003											
January	45	W	W	2.2	58	W	W	*	825	486.76	378.35
February		W	W	2.5	94	W	W	*	634	501.40	466.61
March	29	W	W	2.6	50	W	W	*	986	492.54	463.50
April	30	W	W	2.6	0				1,379	500.53	403.77
Total	136	W	W	2.4	202	\mathbf{W}	\mathbf{W}	*	3,824	495.65	425.83
Year to Date											
2002	145	W	W	2.3	32	W	W	*	4,178	338.59	307.67
2003	136	\mathbf{W}	\mathbf{W}	2.4	202	\mathbf{W}	\mathbf{W}	*	3,824	495.65	425.83

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

W = Withheld to avoid disclosure of individual company data.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: "See Glossary for definitions." Data for 2002 are preliminary. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Price data on the Form EIA-423 are proprietary and are only reported at an aggregated level. Mcf = thousand cubic feet. Monetary values are expressed in nominal terms. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Combined Heat and Power Producers, January 2002 through April 2003

		Co	pal ¹			Petro	leum ²		Natura	al Gas³	All Fossil Fuels
Period	Receipts	Averag	ge Cost	Avg.	Receipts	Avera	ge Cost	Avg.	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars /ton)	Sulfur %	(1000 barrels)	(cents/ 10 ⁶ Btu)	(dollars / barrel)	Sulfur %	(1000 Mcf)	(cents/ 10 ⁶ Btu)	(cents/ 10 ⁶ Btu)
2002											
January	1,140	W	W	1.5	512	W	W	1.9	84,310	285.23	252.71
February	1,033	W	W	3.2	479	W	W	1.8	77,223	245.87	223.66
March		W	W	1.4	642	W	W	1.2	83,418	273.89	248.75
April	1,374	W	W	1.3	437	W	W	2.0	83,710	332.37	281.80
May		W	W	1.4	321	W	W	2.1	86,074	347.07	301.66
June		W	W	1.4	345	W	W	1.8	77,949	326.64	281.66
July	1,260	W	W	1.4	438	W	W	2.0	80,611	344.07	293.70
August		W	W	1.5	317	W	W	2.3	85,907	317.02	281.82
September	1,084	W	W	1.5	371	W	W	1.8	78,089	347.37	300.03
October		W	W	1.4	398	W	W	1.9	77,986	378.41	340.62
November	1,142	W	W	1.3	443	W	W	1.9	74,849	415.28	346.43
December	1,316	W	W	1.3	480	W	W	2.0	82,278	418.22	345.84
Total	13,993	W	W	1.5	5,184	W	W	1.8	972,405	334.86	291.21
2003											
January	. 871	W	W	1.3	397	W	W	1.5	66,559	492.57	412.85
February		W	W	1.2	490	W	W	2.3	68,474	550.26	463.47
March		W	W	1.6	517	W	W	2.4	68,784	749.66	584.10
April		W	W	1.6	354	W	W	3.2	75,787	511.02	417.30
Total		W	\mathbf{W}	1.5	1,759	W	\mathbf{W}	2.3	279,603	576.78	471.28
Year to Date											
2002	4,549	W	W	1.8	2,070	W	W	1.7	328,661	285.17	252.59
2003	3,789	W	W	1.5	1,759	W	W	2.3	279,603	576.78	471.28

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.*Price data on the Form EIA-423 are proprietary and are only reported at an aggregated level.*Mcf = thousand cubic feet.*Monetary values are expressed in nominal terms. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

W = Withheld to avoid disclosure of individual company data.

Receipts of Coal Delivered for Electricity Generation by State, April 2003 and 2002 Table 4.6.A. (Thousand Tons)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	Tot	tal (All Secto	rs)	Electric	Utilities ¹		ent Power ucers	Comm	nercial	Indu	strial
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	816	775	5.4	128	63	679	708	-	-	10	4
Connecticut		209	1.6			212	209				
Maine		16 488	28.6 2.3	43		10 457	12 488			10	4
Massachusetts New Hampshire		63	35.8	43 85	63	437	400				
Rhode Island											
Vermont											
Middle Atlantic	4,110	3,766	9.1	209	163	3,826	3,482	-		75	121
New Jersey		270	25.5	62	47	277	223				
New York		602	25.3	68	42	627	494			59	65
Pennsylvania	3,017 14,400	2,894 13,817	4.2 4.2	79 11,262	74 10,812	2,922 2,841	2,765 2,718	18	21	16 278	56 265
East North Central		3,928	-13.1	612	1,373	2,588	2,716			213	210
Indiana		3,640	18.7	4,210	3,488	111	152				
Michigan	,	2,674	10.4	2,922	2,653	12		18	21		
Ohio	2,085	1,768	17.9	1,933	1,520	130	221			22	27
Wisconsin		1,807	-9.9	1,585	1,779					44	28
West North Central	7,467	10,990	-32.1	7,370	10,657		_	11	14	86	319
Iowa		2,061	-29.1	1,376	1,742					86	319
Kansas		1,645	-27.6	1,191	1,645						
Minnesota Missouri		1,371 3,118	19.3 -65.3	1,635 1,071	1,371 3,104			 11	14		
Nebraska	,	937	-03.3 -74.9	235	937						
North Dakota		1,679	.8	1,693	1,679						
South Dakota		179	-5.6	169	179						
South Atlantic	14,314	11,975	19.5	11,428	9,517	2,770	2,293			116	166
Delaware		149	15.1			171	149				
District of Columbia											
Florida		1,932	*	1,822	1,753	110	179			20	
Georgia Maryland		2,877 769	-2.5 14.8	2,765	2,844	883	769			39	33
North Carolina		1,768	58.3	2,651	1,619	114	89			32	59
South Carolina		1,234	-13.1	1,055	1,220					17	14
Virginia		804	50.8	872	522	324	262			16	20
West Virginia	3,440	2,442	40.8	2,262	1,558	1,167	845			11	40
East South Central	9,289	7,813	18.9	8,594	7,307	550	353			145	152
Alabama		1,911	25.1	2,381	1,905	9	6				
Kentucky		2,383 777	41.9 -25.4	3,068 352	2,383 430	313 228	347				
Mississippi Tennessee	2,938	2,741	-23.4 7.2	2,793	2,589	228	347			145	152
West South Central	9,668	9,142	5.8	5,523	5,360	3,914	3,535			231	247
Arkansas	,	1,456	-34.0	961	1,456						
Louisiana		1,145	-24.7	300	468	561	677			1	
Oklahoma	1,817	1,687	7.8	1,697	1,565	80	72			40	50
Texas		4,855	24.2	2,566	1,871	3,272	2,786			190	197
Mountain	7,294	7,737	-5.7	7,000	7,398	263	315			31	24
Arizona		1,032	13.2	1,137	1,008					31	24
Colorado	1,618	1,639	-1.2	1,618	1,639						
Idaho Montana		935	-32.9	364	619	263	315				
Nevada		291	19.0	346	291	203					
New Mexico		616	3.9	640	616						
Utah		1,288	-5.0	1,224	1,288						
Wyoming	1,672	1,936	-13.7	1,672	1,936						
Pacific Contiguous	846	924	-8.5	263	223	541	626	-		42	75
California		112	-27.7	262		39	37			42	75
Oregon		223 590	17.9 -14.8	263	223	502	590				
Washington Pacific Noncontiguous	60	390	-14.8			60	390				
Alaska											
						60					
Hawaii	00										

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission,

FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, Year-to-Date through April (Thousand Tons)

					Electric Po	wer Sector		Combine	Combined Heat and Power Producers			
Census Division and State	Tota	al (All Sector		Electric	Utilities ¹	Independe Produ		Comm	ercial	Indus	trial	
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002	
New England	2,735	2,393	14.3	511	444	2,190	1,930	[35	18	
Connecticut	607	627	-3.1			607	627					
Maine	84	74	14.5			50	55			35	18	
Massachusetts	1,664	1,249	33.3	131		1,533	1,249					
New HampshireRhode Island	380	444	-14.6 	380	444							
Vermont												
Middle Atlantic	15,676	16,852	-7.0	619	665	14,667	15,767			390	420	
New Jersey	1,082	969	11.7	172	146	910	822					
New York	3,005	2,623	14.5	213	173	2,569	2,219			222	232	
Pennsylvania	11,589	13,260	-12.6	233	346	11,187	12,726			168	188	
East North Central	64,442	60,898	5.8	49,879	49,082	13,673	10,671	85	99	805	1,046	
Illinois	15,727	15,705	.1	2,493	5,579	12,671	9,334			563	792	
Indiana	17,028	17,823	-4.5	16,534	17,297	494	526	 0 <i>5</i>				
Michigan	8,289	8,365	9 38.4	8,191	8,266	12 496	811	85	99	98	121	
Ohio Wisconsin	16,711 6,688	12,072 6,934	-3.5	16,117 6,544	11,139 6,800	496	811			98 144	133	
West North Central	41,832	45,945	-9.0	41,588	45,335			51	46	193	563	
Iowa	6,625	7,049	-6.0	6,432	6,486					193	563	
Kansas	5,843	7,154	-18.3	5,843	7,154							
Minnesota	6,116	6,306	-3.0	6,116	6,306							
Missouri	11,266	12,605	-10.6	11,215	12,559			51	46			
Nebraska	2,891	4,003	-27.8	2,891	4,003							
North Dakota	8,424	8,111	3.9	8,424	8,111							
South Dakota	667	716	-6.8	667	716	10.444	0.446			 	740	
South Atlantic Delaware	52,908 611	52,524 369	.7 65.4	41,917	42,330	10,444 611	9,446 369			547	749	
District of Columbia	011	309	05.4				309					
Florida	7,276	7,924	-8.2	6,556	7,111	720	813					
Georgia	10,640	10,727	8	10,532	10,615					107	112	
Maryland	3,706	3,584	3.4	´	´	3,706	3,584					
North Carolina	9,048	8,276	9.3	8,392	7,523	502	442			154	311	
South Carolina	4,137	5,267	-21.5	4,061	5,196					76	71	
Virginia	4,990	4,394	13.5	3,769	3,541	1,137	775			83	78	
West Virginia	12,502	11,982	4.3	8,607	8,342	3,768	3,463			127	177	
East South Central	33,268	31,704 8,199	4.9 -1.1	31,140 8,070	30,767	1,544 43	377 30	-		584	559	
Alabama Kentucky	8,113 12,749	11,375	12.1	11,800	8,169 11,375	949						
Mississippi	2,120	1,882	12.6	1,569	1,535	552	347					
Tennessee	10,285	10,247	.4	9,701	9,688					584	559	
West South Central	36,470	39,595	-7.9	23,424	24,906	12,112	13,827			933	862	
Arkansas	3,947	4,296	-8.1	3,947	4,296							
Louisiana	2,665	5,339	-50.1	2,096	2,405	561	2,935			8		
Oklahoma	6,763	7,183	-5.8	6,206	6,715	372	290			184	177	
Texas	23,095	22,777	1.4	11,176	11,490	11,178	10,603			741	684	
Mountain	30,426	32,341	-5.9	28,942	30,865	1,362	1,370		-	122	106	
ArizonaColorado	4,693 6,056	4,802 6,395	-2.3 -5.3	4,571 6,056	4,696 6,395					122	106	
Idaho	6,036	0,393	-3.3 	0,030	0,393							
Montana	3,377	3,494	-3.3	2,015	2,125	1,362	1,370					
Nevada	3,175	1,553	104.5	3,175	1,553	1,302	1,570					
New Mexico	3,158	2,385	32.4	3,158	2,385							
Utah	4,070	4,985	-18.4	4,070	4,985							
Wyoming	5,897	8,726	-32.4	5,897	8,726							
Pacific Contiguous	3,477	3,702	-6.1	915	891	2,381	2,585		-	180	225	
California	390	518	-24.6			210	293			180	225	
Oregon	915	891	2.7	915	891	2 171	2 202					
Washington Pacific Noncontiguous	2,171	2,293	-5.3			2,171	2,293					
Alaska	239	180	32.7			239	180					
Hawaii	239	180	32.7			239	180					
		100	J = . 1		_		100					

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

Notes: •See Glossary for definitions.•Data for 2002 are preliminary.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.•Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.7.A. Receipts of Petroleum Delivered for Electricity Generation by State, April 2003 and 2002 (Thousand Barrels)

					Electric Po	wer Sector		Combin	Combined Heat and Power Producers			
Census Division and State	To	tal (All Secto		Electric	Utilities ¹	Independ Prod	ent Power ucers	Comm	nercial	Indu	strial	
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	
New England	533	693	-23.2	15	3	517	584			*	107	
Connecticut		38	752.0			328	38					
Maine		107	-32.6	*		72				*	107	
Massachusetts		545	-78.4 479.6	15	3	117	545					
New Hampshire Rhode Island		3	4/9.0									
Vermont												
Middle Atlantic	3,505	1,803	94.4	1,098	1,090	2,363	711			44	3	
New Jersey	123	47	162.5	106	1	17	46					
New York		1,370	87.1	992	1,088	1,569	280			2	1	
Pennsylvania		387	111.9	*	*	777	385			42	1	
East North Central	521	410	26.9	388	270	27	8_			106	132	
Illinois		15	84.4	30	7	27	8			21	 57	
Indiana Michigan		72 163	-15.9 19.4	195	14 163					31	57	
Ohio		12	460.5	68	11		*			1	1	
Wisconsin		149	14.4	95	75					75	74	
West North Central	144	222	-35.0	144	222		_			_	-	
Iowa		14	-75.0	3	14							
Kansas	79	87	-9.8	79	87							
Minnesota		36	55.5	57	36							
Missouri		79	-98.9	1	79							
Nebraska		2	-11.7	2	2							
North Dakota		3	-23.0	3	3							
South Atlantic	6,525	6,267	4.1	5,667	5,562	707	530			151	174	
Delaware		185	-1.2	14	44	124	57			44	84	
District of Columbia		44	-93.5			3	44					
Florida	5,079	5,287	-3.9	4,715	5,069	335	211			29	7	
Georgia		18	-55.2	8	18						*	
Maryland		217	-26.0			161	217					
North Carolina		48	23.7	38	23	4	*			18	25	
South Carolina		34	7.8	6	7 393	 79	*			30	26	
Virginia West Virginia		420 14	126.3 223.1	845 40	393 9	/9 1	1			26 4	27 4	
East South Central	84	48	74.5	56	48	24				4		
Alabama		8	54.5	8	8					4		
Kentucky		30	72.7	28	30	24						
Mississippi		1	1316.7	9	1							
Tennessee	11	10	18.7	11	10							
West South Central	335	528	-36.7	41	23	257	501			37	4	
Arkansas		7	69.0	12	7							
Louisiana		285	1.8	28	16	256	265			7	4	
Oklahoma Texas		235	 -87.0	1		*	235			30	*	
Mountain	37	74	-50.5	35	63	2	6			*	5	
Arizona		13	-17.5	10	7					*	5	
Colorado	3	1	100.0	3	1							
Idaho												
Montana	7	47	-86.1	5	42	2	6					
Nevada												
New Mexico		4	63.6	6	4							
Utah		2	210.8	6	2							
Wyoming		7	-34.6	5	7 7	 51				12		
Pacific Contiguous California	63 51	67 49	-5.9 4.6			51 51	49 49			12	11	
Oregon		7	4.0		7		49					
Washington		11	7.2				*			12	11	
Pacific Noncontiguous		84	47.5			124	84	-				
Alaska												
Hawaii		84	47.5			124	84					
U.S. Total	11,870	10,198	16.4	7,444	7,289	4,072	2,473			354	437	

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^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/ transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.*Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.7.B. Receipts of Petroleum Delivered for Electricity Generation by State, Year-to-Date through April (Thousand Barrels)

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tota	al (All Sector	rs)	Electric U	Utilities ¹	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	12,013	4,283	180.5	6,136	13	5,776	3,710			102	560
Connecticut	1,009	639	57.9			1,009	639				
Maine	1,754	560	213.3	5 221		1,652	2.071			102	560
Massachusetts New Hampshire	8,335 915	3,072 12	171.3 7654.3	5,221 915	1 12	3,114	3,071				
Rhode Island	913	12	7034.3	913	12						
Vermont											
Middle Atlantic	21,244	5,061	319.7	12,678	2,767	8,332	2,272	15	-	218	22
New Jersey	667	244	173.2	298	101	365	143			4	
New York	16,947	4,040	319.5	12,380	2,666 1	4,501	1,363	15		51	11
Pennsylvania East North Central	3,630 1,472	777 1,704	367.0 -13.6	781	958	3,466 288	766 67			164 403	11 679
Illinois	235	98	140.2	4	50	231	47				
Indiana	305	512	-40.4	105	85					200	428
Michigan	391	580	-32.7	391	580						
Ohio	146	117	24.4	98	105	42	4			5	9
Wisconsin	396	396	1	183	139	15	15			198	242
West North Central Iowa	699 34	1,028 27	-32.0 24.6	699 34	1,028 27						
Kansas	259	273	-5.0	259	273						
Minnesota	372	316	17.6	372	316					*	
Missouri	20	393	-94.9	20	393						
Nebraska	3	3	-2.4	3	3						
North Dakota	10	14	-30.2	10	14						
South Atlantic	21,652	17,204	25.9	17,249	14,849	3,440	1,622	186	32	777	702
Delaware	1,357	865	56.8	42	123	1,037	329	100	32	278	413
District of Columbia	86	48	77.7			86	48				
Florida	14,884	13,934	6.8	14,107	13,531	633	396			145	7
Georgia	90	67	34.7	44	52	41	13			5	1
Maryland	885	772	14.8			885	772				
North Carolina	388 158	262 62	48.4 155.3	204 27	130 31	97 	8			87 131	124 31
South Carolina Virginia	3,621	1,113	225.3	2,672	922	636	50	186	32	127	109
West Virginia	183	82	123.2	154	59	25	6			4	17
East South Central	827	165	400.4	584	155	225				18	10
Alabama	40	43	-8.0	22	33					18	10
Kentucky	324	53	511.8	99	53	225					
Mississippi Tennessee	409 54	9 60	4222.7 -9.4	409 54	9 60						
West South Central	2,707	2,084	29.9	1,035	43	1,476	2,015			197	26
Arkansas	26	17	55.2	26	17						
Louisiana	2,051	1,184	73.2	928	16	1,081	1,150			42	18
Oklahoma	28			28							
Texas	602	883	-31.8	52	10	395	865			155	8
Mountain	174 21	197 21	-11.7 8	146 18	155 13	26	35			2	8 8
Colorado	10	8	20.7	10	8						
Idaho											
Montana	46	92	-50.4	20	57	26	35				
Nevada	55	5	999.5	55	5						
New Mexico	22	11	89.6	22	11						
Utah	13 9	14 45	-11.9 -80.8	13 9	14 45						
Pacific Contiguous	361	278	29.8		7	320	207			41	64
California	320	207	54.4			320	207				
Oregon		7			7						
Washington	41	64	-35.7				*			41	64
Pacific Noncontiguous	542	621	-12.8			542	621				
Alaska	542	621	-12.8			542	621				
U.S. Total	61,692	32,625	-12.8 89.1	39,306	19,975	20,425	10,549	202	32	1,759	2,070
C.S. 10tal	01,072	02,023	07.1	57,500	17,713	20,723	10,577	202	32	1,737	2,070

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^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/ transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.*Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.8.A. Receipts of Natural Gas Delivered for Electricity Generation by State, April 2003 and 2002 (Thousand Mcf)

					Electric Po	wer Sector		Combin	Combined Heat and Power Producers			
Census Division and State	Tot	tal (All Sector	rs)	Electric	Utilities ¹		ent Power ucers	Comm	nercial	Indu	strial	
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	
New England	21,976	22,670	-3.1	893	139	21,084	22,532	-	-	-		
Connecticut		3,516	-10.7			3,140	3,516					
Maine Massachusetts		6,605 7,154	-14.8 41.8	893	128	5,626 9,249	6,605 7,026					
New Hampshire		10	41.6		10),2 4 9	7,020					
Rhode Island Vermont	3,068	5,385	-43.0 	 	 	3,068	5,385	 	 			
Middle Atlantic	24,297	39,101	-37.9	2,539	4,258	20,095	27,495	124	202	1,538	7,146	
New Jersey		10,680	-22.2			8,271	9,237			42	1,443	
New York		21,186	-43.8	2,539	4,258	8,814	16,366	124	202	429	361	
Pennsylvania	4,078 13,617	7,234 22,840	-43.6 - 40.4	1,545	2,321	3,010 9,732	1,891 18,128	6	128	1,067 2,333	5,342 2,264	
East North Central Illinois		6,701	- 40.4 -71.9	25	2,321	1,174	5,719		120	686	694	
Indiana		2,783	-37.9	137	43	153	1,382			1,436	1,358	
Michigan		10,929	-17.1	1,238	1,566	7,817	9,235	6	128	·	´	
Ohio		963	-83.5	13	14	83	878			63	72	
Wisconsin		1,465	-46.4	132	410	504	914			149	140	
West North Central Iowa	3,342 555	3,462 591	-3.5 -6.1	1,629 182	1,693 215	1,672 373	1,750 376	22	11	19	8	
Kansas		391	5.0	410	391	3/3	370					
Minnesota		446	25.0	46	27	493	412			19	8	
Missouri		1,944	-6.4	990	970	807	962	22	11			
Nebraska		90	-99.9	*	90							
North Dakota												
South Atlantic	49,234	54,697	-10.0	29,238	30,875	9,939	13,711	4	68	10.053	10,043	
Delaware		1,690	1.0	110	15	821	983			776	692	
District of Columbia		´										
Florida		35,992	-9.4	27,590	30,023	4,173	4,774			838	1,195	
Georgia		1,866	-43.0	*	2	926	1,805			136	60	
Maryland North Carolina		1,967 2,184	-68.8 -19.2		165	614 1,731	1,967 2,019			34		
South Carolina		2,164	-42.6		4	140	260			13	2	
Virginia		2,806	11.9	1,521	656	1,409	1,708	4	68	208	373	
West Virginia		7,925	3.3	17	10	126	195			8,047	7,720	
East South Central	16,712	19,217	-13.0	7,278	14,834	1,602	2,688	*	453	7,832	1,242	
Alabama		6,879	67.4	3,856	5,629	284	288	*	452	7,379	962	
Kentucky Mississippi		658 11,554	-82.7 -56.3	35 3,387	80 9,125	78 1,231	125 2,175		453	435	254	
Tennessee	27	11,554	-30.3 -78.6	3,367	9,123	9	100			18	27	
West South Central	163,246	181,041	-9.8	40,855	50,137	75,699	77,160	1,223	366	45,469	53,379	
Arkansas		2,635	83.9	708	1,409	4,140	1,226					
Louisiana	35,342	40,957	-13.7	11,776	21,821	4,285	708	834		18,447	18,429	
Oklahoma Texas	,	14,972 122,477	-31.7 -7.9	8,799 19,571	13,051 13,856	1,024 66,250	1,468 73,758	389	366	399 26,623	453 34,497	
Mountain	20,959	22,062	-5.0	8,723	11,296	11,995	10,367	369		20,023	399	
Arizona	,	5,796	43.8	1,890	1,582	6,433	4,210			13	3	
Colorado	3,422	6,392	-46.5	2,171	3,284	1,251	3,109					
Idaho		288	-47.4			151	288					
Montana		2	-40.7	1	1	2 (02	1 2 722					
Nevada New Mexico		6,567 2,059	-2.9 10.7	2,682 1,810	3,846 1,964	3,693 466	2,722 38			3	56	
Utah		605	-73.8	1,810	605	400 					J0 	
Wyoming		353	-33.3	11	14					224	339	
Pacific Contiguous	42,334	42,400	2	6,965	3,961	27,068	29,209	-	-	8,300	9,230	
California		37,587	.2	6,894	3,553	23,274	25,517			7,499	8,517	
Oregon		2,763	-4.4	72	409	2,075	1,976			496	379	
Washington Pacific Noncontiguous		2,050	-1.3	1 7/3	1 420	1,719	1,717			305	334	
Alaska	1,743	1,420 1,420	22.7 22.7	1,743 1,743	1,420 1,420							
		1,420		1,743	1,420							
Hawaii												

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: See Glossary for definitions. Data for 2002 are preliminary. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. • Natural gas includes a small amount of supplemental gaseous fuels.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission,

FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Receipts of Natural Gas Delivered for Electricity Generation by State, Year-to-Date through April **Table 4.8.B.** (Thousand Mcf)

					Electric Po	wer Sector		Combine	d Heat and	l Power Pr	oducers
Census Division and State	Tota	al (All Sector		Electric	Utilities ¹	Independe Produ		Comm	ercial	Indu	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	81,843	100,465	-18.5	1,112	866	80,731	99,600	[-	-
Connecticut	11,123	15,543	-28.4			11,123	15,543				
Maine	19,728	29,784	-33.8			19,728	29,784				
Massachusetts	35,932	32,625	10.1	1,112	846	34,820	31,779				
New Hampshire	15,060	10 22,494	-33.0		10	15,060	22,494				
Vermont	13,000	22,494	-33.0		9	13,000	22,494				
Middle Atlantic	101,104	146,740	-31.1	9,658	21,105	84,286	107,039	665	565	6,495	18,032
New Jersey	28,584	42,764	-33.2			28,325	36,513			259	6,251
New York	58,957	86,108	-31.5	9,658	21,105	47,534	62,758	665	565	1,100	1,681
Pennsylvania	13,563	17,868	-24.1			8,427	7,768			5,136	10,100
East North Central	52,975	76,927	-31.1	5,526	9,854	38,883	57,114	49	145	8,518	9,815
Illinois	8,857	20,258	-56.3	92	1,835	6,630	15,947			2,134	2,476
Indiana	6,189	9,272	-33.3 -18.9	206 4,371	195 6,619	323	2,484	49	145	5,660	6,593
Michigan	33,312 678	41,095 1,571	-16.9 -56.8	4,371	72	28,892 309	34,331 1,206	49	143	321	293
Wisconsin	3,939	4,731	-16.7	808	1,132	2,728	3,146			403	453
West North Central	11,108	10,568	5.1	6,758	5,826	4,291	4,650	31	45	28	46
Iowa	1,777	2,276	-21.9	902	1,003	875	1,273				
Kansas	1,933	2,131	-9.3	1,933	2,131						
Minnesota	2,662	1,990	33.8	651	91	1,983	1,852			28	46
Missouri	3,959	3,844	3.0	2,495	2,274	1,433	1,524	31	45		
Nebraska	777	327	137.5	777	327						
North Dakota			-93.2								
South Atlantic	155,253	178,446	-13.0	104,386	100,900	34,207	36,468	4	994	16,657	40,085
Delaware	6,145	6,741	-8.8	120	32	2,855	3,978		77 4	3,169	2,730
District of Columbia						2,055	5,776			5,105	2,730
Florida	118,788	120,004	-1.0	100,554	99,074	14,574	15,786			3,660	5,145
Georgia	3,136	4,108	-23.7	*	243	2,631	3,423			504	442
Maryland	2,275	3,768	-39.6			2,275	3,768				
North Carolina	4,719	4,794	-1.6	11	428	4,659	4,366			49	
South Carolina	523	2,149	-75.7	*	12	493	1,503			29	634
Virginia	11,095	6,623	67.5	3,646	1,028	6,248	3,140	4	994	1,197	1,461
West Virginia East South Central	8,572 69,601	30,258 70,096	-71.7 7	55 32,918	81 54,006	470 4,708	504 10,693	*	906	8,047 31,975	29,673 4,492
Alabama	48,874	24,685	98.0	17,228	19,965	1,457	1,774			30,189	2,945
Kentucky	373	1,617	-76.9	233	200	140	511	*	906		2,713
Mississippi	20,173	43,556	-53.7	15,458	33,840	3,013	8,263			1,702	1,453
Tennessee	181	239	-24.1			98	145			84	94
West South Central	635,072	671,329	-5.4	141,959	169,247	303,284	284,883	3,075	1,523	186,754	215,677
Arkansas	14,940	8,418	77.5	1,116	3,439	13,823	4,979				
Louisiana	128,870	147,432	-12.6	44,374	69,666	11,078	1,165	1,685		71,732	76,601
Oklahoma	37,561	49,370	-23.9	31,923	41,421	3,712	5,732	1 200	1 522	1,926	2,218
Texas	453,701	466,108	-2.7	64,545	54,721	274,671 45,531	273,007	1,390	1,523	113,095 999	136,858
Mountain	87,600 28,114	85,381 22,683	2.6 23.9	41,070 7,179	41,289 6,441	20,865	42,080 15,909			70	2,012 332
Colorado	20,280	20,985	-3.4	14,093	12,866	6,187	8,119			70	332
Idaho	2,301	3,218	-28.5			2,301	3,218				
Montana	5	5	3.2	4	3	1	1				
Nevada	26,446	28,229	-6.3	12,328	13,478	14,118	14,751				
New Mexico	9,183	7,204	27.5	7,129	6,682	2,050	82			3	439
Utah	320	1,706	-81.2	312	1,706	8					
Wyoming	951	1,352	-29.7	25	112	124 021	140.740			927	1,240
Pacific Contiguous	191,773	213,286	-10.1	29,565	26,241	134,031	148,540	-		28,177	38,504
California	159,517 22,172	178,465 21,802	-10.6 1.7	26,691 2,874	21,047 5,194	107,631 17,207	122,382 14,648			25,195 2,091	35,036 1,960
Oregon Washington	10,085	13,018	-22.5	2,874	5,194	9,193	11,510			892	1,508
Pacific Noncontiguous	7,559	6,804	11.1	7,559	6,317	9,193	487				1,508
Alaska	7,559	6,804	11.1	7,559	6,317		487				
Hawaii											
U.S. Total	1,393,889	1,560,042	-10.7	380,512	435,650	729,950	791,554	3,824	4,178	279,603	328,661

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. • Natural gas includes a small amount of supplemental gaseous fuels.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission,

FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.9.A. Average Cost of Coal Delivered for Electricity Generation by State, April 2003 and 2002 (Cents per Million Btu)

					Electric Po	wer Sector		Combined Heat and Power Producers			
Census Division and State	To	tal (All Sector		Electric	Utilities		ent Power ucers ¹	Comn	nercial	Indu	strial
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	183.57	202.94	-9.5	156.42	185.25	W	W			W	W
Connecticut	W	W	W			W	W				
Maine	W	W	W			W	W			W	W
Massachusetts	W	W	W	197.56	105.25	W	W				
New Hampshire Rhode Island	135.42	185.25	-26.9	135.42	185.25						
Vermont											
Middle Atlantic	133.74	135.38	-1.2	209.41	168.96	128.76	132.17			163.97	175.64
New Jersey	W	W	W	389.89	257.77	W	W				
New York	W	W	W	148.18	155.78	W	W			W	W
Pennsylvania	W	W	W	121.13	118.85	W	W			W	W
East North Central	121.19	121.17	*	121.99	119.11	116.04	128.72	W	W	W	W
Illinois	W	W	W	123.25	118.70	W	W			W	W
Indiana	W	W W	W W	119.94	115.07	W W	W				
Michigan	W W	W W	W W	130.46 122.93	130.45 118.48	W W	W	W	W	W	W
Ohio Wisconsin	W	W	W	108.32	110.16					W	W
West North Central	96.46	91.53	5.4	95.92	90.35			W	W	W	W
Iowa	W	W	W	92.13	91.54					W	W
Kansas	111.54	99.57	12.0	111.54	99.57						
Minnesota	106.59	112.50	-5.3	106.59	112.50						
Missouri	W	W	W	98.38	87.43			W	W		
Nebraska	57.39	56.37	1.8	57.39	56.37						
North Dakota	71.73	79.56	-9.8	71.73	79.56						
South Dakota	134.78	130.42	3.3	134.78	130.42	150.00	155 (2			174.61	160.50
South Atlantic Delaware	160.09 W	157.64 W	1.6 W	160.92	157.94	156.06 W	155.62 W			174.61	168.50
District of Columbia						vv 					
Florida	W	W	W	176.41	164.48	W	W	<u></u>			
Georgia		W	W	171.26	167.47					W	W
Maryland	W	W	W			W	W				
North Carolina	W	W	W	172.97	173.06	W	W			W	W
South Carolina	W	W	W	158.25	157.99					W	W
Virginia		W	W	149.95	155.76	W	W			W	W
West Virginia	W	W	w	127.78	118.06	W	W			W	W
East South Central	129.75 W	128.87 W	.7 W	130.47 149.44	128.20 146.00	W	W W		-	W	W
Alabama Kentucky	W	118.98	W	120.54	118.98	W					
Mississippi	W	W	W	158.45	164.61	W	W				
Tennessee	W	W	W	122.13	118.15					W	W
West South Central	121.79	115.35	5.6	112.03	105.21	139.40	133.80	-		94.18	93.77
Arkansas	114.98	68.25	68.5	114.98	68.25						
Louisiana	W	W	W	145.03	129.67	W	W			W	
Oklahoma	W	W	W	91.90	92.48	W	W			W	W
Texas	W	W	W	121.02	141.79	W	W			W	W
Mountain	111.12	101.30	9.7	112.25	102.79	W	W			W	W
Arizona	W 07.45	W	W	135.70	121.73					W	W
Colorado	97.45	93.83	3.9	97.45	93.83						
Montana	W	W	W	68.09	58.08	W	W				
Nevada	199.67	180.80	10.4	199.67	180.80						
New Mexico	174.08	163.40	6.5	174.08	163.40						
Utah	93.13	98.46	-5.4	93.13	98.46						
Wyoming	88.38	80.43	9.9	88.38	80.43						
Pacific	151.71	142.40	6.5	121.00	134.12	W	W	-	-	W	W
California		W	W			W	W			W	W
Oregon	121.00	134.12	-9.8	121.00	134.12		 W				
Washington	W	W	W			W	W				
Alaska Hawaii	 W					W					
U.S. Total	131.13	125.48	4.5	129.11	121.11	137.29	139.85	W	W	W	W
C.S. I Utai	131.13	123,70	7.0	147,11	121,11	131.4)	137.03			**	**

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

W = Withheld to avoid disclosure of individual company data.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: See Glossary for definitions. Data for 2002 are preliminary. Totals may not equal sum of components because of independent rounding. Monetary values are expressed in nominal terms. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," and Federal Energy Regulatory Commission,

FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.9.B. Average Cost of Coal Delivered for Electricity Generation by State, Year-to-Date through April (Cents per Million Btu)

					Electric Po	wer Sector	Combine	Combined Heat and Power Producers				
Census Division and State	Tota	al (All Secto	,	Electric \	Utilities	Independe Produ	_	Comm	ercial	Indu	strial	
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002	
New England	192.45	202.72	-5.1	180.57	185.99	W	W	-	-	W	W	
Connecticut	W	W	W			W	W					
Maine	W	W	W			W	W			W	W	
Massachusetts	W	W	W	222.33		W	W					
New Hampshire	166.41	185.99	-10.5	166.41	185.99							
Rhode Island Vermont												
Middle Atlantic	133.64	134.41	6	198.69	153.21	129.67	132.53			172.76	171.33	
New Jersey	W	W	W	361.27	228.03	W	W					
New York	W	W	W	149.64	157.83	W	W			W	W	
Pennsylvania	W	W	W	122.32	118.41	W	W			W	W	
East North Central	120.72	121.62	7	120.21	119.96	121.46	127.59	W	W	W	W	
Illinois	W	W	W	117.72	118.81	W	W			W	W	
Indiana	W	W	W	119.08	116.31	W	W		 W			
Michigan	W	W	W	134.27	135.00	W	 W/	W	W	 W/	***	
Ohio Wisconsin	W W	W W	W W	119.88 105.04	120.68 109.13	W	W			W W	W W	
West North Central	90.37	89.23	1.3	90.03	88.57			W	W	W	W	
Iowa	W	W	W	85.27	85.16					W	W	
Kansas	105.10	98.90	6.3	105.10	98.90							
Minnesota	107.76	106.29	1.4	107.76	106.29							
Missouri	W	W	W	90.61	89.32			W	W			
Nebraska	57.97	57.28	1.2	57.97	57.28							
North Dakota	72.70	75.69	-4.0	72.70	75.69							
South Dakota	134.43	130.59	2.9	134.43	130.59							
South Atlantic	159.54	158.23	.8	159.74	158.72	158.18	155.22	-		169.94	168.60	
Delaware District of Columbia	W 	W	W 			W	W					
Florida	W	W	W	176.82	171.04	W	W					
Georgia	W	W	w	170.94	168.09					W	W	
Maryland	W	W	W			W	W					
North Carolina	W	W	W	172.03	170.97	W	W			W	W	
South Carolina	W	W	W	157.25	159.13					W	W	
Virginia	W	W	W	150.59	162.89	W	W			W	W	
West Virginia	W	W	W	126.90	123.08	W	W			W	W	
East South Central	129.70	130.33	5	130.18	129.85	W	W			W	W	
Alabama	W W	W 115.52	W W	148.50	154.22	W W	W					
Kentucky Mississippi	W W	115.52 W	W W	121.41 157.56	115.52 163.78	W W	W					
Tennessee	w	W	W	121.37	121.34					W	W	
West South Central	123.43	120.37	2.5	112.80	108.65	149.10	145.06			100.85	92.98	
Arkansas	105.38	71.47	47.4	105.38	71.47							
Louisiana	W	W	W	136.28	130.83	W	W			W		
Oklahoma	W	W	\mathbf{W}	94.58	92.96	W	W			W	W	
Texas	W	W	W	122.13	128.94	W	W			W	W	
Mountain	109.18	101.26	7.8	110.73	102.63	W	W	-	-	W	W	
Arizona	W 07.04	W	W	130.10	127.70					W	W	
Colorado	97.04	94.90	2.3	97.04	94.90							
Idaho Montana	W	W	W	62.10	56.77	W	W					
Nevada	148.84	140.09	6.2	148.84	140.09							
New Mexico	162.13	166.00	-2.3	162.13	166.00							
Utah	100.53	96.86	3.8	100.53	96.86							
Wyoming	77.45	80.41	-3.7	77.45	80.41							
Pacific	152.03	155.47	-2.2	127.39	135.09	W	W		-	W	W	
California	W	W	W			W	W			W	W	
Oregon	127.39	135.09	-5.7	127.39	135.09							
Washington	W	W	W			W	W					
Alaska	W	W	W			W	W					
Hawaii						vv	**					

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

W = Withheld to avoid disclosure of individual company data.

Notes: •See Glossary for definitions.•Data for 2002 are preliminary.•Totals may not equal sum of components because of independent rounding.•Monetary values are expressed in nominal terms.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.•Coal includes anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.10.A. Average Cost of Petroleum Delivered for Electricity Generation by State, April 2003 and 2002 (Cents per Million Btu)

	-	. 1 / 4 17 0			Electric Po	wer Sector		Combin	ed Heat and	d Power Pr	oducers
Census Division and State	Tot	tal (All Secto		Electric	Utilities		lent Power ucers ¹	Comn	nercial	Indu	strial
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	495.69	299.31	65.6	370.94	514.73	W	W			W	W
Connecticut	W	W	W			W	W				
Maine	W	W	W			W				W	W
Massachusetts	W	W	W	664.00	 514.72	W	W				
New Hampshire Rhode Island	367.99	514.73	-28.5	367.99	514.73						
Vermont											
Middle Atlantic	486.82	346.77	40.4	375.02	349.01	545.99	343.02			98.63	366.39
New Jersey	W	W	W	270.18	552.75	W	W				
New York	W	W	W	386.08	348.80	W	W			W	W
Pennsylvania	W	W	W	811.46	594.90	W	W			W	W
East North Central	361.15	227.93	58.4	406.98	264.21	W	592.64	-	-	W	133.40
Illinois	W	W	W		566.40	W	W			 XX7	***
Indiana	W 421 99	W 274.73	W 52.6	659.83 421.88	529.61					W	W
Michigan	421.88 W	2/4./3 W	53.6 W	631.53	274.73 547.53		W			W	W
Ohio Wisconsin	W	W	W	131.10	115.01					W	W
West North Central	272.93	225.45	21.1	272.93	225.45						
Iowa	695.69	528.57	31.6	695.69	528.57						
Kansas	319.93	259.83	23.1	319.93	259.83						
Minnesota	134.41	119.35	12.6	134.41	119.35						
Missouri	670.20	150.43	345.5	670.20	150.43						
Nebraska	595.34	561.77	6.0	595.34	561.77						
North Dakota	628.45	555.40	13.2	628.45	555.40						
South Atlantia	422.62	331.57	27.8	417.52	324.67	465.26	391.53			435.84	260 11
South Atlantic Delaware	423.62 W	331.57 W	27.8 W	811.11	392.60	405.20 W	391.55 W			435.64 W	368.44 W
District of Columbia	W	W	w		372.00	w	w				
Florida	W	W	W	385.84	318.43	W	W			W	W
Georgia	613.84	W	W	613.84	509.77						W
Maryland	W	W	W			W	W				
North Carolina	W	W	W	618.38	507.80	W	W			W	W
South Carolina	W	W	W	710.61	520.83					W	W
Virginia	W	W	W	561.94	369.49	W	W			W	W
West Virginia	W	W	W	673.53	591.01	W	W			W	W
East South Central	396.51 W	415.78 513.02	-4.6 W	513.26 343.95	415.78 513.02	W				W	
Kentucky	W	350.86	W	453.37	350.86	W					
Mississippi	653.60	525.80	24.3	653.60	525.80						
Tennessee	659.63	528.01	24.9	659.63	528.01						
West South Central	170.46	142.51	19.6	637.82	556.67	46.26	121.01			477.30	361.13
Arkansas	648.88	548.62	18.3	648.88	548.62						
Louisiana	W	W	W	633.30	560.30	W	W			W	W
Oklahoma	631.00			631.00							
Texas	W 705 20	W	W	 	262.12	W	W			W	W
Mountain	785.30 W	284.16 W	176.4 W	786.54 806.19	263.12 650.44	W	W			W W	W
ArizonaColorado	940.80	780.20	20.6	940.80	780.20						
Idaho	940.80	780.20	20.0	J40.60 	, 30.20						
Montana	W	W	W	771.88	92.27	W	W				
Nevada											
New Mexico	732.92	601.21	21.9	732.92	601.21						
Utah	820.53	534.89	53.4	820.53	534.89						
Wyoming	706.21	520.68	35.6	706.21	520.68					 ***	 ***
Pacific	380.21	337.56	12.6		580.00	W	W		-	W	W
California	W	590.00	W		590.00	W	W				
Oregon Washington	W	580.00 W	W		580.00		W			W	W
Alaska											
Hawaii	W	W	W			W	W				
U.S. Total	434.36	316.62	37.2	411.25	324.42	486.58	297.68	-	-	311.24	291.09

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

W = Withheld to avoid disclosure of individual company data.

Notes: •See Glossary for definitions.•Data for 2002 are preliminary.•Totals may not equal sum of components because of independent rounding.•Monetary values are expressed in nominal terms.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.•Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical notes for conversion methodology), and waste oil.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.10.B. Average Cost of Petroleum Delivered for Electricity Generation by State, Year-to-Date through April

(Cents per Million Btu)

					Electric Po	wer Sector		Combine	ed Heat and	Power Pro	oducers
Census Division and State	Tot	al (All Secto	rs)	Electric	Utilities	Independo Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	553.93	293.57	88.7	548.92	458.87	W	W	-	_	W	W
Connecticut	W	W	W			W	W				
Maine	W	W	W			W				W	W
Massachusetts	W	W	W	579.18	437.60	W	W				
New Hampshire	376.97	461.38	-18.3	376.97	461.38						
Rhode Island											
Vermont	499.26	211 20	60.4	422.63	295.37	622.38	330.70	W		W	428.93
Middle Atlantic New Jersey	499.20 W	311.30 W	W	315.53	292.72	022.38 W	330.70 W			W	420.93
New York	W	w	w	425.19	295.43	W	w	W		W	W
Pennsylvania	W	W	W	692.48	475.44	W	W			W	W
East North Central	404.54	253.49	59.6	439.78	261.47	659.12	515.45	_		151.21	217.89
Illinois	W	W	W	755.53	384.90	W	W				
Indiana	W	W	W	692.37	477.78					W	W
Michigan	431.87	212.77	103.0	431.87	212.77						
Ohio	W	W	W	669.65	472.50	W	W			W	W
Wisconsin	W	W	W	177.95	138.39	W	W			W	W
West North Central	237.24	144.46	64.2	237.21	144.46		-	-	-	W	
Iowa Kansas	731.26	471.33 228.09	55.2 42.8	731.26	471.33 228.09						
Minnesota	325.60 W	57.01	42.8 W	325.60 70.92	57.01					W	
Missouri	691.69	105.66	554.7	691.69	105.66						
Nebraska	649.80	539.95	20.3	649.80	539.95						
North Dakota	727.45	499.83	45.5	727.45	499.83						
South Dakota											
South Atlantic	480.39	283.99	69.2	449.52	274.84	608.67	340.44	W	W	W	\mathbf{W}
Delaware	W	W	W	808.92	342.78	W	W			W	W
District of Columbia	W	W	W			W	W				
Florida	W	W	W	421.47	267.00	W	W			W	W
Georgia	W	W	W	727.17	476.30	W	W			W	W
Maryland	W	W	W	714.20	456.42	W W	W			 W	 W
North Carolina	W W	W W	W W	714.28 755.95	456.43 459.34	W	W 			W W	W W
Virginia	W	W	W	548.57	324.53	W	W	W	W	W	W
West Virginia	W	W	W	759.25	522.17	W	W			W	W
East South Central	299.00	W	W	358.87	425.65	W				W	W
Alabama	W	W	W	574.24	446.08					W	W
Kentucky	W	364.48	W	570.74	364.48	W					
Mississippi	256.13	535.11	-52.1	256.13	535.11						
Tennessee	759.80	449.90	68.9	759.80	449.90						
West South Central	318.86	123.96	157.2	622.03	487.04	94.49	112.62			375.34	376.81
Arkansas	611.89	552.31	10.8	611.89	552.31						
Louisiana	W	W	W	611.70	560.01	W	W			W	W
Oklahoma	721.44		W	721.44	254.40					 W	 W
Texas	727 51	390.26	86.4	837.98 716.79	254.40 387.98		W W			W	W
Mountain	727.51 W	390.26 W	80.4 W	874.64	578.94					W	W
Colorado	978.81	655.55	49.3	978.81	655.55						
Idaho											
Montana	W	W	W	793.44	196.27	W	W				
Nevada	542.10	463.40	17.0	542.10	463.40						
New Mexico	825.82	527.30	56.6	825.82	527.30						
Utah	769.85	445.85	72.7	769.85	445.85						
Wyoming	701.75	469.17	49.6	701.75	469.17						
Pacific	412.99	330.23	25.1		580.00	W	W		-	W	W
California	W	W	W			W	W				
Oregon	 W	580.00	 W		580.00		 W			 W	 W
Washington	W	W	W				W 			W	W
Hawaii	W	W	W			W	W				
U.S. Total	487.70	276.61	76.3	456.69	273.35	553.08	280.28	W	W	W	W
	.57.70	270.01	. 0.0	.50.07	270.03	230.00	200.20	,,	,,		

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

W = Withheld to avoid disclosure of individual company data.

Notes: *See Glossary for definitions.*Data for 2002 are preliminary.*Totals may not equal sum of components because of independent rounding.*Monetary values are expressed in nominal terms.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.*Petroleum includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical notes for conversion methodology), and waste oil.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.11.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, April 2003 and 2002 (Cents per Million Btu)

	_		_		Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	tal (All Secto		Electric	Utilities		lent Power ucers ¹	Comm	nercial	Indu	strial
	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	579.55	375.90	54.2	769.97	389.16	571.50	375.82	-			-
Connecticut	W	W	W			W	W				
Maine	W	W	W			W	W				
Massachusetts	W	W	W	769.97	390.09	W	W				
New Hampshire		378.00			378.00						
Rhode Island Vermont	W	W	W			W	W				
Middle Atlantic	604.23	410.22	47.3	574.44	379.55	601.82	415.60	W	W	W	W
New Jersey	W	W	W			W	W			W	W
New York	W	W	W	574.44	379.55	W	W	W	W	W	W
Pennsylvania	W	W	W			W	W			W	W
East North Central	461.86	351.33	31.5	625.57	391.50	415.50	339.51	W	W	W	W
Illinois	W	W	W	739.40	422.74	W	W			W	W
Indiana	W	W	W	1105.10	317.44	W	W			W	W
Michigan	W	W	W	574.27	383.38	W	W	W	W		
Ohio	W	W	W	615.70	621.57	W	W			W	W
Wisconsin	519 22	356.29	45.5	564.51	396.46	F19.24	343.32	W	W	W	W
West North Central Iowa	518.33 W	350.29 W	45.5 W	517.96 585.89	369.77 432.02	518.24 W	343.32 W				W
Kansas	493.71	346.23	42.6	493.71	346.23						
Minnesota	W	W	W	593.36	394.21	W	W			W	W
Missouri	W	W	W	512.08	365.11	W	W	W	W		
Nebraska	595.90	366.08	62.8	595.90	366.08						
North Dakota											
South Dakota											
South Atlantic	589.67	396.79	48.6	612.53	417.07	561.37	365.34	W	W	W	W
Delaware	W	W	W	648.80	374.00	W	W			W	W
District of Columbia					414.70						
Florida	W W	W W	W W	607.74 558.60	414.70 374.70	W W	W W			W W	W W
Georgia Maryland	W	W	W	338.00	3/4./0	W	W				
North Carolina	W	W	W	738.13	366.93	W	W			W	
South Carolina	W	W	W	750.15	416.98	W	w			W	W
Virginia	W	W	W	686.74	539.72	W	W	W	W	W	W
West Virginia	W	W	W	1666.86	390.11	W	W			W	W
East South Central	548.06	356.58	53.7	586.75	356.06	523.91	352.54	W	W	W	W
Alabama	W	W	W	610.99	363.26	W	W			W	W
Kentucky	W	W	W	1204.88	556.50	W	W	W	W		
Mississippi	W	W	W	551.96	349.86	W	W			W	W
Tennessee	W 504.04	W	W	 520.22	250.20	W	W	401.00		W	W
West South Central	504.94 W	342.93 W	47.2 W	528.23 558.44	359.30 360.13	489.33 W	353.93 W	491.90	W	509.93	W
Arkansas Louisiana	W	W	W	567.60	363.42	W	W	W		W	W
Oklahoma	W	W	W	528.94	369.97	W	w			W	W
Texas	W	W	W	503.01	342.71	W	W	W	W	W	W
Mountain	423.63	358.64	18.1	457.41	411.19	400.59	305.35	<u> </u>		365.61	310.36
Arizona	W	W	W	396.66	322.77	W	W			W	W
Colorado	W	W	W	360.86	305.51	W	W				
Idaho	W	W	W			W	W				
Montana	W	W	W	464.20	446.00	W	W				
Nevada	W	W	W	586.02	600.19	W	W				
New Mexico	202.60	W 224.40	W	447.72	308.08	W	W			W	W
Utah	393.60	334.40	17.7	393.60 364.00	334.40					W	W
Wyoming	486.83	W 381.45	W 27.6	364.00 402.35	369.40 355.28	503.42	391.04			518.73	366.75
Pacific		361.45 W	27.0 W	450.28	406.38	303.42 W	391.04 W			W W	300.75 W
Oregon	W	W	W	404.20	289.17	W	W			W	W
Washington	w	W	w		207.17	w	W			W	W
Alaska	210.71	246.20	-14.4	210.71	246.20						
Hawaii											
U.S. Total	519.76	364.11	42.7	545.13	379.77	508.49	366.89	500.53	368.12	511.02	332.37

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

W = Withheld to avoid disclosure of individual company data.

Notes: •See Glossary for definitions.•Data for 2002 are preliminary.•Totals may not equal sum of components because of independent rounding.•Monetary values are expressed in nominal terms.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data.•Natural gas includes a small amount of supplemental gaseous fuels.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.11.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, Year-to-Date through April

(Cents per Million Btu)

					Electric Po	wer Sector		Combined Heat and Power Producers			
Census Division and State	Tota	al (All Sector	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	686.74	338.30	103.0	811.48	357.32	685.02	338.14				
Connecticut	W	W	W			W	W				
Maine	W	W	W			W	W				
Massachusetts	W	W	W	811.48	357.49	W	W				
New Hampshire		378.00			378.00						
Rhode Island	W 	W 315.51	W 		315.51	W	W				
Middle Atlantic	699.67	353.35	98.0	794.10	326.03	694.23	351.85	W	W	W	W
New Jersey	W	W	W	7,74.10	320.03	W	W			W	W
New York	W	W	W	794.10	326.03	W	W	W	W	W	W
Pennsylvania	W	W	W			W	W			W	W
East North Central	502.21	322.78	55.6	638.43	333.40	448.85	317.40	W	W	W	W
Illinois	W	W	W	710.31	325.77	W	W			W	W
Indiana	W	W	W	938.42	312.55	W	W			W	W
Michigan	W	W	W	623.83	330.06	W	W	W	W		 W/
Ohio	W	W	W	696.23	514.73	W	W			W	W
Wisconsin West North Central	500.72	204.77	W	624.44	353.85	W	W 204.50	W		W	W
	590.72 W	304.77 W	93.8 W	592.03 604.46	312.47 342.15	588.79 W	294.50 W		W	W	W
Iowa Kansas	621.20	268.94	131.0	621.20	268.94						
Minnesota	W	W	W	631.40	374.81	W	W			W	W
Missouri	w	w	W	525.37	335.84	W	W	W	W		
Nebraska	690.11	322.73	113.8	690.11	322.73						
North Dakota	750.00	269.80	178.0	750.00	269.80						
South Dakota											
South Atlantic	631.70	349.11	80.9	666.63	364.44	549.43	331.24	W	W	W	W
Delaware	W	W	W	660.93	349.49	W	W			W	W
District of Columbia											
Florida	W	W	W	664.38	360.53	W	W			W	W
Georgia	W W	W W	W W	558.60	328.64	W W	W W			W	W
Maryland North Carolina	W	W	W	723.62	421.47	W	W			W	
South Carolina	W	W	W	709.98	439.06	W	W			W	W
Virginia	W	W	W	715.05	729.08	W	w	W	W	W	W
West Virginia	w	w	W	1381.36	348.00	W	w			W	W
East South Central	585.34	287.58	103.5	618.07	284.45	588.86	295.73	W	W	W	W
Alabama	W	W	W	614.92	291.81	W	W			W	W
Kentucky	W	W	W	769.38	454.50	W	W	W	W		
Mississippi	W	W	W	619.38	279.08	W	W			W	W
Tennessee	W	W	W			W	W			W	W
West South Central	595.01	284.34	109.3	625.81	303.63	590.27	283.44	481.99	W	580.97	W
Arkansas	W	W W	W W	577.61	322.40	W	W W	 W		W	 W/
LouisianaOklahoma	W W	W	W	670.28 660.98	303.33 319.43	W W	W			W	W W
Texas	W	W	W	578.46	290.88	w	W	W	W	W	W
Mountain	481.17	359.33	33.9	472.56	450.63	490.47	275.44			405.60	270.63
Arizona	W	W	W	521.06	318.38	W	W			W	W
Colorado	W	W	W	396.92	294.34	W	W				
Idaho	W	W	W			W	W				
Montana	W	W	W	512.56	446.76	W	W				
Nevada	W	W	W	501.32	704.03	W	W				
New Mexico	W	W	W	521.34	307.14	W	W			W	W
Utah	W	644.08	W	360.11	644.08	W				 XX7	
Wyoming	529.07	241.05	W	338.48	468.54	 5 47 29	240.40			W	202.26
Pacific	528.07	341.95	54.4	432.56 504.30	396.73 459.33	547.28	340.48 W			559.67	303.36
California	W W	W W	W W	362.61	439.33 311.06	W W	W			W W	W W
OregonWashington	W	W	W	302.01	311.00	W	W			W	W
Alaska	203.95	W	W	203.95	258.35		W				
Hawaii	203.93										
U.S. Total	591.14	315.59	87.3	604.97	337.98	589.41	314.83	495.65	338.59	576.78	285.17

¹ Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.

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Notes: See Glossary for definitions. Data for 2002 are preliminary. Totals may not equal sum of components because of independent rounding. Monetary values are expressed in nominal terms. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Natural gas includes a small amount of supplemental gaseous fuels.

Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.12. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, April 2003

Census Division and State		Bituminous			Subbituminous	S		Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %		
New England	816	.6	5.6			_					
Connecticut	212	.4	3.6								
Maine	20	.6	5.7								
Massachusetts	499	.6	6.4								
New Hampshire	85	.7	6.1								
Rhode Island											
Vermont											
Middle Atlantic	2,826	2.1	10.4	84	.3	5.1	_				
New Jersey	339	1.3	7.5								
New York	670	2.1	8.1	84	.3	5.1					
Pennsylvania	1,817	2.2	11.8								
East North Central	6,856	1.8	9.0	7,544	.3	4.7	-				
Illinois	725	2.1	8.5	2,687	.3	4.7					
Indiana	2,933	1.9	8.5	1,388	.2	4.6					
Michigan	1,011	1.2	9.3	1,941	.3	4.7					
Ohio	2,085	1.9	9.9								
Wisconsin	101	1.0	8.6	1,527	.3	5.0					
West North Central	269	1.4	7.6	5,505	.4	5.5	1,693	.7	9.5		
Iowa	169	1.4	7.5	1,292	.3	5.1					
Kansas				1,191	.4	5.0					
Minnesota	10	.9	8.8	1,625	.5	6.9					
Missouri	90	1.5	7.7	992	.2	4.5					
Nebraska				235	.3	4.6					
North Dakota							1,693	.7	9.5		
South Dakota				169	.3	4.6					
South Atlantic	13,613	1.2	10.1	498	.3	5.1	_				
Delaware	171	.9	9.2								
District of Columbia											
Florida	1,933	1.4	7.8								
Georgia	2,306	1.0	10.0	498	.3	5.1					
Maryland	760	1.0	10.6								
North Carolina	2,797	.9	10.6								
South Carolina	1,072	1.2	8.8								
Virginia	1,213	1.0	9.6								
West Virginia	3,362	1.7	11.5	1.77					16.0		
East South Central	7,117	1.9	11.0	1,776	.3	5.5	228	.5	16.0		
Alabama	1,556	1.3	11.1	834	.2	4.7					
Kentucky	3,079	2.4	12.1	134	.3	5.0	220		16.0		
Mississippi	352	.7	8.2				228	.5	16.0		
Tennessee	2,130	1.7	10.0	808	.3	6.4	2.000		16.5		
West South Central	81	2.6	16.9	6,627	.3	5.1	2,960	1.3	16.5		
ArkansasLouisiana	 1	1.0	9.9	961 793	.3 .4	4.6 5.5	68	.7	15.0		
Oklahoma	80	2.7	17.0	1,737	.3	5.0		. /	13.0		
Texas		2.1	17.0	3,137	.3	5.1	2,891	1.4	16.6		
Mountain	2,812	.6	9.9	4,469	.6	10.5	13	.5	10.0		
Arizona	480	.5	9.7	688	.8	17.2		.5	10.2		
Colorado	493	.5	10.6	1,125	.6	5.8					
Idaho	473	.5	10.0	1,123	.т	5.6					
Montana				614	6	8.6	13	.5	10.2		
Nevada	346	.5	9.3	014	.0	0.0		.5	10.2		
New Mexico	J-10 	.5	7.5	640	.8	20.1					
Utah	1,224	.5	10.9		.0	20.1					
Wyoming	269	 1.1	5.0	1,403	.5	7.4					
Pacific Contiguous	81	2.2	8.0	765	.6	12.3					
California	81	2.2	8.0	703		12.5					
Oregon				263	.2	4.4					
Washington				502	.8	16.4					
Pacific Noncontiguous				60	.4	5.3					
Alaska						3.3 					
Hawaii				60	.4	5.3					
U.S. Total	34,472	1.5	10.0	27,328	.4	6.2	4,894	1.1	14.1		

Notes: *See Glossary for definitions.*Data for 2003 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.13. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilities by State, April 2003

Census Division and State		Bituminous			Subbituminous	s	Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England	128	.7	6.6	_	-	-	_	-	-	
Connecticut										
Maine										
Massachusetts	43	.7	7.8							
New Hampshire	85	.7	6.1							
Rhode Island										
Vermont										
Middle Atlantic	209	2.2	7.8	_	-	-	_	-	-	
New Jersey	62	2.4	7.9							
New York	68	2.1	7.3							
Pennsylvania	79	2.2	8.1							
East North Central	6,217	1.8	9.1	5,045	.3	4.8	-	-	-	
Illinois	277	2.5	8.7	335	.3	4.6				
Indiana	2,933	1.9	8.5	1,277	.2	4.7				
Michigan	981	1.2	9.3	1,941	.3	4.7				
Ohio	1,933	1.9	9.9							
Wisconsin	93	.9	8.5	1,492	.3	4.9				
West North Central	227	1.1	7.9	5,449	.4	5.5	1,693	.7	9.5	
Iowa	139	1.0	7.3	1,236	.3	5.1				
Kansas				1,191	.4	5.0				
Minnesota	10	.9	8.8	1,625	.5	6.9				
Missouri	78	1.2	8.8	992	.2	4.5				
Nebraska				235	.3	4.6				
North Dakota							1,693	.7	9.5	
South Dakota				169	.3	4.6				
South Atlantic	10,930	1.1	10.1	498	.3	5.1	-	-	-	
Delaware										
District of Columbia										
Florida	1,822	1.5	7.8							
Georgia	2,267	1.0	10.1	498	.3	5.1				
Maryland										
North Carolina	2,651	.9	10.7							
South Carolina	1,055	1.2	8.8							
Virginia	872	1.0	10.2							
West Virginia	2,262	1.2	11.9							
East South Central	6,818	1.9	11.1	1,776	.3	5.5	_		_	
Alabama	1,547	1.3	11.1	834	.2	4.7				
Kentucky	2,934	2.4	12.0	134	.3	5.0				
Mississippi	352	.7	8.2							
Tennessee	1,985	1.7	10.2	808	.3	6.4				
West South Central	_		-	5,044	.3	5.0	480	1.1	12.1	
Arkansas				961	.3	4.6				
Louisiana				232	.5	5.6	68	.7	15.0	
Oklahoma				1,697	.3	5.0				
Texas				2,154	.3	5.1	411	1.2	11.6	
Mountain	2,812	.6	9.9	4,175	.5	10.6	13	.5	10.2	
Arizona	480	.5	9.7	657	.8	17.4				
Colorado	493	.5	10.6	1,125	.4	5.8				
Idaho										
Montana	246			351	.7	9.0	13	.5	10.2	
Nevada	346	.5	9.3							
New Mexico				640	.8	20.1				
Utah	1,224	.5	10.9							
Wyoming	269	1.1	5.0	1,403	.5	7.4				
Pacific Contiguous	-			263	.2	4.4	-	-		
California										
Oregon				263	.2	4.4				
Washington										
Pacific Noncontiguous	-			_	-	-	-		_	
Alaska										
Hawaii										
U.S. Total	27,341	1.4	10.0	22,250	.4	6.1	2,186	.8	10.1	

Notes: •See Glossary for definitions.•Data for 2003 are preliminary.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Sources: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, April 2003

Census Division and State		Bituminous			Subbituminous			Lignite	
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %
New England	679	.5	5.4	-	-	_	-		
Connecticut	212	.4	3.6						
Maine	10	.7	5.8						
Massachusetts	457	.6	6.2						
New Hampshire									
Rhode Island									
Vermont									
Middle Atlantic	2,552	2.1	10.7	84	.3	5.1			
New Jersey	277	1.1	7.5						
New York	543	2.2	8.2	84	.3	5.1			
Pennsylvania	1,733	2.2	12.0						
East North Central	431	1.5	8.6	2,410	.3	4.6	_		
Illinois	289	1.2	8.1	2,299	.3	4.7			
Indiana				111	.3	3.6			
Michigan	12	1.2	7.3						
Ohio	130	2.1	9.8						
Wisconsin									
West North Central						_			
Iowa									
Kansas									
Minnesota									
Missouri									
Nebraska									
North Dakota									
South Dakota	2,568	1.7	10.1						
South Atlantic									
Delaware District of Columbia	171	.9	9.2						
Florida	110	.8	8.8						
Georgia	760	1.0	10.6						
Maryland	760	1.0	10.6						
North Carolina	114	.9	8.8						
South Carolina									
Virginia	324	.8	8.2						
West Virginia	1,088	2.8	10.7						
East South Central	154	3.1	13.1	-		-	228	.5	16.0
Alabama	9	.6	9.2						
Kentucky	146	3.3	13.3						
Mississippi							228	.5	16.0
Tennessee									
West South Central	80	2.7	17.0	1,543	.4	5.2	2,290	1.4	17.1
Arkansas									
Louisiana				561	.4	5.5			
Oklahoma	80	2.7	17.0						
Texas				982	.3	5.1	2,290	1.4	17.1
Mountain	-	-	-	263	.6	8.1	-	-	-
Arizona									
Colorado									
Idaho									
Montana				263	.6	8.1			
Nevada									
New Mexico									
Utah									
Wyoming									
Pacific Contiguous	39	.7	8.2	502	.8	16.4	_		
California	39	.7	8.2						
Oregon									
Washington				502	.8	16.4			
Pacific Noncontiguous		_	_	60	.4	5.3	_		_
Alaska									
				60	.4	5.3			
Hawaii									

Notes: •See Glossary for definitions.•Data for 2003 are preliminary.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Combined Heat and Power Producers by State, April 2003

New England	Ash %
Connecticut	
Maine - <td></td>	
Masachusetts	
New Hampshire	
Rhode Island	
Middle Atlantic	
Middle Atlantic	
New Jersey. New York. Pennsylvania Bast North Central. Bast North	
New York	-
Pennsylvania	
East North Central 18 1.9 10.6 - - - - - - - - -	
Illinois	
Indiana	-
Michigan 18 1.9 10.6	
Ohio	
Wisconsin	
West North Central 11 3.6 .0 -	
Iowa	
Kansas	
Minnesota.	
Missouri 11 3.6 .0 Nebraska	
Nebraska	
North Dakota	
South Dakota	
South Atlantic	
Delaware	
District of Columbia	
Florida	
Georgia	
Maryland	
North Carolina	
South Carolina	
Virginia	
West Virginia	
East South Central	
Alabama	
Kentucky	
Mississippi	
Tennessee	
West South Central	-
Arkansas	
Louisiana	
Oklahoma	
Texas	
Mountain	-
Arizona	
Colorado	
Idaho	
Montana	
Nevada	
New Mexico	
Utah	
Wyoming	
Pacific Contiguous	-
California	
Oregon	
Washington	
Pacific Noncontiguous	
Alaska	
Hawaii	
U.S. Total	

Notes: •See Glossary for definitions.•Data for 2003 are preliminary.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Combined Heat and Power Producers by State, April 2003

Census Division and State		Bituminous			Subbituminou	S		Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %		
New England	10	.6	5.5	-		-					
Connecticut											
Maine	10	.6	5.5								
Massachusetts											
New Hampshire											
Rhode Island											
Vermont											
Middle Atlantic	64	1.5	7.7								
New York	 59	1.6	7.9								
Pennsylvania	5	.6	6.1								
East North Central	189	3.2	9.1	89	.3	5.1					
Illinois	159	3.0	8.8	54	.4	4.4					
Indiana		J.0 									
Michigan											
Ohio	22	4.5	10.9								
Wisconsin	8	2.9	9.0	36	.3	6.2					
West North Central	30	3.2	8.6	56	.3	4.8					
Iowa	30	3.2	8.6	56	.3	4.8					
Kansas											
Minnesota											
Missouri											
Nebraska											
North Dakota											
South Dakota											
South Atlantic	116	.8	7.8	_	-	_	_	-			
Delaware											
District of Columbia											
Florida											
Georgia	39	.8	8.2								
Maryland											
North Carolina	32	.7	6.6								
South Carolina	17	.9	9.2								
Virginia	16	.8	6.9								
West Virginia	11	1.4	8.6								
East South Central	145	.9	7.8	_	-	-			-		
Alabama											
Kentucky											
Mississippi	145		7.0								
Tennessee	145 1	.9 1.0	7.8 9.9	40	.2	6.5	190	1.8	21.4		
West South Central		1.0	9.9	40	.2	0.5	190	1.0	21.4		
Louisiana	1	1.0	9.9								
Oklahoma		1.0	7.7	40	.2	6.5					
Texas							190	1.8	21.4		
Mountain				31	.4	13.7			21.1		
Arizona				31	.4	13.7					
Colorado											
Idaho											
Montana											
Nevada											
New Mexico											
Utah											
Wyoming											
Pacific Contiguous	42	3.6	7.8			-					
California	42	3.6	7.8								
Oregon											
Washington											
Pacific Noncontiguous	-	-		-		-	-	-			
Alaska											
Hawaii											
U.S. Total	598	2.0	8.2	216	.3	6.5	190	1.8	21.4		

Notes: *See Glossary for definitions.*Data for 2003 are preliminary.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the Independent Power Producer sector. This will affect comparisons of current and historical data. Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Chapter 5. Retail Sales, Revenue, and Average Revenue per Kilowatthour

Table 5.1. Retail Sales of Electricity to Ultimate Consumers: Total by Sector, 1990 through May 2003 (Million Kilowatthours)

Period	Residential	Commercial	Industrial	Other ¹	All Sectors
1990	924,019	751,027	945,522	91,988	2,712,555
1991		765,664	946,583	94,339	2,762,003
1992		761,271	972,714	93,442	2,763,365
1993	994,781	794,573	977,164	94,944	2,861,462
1994	1,008,482	820,269	1,007,981	97,830	2,934,563
1995	1,042,501	862,685	1,012,693	95,407	3,013,287
1996		887,445	1,033,631	97,539	3,101,127
1997	1,075,880	928,633	1,038,197	102,901	3,145,610
1998	1,130,109	979,401	1,051,203	103,518	3,264,231
1999	1,144,923	1,001,996	1,058,217	106,952	3,312,087
2000		1,055,232	1,064,239	109,496	3,421,414
2001					
January		91,407	80,245	9,167	309,283
February	101,026	82,072	79,349	8,636	271,083
March	93,568	84,477	80,533	8,730	267,307
April	82,937	81,538	79,824	8,525	252,823
May	81,539	87,955	82,736	9,038	261,269
June	98,689	96,153	82,616	10,075	287,533
July	119,819	102,863	80,766	10,355	313,803
August		106,234	84,259	11,024	329,988
September	105,385	97,267	80,133	10,925	293,709
October	85,207	89,818	80,569	9,660	265,255
November	81,188	83,539	77,774	8,902	251,404
December	96,354	85,830	75,421	8,717	266,322
Total	. 1,202,647	1,089,154	964,224	113,756	3,369,781
2002					
January		88,712	78,304	8,162	293,032
February	97,402	81,921	78,113	7,880	265,317
March		84,432	79,861	7,862	268,165
April	86,185	84,922	80,674	7,861	259,643
May	87,577	90,154	84,072	8,344	270,147
June	107,956	97,916	84,266	9,135	299,274
July		107,299	87,631	9,879	338,327
August	134,080	106,652	88,669	9,996	339,397
September		99,405	85,978	10,077	310,521
October	94,328	94,491	85,647	9,282	283,748
November	89,012	84,738	80,816	8,308	262,874
December	109,190	87,430	79,768	8,389	284,777
Total	1,268,172	1,108,072	993,800	105,177	3,475,221
2003					
January		93,712	80,351	8,743	308,113
February	112,021	84,886	77,901	8,327	283,136
March		86,482	78,914	8,265	273,816
April		83,470	80,561	7,924	256,057
May		89,391	82,495	8,581	268,807
Total	509,925	437,941	400,224	41,840	1,389,929
Year to Date					
2001		427,449	402,687	44,096	1,361,765
2002		430,140	401,023	40,111	1,356,304
2003		437,941	400,224	41,840	1,389,929
Rolling 12 Months Ending					
2002		1,091,845	962,561	109,770	3,364,320
2003	1,293,067	1,115,872	993,000	106,907	3,508,846

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: *See Glossary for definitions.*Geographic coverage is the 50 States and the District of Columbia.*Sales values for 1996-2003 include energy service provider (power marketer) data.*Values for 2001 have been adjusted to reflect the Form EIA-861 annual total. See Technical Notes for methodology. *Values for 2002 have been revised and are preliminary. *Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826.*Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. *Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. *Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. *Totals may not equal sum of components because of independent rounding.

Sources: 2002 - 2003: Energy Information Administration, Form EIA-826, "Monthly Electric Sales and Revenue Report with State Distributions Report;" 1990-2001: Form EIA-861, "Annual Electric Power Industry Report."

Table 5.2. Revenue from Retail Sales of Electricity to Ultimate Consumers: Total by Sector, 1990 through May 2003
(Million Dollars)

Period	Residential	Commercial	Industrial	Other ¹	All Sectors
1 61104	Residential	Commercial	industrial	Other	7 III Sectors
1990	72,378	55,117	44,857	5,891	178,243
1991	76,828	57,655	45,737	6,138	186,359
1992	76,848	58,343	46,993	6,296	188,480
1993		61,521	47,357	6,528	198,220
1994	84,552	63,396	48,069	6,689	202,706
1995		66,365	47,175	6,567	207,717
1996		67,829	47,536	6,741	212,609
1997		70,497	47,023	7,110	215,334
1998		72,575	47,050	6,863	219,848
1999		72,771	46,846	6,796	219,896
2000	98,209	78,405	49,369	7,179	233,163
2001					
January	10,001	6,732	4,000	608	21,341
February	8,176	6,192	3,834	596	18,799
March	7,815	6,504	3,925	607	18,851
April	7,063	6,302	3,885	595	17,844
May	7,236	6,806	4,127	640	18,810
June	8,961	7,789	4,283	714	21,747
July	10,850	8,629	4,424	748	24,651
August	11,592	8,875	4,554	791	25,813
September	9,423	8,001	4,205	756	22,384
October	7,588	7,453	4,039	706	19,786
November	6,923	6,480	3,694	626	17,724
December	8,043	6,591	3,603	611	18,847
Гоtal	103,671	86,354	48,573	7,999	246,597
2002					
January	9,526	6,628	3,705	541	20,400
February	7,970	6,302	3,724	537	18,533
March	7,835	6,517	3,816	538	18,705
April	7,215	6,488	3,800	544	18,046
May	7,563	7,030	3,977	571	19,141
June	9,405	7,915	4,161	629	22,110
July	11,751	8,890	4,492	663	25,795
August	11,727	8,776	4,482	662	25,647
September	9,950	8,026	4,208	666	22,850
October	8,022	7,622	4,145	631	20,421
November	7,413	6,505	3,784	561	18,263
December	8,839	6,681	3,736	587	19,843
Гotal	107,215	87,380	48,028	7,129	249,752
1003					
January	10,005	7,286	3,754	584	21,629
February	8,961	6,589	3,758	575	19,883
March	8,322	6,777	3,862	594	19,555
April	7,417	6,704	3,919	571	18,611
May	7,947	7,285	4,055	616	19,903
Total	42,653	34,640	19,348	2,939	99,581
Year to Date					
001	40,291	32,536	19,772	3,047	95,645
.002	40,108	32,964	19,022	2,731	94,825
	42,653	34,640	19,348	2,939	99,581
Rolling 12 Months Ending i	n May				
002	103,488	86,782	47,824	7,683	245,776
003	109,760	89,056	48,355	7,338	254,509

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: •See Glossary for definitions.•Geographic coverage is the 50 States and the District of Columbia.•Revenue values for 1996-2003 include energy service provider (power marketer) data. Values for 2001 have been adjusted to reflect the Form EIA-861 annual total. See Technical Notes for methodology.•Values for 2002 have been revised and are preliminary.•Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826.•Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.•Values for 1996 in the commercial and industrial sectors reflect an electric utility's reclassification for this information by Standard Industrial Classification.•Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.•Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.•Totals may not equal sum of components because of independent rounding.

Sources: 2002-2003: Energy Information Administration, Form EIA-826, "Monthly Electric Sales and Revenue Report with State Distributions Report;" 1990-2001: Form EIA-861, "Annual Electric Power Industry Report."

Table 5.3. Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers: Total by Sector, 1990 through May 2003 (Cents)

Period	Residential	Commercial	Industrial	Other ¹	All Sectors
1990	7.83	7.34	4.74	6.40	6.57
1991		7.53	4.83	6.51	6.75
1992		7.66	4.83	6.74	6.82
1993		7.74	4.85	6.88	6.93
1994		7.73	4.77	6.84	6.91
1995		7.69	4.66	6.88	6.89
1996		7.64	4.60	6.91	6.86
1997		7.59	4.53	6.91	6.85
1998		7.41	4.48	6.63	6.74
1999		7.26	4.43	6.35	6.64
		7.43	4.64	6.56	6.81
2000	. 0.24	7.43	4.04	0.50	0.01
2001	7.70	7.26	4.00	6.62	6.00
January		7.36	4.99	6.63	6.90
February	8.09	7.54	4.83	6.91	6.93
March	8.35	7.70	4.87	6.95	7.05
April		7.73	4.87	6.98	7.06
May		7.74	4.99	7.09	7.20
June		8.10	5.18	7.08	7.56
July	9.06	8.39	5.48	7.23	7.86
August		8.35	5.40	7.18	7.82
September	8.94	8.23	5.25	6.92	7.62
October	8.91	8.30	5.01	7.31	7.46
November	8.53	7.76	4.75	7.04	7.05
December	8.35	7.68	4.78	7.00	7.08
Average		7.93	5.04	7.03	7.32
2002					
January	8.08	7.47	4.73	6.63	6.96
February	8.18	7.69	4.77	6.81	6.99
March	8.16	7.72	4.78	6.84	6.98
April		7.64	4.71	6.91	6.95
May	8.64	7.80	4.73	6.84	7.09
June	8.71	8.08	4.94	6.88	7.39
July	8.80	8.29	5.13	6.71	7.62
August		8.23	5.05	6.62	7.56
	8.65	8.07	4.89	6.61	7.36
September	8.50	8.07	4.84	6.80	7.20
October		8.07 7.68			7.20 6.95
November			4.68	6.76	
December		7.64	4.68	7.00	6.97
Average 2003	. 8.45	7.89	4.83	6.78	7.19
January	7.98	7.77	4.67	6.68	7.02
February		7.76	4.82	6.90	7.02
March		7.84	4.89	7.19	7.14
April	8.82	8.03	4.86	7.19	7.27
May		8.15	4.92	7.17	7.40
Average		7.91	4.83	7.03	7.16
Year to Date	0.50	7.71	7.05	7.03	7.10
	9.26	7.61	4.01	(01	7.02
2001		7.61	4.91	6.91	7.02
2002		7.66	4.74	6.81	6.99
2003		7.91	4.83	7.03	7.16
Rolling 12 Months Ending					
2002		7.95	4.97	7.00	7.31
	8.49	7.98	4.87	6.86	7.25

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: *See Glossary for definitions.*Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. *Geographic coverage is the 50 States and the District of Columbia.*Average Revenue values for 1996-2003 include power marketer data. *Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. *Values for 2002 have been revised and are preliminary. *Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. *Values for 1996 in the commercial and industrial sectors reflect an electric utility's reclassification for this information by Standard Industrial Classification. *Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. *Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity). *Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. *Totals may not equal sum of components because of independent rounding. *Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data. Sources: 2002-2003: Energy Information Administration, Form EIA-826, "Monthly Electric Sales and Revenue Report w

Table 5.4.A. Retail Sales of Electricity to Ultimate Consumers - Estimated by Sector, by State, May 2003 and 2002 (Million Kilowatthours)

	Resid	ential	Comn	nercial	Indu	strial	Otl	ner¹	All S	ectors
Census Division and State	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
Now England	2.167	2.072	4.027	2.00/	1 0 41	1 002	110	120	0.252	0.070
New England		3,062 838	4,027 997	3,905 997	1,941 426	1,983 464	119 43	120 48	9,253 2,305	9,070 2,347
Maine		308	304	297	262	271	5	5	878	881
Massachusetts		1,312	1,998	1,898	834	841	49	54	4,254	4,105
New Hampshire	. 293	250	318	302	186	161	11	2	809	715
Rhode Island		202	261	256	107	112	7	7	576	577
Vermont		151	149	155	125	134	4	4	431	445
Middle Atlantic	,	8,154	10,758	10,874	6,993	7,244	1,226	1,244	27,169	27,515
New Jersey New York		1,737 3,266	2,781 4,678	2,775 4,814	1,080 2,064	995 2,198	39 1,070	40 1,092	5,606 11,042	5,547 11,370
Pennsylvania		3,150	3,299	3,285	3,848	4,052	117	112	10,520	10,598
East North Central		11,627	12,874	12,851	17,302	17,759	1,381	1,296	42,974	43,531
Illinois		2,703	3,422	3,452	3,323	3,422	832	776	10,200	10,353
Indiana		1,910	1,710	1,765	3,995	4,056	53	54	7,594	7,785
Michigan		2,372	2,915	2,898	2,915	3,003	62	53	8,151	8,327
Ohio		3,155	3,298	3,246	4,845	5,102	373	355	11,676	11,858
Wisconsin		1,487	1,529	1,489	2,223	2,176	60	58	5,353	5,209
West North Central		5,928 827	6,451 660	6,373 662	6,552	6,549 1,468	469 139	451 130	19,338 3,013	19,301
Iowa Kansas		827 807	1,096	1,042	1,411 872	1,468 868	35	32	2,811	3,087 2,749
Minnesota		1,359	1,503	1,485	1,893	1,901	51	48	4,816	4,793
Missouri	,	1,863	2,152	2,142	1,352	1,310	98	94	5,441	5,408
Nebraska		575	547	562	662	643	85	86	1,867	1,866
North Dakota		247	254	256	225	220	34	34	742	757
South Dakota	. 245	250	238	224	137	140	NM	NM	647	641
South Atlantic		22,654	19,596	20,654	14,991	14,120	1,843	1,910	58,371	59,338
Delaware		250	282	290	332	340	5	5	873	884
District of Columbia		163	694	696	23	21	31	29 502	833	909
Florida Georgia		8,803 3,359	6,510 3,264	6,594 3,198	1,639 2,966	1,705 3,016	508 139	503 141	17,237 9,627	17,606 9,713
Maryland ²		1,625	1,227	2,051	2,247	847	58	79	5,187	4,602
North Carolina		3,339	3,182	3,298	2,655	2,865	163	175	9,196	9,678
South Carolina		1,807	1,497	1,511	2,712	2,750	73	81	6,016	6,149
Virginia		2,593	2,406	2,461	1,534	1,643	861	891	7,316	7,588
West Virginia		714	534	554	884	935	6	6	2,086	2,209
East South Central		7,391	6,029	5,932	10,399	10,720	494	500	24,308	24,543
Alabama		2,188	1,704	1,704	2,934	2,839	64	65	6,884	6,796
Kentucky		1,505	1,195	1,197	3,488	3,802	284	279	6,483	6,783
Mississippi Tennessee		1,284 2,414	1,061 2,069	986 2,045	1,276 2,701	1,253 2,827	64 82	63 92	3,677 7,264	3,586 7,378
West South Central		13,488	11,263	10,825	12,967	13,694	1,491	1,227	40,699	39,234
Arkansas		987	837	751	1,369	1,382	54	61	3,263	3,180
Louisiana		2,154	1,655	1,581	2,194	2,580	205	231	6,130	6,546
Oklahoma		1,244	1,102	1,100	1,112	1,035	330	256	3,891	3,635
Texas	10,551	9,103	7,669	7,393	8,292	8,697	903	679	27,415	25,873
Mountain		5,285	6,591	6,611	5,121	5,181	NM	NM	18,067	17,955
Arizona		1,858	1,913	1,938	919	926	NM	NM	5,026	5,065
Colorado		1,089	1,532	1,533	826	900	NM 26	NM	3,590	3,647
Idaho		489 285	594 312	637 301	505 258	512 265	26 19	25 19	1,624 873	1,663 870
Montana Nevada		563	666	647	238 987	265 977	45	66	2,390	2,253
New Mexico		360	570	583	406	427	NM	NM	1,557	1,569
Utah		486	760	734	595	545	87	NM	1,980	1,853
Wyoming		156	242	238	625	629	8	13	1,028	1,036
Pacific Contiguous	9,493	9,614	11,351	11,684	5,829	6,422	704	697	27,378	28,417
California		5,801	8,315	8,650	3,644	3,995	390	391	18,077	18,837
Oregon		1,309	1,153	1,138	921	996	39	35	3,461	3,479
Washington		2,504	1,883	1,896	1,264	1,431	274	271	5,839	6,102
Pacific Noncontiguous		375	452 189	445	400	400 90	19	22	1,251	1,242
Alaska Hawaii		145 230	263	180 265	91 310	310	15 5	17 5	439 812	432 810
U.S. Total		87,577	89,391	90,154	82,495	84,072	8,581	8,344	268,807	270,147
D.H. A. A. H. H.	00,540	1 (11	07,371	70,134	02,773	04,072	0,301	0,011	200,007	2/0,14/

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: *See Glossary for definitions. Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Values for 2002 have been revised and are preliminary. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity). Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. Totals may not equal sum of components because of independent rounding. Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

² A major utility in Maryland reclassified consumers from commercial to industrial in July 2002.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Table 5.4.B. Retail Sales of Electricity to Ultimate Consumers - Estimated by Sector, by State, Year-to-Date through May

(Million Kilowatthours)

	Reside	ential	Comm	ercial	Indu	strial	Oth	ier¹	All Se	ectors
Census Division and State	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
New England	19,385	17,353	20,688	19,472	9,391	9,881	663	628	50,127	47,334
Connecticut	5,428	4,860	5,089	4,943	2,062	2,163	241	236	12,820	12,202
Maine	1,785	1,688	1,547	1,495	1,365	1,557	24	24	4,720	4,764
Massachusetts	8,253	7,401	10,253	9,506	3,927	4,177	280	302	22,713	21,386
New Hampshire	1,785	1,438	1,663	1,458	900	781	59	13	4,407	3,689
Rhode Island	1,206	1,101	1,346	1,289	510	535	40	34	3,102	2,959
Vermont	929	865	789	781	627	668	19	19	2,365	2,333
Middle Atlantic	50,909 10,334	46,558 9,508	56,304 14,349	54,123 13,473	33,802 4,579	34,730 4,695	6,668 226	6,612 231	147,682 29,489	142,024 27,908
New Jersey New York	19,040	17,965	24,483	24,160	10,136	10,642	5,846	5,827	59,504	58,594
Pennsylvania	21,535	19,086	17,472	16,490	19,087	19,393	596	554	58,690	55,522
East North Central	73,067	69,654	64,885	63,140	84,248	83,158	6,693	6,634	228,893	222,585
Illinois	17,049	16,396	17,642	17,219	15,838	15,714	4,037	4,031	54,566	53,360
Indiana	12,875	11,905	8,583	8,377	19,470	19,002	295	289	41,223	39,572
Michigan	13,491	13,221	14,635	14,259	14,360	14,111	356	350	42,841	41,941
Ohio	20,924	19,740	16,338	15,824	23,906	23,971	1,699	1,665	62,866	61,200
Wisconsin	8,728	8,392	7,687	7,461	10,674	10,360	306	299	27,396	26,513
West North Central	37,318	35,396	32,195	31,100	31,544	30,774	2,486	2,332	103,543	99,602
lowa	5,076	4,802	3,430	3,263	6,806	6,677	701	663	16,012	15,406
Kansas	4,566	4,379	5,182	4,853	4,116	4,128	163	169	14,027	13,529
Minnesota	8,198	7,769	7,639	7,457	9,318	9,009	265	257	25,420	24,491
Missouri	12,614	11,767	10,437	10,165	6,313	6,155	506	466	29,870	28,552
Nebraska	3,561	3,473	2,860	2,811	3,165	2,995	492	444	10,078	9,723
North Dakota	1,691	1,632	1,406	1,386	1,161	1,129	199	182	4,457	4,329
South Dakota	1,612	1,575	1,241	1,166	665	681	161	151	3,679	3,572
South Atlantic	128,887	118,917	94,157	96,144	71,725	65,827	9,199	8,940	303,968	289,828
Delaware	1,773	1,522	1,536	1,435	1,517	1,647	55	24	4,881	4,628
District of Columbia	681	643	3,356	3,268	111	104	152	150	4,301	4,165
Florida	42,912	40,036	30,201	29,707	7,847	7,771	2,350	2,253	83,310	79,767
Georgia	18,550	17,514	15,093	15,065	14,054	13,809	710	680	48,407	47,068
Maryland ²	11,483	9,773	6,510	10,408	10,153	4,235	336	421	28,482	24,836
North Carolina	20,574	19,273	15,444	15,084	12,849	13,094	884	856	49,750	48,306
South Carolina	10,766	10,076	7,047	6,853	12,786	12,755	384	376	30,983	30,060
Virginia	17,382	15,580	12,069	11,499	7,843	7,891	4,297	4,148	41,590	39,118
West Virginia East South Central	4,766 45,225	4,500 42,726	2,901 28,627	2,824 27,618	4,566 51,098	4,522 51,326	32 2,433	32 2,337	12,264 127,383	11,878 124,006
Alabama	11,664	11,210	7,671	7,501	13,453	13,133	326	311	33,114	32,155
Kentucky	10,517	9,676	5,872	5,564	18,318	18,999	1,346	1,258	36,053	35,497
Mississippi	6,777	6,561	4,760	4,391	6,027	6,059	300	311	17,864	17,321
Tennessee	16,268	15,279	10,324	10,162	13,301	13,135	460	458	40,352	39,033
West South Central	69,370	66,783	49,925	49,276	61,972	66,950	6,466	5,735	187,733	188,744
Arkansas	6,156	5,824	3,930	3,443	6,466	6,531	239	282	16,792	16,080
Louisiana	10,286	10,091	7,636	7,077	11,007	12,052	992	1,073	29,920	30,292
Oklahoma	7,526	7,174	5,086	5,092	5,246	5,292	1,595	1,181	19,453	18,738
Texas	45,403	43,695	33,273	33,665	39,253	43,076	3,639	3,198	121,568	123,634
Mountain	28,759	29,285	29,819	29,718	24,907	25,021	3,431	3,204	86,916	87,228
Arizona	8,816	9,039	8,419	8,394	4,286	4,399	1,267	1,191	22,788	23,023
Colorado	6,143	6,153	7,283	7,206	4,061	4,364	556	450	18,043	18,172
Idaho	3,043	3,233	2,395	2,453	2,360	2,406	134	127	7,931	8,220
Montana	1,803	1,798	1,628	1,584	1,386	1,344	102	101	4,919	4,826
Nevada	3,121	3,213	2,883	2,828	4,428	4,536	208	220	10,640	10,796
New Mexico	2,087	2,080	2,602	2,675	2,018	2,056	745	687	7,453	7,498
Utah	2,730	2,732	3,330	3,352	3,027	2,805	371	361	9,458	9,250
Wyoming	1,016	1,038	1,280	1,226	3,341	3,111	48	68	5,685	5,443
Pacific Contiguous	54,981	56,364	57,168	57,417	29,646	31,408	3,688	3,574	145,483	148,763
California	31,552	31,541	41,006	41,253	18,598	19,726	2,026	1,917	93,182	94,438
Oregon	8,102	8,520	5,895	5,928	4,565	4,695	201	187	18,763	19,330
Washington	15,327	16,302	10,267	10,236	6,483	6,987	1,461	1,470	33,538	34,995
Pacific Noncontiguous	2,023	1,994	4,173	2,132	1,892	1,949	113	115	8,201	6,190
Alaska	878	876	2,925	916	438	508	89	91	4,330	2,391
Hawaii	1,145	1,118	1,248	1,216	1,454	1,441	24	24	3,871	3,799
U.S. Total	509,925	485,030	437,941	430,140	400,224	401,023	41,840	40,111	1,389,929	1,356,304

Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: •See Glossary for definitions.•Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826.•Values for 2002 have been revised and are preliminary.•Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.•Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.•Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity).•Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

² A major utility in Maryland reclassified consumers from commercial to industrial in July 2002.

Table 5.5.A. Revenue from Retail Sales of Electricity to Ultimate Consumers - Estimated by Sector, by State, May 2003 and 2002

(Million Dollars)

	Resid	ential	Comn	iercial	Indu	strial	Otl	ier¹	All S	ectors
Census Division and State	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	378	345	398	361	152	143	17	17	944	865
Connecticut		94	100	95	34	36	5	5	238	230
Maine		41	27	24	10	9	1	1	79	75
Massachusetts		140	196	174	71	64	8	8	434	386
New Hampshire		31	33	30	18	15	1		87	76
Rhode Island		20 19	25 17	21	9 10	9 10	1	1	59 47	51
Vermont Middle Atlantic		932	1,134	17 1,095	404	417	114	108	2,622	2,552
New Jersey		186	245	255	79	74	8	7	508	522
New York		433	607	555	106	108	93	88	1,279	1,184
Pennsylvania		313	282	285	220	235	14	13	835	846
East North Central		986	979	983	802	816	86	83	2,841	2,869
Illinois		238	298	290	176	180	47	47	754	754
Indiana	138	144	103	107	154	161	5	5	400	417
Michigan	189	196	210	223	137	150	8	7	544	576
Ohio	280	285	261	264	232	231	20	19	794	799
Wisconsin		123	106	98	102	95	5	5	349	322
West North Central		453	408	396	281	273	34	31	1,183	1,154
Iowa		70	44	43	59	57	10	9	184	179
Kansas		63	70	66	39	39	3	3	175	172
Minnesota		102	95 120	91	78	72	5	4	284	270
Missouri		144 39	139 31	133 32	64 26	64 25	6 8	6 6	352 103	347 101
Nebraska North Dakota		17	15	17	NM	NM	2	1	42	44
South Dakota		19	15	14	6	6	1	1	42	40
South Atlantic	1,817	1,819	1,326	1,341	620	589	126	123	3,889	3,872
Delaware		22	20	21	13	14	1	1	56	57
District of Columbia		14	56	57	1	1	1	2	66	74
Florida		719	464	438	90	88	40	38	1,331	1,283
Georgia	256	260	211	206	114	119	12	12	593	597
Maryland ²	134	131	96	137	81	32	7	7	318	307
North Carolina		274	205	207	119	125	12	12	604	617
South Carolina		142	99	98	103	105	5	5	349	351
Virginia		213	144	147	66	70	48	45	466	475
West Virginia		46	29	29	33	36	1	1	106	112
East South Central		503	386	379	389	394	33	33	1,317	1,309
Alabama		157	109	110	110	110	5	5	378	381
Kentucky		90 98	64 77	65 69	107 57	115 55	14 7	14	276 243	283 228
Mississippi		159	136	136	115	114	9	6 8	420	417
Tennessee West South Central	1,349	1,057	860	692	685	610	110	82	3,004	2,440
Arkansas		75	50	44	58	57	4	4	188	180
Louisiana		155	128	103	137	111	17	16	455	385
Oklahoma		85	73	58	51	38	18	13	247	194
Texas		743	611	486	439	404	72	49	2,114	1,681
Mountain		441	454	444	255	252	45	45	1,221	1,182
Arizona	175	173	143	141	52	51	14	14	384	379
Colorado		84	102	90	42	40	9	9	246	222
Idaho		32	34	37	19	21	2	1	87	91
Montana		20	19	17	12	12	2	2	55	51
Nevada	. 64	55	58	58	64	63	3	4	189	181
New Mexico		33	42	45	20	22	11	NM	106	111
Utah		32	41	41	22	21	4	4	104	98
Wyoming		11	14	14	24	23	1	1	51	48
Pacific Contiguous		972 719	1,278	1,284	423	445	47	46	2,715	2,747
California		93	1,090 73	1,091 77	328 40	342 45	31	31	2,169 212	2,184 218
Oregon Washington		159	114	115	55	45 58	13	12	334	345
Pacific Noncontiguous		53	60	56	45	39	3	3	166	151
Alaska		18	18	19	7	7	2	3	44	47
Hawaii		35	42	36	38	32	1	1	121	104
U.S. Total	7,947	7,563	7,285	7,030	4,055	3,977	616	571	19,903	19,141

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: •See Glossary for definitions. •Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. •Values for 2002 have been revised and are preliminary. •Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. •Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. •Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity). •Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. •Totals may not equal sum of components because of independent rounding. •Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

² A major utility in Maryland reclassified consumers from commercial to industrial in July 2002.

NM = Not meaningful due to large relative standard error or excessive percentage change.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table 5.5.B. Revenue from Retail Sales of Electricity to Ultimate Consumers - Estimated by Sector, by State, Year-to-Date through May

(Million Dollars)

C	Reside	ential	Comm	ercial	Indu	strial	Oth	ner ¹	All Se	ectors
Census Division and State	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
New England	2,175	1,976	1,945	1,872	720	716	90	90	4,931	4,655
Connecticut	588	531	475	458	162	165	23	23	1,249	1,178
Maine	233	229	151	164	53	66	5	5	443	465
Massachusetts	898	824	943	910	330	322	42	46	2,212	2,102
New Hampshire	211	172	169	146	84	68	7	3	471	389
Rhode Island	127	111	119	107	40	41	9	9	296	269
Vermont	117	109	88	87	51	53	4	3	259	253
Middle Atlantic	5,603	5,075	5,700	5,339	1,946	2,017	586	557	13,835	12,987
New Jersey	1,027	954	1,231	1,230	328	362	39	30	2,625	2,575
New York	2,598 1,978	2,312 1,808	3,004 1,464	2,718 1,391	511 1,108	513 1,142	476 71	464 63	6,589 4,621	6,007 4,404
Pennsylvania East North Central	5,740	5,490	4,811	4,679			407	391	14,835	
Illinois	1,356	1,325	1,455	1,377	3,877 832	3,819 820	222	209	3,866	14,379 3,731
	884	825	516	507	767	754	26	26	2,194	2,112
Indiana Michigan	1,123	1,089	1,071	1,086	682	699	40	40	2,194	2,112
Ohio	1,123	1,576	1,071	1,228	1,110	1,093	93	92	4,101	3,989
Wisconsin	731	674	517	481	486	454	26	24	1,760	1,634
West North Central	2,609	2,459	1,874	1,786	1,313	1,258	164	151	5,960	5,654
Iowa	414	382	218	204	273	254	44	42	950	883
Kansas	340	318	328	296	190	187	16	16	874	816
Minnesota	603	562	448	425	390	365	21	20	1,462	1,372
Missouri	814	775	567	559	257	259	31	28	1,669	1,622
Nebraska	218	212	153	149	124	116	37	31	531	509
North Dakota	104	98	81	80	49	46	8	7	242	231
South Dakota	116	112	78	72	31	30	7	6	232	221
South Atlantic	10,066	9,342	6,207	6,215	2,976	2,735	613	585	19,863	18,876
Delaware	142	125	107	99	63	71	6	4	317	298
District of Columbia	52	48	227	222	5	5	5	9	290	285
Florida	3,593	3,389	2,090	2,074	418	416	182	178	6,282	6,057
Georgia	1,381	1,301	998	978	546	524	61	58	2,986	2,861
Maryland ²	810	701	450	601	368	158	35	36	1,663	1,496
North Carolina	1,662	1,545	1,004	967	578	583	61	58	3,304	3,153
South Carolina	834	771	470	444	492	479	26	25	1,822	1,720
Virginia	1,299	1,184	702	676	335	328	234	213	2,571	2,401
West Virginia	295	277	159	154	171	172	3	3	628	606
East South Central	2,959	2,753	1,850	1,752	1,904	1,832	160	149	6,872	6,486
Alabama	821	777	517	498	514	489	23	22	1,876	1,786
Kentucky	591	538	315	294	549	546	64	58	1,518	1,436
Mississippi	501	459	344	299	270	262	31	28	1,146	1,048
Tennessee	1,045	979	674	661	571	536	43	40	2,333	2,216
West South Central	5,634	5,041	3,644	3,305	3,144	3,192	470	378	12,893	11,916
Arkansas	432	417	220	201	263	271	18	19	934	908
Louisiana	769	669	552	450	592	478	79	72	1,992	1,669
Oklahoma	531	446	320	253	233	186	84	55	1,168	940
Texas	3,902	3,509	2,552	2,400	2,056	2,256	289	232	8,800	8,398
Mountain	2,235	2,196	1,997	1,915	1,200	1,164	195	180	5,626	5,456
Arizona	698	701	586	581	220	219	58	53	1,562	1,553
Colorado	479	439	454	396	196	190	41	34	1,170	1,059
Idaho	202	206	142	142	103	103	7	7	454	458
Montana	130	125	100	93	61	60	9	9	300	286
Nevada	297	305	265	255	290	280	14	16	866	856
New Mexico	178	173	193	193	96	96 107	45	42	511	504
Utah	182 69	179 69	184 73	187 69	110 123	107 110	17 3	16 4	493	489
Wyoming									268 13.625	250
Pacific Contiguous	5,339	5,506	5,988	5,844	2,058	2,105	240	235	13,625	13,690
California	3,824 565	3,872 609	4,976 378	4,809 401	1,556 212	1,575 226	154 17	152	10,510 1,172	10,408 1,252
Oregon Washington	950	1,025	634	634	212	304	69	16 67	1,172	2,029
Pacific Noncontiguous	293	270	624	257	209	184	15	15	1,141	726
Alaska	102	105	432	95	33	39	12	12	578	251
Hawaii	192	165	192	162	33 176	39 145	3	3	563	475
1 1 a vv a 11	42,653	40,108	34,640	32,964	19,348	19,022	2,939	2,731	99,581	94,825

Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: •See Glossary for definitions.•Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826.•Values for 2002 have been revised and are preliminary.•Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.•Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.•Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity).•Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.•Totals may not equal sum of components because of independent rounding.•Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

² A major utility in Maryland reclassified consumers from commercial to industrial in July 2002.

Table 5.6.A. Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers - Estimated by Sector, by State, May 2003 and 2002

(Cents)

ļ	Resid	lential	Comn	nercial	Indu	strial	Otl	ner¹	All S	ectors
Census Division and State	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002	May 2003	May 2002
New England	11.94	11.28	9.87	9.24	7.81	7.20	14.33	13.78	10.21	9.54
Connecticut		11.24	10.02	9.54	8.07	7.74	10.79	10.50	10.33	9.81
Maine	. 13.50	13.40	8.84	7.93	3.78	3.26	20.87	23.17	9.02	8.49
Massachusetts	. 11.57	10.65	9.82	9.15	8.51	7.67	16.19	14.44	10.20	9.40
New Hampshire		12.31	10.26	10.05	9.44	9.13	12.24	23.63	10.79	10.68
Rhode Island		10.01	9.59	8.17	8.51	7.74	19.78	20.06	10.17	8.87
Vermont		12.61	11.29	11.00	7.74	7.64	19.42	18.50	10.94	10.60
Middle Atlantic		11.43	10.54	10.07	5.78	5.76	9.29	8.67	9.65	9.27
New Jersey		10.69	8.82	9.20	7.30	7.42	19.27	18.25	9.07	9.41
New York		13.26	12.97	11.53	5.12	4.91	8.64	8.04	11.58	10.41
Pennsylvania		9.94 8.48	8.56	8.66	5.71 4.63	5.81	11.87 6.23	11.41 6.41	7.94	7.98
East North Central		8.79	7.60 8.72	7.65 8.41	5.30	4.60 5.25	5.65	5.99	6.61 7.39	6.59 7.28
Indiana		7.55	6.03	6.08	3.84	3.96	9.98	9.69	5.27	5.36
Michigan		8.27	7.19	7.69	4.71	5.00	13.04	13.43	6.68	6.92
Ohio		9.03	7.19	8.15	4.71	4.52	5.44	5.46	6.80	6.74
Wisconsin		8.29	6.94	6.60	4.59	4.37	8.95	8.38	6.52	6.17
West North Central		7.65	6.33	6.22	4.29	4.17	7.33	6.81	6.12	5.98
Iowa		8.47	6.68	6.54	4.17	3.89	6.86	6.87	6.11	5.81
Kansas		7.76	6.35	6.37	4.46	4.54	9.96	9.88	6.24	6.24
Minnesota		7.53	6.31	6.16	4.11	3.79	8.98	8.81	5.89	5.64
Missouri		7.73	6.46	6.20	4.70	4.90	6.61	6.23	6.47	6.41
Nebraska		6.74	5.59	5.63	3.95	3.89	8.80	6.89	5.52	5.43
North Dakota		6.68	5.94	6.61	4.27	4.13	4.61	4.32	5.72	5.81
South Dakota		7.66	6.41	6.23	4.62	4.42	4.76	4.26	6.50	6.31
South Atlantic		8.03	6.77	6.49	4.14	4.17	6.82	6.44	6.66	6.53
Delaware		8.71	7.12	7.14	3.89	4.11	14.97	16.89	6.39	6.47
District of Columbia		8.33	8.13	8.21	4.88	4.85	3.16	6.65	7.98	8.11
Florida	. 8.59	8.16	7.13	6.64	5.48	5.18	7.83	7.53	7.72	7.29
Georgia	. 7.84	7.73	6.48	6.45	3.85	3.94	8.64	8.49	6.16	6.15
Maryland	8.07	8.07	7.84	6.67	3.61	3.76	12.03	9.44	6.12	6.68
North Carolina	. 8.40	8.20	6.45	6.27	4.48	4.35	7.09	6.63	6.57	6.38
South Carolina		7.86	6.65	6.49	3.82	3.82	7.10	6.67	5.79	5.70
Virginia		8.20	5.98	5.98	4.28	4.24	5.55	5.08	6.37	6.26
West Virginia		6.44	5.47	5.32	3.72	3.83	11.44	11.87	5.08	5.07
East South Central		6.81	6.41	6.39	3.74	3.67	6.75	6.51	5.42	5.33
Alabama		7.16	6.40	6.47	3.75	3.86	7.09	7.04	5.49	5.61
Kentucky		5.97	5.39	5.39	3.07	3.03	4.83	4.91	4.26	4.17
Mississippi		7.60	7.23	6.96	4.48	4.42	10.28	9.47	6.62	6.35
Tennessee		6.60	6.57	6.65	4.25	4.02	10.38	8.98	5.78	5.65
West South Central		7.84	7.64	6.39	5.28	4.46	7.37	6.67	7.38	6.22
Arkansas		7.55	5.93	5.89	4.20	4.12	7.09	6.87	5.76	5.66
Louisiana		7.20	7.70	6.53	6.23	4.30	8.29	6.79	7.42	5.88
Oklahoma		6.80 8.16	6.59 7.96	5.31	4.59 5.30	3.67 4.65	5.34 7.92	5.24 7.15	6.36 7.71	5.35
Texas		8.16 8.35	6.90	6.57	5.30 4.97		7.92 NM	7.15 NM	6.76	6.50 6.58
Mountain		9.32	6.90 7.46	6.71 7.28	5.62	4.86 5.45	NM NM	NM NM	7.64	7.48
Arizona Colorado		9.32 7.67	6.64	7.28 5.88	5.02	5.45 4.46	7.19	6.95	6.84	6.10
Idaho		6.58	5.77	5.76	3.72	4.46	5.70	5.16	5.36	5.47
Montana		7.17	6.21	5.79	4.71	4.46	9.92	8.75	6.30	5.90
Nevada		9.81	8.75	8.98	6.44	6.46	6.73	6.51	7.91	8.02
New Mexico		9.21	7.40	7.78	4.90	5.04	5.60	5.62	6.81	7.09
Utah		6.69	5.45	5.61	3.74	3.87	4.17	4.18	5.25	5.31
Wyoming		7.18	5.95	5.78	3.89	3.58	7.91	5.31	4.92	4.65
Pacific Contiguous		10.11	11.26	10.99	7.26	6.92	6.67	6.66	9.92	9.67
California		12.40	13.12	12.62	8.99	8.55	7.88	8.03	12.00	11.59
Oregon		7.13	6.37	6.75	4.38	4.50	8.51	8.60	6.12	6.27
Washington		6.37	6.06	6.09	4.35	4.05	4.67	4.44	5.72	5.65
Pacific Noncontiguous		14.13	13.38	12.47	11.20	9.72	15.69	14.72	13.26	12.13
Alaska		12.54	9.72	10.68	7.22	7.57	15.97	15.22	10.09	10.83
Hawaii		15.13	16.01	13.69	12.37	10.35	14.85	12.98	14.97	12.82
U.S. Total		8.64	8.15	7.80	4.92	4.73	7.17	6.84	7.40	7.09

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

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NM = Not meaningful due to large relative standard error or excessive percentage change.

Table 5.6.B. Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers - Estimated by Sector, by State, Year-to-Date through May

(Cents)

	Reside	ential	Comm	ercial	Indu	strial	Oth	ier¹	All So	ectors
Census Division and State	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
New England	11.22	11.39	9.40	9.61	7.67	7.25	13.59	14.33	9.84	9.83
Connecticut	10.84	10.92	9.34	9.27	7.86	7.65	9.71	9.75	9.74	9.65
Maine	13.07	13.58	9.79	10.98	3.89	4.23	21.83	22.11	9.38	9.75
Massachusetts	10.88	11.13	9.20	9.57	8.40	7.72	14.98	15.33	9.74	9.83
New Hampshire	11.85	11.96	10.14	10.00	9.35	8.76	11.99	20.61	10.70	10.54
Rhode Island	10.56	10.06	8.84	8.31	7.91	7.73	22.22	27.09	9.53	9.07
Vermont	12.60	12.64	11.11	11.13	8.07	7.94	18.73	18.11	10.95	10.84
Middle Atlantic	11.01	10.90	10.12	9.86	5.76	5.81	8.79	8.42	9.37	9.14
New York	9.94 13.64	10.04 12.87	8.58 12.27	9.13 11.25	7.16 5.04	7.70 4.82	17.04 8.15	13.10 7.95	8.90 11.07	9.23 10.25
Pennsylvania	9.18	9.48	8.38	8.43	5.80	5.89	11.92	11.34	7.87	7.93
East North Central	7.86	7.88	7.42	7.41	4.60	4.59	6.07	5.90	6.48	6.46
Illinois	7.96	8.08	8.25	8.00	5.25	5.22	5.49	5.20	7.08	6.99
Indiana	6.87	6.93	6.02	6.05	3.94	3.97	8.97	9.02	5.32	5.34
Michigan	8.32	8.23	7.32	7.61	4.75	4.95	11.30	11.36	6.80	6.95
Ohio	7.87	7.99	7.66	7.76	4.64	4.56	5.45	5.52	6.52	6.52
Wisconsin	8.37	8.04	6.72	6.45	4.56	4.38	8.37	8.09	6.42	6.16
West North Central	6.99	6.95	5.82	5.74	4.16	4.09	6.60	6.47	5.76	5.68
Iowa	8.15	7.96	6.36	6.25	4.02	3.80	6.34	6.39	5.93	5.73
Kansas	7.45	7.26	6.33	6.10	4.61	4.52	10.09	9.21	6.23	6.03
Minnesota	7.35	7.23	5.87	5.70	4.19	4.05	7.95	7.91	5.75	5.60
Missouri	6.45	6.59	5.44	5.50	4.07	4.21	6.08	6.05	5.59	5.68
Nebraska	6.12	6.10	5.35	5.32	3.90	3.89	7.44	7.04	5.27	5.24
North Dakota	6.16	6.01	5.74	5.77	4.18	4.07	4.16	3.98	5.42	5.34
South Atlantia	7.21 7.81	7.12 7.86	6.32	6.19	4.60	4.47	4.05	3.98	6.30 6.53	6.18
South Atlantic Delaware	7.98	8.22	6.59 6.96	6.46 6.87	4.15 4.12	4.15 4.30	6.66 10.94	6.54 15.64	6.49	6.51 6.44
District of Columbia	7.68	7.53	6.77	6.80	4.66	4.56	3.52	6.22	6.75	6.84
Florida	8.37	8.47	6.92	6.98	5.33	5.35	7.74	7.91	7.54	7.59
Georgia	7.44	7.43	6.61	6.49	3.89	3.79	8.56	8.59	6.17	6.08
Maryland	7.05	7.17	6.92	5.78	3.63	3.72	10.28	8.67	5.84	6.02
North Carolina	8.08	8.02	6.50	6.41	4.50	4.46	6.88	6.74	6.64	6.53
South Carolina	7.74	7.66	6.67	6.49	3.85	3.76	6.77	6.56	5.88	5.72
Virginia	7.47	7.60	5.82	5.88	4.27	4.15	5.45	5.13	6.18	6.14
West Virginia	6.18	6.16	5.48	5.44	3.75	3.80	10.60	10.51	5.12	5.10
East South Central	6.54	6.44	6.46	6.34	3.73	3.57	6.59	6.36	5.39	5.23
Alabama	7.04	6.93	6.74	6.63	3.82	3.72	7.09	7.09	5.66	5.55
Kentucky	5.62	5.56	5.36	5.29	2.99	2.87	4.72	4.60	4.21	4.05
Mississippi	7.39	7.00	7.22	6.81	4.49	4.32	10.30	9.09	6.41	6.05
Tennessee	6.43	6.41	6.53	6.51	4.29	4.08	9.30	8.83	5.78	5.68
West South Central	8.12 7.02	7.55 7.16	7.30 5.60	6.71 5.84	5.07 4.07	4.77 4.14	7.26 7.61	6.59 6.86	6.87 5.56	6.31 5.65
ArkansasLouisiana	7.02	6.63	7.23	6.36	5.38	3.97	7.92	6.67	6.66	5.51
Oklahoma	7.06	6.21	6.29	4.97	4.44	3.52	5.25	4.66	6.00	5.02
Texas	8.59	8.03	7.67	7.13	5.24	5.24	7.94	7.26	7.24	6.79
Mountain	7.77	7.50	6.70	6.45	4.82	4.65	5.67	5.63	6.47	6.25
Arizona	7.92	7.75	6.96	6.92	5.14	4.97	4.58	4.45	6.86	6.75
Colorado	7.79	7.13	6.23	5.50	4.83	4.36	7.39	7.58	6.48	5.83
Idaho	6.65	6.38	5.93	5.80	4.35	4.29	5.57	5.17	5.73	5.58
Montana	7.22	6.94	6.16	5.85	4.39	4.43	8.83	9.16	6.10	5.93
Nevada	9.51	9.48	9.18	9.02	6.56	6.18	6.93	7.23	8.14	7.93
New Mexico	8.51	8.32	7.41	7.22	4.75	4.65	6.02	6.13	6.86	6.72
Utah	6.66	6.56	5.54	5.57	3.65	3.81	4.49	4.40	5.22	5.29
Wyoming	6.77	6.63	5.71	5.59	3.69	3.52	6.61	5.21	4.72	4.60
Pacific Contiguous	9.71	9.77	10.47	10.18	6.94	6.70	6.50	6.56	9.37	9.20
California	12.12	12.28	12.13	11.66	8.36	7.99	7.60	7.91	11.28	11.02
Oregon	6.97	7.15	6.42	6.77	4.63	4.81	8.56	8.55	6.25	6.48
Washington	6.20	6.29	6.17	6.19	4.49	4.34	4.69	4.55	5.79	5.80
Pacific Noncontiguous	14.50 11.59	13.53 12.00	14.95 14.76	12.06 10.36	11.04 7.46	9.45 7.64	13.57 13.36	13.29 13.48	13.92 13.35	11.74 10.50
Hawaii	16.74	14.73	15.38	13.34	12.12	10.09	14.31	12.55	14.55	12.51
U.S. Total	8.36	8.27	7.91	7.66	4.83	4.74	7.03	6.81	7.16	6.99

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: *See Glossary for definitions.*Values for 2003 are estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826.*Values for 2002 have been revised and are preliminary.*Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.*Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.*Retail sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include imported electricity).*Net generation is for the calendar month while retail sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.*Totals may not equal sum of components because of independent rounding.*Due to restructuring of the electric power industry, electric utilities are selling/transferring plants to the proputility sector. This affects comparisons of current and historical data

utilities are selling/transferring plants to the nonutility sector. This affects comparisons of current and historical data.

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

Appendices

- A. Relative Standard Error
- B. Major Disturbances and Unusual Occurrences
- C. Technical Notes
- D. Estimating and Presenting Power Sector Fuel Use

Appendix A **Relative Standard Error**

Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and Table A1.A. State, May 2003 (Percent)

(1 61	(Cent)								
Census Division and State	Coal ¹	Petroleum ²	Natural Gas ³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
New England	2	3	4	0	0	3	1	0	1
Connecticut	0	46	9	0	0	17	1		2
Maine	0	9	15	0		4	1	0	7
Massachusetts	3	5	4		0	4	2		2
New Hampshire	0	3	534		0	4	5		2
Rhode Island		286	2			178	0		3
Vermont		595	0		0	14	4		3
Middle Atlantic	1	1	3	104	0	1	2		1
New Jersey	0	18	7	558	0	3	4		2
New York	4	1	4	512	0	1	3		1
Pennsylvania	1	6	13	94	0	3	2		1
East North Central	1	12	8	40	0	5	4	0	*
Illinois	2	102	43	295	0	49	12		l
Indiana	2	5	9	5		0	6		l 1
Michigan	2	17	7	0	0	8	3		I 1
Ohio	1	6	86	349	•	9	24		1
West North Control	2	38	39	 655	0	2	11	0	2
West North Central	4	159	19 144	655	0	3	4		3
Iowa Kansas	0	16	25		0	62	0		3 1
Minnesota	2	6	23 77		0	10	3	0	2
Missouri	1	49	5	0	0	8	9		1
Nebraska	2	141	52	0	0	*	30		1
North Dakota	2	91	2,937	670		0	37		2
South Dakota	0	0	0			ő	0		0
South Atlantic	*	1	1	0	0	*	3		*
Delaware	19	9	0	0					12
District of Columbia		0	<u></u>						0
Florida	0	*	1	0	0	0	5		*
Georgia	*	9	12		0	1	3		*
Maryland	0	51	10	0	0	0	3		1
North Carolina	*	8	7	0	0	1	10		*
South Carolina	*	2	2	0	0	1	7		*
Virginia	2	25	13	0	0	1	9		1
West Virginia	*	2	94	0		5	0		*
East South Central	*	1	5	53	0	0	4		*
Alabama	*	6	8	58	0	0	4		*
Kentucky	*	0	99			0	5		1
Mississippi	1	29	4	0	0	0	11		1
Tennessee	2	2	239	0	0	0	5		1
West South Central	*	1	*	8	0	2	2	0	*
Arkansas	0	14	5		0	4	8	0	1
Louisiana	0	·	l	4	0	0	*	0	l *
Oklahoma	0	16	1	127		0	10		*
Texas	1	2	1	16	0	15	4		*
Mountain	1	11	3	392	0	2	7		1 *
Arizona Colorado	0	6 99	1 8	0	0	0	42 31		2
Idaho	689	99	8 178	U		5	9		6
Montana	6	3	0	0		3 1	0		3
Nevada	0	0	0	0		4	5		<i>5</i>
New Mexico	*	11	14				304		2
Utah	*	152	30			46 17	19		1
Wyoming	2	23	65	1,994		5	32		2
Pacific Contiguous	8	21	3	*	0	1	2		1
California	12	21	3	*	0	2	2		1
Oregon	91	17	4			1	7		1
Washington	10	136	18	0	0	1	4		1
Pacific Noncontiguous.	43	4	16	168		19	22		7
Alaska	178	44	16			14	389		18
Hawaii	6	1	0	168		90	22		3
	•	•	•			, ,			2

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information. •Estimates for 2003 are preliminary.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁶ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

⁷ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Relative Standard Error for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State, Year-to-Date through May (Percent)

New England	Census Division and State	Coal ¹	Petroleum ²	Natural Gas³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
Connecticut	New England	1	2	1	0	0	2	*	0	*
Massebusets		0	5	3	0	0	6	1		1
New Hampshire	Maine	0	5	3	0		2	1	0	2
Bhode Island	Massachusetts	1	3	1		0	2	1		1
Vermont		0	8	130		0	3	3		1
Middle Atlantic * 2	Rhode Island		163	2			101	0		3
New Jersey	Vermont		121	0		0		2		2
New York	Middle Atlantic		_	1		•		1	-	*
Pennsylvana	New Jersey	0	9	3	233	0	2	2		1
East North Central * 5 3 18 0 3 2 0 *		1	2	1	213	0	1	2		*
Illinois		*	· · · · · · · · · · · · · · · · · · ·				1			*
Indiama		*	5	-		-			0	*
Michigan * 11 4 0 0 3 1 - 1 Wisconsin 1 26 6 0 5 5 0 1 West North Central * 10 5 266 0 1 1 0 * Iowa 1 132 29 0 2 3 1 Iowa 1 11 14 0 47 0 * Minnesota 1 11 14 0 7 2 0 1 Nebraska * 99 24 0 0 4 16 * 1 1 4 0 0 1 * 1 * 1 * 1 * * 1 * *		1				0		,		*
Ohio * 1 26 6 6 0 5 5 0 1 West North Central * 10 5 266 0 1 1 0 * West North Central * 10 5 266 0 1 1 0 *		*		4			-	3		*
Wasconsin. 1 26 6 - 0 5 5 0 1 lows. 1 132 29 - 0 2 3 - 1 lows. 1 11 14 - 0 47 0 - * Minnesota. 1 11 14 - 0 7 2 0 1 Missouri * 44 2 0 0 4 5 - * Nobraska * 99 24 0 0 * 16 - * Nobraska * 99 24 0 0 * 16 - * Nobraska * 99 24 0 0 * 16 - * Oboth Carolina * 1 1 0 0 * 1 - * Delavare * 1		*		•		•	2	1		1
West North Central * 10 5 266 0 1 1 0 *		*				•	9			*
The synth Celtural								5		1
Kansas 0 11 14 0 47 0 *Minnesota 1 11 14 0 47 0 *Minnesota 1 1 11 14 0 7 7 2 0 1 1 Missouri					266		-	1	0	*
Minesota		•								1
Missouri * 44 2 0 0 4 5		0				-	47	0		*
Nebraska * 99 24 0 0 * 16 - *		1				0	7	=	0	1
North Dakota		*				•	4			*
South Dakota 0 0 - 0 0 - 0 South Atlatic * 1 1 0 0 * 1 - * Delaware 3 5 21 0 - - - - - 3 3 District of Columbia - 0 0 0 0 2 - * 0 0 0 2 - * 0 0 0 2 - * * 0 0 0 2 - * * May 0 0 0 2 - *		*				0	*			*
South Atlantic		*			279		0			1
Solutivariation			0							
District of Columbia			1	_		0	*	1		
Florida		3		21	0					-
Georgia * 17 7 0 * 2 * Maryland 0 6 5 0 0 0 2 1 North Carolina * 8 1 0 0 * 2 * Virginia 1 1 6 3 0 0 1 3 - * West Virginia * 5 27 0 3 2 * * Least South Central * 4 2 29 0 0 2 * * Alabama * 18 4 30 0 0 2 * * Kentucky * 0 27 0 0 7 * * Mest South Central * 13 22 0 0			0							0
Maryland 0 6 5 0 0 2 1 North Carolina * 9 5 0 0 * 4 * South Carolina * 8 1 0 0 * 2 * * * * * * * 1 6 3 0 0 1 3 * * * * 1 6 3 0 0 0 1 3 * * * 1 6 3 0 0 0 2 * * * 1 1 0 0 0 2 *		*	*	*	0	-	0			*
North Carolina * 9 5 0 0 * 4 *		*		7		0	*			*
South Carolina * 8 1 0 0 * 2 * Virginia 1 6 3 0 0 1 3 1 East South Central * 4 2 29 0 0 2 * Alabama * 18 4 30 0 0 2 * Kentucky * 0 27 0 7 * Kentucky * 0 27 0 7 * Kentucky * 0 27 0 0 7 * Kentucky * 0 27 0 0 5 * Mississipin * 11 2 0 0 0 5 1 <t< td=""><td></td><td>0</td><td>6</td><td>-</td><td>0</td><td>0</td><td>0</td><td>2</td><td></td><td>1</td></t<>		0	6	-	0	0	0	2		1
Virginia 1 6 3 0 0 1 3 1 West Virginia * 5 27 0 3 2 * East South Central * 4 2 29 0 0 2 * Alabama * 18 4 30 0 0 2 * Kentucky * 0 27 0 7 * Kentucky * 0 27 0 0 7 * Kentucky * 0 27 0 0 0 5 * * Kentucky * 0 27 0 0 5 1 0 0 1 0 0 1 1 0 4		*	9	5	0	0	*	4		*
West Virginia * 5 27 0 3 2 * East South Central		*	8	1	0	· ·	*	2		*
East South Central		1	6		0	0	1	-		1
Alabama		*								*
Kentucky * 0 27 0 7 * Mississippi * 11 2 0 0 0 5 1 Temnessee * 13 22 0 0 0 3 * West South Central * 2 * 5 0 1 1 0 * Arkansas 0 2 2 2 0 2 2 0 * Oklahoma 0 12 2 69 0 5 * Oklahoma 0 12 2 69 0 5 * Texas * 5 1 7 0 6 1 * Texas * 22 2 114 0 1 2 * Mountain * 229<		*	-	_			•	_		*
Mississippi * 11 2 0 0 0 5 1 Tennessee * 13 22 0 0 0 3 * West South Central * 2 * 5 0 1 1 0 * Arkansas		·				0				*
Tennessee * 13 22 0 0 0 3 * West South Central * 2 * 5 0 1 1 0 * Arkansas 0 2 2 0 2 2 0 * Louisiana * 1 1 3 0 0 1 0 * Oklahoma 0 12 2 69 0 5 * Oklahoma 0 12 2 69 0 5 * Oklahoma 0 12 2 2 69 0 5 * Rexas * 5 1 7 0 6 1 * Mountain * 229 4 0 3 10 * Colorado * </td <td></td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>,</td> <td></td> <td>1</td>		*					0	,		1
West South Central		*					U	-		! *
Arkansas 0		* •				Ů	0			* *
Louisiana * 1 1 3 0 0 1 0 * Oklahoma 0 12 2 69 0 5 * Texas * 5 1 7 0 6 1 * Mountain * 22 2 114 0 1 2 * Arizona 0 59 1 0 0 21 * Colorado * 229 4 0 3 10 1 Colorado * 229 4 0 3 10 1 Colorado * 229 4 0 2 4 3 10 1 1 1 1 1 2 2 2 4 3							1	-		*
Oklahoma 0 12 2 69 0 5 * Texas * 5 1 7 0 6 1 * Mountain * 22 2 114 0 1 2 * Arizona 0 59 1 0 0 21 * Colorado * 229 4 0 3 10 1 Idaho 181 0 54 2 2 4 1 Idaho 181 0 54 2 2 4 1 Idaho 181 0 54 2 2 4 3 Montana 1 4 0 0 1 1 2 2		*						<u> </u>		*
Texas * 5 1 7 0 6 1 * Mountain * 22 2 114 0 1 2 * Arizona 0 59 1 0 0 21 * Colorado * 229 4 0 3 10 1 Idaho 181 0 54 2 4 1 Idaho 181 0 54 2 2 4 3 Montana 1 4 0 0 * 0 1 New Mexico * 61 11 21 104 1 Utah * 159 18 9 7 1 Wyoming 1							9	<u>1</u> 5	U	*
Mountain							· ·	-		*
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New Mexico		0		1	•		1	0		*
Utah * 159 18 9 7 1 Wyoming 1 63 11 831 3 9 1 Pacific Contiguous 1 12 1 * 0 * 1 * California 6 12 1 * 0 1 1 1 Oregon 2 19 1 * 3 * Washington 1 132 1 0 0 * 2 * Pacific Noncontiguous 14 7 7 91 6 9 4 Alaska 52 54 7 5 128 9		*		11			21	_		1
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Pacific Contiguous 1 12 1 * 0 * 1 * California 6 12 1 * 0 1 1 1 Oregon 2 19 1 * 3 * Washington 1 132 1 0 0 * 2 * Pacific Noncontiguous 14 7 7 91 6 9 4 Alaska 52 54 7 5 128 9		1			831					1
California								1		*
Oregon	California	_		-			1	1		1
Washington 1 132 1 0 0 * 2 * Pacific Noncontiguous 14 7 7 91 6 9 4 Alaska 52 54 7 5 128 9	Oregon			1			*			*
Pacific Noncontiguous. 14 7 7 91 6 9 4 Alaska 52 54 7 5 128 9				1			*			*
Alaska				-			6			4
										0

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic renergy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Electric Utilities by Census Division and State, May 2003

(Percent)

Census Division and State	Coal ¹	Petroleum ²	Natural Gas³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
New England	0	6	31		0	24	0	-	4
Connecticut		1,136				225			223
Maine						530			530
Massachusetts		136	37			854			117
New Hampshire	0	1	0		0	0			*
Rhode Island		444							444
Vermont		595	0			43	0		27
Middle Atlantic	0	1	*		0	1			*
New Jersey	0	0	0			0			0
New York	0	1	*		0	1			1
Pennsylvania	0	32	207		0	5			*
East North Central	*	10	3		0	6	0		*
Illinois	6	248	49			147	0		6
Indiana	*	4	*			0			*
Michigan	*	16	4		0	8	0		*
Ohio	*	3	2		0	0			*
Wisconsin	*	24	1		0	10	0		1
West North Central	*	8	8	0	0	1	2		*
Iowa	1	144	4		0	2	23		1
Kansas	0	16	22		0				*
Minnesota	1	5	20		0	9	0		1
Missouri	0	48	2	0	0	8	0		*
Nebraska	0	133	11	0	0	*	0		*
North Dakota	0	0	0	U		0	0		0
South Dakota	0	0	0			0	0		0
	*	1	*		0	*	0		*
South Atlantic		39	0						
Delaware		39	U						33
District of Columbia			*						
Florida	0	1.4			0	0	0		*
Georgia		14	27		0	I			000
Maryland		818	261						809
North Carolina	0	2	36		0	1			*
South Carolina	0	1	0		0	1	0		*
Virginia	2	28	*		0	1	0		1
West Virginia	0	0	0			0	0		0
East South Central	*	1	4		0	0	0		*
Alabama	0	0	10		0	0			*
Kentucky	*	0	0			0	0		*
Mississippi	1	14	1		0				*
Tennessee	0	0	0		0	0	0		0
West South Central	*	1	*	-	0	2	0	-	*
Arkansas	0	16	0		0	4			*
Louisiana	0	*	1		0				*
Oklahoma	0	51	*			0			*
Texas	1	2	*		0	16	0		1
Mountain	*	29	3	0	0	1	0		*
Arizona	0	0	0		0	0	0		0
Colorado	0	45	3	0		2	0		*
Idaho		0	0			1			1
Montana	0	1,841	0			1			1
Nevada	0	0	0			0			0
New Mexico	*	0	13			46			1
Utah	0	152	25			14	0		1
Wyoming	ő	0	0			5	0		*
Pacific Contiguous	0	0	3		0	*	*		*
California		0	4		0	1	*		*
Oregon	0	0	0			*	0		*
Washington	0	0	0		0	*	0		*
Pacific Noncontiguous.	0	4	2			14	189		3
Alaska	0	45	2			14	389		
Hawaii		0				0	0		0
11awa11		U				U	U		U

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Notes: *See Glossary for definitions. *Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information. •Estimates for 2003 are preliminary.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

7 Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Electric Utilities by Census Division and State, Year-to-Date through May (Percent)

Census Division	a -1		Natural	Other		Hydro-	Other	0.7.7	
and State	Coal ¹	Petroleum ²	Gas ³	Gases ⁴	Nuclear	electric ⁵	Renewables ⁶	Other ⁷	Total
New England	0	5	44		0	12	0	-	2
Connecticut		1,330				103			145
Maine						244			244
Massachusetts		27	49			393			25
New Hampshire	0	1	0		0	0			*
Rhode Island		520							520
Vermont		121	0			22	0		14
Middle Atlantic	0	1	*		0	*			*
New Jersey	0	0	0			0			0
New York	0	1			0				*
Pennsylvania	0	52 7	255 4		0	2 3			*
East North Central	2	210	57		0	58	0		3
IllinoisIndiana	*	6	37 *			0	U		3 *
Michigan	*	10	3		0	3	0		*
Ohio	*	4	2		0	0			*
Wisconsin	*	22	1		0	6	0		*
West North Central	*	8	5	0	0	1	1		*
Iowa	*	130	5		0	i	7		*
Kansas	0	11	17		0		, 		*
Minnesota	*	8	14		0	5	0		*
Missouri	0	38	2	0	0	4	0		*
Nebraska	0	73	19	0	0	*	0		*
North Dakota	0	0	0			0	0		0
South Dakota	0	0	0			0	0		0
South Atlantic	*	1	1		0	*	0		*
Delaware		42	0						35
District of Columbia									
Florida	0	*	*		0	0	0		*
Georgia	*	23	39		0	*			*
Maryland		526	321						519
North Carolina	0	2	24		0	*			*
South Carolina	0	1	0		0	*	0		•
Virginia	0	0	0		0	0	0		1
West Virginia	*	1	0		0	0	0		0
East South Central	0	0	5		0	0			*
Alabama Kentucky	*	0	0			0	0		*
Mississippi	*	4	*		0	0			*
Tennessee	0	0	0		0	0	0		0
West South Central	*	2	*		0	1	ů o		*
Arkansas	0	2	0		0	2			*
Louisiana	0	*	*		0				*
Oklahoma	0	5	*			0			*
Texas	*	5	*		0	6	0		*
Mountain	*	40	2	0	0	*	*		*
Arizona	0	0	5		0	0	*		*
Colorado	0	19	2	0		1	0		*
Idaho		0	0			1			1
Montana	0	724	0			*			1
Nevada	0	0	0			0			0
New Mexico	*	0	12			21			1
Utah	0	159	15			8	0		1
Wyoming	0	0	0			3	0		*
Pacific Contiguous	0	0	1	-	0	*	*		*
California		0	2		0	*	*		*
Oregon	0	0	0			*	0		÷
Washington	0	0	0		0		0		*
Pacific Noncontiguous.	0	5	7			5	74	-	4
Alaska Hawaii	0	53 0	7			5 0	128 0		8 0
1 1a w a11		U				U	U		U

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State, May 2003 (Percent)

Census Division and State	Coal ¹	Petroleum ²	Natural Gas ³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
	0	3	4	0	0	3	1		1
New England Connecticut	0	21	1	0	0	8	1		*
Maine	0	14	18	0		5	1		10
Massachusetts	0	2	2		0	4	2		10
New Hampshire		0			0	6	5		1
Rhode Island		0	0		Ü	178	0		*
Vermont					0	5	0		1
Middle Atlantic	1	2	3	0	0	2	2		1
New Jersey	0	49	5	0	0	75	4		1
New York	4	2	3		0	3	4		1
Pennsylvania	1	3	5	0	0	3	3		1
East North Central	1	8	7	469	0	24	6		1
Illinois	1	0	23		0	36	12		*
Indiana	4	1,068	14	2,230			38		6
Michigan	0	0	7	0		34	5		5
Ohio	7	60	123	503		J -	23		12
Wisconsin	0	17	71	303		89	45		47
							2		
West North Central	537	50 956	43			38 81	4		20 63
Iowa	537						0		
Kansas			107			62	-		6
Minnesota		0	107			61	4		27
Missouri			0				140		0
Nebraska			4,821				140		430
North Dakota									
South Dakota	*								*
South Atlantic		2	2	0	0	3	3		
Delaware	0	0	0						0
District of Columbia		0							0
Florida	0	3	3	0		212	3		1
Georgia		56	12			213	294		12
Maryland	0	0	0	0	0	0	2		2
North Carolina	3	105	5	0		102	21		3
South Carolina		0	0			53			16
Virginia	0	6	17	0		50	12		2
West Virginia	0	0	0			14	0		*
East South Central	0	*	2	-		0	9		
Alabama	0	5	4				0		3
Kentucky	0	0	0						0
Mississippi	0		2			0			1
Tennessee		0	0				61		61
West South Central	0	0	*	0	0	1	5		*
Arkansas		0	0			1,771	0		*
Louisiana	0	0	0			0	0		0
Oklahoma	0		0						0
Texas	0	0	*	0	0	21	5		*
Mountain	5	1	4	0		11	11		3
Arizona			0						0
Colorado	55	1,008	17			175	62		16
Idaho			365			36	82		39
Montana	6	0	0	0		1			4
Nevada		0	0	0		267	5		2
New Mexico		0	9				304		13
Utah	0	2,156	0			282	398		20
Wyoming	0		0				41		11
Pacific Contiguous	8	27	3	0		26	2		3
California	14	28	3	0		24	2		2
Oregon			4			58	14		13
Washington	10	93	2	0		71	16		10
Pacific Noncontiguous.	41	1	0			143	6		17
Alaska	386	980							382
Hawaii	5	*	0			143	6		5

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Independent Power Producers by Census Division and State, Year-to-Date through May (Percent)

Census Division and State	Coal ¹	Petroleum ²	Natural Gas³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
New England	0	1	1	0	0	1	1	-	*
Connecticut	0	2	1	0	0	3	1		*
Maine	0	3	4	0		3	1		2
Massachusetts	0	1	1		0	2	1		*
New Hampshire		35			0	4	3		*
Rhode Island		0	2			101	0		2
Vermont					0	3	0		*
Middle Atlantic	*	2	1	0	0	1	1		*
New Jersey	0	4	3	0	0	42	2		1
New York	1	3	1		0	2	2		*
Pennsylvania	*	2	2	0	0	1	2		*
East North Central	1	1	3	197	0	18	3	-	*
Illinois	*	0	3		0	27	7		*
Indiana	17	23	6	929			21		13
Michigan	0	0	4	0		26	2		3
Ohio	2	81	23	210			9		4
Wisconsin	0	31	12			67	17		9
West North Central	141	174	10	_	_	29	1	-	6
Iowa	141	922				61	3		17
Kansas						47	0		4
Minnesota		0	20			46	1		7
Missouri			0						0
Nebraska			1,175				79		143
North Dakota									
South Dakota									
South Atlantic	*	2	1	0	0	2	1		*
Delaware	0	3	22						2
District of Columbia		0							0
Florida	0	1	1	0			1		*
Georgia		50	5			120	101		5
Maryland	0	0	0	0	0	0	1		*
North Carolina	2	8	2	0		58	7		1
South Carolina		0	0			30			5
Virginia	0	9	4	0		28	3		1
West Virginia	0	0	0			10	3		*
East South Central	0	4	2	-	-	0	5	-	1
Alabama	0	150	2				0		2
Kentucky	0	0	0						0
Mississippi	0	1 270	2			0			1
Tennessee	 1	1,379	62				34		86
West South Central	_	4	1 0	4	0	1 242	2		*
Arkansas	0	0				1,342 0	0		1
LouisianaOklahoma	0	2	3 7			0	U		1
	1	8	1	4	0	19	2		*
Texas Mountain	1	5	2	0		4	3		1
Arizona		3	0						0
Colorado	37	306	10			91	16		9
Idaho	37 	500	89			20	42		20
Montana	1	0	0	0		1	42		1
Nevada		0	2	0		139	2		2
New Mexico		0	6			139	104		7
Utah	0	7,332	0			147	136		7
Wyoming	0	7,552	ő				10		4
Pacific Contiguous	1	14	1	2		13	1		1
California	7	14	1	348		13	1		1
Oregon			*	346		24	4		2
Washington	1	397	*	0		37	3		1
Pacific Noncontiguous.	13	4	0			75	3		7
Alaska	101	945							101
Hawaii	3	3	0			75	3		2
* *** ** WII	,	5	U			15	,		2

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Commercial Combined Heat and Power Producers by Census Division and State, May 2003 (Percent)

Census Division	C- 11	Deturi 2	Natural	Other	N	Hydro-	Other	041 7	T-4 1
and State	Coal ¹	Petroleum ²	Gas ³	Gases ⁴	Nuclear	electric ⁵	Renewables ⁶	Other ⁷	Total
New England	-	44	170	-	-	0	8		68
Connecticut		721	796						688
Maine		0	55,787				9		9
Massachusetts		20	171			0	0		97
New Hampshire		397							397
Rhode Island		375	2,798						458
Vermont									
Middle Atlantic	1,067	230	214	_		10,003	3		82
New Jersey	1.150	1,009	362			10.003	208		347
New York	1,159	252	435			10,003	4		105
Pennsylvania	2,730 131	647 417	335 268			118	10		119 80
East North Central	1,037	931	332			180	133		299
Indiana	256	963	1,506			160	58		200
Michigan	0	2,253	1,089				4		18
Ohio	2,533	1,420	1,292				1,105		1,122
Wisconsin	967	592	568			156	76		355
West North Central	593	568	391				59		272
Iowa	614	937	1,052				108		462
Kansas		0	1,734						1,734
Minnesota		895	441				83		342
Missouri	0	1,513	22,865				0		403
Nebraska		966	1,833				140		621
North Dakota			,						
South Dakota									
South Atlantic	96	302	236	_		215	39		41
Delaware									
District of Columbia									
Florida			303				211		201
Georgia		426	0						426
Maryland		2,135					77		83
North Carolina	96	717	1,085			247			99
South Carolina		539	1,503			439	184		181
Virginia	0	161	0				39		37
West Virginia									
East South Central	826	582	509		-	-	122	-	441
Alabama									
Kentucky		582	0 543						0 513
Mississippi	826	362	799				122		535
West South Central	820	324	14				73		14
Arkansas			1,367				562		600
Louisiana			6						6
Oklahoma		618	502						481
Texas		380	56				0		51
Mountain		923	151				55		127
Arizona		923	619				692		502
Colorado			185				0		147
Idaho									
Montana									
Nevada									
New Mexico			332						332
Utah			546						546
Wyoming									
Pacific Contiguous	2,288	988	44	9,391	-	107	41	-	35
California		801	42	9,391			41		35
Oregon		4,801	2,050						2,003
Washington	2,288	7,366	603			107			132
Pacific Noncontiguous.	501	438		_					461
Alaska	501	438							461
Hawaii									

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁶ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information. •Estimates for 2003 are preliminary.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Relative Standard Error for Net Generation by Fuel Type: Commercial Combined Heat and Power Producers by Census Division and State, Year-to-Date through May (Percent)

Census Division and State	Coal ¹	Petroleum ²	Natural Gas ³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
New England		81	48	-		0	5	-	32
Connecticut		694	194						238
Maine		0	13,594				6		5
Massachusetts		57	49			0	0		35
New Hampshire		299							299
Rhode Island		203	682						197
Vermont									
Middle Atlantic	280	167	47			5,639	2		29
New Jersey		972	88				117		91
New York	304	173	74			5,639	3		45
Pennsylvania	716	729	82			5,057	0		37
East North Central	38	402	60			89	5		25
Illinois	272	897	81			136	75		80
	69	937	281			130	35		61
Indiana			96				2		
Michigan	0	2,171							7
Ohio	664	1,368	315				571		329
Wisconsin	253	570	138			118	43		113
West North Central	83	348	92	-			31		57
Iowa	161	400	256				60		127
Kansas		0	967						967
Minnesota		519	107				46		92
Missouri	0	1,348	35				0		33
Nebraska		931	447				78		341
North Dakota									
South Dakota									
South Atlantic	65	30	75			121	15		17
Delaware									
District of Columbia									
Florida		 	169				72		104
		1,448					72 		
Georgia			0						1,448
Maryland		2,057					42		98
North Carolina	65	1,140	605			139			70
South Carolina		2,038	838			247	75		116
Virginia	0	7	0				15		9
West Virginia									
East South Central	217	1,978	168				68		133
Alabama									
Kentucky			0						0
Mississippi		1,978	303						333
Tennessee	217	·	195				68		145
West South Central		1,101	16				25		16
Arkansas			762				193		286
Louisiana			6						6
Oklahoma		2,103	280						302
Texas		1,292	48				0		45
Mountain		3,140	84				41		73
		3,140	345	-	-		237		296
Arizona									
Colorado			103				38		84
Idaho									
Montana									
Nevada									
New Mexico			185						185
Utah			304						304
Wyoming									
Pacific Contiguous	600	2,263	27	5,106		56	14		21
California		2,723	27	5,106			14		22
Oregon		4,626	500						535
Washington	600	7,099	147			56			61
Pacific Noncontiguous.	131	422							129
Alaska	131	422							129
Hawaii									

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁶ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic renergy, and wind.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information. •Estimates for 2003 are preliminary.

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Relative Standard Error for Net Generation by Fuel Type: Industrial Combined Heat and Power Producers by Census Division and State, May 2003 (Percent)

Census Division	_	_	Natural	Other		Hydro-	Other	_	
and State	Coal ¹	Petroleum ²	Gas ³	Gases ⁴	Nuclear	electric ⁵	Renewables ⁶	Other ⁷	Total
New England	73	20	32	_		7	2	0	12
Connecticut		398	320						295
Maine	0	10	9			7	1	0	3
Massachusetts	931	103	226			114	180		164
New Hampshire		395	535			141	283		367
Rhode Island		1,685							1,685
Vermont						86	124		71
Middle Atlantic	41	16	38	106	-	81	4		22
New Jersey		20	82	558			99		56
New York	48	15	64	512		81	0		38
Pennsylvania	55 61	43 60	33 91	96 37		17	4	0	30 24
East North Central	70	503	240	295			43		77
Indiana	840	503 57	221	0			0		20
Michigan	165	274	180			61	3		65
Ohio	375	341	724	462			56		234
Wisconsin	73	55	89			17	11	0	32
West North Central	33	323	215	670		23	11	0	28
Iowa	331	2,399	430				1,600		274
Kansas		0	448				-,		448
Minnesota	17	282	217			23	11	0	15
Missouri	460	3,539	1,625				121		420
Nebraska	904	´	2,655						868
North Dakota	665	686	2,937	670			458		462
South Dakota									
South Atlantic	14	7	41	0	_	1	4	_	4
Delaware	662	9	0	0					53
District of Columbia									
Florida	0	26	56	0			10		11
Georgia	13	13	68			59	3		6
Maryland	0	1,281	677				0		41
North Carolina	17	26	428			*	12		5
South Carolina	37	0	0	0			0		8
Virginia	28	45	64			271	9		13
West Virginia	20	3,306	304	0		2			13
East South Central	35 38	26 23	36 24	53 58		0	4 5		9 7
Alabama	38	23	313	38 			5		106
Kentucky Mississippi	0	122	61	0			11		23
Tennessee	43	38	290	0		0	5		21
West South Central	1	2	3	10			2	0	2
Arkansas	0	0	99				8	0	12
Louisiana	0	0	4	4			*	0	3
Oklahoma	0	0	17	127			10		11
Texas	1	4	3	29			5		3
Mountain	114	183	70	1,994	-	-	8	-	47
Arizona	0	1,002	9,515						1
Colorado		177	309						257
Idaho	689	0	74				7		69
Montana			0				0		0
Nevada									
New Mexico		482	184						183
Utah	97		179						117
Wyoming	385	1,465	88	1,994			41		147
Pacific Contiguous	35	33	8	0		611	6		6
California	17	34	8	0			11		6
Oregon	1,655	0	0				5		24
Washington	0	160	0			611	6		10
Pacific Noncontiguous.	143	64	71	168	-	116	98		45
Alaska		197	71	1.00					68
Hawaii	143	55		168		116	98		51

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

³ Natural gas, including a small amount of supplemental gaseous fuels.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.
6 Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

7 Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Relative Standard Error for Net Generation by Fuel Type: Industrial Combined Heat and Power Producers by Census Division and State, Year-to-Date through May (Percent)

Census Division	Co-11	Petroleum ²	Natural	Other	N	Hydro-	Other	Other ⁷	Tc4-1
and State	Coal ¹	Petroleum-	Gas ³	Gases ⁴	Nuclear	electric ⁵	Renewables ⁶	Otner	Total
New England	22	27	8			4	1	0	5
Connecticut		216	78						77
Maine	0	16	2			4	1	0	2
Massachusetts	244	85	84			64	101		60
New Hampshire		370	130			30	34		76
Rhode Island		915							915
Vermont						48	64		39
Middle Atlantic	12	38	11	50		33	2	-	8
New Jersey		80	19	233			56		23
New York	14	27	22	213		33	5		13
Pennsylvania	17	65	7	46			2		11
East North Central	13	26	15	17		12	2	0	7
Illinois	9	145	26	123			21		14
Indiana	220	16	27	10			0		8
Michigan	50	280	56			46	2		23
Ohio	98	453	167	196			29		67
Wisconsin	21	31	18			13	6	0	10
West North Central	11	312	29	279	-	18	7	0	9
Iowa	32	2,429	88				826		30
Kansas		0	26						26
Minnesota	7	637	51			18	6	0	6
Missouri	121	3,410	396				68		112
Nebraska	196		647						189
North Dakota	169	373	716	279			281		136
South Dakota									
South Atlantic	8	17	17	0		1	2		3
Delaware	174	35	0	0					29
District of Columbia									
Florida	36	63	23	0			4		6
Georgia	13	22	48			33	2		6
Maryland	0	695	165				0		12
North Carolina	9	39	209			*	4		3
South Carolina	18	0	0	0			0		5
Virginia	19	162	26			153	5		10
West Virginia	29	177	65	0		1			14
East South Central	12	47	15	29		0	2		4
Alabama	26	53	13	30			2		4
Kentucky			79				7		27
Mississippi	0	218	35	0			5		12
Tennessee	13	44	74	0		0	3		7
West South Central	1	7	1	5		-	1	0	1
Arkansas	0	0	35				2	0	4
Louisiana	16	5	2	3			1	0	1
Oklahoma	0	0	9	69			5		5
Texas	1	10	2	9			2		1
Mountain	37	486	35	831			4		18
Arizona	0	936	216						5
Colorado		602	172						206
Idaho	181	0	24				3		21
Montana			0				0		0
Nevada									
New Mexico		1,685	103						104
U tah	66		100						67
Wyoming	101	1,020	24	831			23		44
Pacific Contiguous	16	31	4	0	_	318	2		3
California	13	27	4	0			4		3
Oregon	434	573	9				4		9
Washington	0	149	ó			318	3		14
Pacific Noncontiguous.	107	128	21	91		63	43		36
Alaska		189	21						32
Hawaii	107	168		91		63	43		80

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste oil.

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⁵ Conventional hydroelectric power and hydroelectric pumped storage facility production minus energy used for pumping.

⁶ Wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, tires, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

7 Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Table A6.A. Relative Standard Error for Retail Sales of Electricity to Ultimate Consumers by Sector, Census Division, and State, May 2003
(Percent)

Census Division				0 1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	2	*
Connecticut		*	0	3	*
Maine		*	0	2	*
Massachusetts		*	2	2	1
New Hampshire		*	1	*	*
		*	0	*	*
Rhode Island		*	0		
Vermont		. ·	1	4	1
Middle Atlantic		*	3	15	1
New Jersey	*	*	1	1	*
New York	*	*	7	12	2
Pennsylvania	*	*	0	*	*
East North Central	*	*	1	*	*
Illinois	*	*	1	*	1
Indiana		*	1	4	i
Michigan		1	i	2	*
		*	1	1	1
Ohio		•	1	1	1
Wisconsin		l	4	2	*
West North Central		1	4	8	*
Iowa		3	7	7	1
Kansas	. 1	3	4	4	1
Minnesota	. 1	2	4	5	*
Missouri	*	*	4	4	1
Nebraska		2.	7	19	1
North Dakota		1	34	25	2
South Dakota		2	12	55	1
		±	12	1	1
South Atlantic		<u>.</u>	1	I 1	
Delaware		-	1	1	· ·
District of Columbia		0	0	0	0
Florida	. *	1	2	2	1
Georgia	. 1	1	1	4	1
Maryland	. 1	*	0	2	1
North Carolina	*	*	1	2	1
South Carolina		*	1	2	*
Virginia		*	i	1	*
		*	0	1	*
West Virginia			0	1	
East South Central		1	1	1	I I
Alabama			2	7	1
Kentucky		*	1	*	1
Mississippi	. 2	3	2	3	1
Tennessee	*	*	2	2	1
West South Central	. 1	4	2	3	1
Arkansas		3	5	2	1
Louisiana		3	0	1	1
Oklahoma		3	2	1	1
		3	2	3	1
Texas		4	1		1
Mountain		*	1	78	
Arizona		*	l	90	*
Colorado	. 1	1	2	58	1
Idaho	. 1	*	1	31	1
Montana	. 1	1	4	27	1
Nevada		1	0	8	1
New Mexico		ĺ	4	73	1
Utah		1	i	48	*
Wyoming		1	2	34	*
		1			4
Pacific Contiguous			5	20	1
California		* .	2	34	1
Oregon		1	6	18	3
Washington	. 1	1	16	9	4
Pacific Noncontiguous	*	*	0	8	*
Alaska		1	1	11	*
Hawaii		0	0	5	*

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Table A6.B. Relative Standard Error for Retail Sales of Electricity to Ultimate Consumers by Sector, Census Division, and State, Year-to-Date through May (Percent)

Census Division				0.1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	1	*
Connecticut		*	0	1	*
Maine		*	0	1	*
Massachusetts		*	2	1	*
New Hampshire		*	1	*	*
		*	0	*	*
Rhode Island			0		1
Vermont		·	1		1
Middle Atlantic		*	2	7	1
New Jersey	*	*	1	*	*
New York	*	*	6	5	1
Pennsylvania	*	*	0	*	*
East North Central	*	*	0	*	*
Illinois		*	0	*	*
ndiana		*	Õ	2	*
Michigan		*	1	2	*
		*	0	*	*
Ohio			0	3	
Wisconsin		1	1	2	·
West North Central		*	2	6	*
lowa	. 1	1	3	6	*
Kansas	*	1	2	4	*
Minnesota	*	1	2	4	*
Missouri	. 1	*	2	2	1
Nebraska		1	3	14	*
North Dakota		i	16	16	1
South Dakota		1	6	34	1
		1 *	0	J4 *	1
South Atlantic		.	U		
Delaware		-	1	-	T -
District of Columbia		0	0	0	0
Florida		*	1	1	•
Georgia	. 1	*	0	2	*
Maryland	*	*	0	1	*
North Carolina	*	*	0	1	*
South Carolina	. 1	*	0	1	*
Virginia		*	0	*	*
West Virginia		*	Ŏ	1	*
East South Central		*	0	1	*
		*	0	2	*
Alabama			1	2	
Kentucky		*	1	* -	1
Mississippi		1	1	3	*
Γennessee	. *	*	1	1	1
West South Central	. 1	2	1	3	*
Arkansas	. 1	1	2	2	1
Louisiana		1	0	1	*
Oklahoma		1	1	1	*
Texas		2	1	4	*
		*	0	20	*
Mountain		*	0		*
Arizona			0	25	
Colorado		*	1	14	*
daho		*	1	16	1
Montana	. 1	*	2	18	*
Nevada	*	*	0	6	*
New Mexico		1	1	21	1
Jtah		*	0	12	*
Wyoming		1	1	21	*
		1	2	14	1
Pacific Contiguous			2		1
California		·	0	26	*
Oregon		*	3	9	1
Washington	*	1	7	4	2
Pacific Noncontiguous	*	*	0	3	*
Alaska		*	1	3	*
	. 0		0	4	•

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Table A7.A. Relative Standard Error for Revenue from Retail Sales of Electricity to Ultimate Consumers by Sector, Census Division, and State, May 2003
(Percent)

Census Division				0.1 1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	1	*
Connecticut		*	*	1	*
Maine		*	*	*	*
Massachusetts		*	2.	1	1
New Hampshire		*	1	*	*
Rhode Island		*	1	*	*
		*	2	2	1
Vermont			2	2	1
Middle Atlantic		*	1	8	1
New Jersey		*	1	*	*
New York	*	*	3	7	1
Pennsylvania	*	*	*	*	*
East North Central	*	*	1	*	*
Illinois	*	*	*	*	*
Indiana		*	1	1	1
Michigan		1	2	1	*
Ohio		*	1	i	*
		1	1 A	1	*
Wisconsin		1	4	1	T
West North Central		1	5	3	*
Iowa		3	8	5	1
Kansas	. 2	4	4	1	1
Minnesota	. 1	2	5	1	1
Missouri	*	*	2	2	1
Nebraska	. 1	2	19	9	1
North Dakota		2	62	9	2
South Dakota		2	21	17	1
South Atlantic		*	1	1	*
		*	1	1	1
Delaware			1	1	1
District of Columbia		0	0	0	0
Florida		*	4	1	*
Georgia	. 1	*	2	3	1
Maryland	. 1	*	*	1	1
North Carolina	. 1	*	2	2	1
South Carolina	. 1	*	1	1	*
Virginia		*	1	*	*
West Virginia		*	*	1	*
East South Central		1	1		*
		1 *	1	1	1
Alabama		T.	4	4	I .
Kentucky		*	1	*	1
Mississippi		4	2	1	1
Tennessee	*	*	1	1	1
West South Central	. 1	5	1	1	1
Arkansas	2	5	4	1	2
Louisiana		3	*	*	1
Oklahoma		4	2	*	1
Texas		5	1	1	1
		3	1	29	1
Mountain		1	1		
Arizona		l .	1	24	*
Colorado		1	2	31	1
Idaho	. 1	*	2	29	1
Montana	. 1	1	9	9	1
Nevada	. 1	1	*	5	*
New Mexico		2	4	45	1
U tah		1	i	29	1
Wyoming		1	5	19	1
		1	2	7	1
Pacific Contiguous					1
California		*	~	9	1
Oregon		l	5	15	2
Washington		1	12	10	3
Pacific Noncontiguous	*	*	*	5	*
Alaska	1	1	2	6	1
Hawaii		0	0	3	*

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Table A7.B. Relative Standard Error for Revenue from Retail Sales of Electricity to Ultimate Consumers by Sector, Census Division, and State, Year-to-Date through May (Percent)

Census Division				0.1.1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
Now England	*	*	1	*	*
New England	•	*	*	*	*
Connecticut		*	*	*	*
Maine		*	2	*	
Massachusetts		*	2	*	•
New Hampshire		*	1	*	*
Rhode Island	. *	*	1	*	*
Vermont	. 1	*	1	1	1
Middle Atlantic	. *	*	1	4	*
New Jersey	*	*	1	*	*
New York		*	3	4	1
Pennsylvania		*	*	*	*
East North Central		*	*	*	*
		*			
Illinois		*	T.	7	
ndiana		*	*	I	*
Michigan	*	*	1	1	*
Ohio	. *	*	*	*	*
Wisconsin	. *	*	1	1	*
West North Central		*	3	3	*
lowa		1	3	5	*
Kansas		2	2	1	*
		2	2	4	*
Minnesota		1	2	1	
Missouri		*	1	1	1
Nebraska	. 1	1	10	7	1
North Dakota	. 1	1	29	5	1
South Dakota	. 1	1	10	11	1
South Atlantic		*	*	*	*
Delaware		*	1	*	*
District of Columbia		0	0	0	0
		*	1	0	*
Florida			1	1	
Georgia		*	1	1	*
Maryland	. *	*	*	*	*
North Carolina	. *	*	1	1	*
South Carolina	. 1	*	*	1	*
Virginia		*	*	*	*
West Virginia		*	*	1	*
East South Central		*	*	<u> </u>	*
		*	1	1	*
Alabama			1	2	
Kentucky		*	1	*	1
Mississippi	. 1	2	1	4	*
Tennessee	*	*	1	1	*
West South Central	. 1	2	1	4	*
Arkansas		2	2	3	*
Louisiana		1	*	2	*
Oklahoma		2	1	1	*
		2	1	1	
Texas		2	I	4	*
Mountain		*	I	8	*
Arizona		*	*	7	*
Colorado	. 1	1	1	8	1
daho	. *	*	1	16	1
Montana		*	4	6	1
Nevada		*	*	4	*
		1	2	12	1
New Mexico		1	∠ 1	13	1
Utah		1	1	7	1
Wyoming		1	2	12	*
Pacific Contiguous	. *	*	1	6	*
California	*	*	1	9	*
Oregon		*	2	8	1
Washington		*	5	5	1
		*	*	3	1
Pacific Noncontiguous			1		
Alaska		↑	1	3	*
Hawaii	. 0	0	0	2	*

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Table A8.A. Relative Standard Error for Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers by Sector, Census Division, and State, May 2003 (Percent)

Census Division				0.1 1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	2	*
Connecticut		*	*	2	*
Maine		*	*	1	*
Massachusetts		*	1	2	*
New Hampshire		*	*	*	*
		*	*	*	· ·
Rhode Island		4	1	2	
Vermont		*	1	3	
Middle Atlantic		**	2	11	*
New Jersey		*	*	1	*
New York	*	*	4	8	1
Pennsylvania		*	*	*	*
East North Central	*	*	*	*	*
Illinois	*	*	*	*	*
Indiana	*	*	*	4	*
Michigan	. 1	*	1	3	*
Ohio		*	*	1	*
Wisconsin		*	1	2	*
West North Central		*	2	8	*
lowa		1	2	9	1
Kansas		2	2	<i>j</i> 1	1
		1	2		1
Minnesota		1	2	3	1
Missouri		•	2	4	1
Nebraska		1	13	16	1
North Dakota		1	30	20	1
South Dakota		1	11	45	1
South Atlantic	*	*	1	1	*
Delaware	. *	*	1	1	*
District of Columbia	. 0	0	0	0	0
Florida	*	1	2	1	1
Georgia	. 1	*	1	3	1
Maryland	. 1	*	*	2	*
North Carolina	. 1	*	1	1	*
South Carolina		*	1	1	*
Virginia		*	1	*	*
West Virginia		*	*	1	*
East South Central		*	1	<u> </u>	*
		*	2	1	1
Alabama			2	4	1
Kentucky		•	1	2	
Mississippi		1	1	3	1
Tennessee		*	1	2	I
West South Central		1	1	3	1
Arkansas	. 1	2	2	2	1
Louisiana	. 1	1	*	1	*
Oklahoma	. 1	2	1	1	1
Гехаs	*	1	*	3	1
Mountain	*	*	1	57	*
Arizona		*	1	73	*
Colorado		1	1	31	1
daho		1	1	14	1
Montana		*	5	22	1
		**	<i>3</i>	4	1 *
Nevada		1	2	•	1
New Mexico		1	<i>L</i>	31	1
Jtah		1	1	24	1
Wyoming		*	3	27	*
Pacific Contiguous		*	3	15	1
California	*	*	1	27	1
Oregon	. 1	1	3	10	1
Washington		1	7	4	2
Pacific Noncontiguous		*	*	6	*
Alaska		1	1	8	1
Hawaii		0	0	2	*

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Table A8.B. Relative Standard Error for Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers by Sector, Census Division, and State, Year-to-Date through May (Percent)

Census Division				0.1 1	
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	*	1	*
Connecticut		*	*	1	*
Maine		*	*	1	*
Massachusetts		*	1	1	*
New Hampshire		*	*	*	*
Rhode Island		*	*	*	*
Vermont		*	*	2	*
		+		2	
Middle Atlantic			1	6	
New Jersey		*	*	*	*
New York		*	2	5	1
Pennsylvania		*	*	*	*
East North Central	. *	*	*	*	*
Illinois	*	*	*	*	*
ndiana	*	*	*	2	*
Michigan		*	*	2	*
Ohio		*	*	*	*
Wisconsin		*	*	1	*
		+	3	- I	
West North Central		,	2	5	
lowa		1	1	5	1
Kansas	. *	1	1	3	*
Minnesota	. 1	*	1	3	*
Missouri	*	*	2	2	*
Nebraska	*	*	8	11	*
North Dakota	*	*	18	14	1
South Dakota		*	6	30	1
South Atlantic		*	*	*	*
Delaware		*	*	1	*
		0		1	
District of Columbia		0	0	0	0
Florida		*	1	*	•
Georgia		*	1	2	*
Maryland	*	*	*	1	*
North Carolina	*	*	1	1	*
South Carolina	*	*	*	1	*
Virginia		*	*	*	*
West Virginia		*	*	1	*
East South Central		*	*	*	*
		*	1	2	*
Alabama			1	<i>L</i>	
Kentucky		*	* .	*	*
Mississippi		1	*	2	*
Tennessee	. *	*	1	1	*
West South Central	*	1	*	2	*
Arkansas	*	1	1	2	1
Louisiana		1	*	1	*
Oklahoma		1	*	*	*
Texas		i	*	2	*
		*	*	28	*
Mountain		*	*	-	*
Arizona				37	
Colorado		· .	<u>l</u>	16	*
daho		*	*	8	*
Montana	*	*	3	15	*
Nevada	*	*	*	3	*
New Mexico	. 1	1	1	15	1
Jtah		1	1	12	*
Wyoming		*	2	18	*
		*	2	10	1
Pacific Contiguous			2		1
California		•	l	19	* .
Oregon		1	2	6	1
Washington	. 1	1	4	3	1
Pacific Noncontiguous	*	*	*	4	*
Alaska		*	1	5	*
Hawaii		0	0	1	*

¹ Public street and highway lighting, other sales to public authorities, sales to railroads and railways,and interdepartmental sales.

^{* =} Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is "1" and values under 0.5 are shown as "*".)

Notes: •See Glossary for definitions.•Relative Standard Error is designed to indicate error due to sampling. However, nonsampling error is important for all surveys, census or sample. See Technical Notes for further information.•It should be noted that such things as large changes in retail sales, reclassification of retail sales, or changes in billing procedures can contribute to unusually high relative standard error.

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

Appendix B

Major Disturbances and Unusual Occurrences Table B.1. Major Disturbances and Unusual Occurrences, 2003

	1					Number of	
Date	Utility/Power Pool (NERC Region)	Time	Area	Type of Disturbance	Loss (megawatts)	Customers Affected	Restoration Time
January							
1/25/03	Cinergy Corporation (ECAR)	2:00 pm	Cincinnati, Ohio	Cyber Threat From Internet	NA	NA	2:00am, January 26
February							
2/27/03	Duke Energy Corporation (SERC)	11:32am	Piedmont, North Carolina	Winter Ice Storm	1,000	over 340,000	8:00am, March 1
March							
None							
April							
4/03/03	Consumers Energy (ECAR)	7:00 pm	Lower Peninsula of Michigan New York	Ice Storm	300	425,000	12:00 am, April 8
4/04/03	Niagara Mohawk Power Corporation (NPCC)	3:11 am	Upstate New York	Severe Storm	200-250	160,000	April 16
4/15/03	Byran Texas Utilities (ERCOT)	11:00am	Cities of Bryan/ College Station and surrounding areas	Relaying Malfunction	212	68,530	2:50 pm, April 15
4/28/03	American Transmission Company (MAIN)	3:41 pm	Wisconsin, County of Waukesha, Town of Lisbon	Vandalism	none	none	NA
May							
5/02/03	Duke Energy Company/ Duke Power Control Area (SERC)	5:00 pm	Piedmont North and South Carolina	Severe Thunderstorms	1,500	139,000	12:00 noon, May 4
5/02/03	Southern Company (SERC)	8:00 pm	Central Georgia, Alabama	Severe Thunderstorms	130	102,842 (Georgia) 12,897 (Alabama)	8:00 am, May 3
5/15/03	Center Point Energy (ERCOT)	2:52 am	North Texas	Interruption of Firm Power	476	192,000	3:29 am, May 15
5/15/03	We Energies (MAIN)	2:00 pm	Upper Peninsula of Michigan	Flood	240	2	2:00 pm, June 16

Note: North American Electric Reliability Council region acronyms are defined in the glossary. Source: Form EIA-417, "Electric Emergency Incident and Disturbance Report"

Table B.2. Major Disturbances and Unusual Occurrences, 2002

Date	Utility/Power Pool (NERC Region)	Time	Area	Type of Disturbance	Loss (megawatts)	Number of Customers Affected	Restoration Time
January							
1/30/02	Oklahoma Gas & Electric (SPP)	6:00 am	Oklahoma	Ice Storm	500	1,881,134	12:00 pm, February 7
1/29/02	Kansas City Power & Light (SPP)	Evening	Metropolitan Kansas City Area	Ice Storm	500-600	270,000	NA
1/30/02	Missouri Public Service (SPP)	4:00 pm	Missouri	Ice Storm	210	95,000	9:00 pm, February 10
February							
2/27/02	San Diego Gas & Electric (WSCC)	10:48 am	California	Interruption of Firm Load	300	255,000	11:35 am, February 27
March							
3/09/02	Consumers Energy Co. (ECAR)	12:00 am	Lower Peninsula of Michigan	Severe Weather	190	190,000	12:00 pm, March 11
April							
4/08/02	Arizona Public Service (WSCC)	3:00 pm	Arizona	Vandalism/ Insolators	None	None	April 9
July							
7/09/02	Pacific Gas & Electric (WSCC)	12:27 pm	California	Interruption of Firm Power	240	1 PG&E	7:54 pm, July 9
7/19/02	Pacific Gas & Electric (WSCC)	11:51 am	California	Interruption of Firm Power (Unit Tripped)	240	1 PG&E	4:30 pm, July 19
7/20/02	Consolidated Edison Co. of New York (NPCC)	12:40 pm	New York	Fire	278	63,500	8:12 pm, July 20
August		12.12	****				
8/02/02	Central Illinois Light Co. (MAIN)	12:43 pm	Illinois	Interruption of Firm Power	232	53,565	6:36 pm, August 2
8/09/02	Lake Worth Utils (SERC)	8:23 am	Florida	Interruption of Firm Power	51	25,000	12:13 pm, August 9
8/25/02	Pacific Gas & Elec. (WSCC)	3:41 am	California	Interruption of Firm Power	120	1 PG&E	9:17 am, August 25
8/28/02	Lakeworth Utils (SERC)	2:09 pm	Florida	Severe Weather	67.6	25,000	3:38 pm, August 28
October							
10/03/02	Entergy Corporation (SPP)	3:33 am	Coastal Areas of Southern Louisiana	Hurricane Lily	NA	242,910	October 12
November							
11/06/02	Pacific Gas & Electric Co. (WSCC)	10:00 pm	Northern and Central California	Winter Storm	270	939,000	Noon November 10
11/17/02	Long Island Power Authority (NPPC)	3:48 pm	Northport, NY Norwalk, CT	Cable Tripped	None	None	Unknown
11/17/02	Northeast Utilities (NPCC)	6:00 am	Northwest and North Central Connecticut	Ice Storm	NA	224,912	8:00 am, November 21
December							
12/03/02	Entergy Corporation (SPP)	6:30 pm	Arkansas	Ice Storm	NA	43,000	10:30 pm, December 9
12/11/02	Dominion-Virginia Power/North Carolina Power (SERC)	1:09 pm	Northern Virginia to Fredericksburg Staunton to Harrisonburg	Winter Storm	63	130,000	10:00 pm, December 13
12/14/02	Pacific Gas & Electric (WSCC)	11:00 am	Northern and Central California	Winter Storm	180	1.5 million	4:00 pm, December 19
12/19/02	Pacific Gas & Electric (WSCC)	6:00 am	Northern and Central California	Winter Storm	56	385,000	5:00 pm, December 21
12/25/02	PPL Corporation (MAAC)	5:00 pm	Eastern Pennsylvania	Winter Storm	250	106,000	5:00 am, December 26
12/25/02	Metropolitan Edison Co./First Energy (MAAC)	10:00 am	Reading, York, Hanover, Hamburg Pennsylvania	Winter Storm	NA	95,630	8:30 am, December 27

Note: North American Electric Reliability Council region acronyms are defined in the glossary. Source: Form EIA-417, "Electric Emergency Incident and Disturbance Report"

Appendix C

Technical Notes

The Energy Information Administration (EIA) has comprehensively reviewed and revised how it collects, estimates, and reports fuel use for facilities producing electricity. Appendix B provides detail on these changes and describes the reasoning behind the changes and their effects on EIA forms and publications. Following is a description of the ongoing data quality efforts and sources of data for the *Electric Power Monthly*.

Data Quality

The Electric Power Monthly is prepared by the Electric Power Division, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), Energy Information Administration (EIA), U.S. Department of Energy. Quality statistics begin with the collection of the correct data. To assure this, CNEAF performs routine reviews of the data collected and the forms on which it is collected. Additionally, to assure that the data is collected from the correct parties, CNEAF routinely reviews the frames for each data collection.

Automatic, computerized verification of keyed input, review by subject matter specialists, and follow-up with non-respondents assure quality statistics. To ensure the quality standards established by the EIA, formulas that use the past history of data values in the database have been designed and implemented to check data input for errors automatically. Data values that fall outside the ranges prescribed in the formulas are verified by telephoning respondents to resolve any discrepancies. All survey non-respondents are identified and contacted.

Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Non-sampling errors can be attributed to many sources in the collection and processing of data. The accuracy of survey results is determined by the joint effects of sampling and nonsampling errors. Monthly sample survey data have both sampling and nonsampling error. The annual series for a monthly sample is not subject to sampling error because it is a census.

Nonsampling errors can be attributed to many sources: (1) inability to obtain complete information about all cases in the sample (i.e., nonresponse); (2) response errors; (3) definitional difficulties; (4) differences in the interpretation of questions; (5) mistakes in recording or coding the data obtained; and (6) other errors of collection, response, coverage, and estimation for missing data.

Although no direct measurement of the biases due to nonsampling errors can be obtained, precautionary steps were taken in all phases of the frame development and data collection, processing, and tabulation processes, in an effort to minimize their influence. See the Data Processing and Data System Editing section for each EIA Form for an in depth discussion of how the sampling and nonsampling errors are handled in each case.

Data Revision Procedure

CNEAF has adopted the following policy with respect to the revision and correction of recurrent data in energy publications:

- 1. Annual survey data collected by CNEAF are published either as preliminary or final when first appearing in a data report. Data initially released as preliminary will be so noted in the report. These data will be revised, if necessary, and declared final in the next publication of the data.
- 2. All monthly and quarterly survey data collected by this office are published as preliminary. These data are typically revised only after the completion of the 12-month cycle of the data. No revisions are made to the published data before this unless major errors are discovered that may affect the national total.
- 3. The magnitudes of changes due to revisions experienced in the past will be included in the data reports, so that the reader can assess the accuracy of the data.
- 4. After data are published as final, corrections will be made only in the event of a difference of one percent or greater at the national level. Corrections for differences that are less than the one percent or greater threshold are left to the discretion of the Office Director.

In accordance with policy statement number 3, above, the mean value (unweighted average) for the absolute values of the 12 monthly revisions of each item are provided at the U.S. level for the past four years (Table C2). For example, the mean of the 12 monthly absolute errors (absolute differences between preliminary and final monthly data) for coal-fired generation in 1999 was 288. That is, on average, the absolute value of the change made each month to coal-fired generation was 288 million kilowatthours.

Data Sources For Electric Power Monthly

Data published in the EPM are compiled from the following sources: FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," Form EIA-826, "Monthly Electric Utility Sales and Revenues with State Distributions Report," Form EIA-860, "Annual Electric Generator Report," Form EIA-861, "Annual Electric Power Industry Report," and the Form EIA-906, "Power Plant Report.

In addition to the above-named forms, the historical data published in the EPM are compiled from the following sources: Form EIA-759, "Monthly Power Plant Report," Form EIA-860A, "Annual Electric Generator Report—Utility," Form EIA-860B, "Annual Electric Generator Report—Nonutility," and Form EIA-900, "Monthly Nonutility Power Report." A brief description of each of these forms can be found on the EIA website on the Internet with the following URL:

http://tonto.eia.doe.gov/FTPROOT/electricity/epatech.pdf.

Form EIA-423

As of January 2002, the EIA began collecting data on the cost and quality of fuel associated with the production of electricity by unregulated generators. Similar to the FERC Form 423, the EIA-423 is used to collect data from approximately 600 unregulated generators that have a fossil-fired generating nameplate capacity of 50 or more megawatts. The cutoff threshold sample includes independent power producers (including those facilities that formerly reported on the FERC Form 423), commercial, and industrial combined heat and power producers.

Formulas and Methodologies. Data for the Form EIA-423 are collected at the facility level. These data are then used in the following formulas to produce aggregates and averages for each fuel type at the State, Census division, and U.S. levels. For these formulas, receipts and average heat content are at the facility level. For each geographic region, the summation sign, \sum , represents the sum of all facilities in that geographic region.

For coal, units for fuel consumption, fuel stocks and receipts are in tons, units for average heat content (A) are in Btu per ton.

For petroleum, units for fuel consumption, fuel stocks and receipts are in barrels, units for average heat content (A) are in Btu per barrel.

For gas, units for fuel consumption and receipts are in thousand cubic feet (Mcf), average heat content (A) are in Btu per thousand cubic foot.

For fuel receipts (R), the following holds true:

Total Btu =
$$\sum_{i} (R_i \times A_i)$$
,

where *i* denotes a facility; R_i = receipts for facility *i*; A_i = average heat content for receipts at facility *i*;

Weighted Average Btu =
$$\frac{\sum_{i} (R_i \times A_i)}{\sum_{i} R_i},$$

where *i* denotes a facility; R_i = receipts for facility *i*; and, A_i = average heat content for receipts at facility *i*.

The weighted average cost in cents per million Btu is calculated using the following formula:

Weighted Average Cost =
$$\frac{\sum_{i} (R_i \times A_i \times C_i)}{\sum_{i} (R_i \times A_i)},$$

where *i* denotes a facility; R_i = receipts for facility *i*; A_i average heat content for receipts at facility *i*; and C_i = cost in cents per million Btu for facility *i*.

The weighted average cost in dollars per unit (i.e., tons, barrels, or Mcf) is calculated using the following formula:

Weighted Average Cost =
$$\frac{\sum_{i} (R_i \times A_i \times C_i)}{10^8 \sum_{i} R_i},$$

where *i* denotes a facility; R_i = receipts for facility *i*; A_i = average heat content for receipts at facility *i*; and, C_i = cost in cents per million Btu for facility *i*.

Rounding Rules for Data. Given a number with r digits to the left of the decimal and d+t digits in the fraction part, with d being the place to which the number is to be rounded and t being the remaining digits which will be truncated, this number is rounded to r+d digits by adding 5 to the (r+d+1)th digit when the number is positive or by subtracting 5 when the number is negative. The t digits are then truncated at the (r+d+1)th digit. The symbol for a number rounded to zero is (*).

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x 100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Facility fuel cost data collected on the survey are considered confidential and will not be made available to the public. State and national level aggregations will be published in this report if sufficient data are available to avoid disclosure of individual company and facility level costs.

FERC Form 423

The Federal Energy Regulatory Commission (FERC) Form 423 is a monthly record of delivered-fuel purchases, submitted by approximately 200 respondents for each regulated electric generating plant with a total steam-electric and combined-cycle nameplate capacity of 50 or more megawatts.

On July 7, 1972, the FPC issued Order Number 453 enacting the New Code of Federal Regulations, Section 141.61, legally creating the FPC Form 423. Originally, the form was used to collect data from fossil-steam plants, but was amended in 1974 to include data on internal combustion and combustion turbines. When the FERC Form 423 replaced the FPC Form 423 in January 1983, peaking units were eliminated from the form and the generator nameplate capacity threshold was changed from 25 megawatts to 50 megawatts. This reduction in coverage eliminated approximately 50 utilities and 250 plants. Historical FPC Form 423 data in this publication were revised to reflect the new generator nameplate capacity threshold of 50 or more megawatts. In January 1991, the collection of data on the FERC Form 423 was extended to include combined-cycle units. Historical data have not been revised to include these units. Starting with the January 1993 data, the FERC began to collect the data directly from the respondents.

Formulas and Methodologies. Data for the FERC Form 423 are collected at the plant level. These data are then used in the same formulas shown under the "Formulas and Methodologies" section for the Form EIA-423 to produce aggregates and averages for each fuel type at the State, Census division, and U.S. levels.

Rounding Rules for Data. Given a number with r digits to the left of the decimal and d+t digits in the fraction part, with d being the place to which the number is to be rounded and t being the remaining digits which will be

truncated, this number is rounded to r+d digits by adding 5 to the (r+d+1)th digit when the number is positive or by subtracting 5 when the number is negative. The t digits are then truncated at the (r+d+1)th digit. The symbol for a number rounded to zero is (*).

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x 100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Data collected on FERC Form 423 are not considered to be confidential.

Form EIA-826

The Form EIA-826 is a monthly collection of data from approximately 450 of the largest electric utilities (primarily investor-owned and publicly owned) as well as a census of energy service providers with retail sales in deregulated States. A model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities.

The collection of electric power sales data and related information began in the early 1940's and was established as FPC Form 5 by FPC Order 141 in 1947. In 1980, the report was revised with only selected income items remaining and became the FERC Form 5. The Form EIA-826, "Electric Utility Company Monthly Statement," replaced the FERC Form 5 in January 1983. In January 1987, the "Electric Utility Company Monthly Statement" was changed to the "Monthly Electric Utility Sales and Revenue Report with State Distributions." The title was changed again in January 2002 to "Monthly Electric Utility Sales and Revenues with State Distributions Report" to become consistent with other EIA report titles. The Form EIA-826 was revised in January 1990, and some data elements were eliminated.

In 1993, EIA for the first time used a model sample for the Form EIA-826. A stratified-random sample, employing auxiliary data, was used for each of the four previous years. 1 2 3 (See previous issues of this publication for

¹ Knaub, J.R., Jr. (1989), "Ratio Estimation and Approximate Optimum Stratification in Electric Power Surveys," <u>Proceedings of the Section on Survey Research Methods</u>, American Statistical Association, pp. 848-853.

details.) The sample for the Form EIA-826 was designed to obtain estimates of electricity sales and revenue per kilowatthour at the State level by end-use sector.

Starting with data for January 2001, the restructuring of the electric power industry was taken into account by forming three schedules on the EIA-826 form. Schedule 1, Part A is for full service utilities that operate as in the past. Schedule 1, Part B is for electric service providers only, and Schedule 1, Part C is for those utilities providing distribution service for those on Schedule 1, Part B. Also, the Form EIA-826 frame was modified to include all investor-owned electric utilities and a sample of companies from other ownership classes. A new method of estimation was implemented at this same time. (See EPM April 2001, p.1.)

Data Processing and Data System Editing. The forms are mailed each year to the electric utilities with State-parts selected in the sample. The completed form is to be returned to the EIA by the last calendar day of the month following the reporting month. Nonrespondents are telephoned to obtain the data. Imputation, in model sampling, is an implicit part of the estimation. That is, data that are unavailable, either because respondents were not part of the sample or because of nonresponse, are estimated using a model. The data are edited and entered into the computer where additional checks are completed. After all forms have been received from the respondents. the final automated edit is submitted. Following verification, tables and text of the aggregated data are produced for inclusion in the EPM.

Formulas and Methodologies. The Form EIA-826 data are collected at the utility level by end-use sector (residential, commercial, industrial, and other) and State. Form EIA-861 data were used as the frame from which the sample was selected and also as regressor data. Updates have been made to the frame to reflect mergers that affect data processing.

Data from the Form EIA-826 are used to determine estimates by sector at the State, Census Division, and national level for the entire corresponding State, Census Division, or national category. State level sales and revenues estimates are calculated. A ratio estimation

procedure is used for estimation of revenue per kilowatthour at the State level. The estimates are accumulated separately to produce the Census Division and U.S. level estimates.⁴

Some electric utilities provide service in more than one State. Thus, the State-service area is actually the sampling unit. For each State served by each utility, there is a utility State-part, or "State-service area." This approach allows for an explicit calculation of estimates for sales, revenue, and revenue per kilowatthour by end-use sector at State, Census division, and national level. Estimation procedures include imputation to account for nonresponse. Nonsampling error must also be considered. The nonsampling error is not estimated directly, although attempts are made to minimize the nonsampling error. ^{4 5 6}

Average revenue per kilowatthour represents the cost per unit of electricity sold and is calculated by dividing retail electric revenue by the corresponding sales of electricity. The average revenue per kilowatthour is calculated for all consumers and for each end-use sector.

The electric revenue used to calculate the average revenue per kilowatthour is the operating revenue reported by the electric utility. Operating revenue includes energy charges, demand charges, consumer service charges, environmental surcharges, fuel adjustments, and other miscellaneous charges. Electric utility operating revenues also include State and Federal income taxes and taxes other than income taxes paid by the utility.

The average revenue per kilowatthour reported in this publication by sector represents a weighted average of

² Knaub, J.R., Jr. (1993), "Alternative to the Iterated Reweighted Least Squares Method: Apparent Heteroscedasticity and Linear Regression Model Sampling," <u>Proceedings of the International Conference on Establishment Surveys</u>, American Statistical Association, pp. 520-525.

³ Knaub, J.R., Jr. (1994), "Relative Standard Error for a Ratio of Variables at an Aggregate Level Under Model Sampling," Proceedings of the Section on Survey Research Methods, American Statistical Association, pp. 310-312.

⁴ Knaub, J.R., Jr. (2000), "Using Prediction-Oriented Software for Survey Estimation - Part II: Ratios of Totals," <u>InterStat</u>, June 2000, http://interstat.stat.vt.edu/InterStat/. (<u>Note shorter, more recent version in ASA Survey Research Methods Section proceedings, 2000.)</u>

⁵ Knaub, J.R., Jr. (1999), "Using Prediction-Oriented Software for Survey Estimation," <u>InterStat</u>, August 1999, http://interstat.stat.vt.edu/InterStat/, partially covered in "Using Prediction-Oriented Software for Model-Based and Small Area Estimation," in ASA Survey Research Methods Section proceedings, 1999, and partially covered in "Using Prediction-Oriented Software for Estimation in the Presence of Nonresponse," presented at the International Conference on Survey Nonresponse, 1999.

⁶ Knaub, J.R., Jr. (2001), "Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias," <u>InterStat</u>, June 2001, http://interstat.stat.vt.edu/InterStat/. (<u>Note shorter, more recent version in ASA Survey Research Methods Section proceedings, 2001.)</u>

consumer revenue and sales within sectors and across sectors for all consumers, and does not reflect the per kWh rate charged by the electric utility to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs to the electric utility for providing electrical service.

Relative Standard Error. The relative standard error (RSE) statistic, usually given as a percent, describes the magnitude of sampling error that might reasonably be incurred. The RSE is the square root of the estimated variance, divided by the variable of interest. The variable of interest may be the ratio of two variables (for example, revenue per kilowatthour), or a single variable (for example, sales).

The sampling error may be less than the nonsampling error. In fact, large RSE estimates found in preliminary work with these data have often indicated nonsampling errors, which were then identified and corrected. Nonsampling errors may be attributed to many sources, including the response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding data obtained, and other errors of collection, response, or coverage. These nonsampling errors also occur in complete censuses. In a complete census, this problem may become unmanageable. One indicator of the magnitude of possible nonsampling error may be gleaned by examining the history of revisions to data for a survey (Table C2).

Using the Central Limit Theorem, which applies to sums and means such as are applicable here, there is approximately a 68-percent chance that the true sampling error is less than the corresponding RSE. Note that reported RSEs are always estimates, themselves, and are usually, as here, reported as percents. As an example, suppose that a revenue-per-kilowatthour value is estimated to be 5.13 cents per kilowatthour with an estimated RSE of 1.6 percent. This means that, ignoring any nonsampling error, there is approximately a 68-percent chance that the true average revenue per kilowatthour is within approximately 1.6 percent of 5.13 cents per kilowatthour (that is, between 5.05 and 5.21 cents per kilowatthour). There is approximately a 95-percent chance of a true sampling error being 2 RSEs or less.

Note that there are times when a model may not apply, such as in the case of a substantial reclassification of sales, when the relationship between the variable of interest and the regressor data does not hold. In such a case, the new information represents only itself, and such numbers are added to model results when estimating totals. Further, there are times when sample data may be known to be in error, or are not reported. Such cases are treated as if they were never part of the model-based sample, and values are imputed.

Adjusting Monthly Data to Annual Data. As a final adjustment based on our most complete data, use is made of final Form EIA-861 data, when available. The annual totals for Form EIA-826 data by State and end-use sector are compared to the corresponding Form EIA-861 values for sales and revenue. The ratio of these two values in each case is then used to adjust each corresponding monthly value.

Rounding Rules for Data. Given a number with r digits to the left of the decimal and d+t digits in the fraction part, with d being the place to which the number is to be rounded and t being the remaining digits which will be truncated, this number is rounded to r+d digits by adding 5 to the (r+d+1)th digit when the number is positive or by subtracting 5 when the number is negative. The t digits are then truncated at the (r+d+1)th digit. The symbol for a number rounded to zero is (*).

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x 100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Most of the data collected on the Form EIA-826 are not considered confidential. However, revenue, sales, and customer data collected from energy service providers (Schedule 1, Part B), which do not also provide energy delivery, are considered confidential and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

Form EIA-860

Beginning with data collected for the year 2001, the Forms EIA-860A and EIA-860B are obsolete. The infrastructure data collected on those forms are now collected on the

⁷ Knaub, J.R., Jr. (2002), "Practical Methods for Electric Power Survey Data," InterStat, July 2002, http://interstat.stat.vt.edu/InterStat/.

Form EIA-860 and the monthly and annual versions of the Form EIA-906.

The Form EIA-860 is a mandatory census of all existing and planned electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts. The survey is used to collect data on existing power plants and 5-year plans for constructing new plants, generating unit additions, modifications, and retirements in existing plants. Data on the survey are collected at the generator unit level.

Instrument and Design History. The Form EIA-860 was originally implemented in January 1985 to collect data as of year-end 1984. In January 1999, the Form EIA-860 was renamed the Form EIA-860A and was implemented to collect data as of January 1, 1999.

In 1989, the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 5 or more megawatts. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts. Previously, data were collected every 3 years from facilities with a nameplate capacity between 1 and 5 megawatts. In 1998, the Form EIA-867, was renamed Form EIA-860B, "Annual Electric Generator report -Non-utility." The Form EIA-860B was a mandatory survey of all existing and planned nonutility electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts.

Beginning with data collected for the year 2001, the infrastructure data collected on the Form EIA-860A and the Form EIA-860B were combined into the new Form EIA-860 and the monthly and annual versions of the Form EIA-906. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

Data Processing and Data System Editing. The Form EIA-860 is mailed to approximately 3,000 respondents to collect data as of January 1 of the reporting year. Respondents have the option of filing Form EIA-860 directly with the EIA or through an agent, such as the respondent's regional electric reliability council. Data reported through the regional electric reliability councils are submitted to the EIA electronically from the North American Electric Reliability Council (NERC).

Data for each respondent are preprinted. Respondents are instructed to verify all preprinted data and to supply missing data. Computer programs containing edit checks

are run to identify errors. Respondents are telephoned to obtain correction or clarification of reported data and to obtain missing data, as a result of the editing process.

Rounding Rules for Data. Not applicable.

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Most of the data collected on the Form EIA-860 are not considered confidential. However, plant latitudes and longitudes and tested heat rate data are considered confidential and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

Form EIA-861

The Form EIA-861 is a mandatory census of electric power industry participants in the United States. The survey is used to collect information on power production and sales data from approximately 4,900 respondents. About 3,300 are electric utilities, and the remainder are nontraditional entities such as independent power producers, power marketers, and the unregulated subsidiaries of electric utilities. The data collected are used to maintain and update the EIA's electric power industry participant frame database.

Instrument and Design History. The Form EIA-861 was implemented in January 1985 for collection of data as of year-end 1984. The Federal Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

Data Processing and Data System Editing. The Form EIA-861 is mailed to the respondents in January of each year to collect data as of the end of the preceding calendar year. The data are edited when entered into the interactive on-line system. Internal edit checks are performed to verify that current data total across and between schedules, and are comparable to data reported the previous year. Edit checks are also performed to compare data reported on the Form EIA-861 and similar data reported on the Forms EIA-826 and the EIA-412, "Annual Electric Industry Financial Report." Respondents are telephoned to

obtain clarification of reported data and to obtain missing data.

Data for the Form EIA-861 are collected at the owner level from all electric utilities including energy service providers in the United States, its territories, and Puerto Rico. Form EIA-861 data in this publication are for the United States only.

Average revenue per kilowatthour represents the cost per unit of electricity sold and is calculated by dividing retail electric revenue by the corresponding sales of electricity. The average revenue per kilowatthour is calculated for all consumers and for each end-use sector. A ratio estimation procedure is used for estimation of revenue per kilowatthour at the State level.

The electric revenue used to calculate the average revenue per kilowatthour is the operating revenue reported by the electric power industry participant. Operating revenue includes energy charges, demand charges, consumer service charges, environmental surcharges, fuel adjustments, and other miscellaneous charges. Electric power industry participant operating revenues also include State and Federal income taxes and taxes other than income taxes paid by the utility.

The average revenue per kilowatthour reported in this publication by sector represents a weighted average of consumer revenue and sales within sectors and across sectors for all consumers, and does not reflect the per kWh rate charged by the electric power industry participant to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs to the electric power industry participant for providing electrical service.

Rounding Rules for Data. Given a number with r digits to the left of the decimal and d+t digits in the fraction part, with d being the place to which the number is to be rounded and t being the remaining digits which will be truncated, this number is rounded to r+d digits by adding 5 to the (r+d+1)th digit when the number is positive or by subtracting 5 when the number is negative. The t digits are then truncated at the (r+d+1)th digit. The symbol for a number rounded to zero is (*).

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Data collected on the Form EIA-861 are not considered to be confidential.

Form EIA-906

As of January 2001, Form EIA-906 superseded Forms EIA-759 and 900. The Form EIA-906 is used to collect monthly plant-level data on generation, fuel consumption, stocks, fuel heat content, and useful thermal output from electric utilities and nonutilities from a model-based sample of approximately 260 electric utilities and 900 nonutilities. Fuel consumption for combined heat and power facilities is apportioned between fuel for generation of electricity and fuel for production of useful thermal output, by assuming they are additive. Fuel usage for these facilities is assumed to have an efficiency of 80 percent. The consumption for useful thermal output is obtained by dividing the reported or estimated value for useful thermal output by 0.8. This value is then subtracted from total fuel consumption by facility to arrive at the fuel consumption to be associated with the generation of electricity. Consumption values that are imputed, either because observed data failed edit, or because data were not collected (not part of a sample) are not imputed by regression directly. Historical ratios for generation to consumption are applied to the imputed generation numbers to arrive at the consumption values to be used. The form is also used to collect these statistics from the rest of the frame on an annual basis.

Instrument and Design History. In January 2001, Form EIA-906 superseded Forms EIA-759 and EIA-900. The Federal Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

Relating to the Form EIA-759, the Bureau of Census and the U.S. Geological Survey collected, compiled and published data on the electric power industry prior to 1936. After 1936, the Federal Power Commission (FPC) assumed all data collection and publication responsibilities for the electric power industry and implemented the Form FPC-4. The Federal Power Act, Section 311 and 312, and FPC Order 141 define the legislative authority to collect power production data. The Form EIA-759 replaced the Form FPC-4 in January 1982.

In 1996, the Form EIA-900 was initiated to collect sales for resale data from unregulated entities. In 1998, the form was modified to collect sales for resale, gross generation, and sales to end-user data. In 1999, the form was modified to collect net generation, consumption, and ending stock data. In 2000, the form was modified to include useful thermal output data.

Data Processing and Data System Editing. In 2001 and 2002 the Form EIA-906 was received by the EIA as a hard copy, typically via fax, and manually entered into a computerized database. Anomalous data were identified via range checks, comparisons with historical data, and consistency checks (for example, whether the fuel consumption and generation numbers for a given facility and month are consistent).

The review of the Form EIA-906 filings for non-regulated facilities in 2001 uncovered widespread problems with the data reporting. The most prevalent problems were reported fuel consumption inconsistent with generation and, most significantly, incorrect reporting of useful thermal output (UTO) by combined heat and power (CHP) facilities.

UTO is the thermal output from a CHP facility applied to a production process other than electricity generation. Many facilities either misunderstood EIA's definition or did not meter internally such that they could easily estimate CHP. This was an important problem in the data collection effort because within the Form EIA-906 schema for CHP facilities, the intent is to calculate fuel used for electricity as the residual after subtracting UTO (adjusted assuming an 80 percent efficiency factor) from total heat (fuel) input to the plant. If UTO is reported incorrectly, then the reported data cannot be used to estimate fuel for electricity.

EIA's preferred means of resolving any questionable response is via direct communication with the respondent, usually via phone or e-mail. In cases where the reported data appeared to be incorrect or was missing, and EIA was unable to resolve the matter with the respondent, the following estimation approaches were used for the 2001 data:

- In cases where electric generation appeared reasonable but fuel consumption was inconsistent with generation, fuel consumption by prime mover was estimated using 2000 heat rates and the assumption that the fuel shares for that prime mover in 2001 were the same as in 2000.
- If the reported electric generation data appeared to be in error, or if the facility was a nonrespondent, a regression methodology was used to estimate generation and fuel consumption for the facility. The regression methodology relied on 2000 and 2001 data for other facilities to make estimates for erroneous or missing responses. The basic technique employed is described in the paper Model-Based Sampling and Inference, found the EIA web on http://www.eia.doe.gov/cneaf/electricity/page/for ms.html.

• UTO was estimated by applying the power to steam ratio calculated for the facility in 2000 to 2001.

Overall, of the approximately 2600 facilities in the Form EIA-906 frame for 2001, some estimation was performed for 803 facilities. These facilities account for approximately 4% of the generation in the frame and about 20% of the fuel consumption.

Relative Standard Error. The relative standard error (RSE) statistic, usually given as a percent, describes the magnitude of sampling error that might reasonably be incurred. The RSE is the square root of the estimated variance, divided by the variable of interest. The variable of interest may be the ratio of two variables, or a single variable. (See footnotes number 4, 5, and 6.)

The sampling error may be less than the nonsampling error. In fact, large RSE estimates found in preliminary work with these data have often indicated nonsampling errors, which were then identified and corrected. (See footnote number 7.) Nonsampling errors may be attributed to many sources, including the response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding data obtained, and other errors of collection, response, or coverage. These nonsampling errors also occur in complete censuses. In a complete census, this problem may become unmanageable.

Using the Central Limit Theorem, which applies to sums and means such as are applicable here, there is approximately a 68-percent chance that the true sampling error is less than the corresponding RSE. Note that reported RSEs are always estimates, themselves, and are usually, as here, reported as percents. As an example, suppose that a net generation from coal value is estimated to be 1,507 million kilowatthours with an estimated RSE of 4.9 percent. This means that, ignoring any nonsampling error, there is approximately a 68-percent chance that the true million kilowatthour value is within approximately 4.9 percent of 1,507 million kilowatthours (that is, between 1,433 and 1,581 million kilowatthours). There is approximately a 95-percent chance of a true sampling error being 2 RSEs or less.

Note that there are times when a model may not apply, such as in the case of a substantial reclassification of sales, when the relationship between the variable of interest and the regressor data does not hold. In such a case, the new information represents only itself, and such numbers are added to model results when estimating totals. Further, there are times when sample data may be known to be in error, or are not reported. Such cases are treated as if they

were never part of the model-based sample, and values are imputed.

Adjusting Monthly Data to Annual Data. As a final adjustment based on our most complete data, use is made of annual Form EIA-906 data, when available. The annual totals of the monthly Form EIA-906 data by State and enduse sector are compared to the corresponding annual Form EIA-861 values for sales and revenue. The ratio of these two values in each case is then used to adjust each corresponding monthly value.

Average Heat Content. The average heat content values collected on the Form EIA-906 were used to convert the consumption data into Btu. Therefore, the results may not be completely representative.

Rounding Rules for Data. Given a number with r digits to the left of the decimal and d+t digits in the fraction part, with d being the place to which the number is to be rounded and t being the remaining digits which will be truncated, this number is rounded to r+d digits by adding 5 to the (r+d+1)th digit when the number is positive or by subtracting 5 when the number is negative. The t digits are then truncated at the (r+d+1)th digit. The symbol for a number rounded to zero is (*).

Percent Difference. The following formula is used to calculate percent differences.

Percent Difference =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x 100$$
,

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Confidentiality of the Data. Most of the data collected on the Form EIA-906 are not considered confidential. However, the reported fuel stocks at the end of the reporting period are considered confidential and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

Conversion of Petroleum Coke to Liquid Petroleum.

The quantity conversion is 5 barrels (of 42 U.S. gallons each) per short ton (2,000 pounds). Coke from petroleum has a heating value of 6.024 million Btus.

Business Classification

The nonutility industry consists of all manufacturing, agricultural, forestry, transportation, finance, service and administrative industries, based on the Office of Management and Budget's Standard Industrial

Classification (SIC) Manual.17 In 1997, the SIC Manual name was changed to North American Industry Classification System (NAICS). The following is a list of the main classifications and the category of primary business activity within each classification.

Agriculture, Forestry, and Fishing

111 Agriculture production-crops

112 Agriculture production, livestock and animal specialties

115 Agricultural services

114 Fishing, hunting, and trapping

113 Forestry

Mining

2122 Metal mining

2121 Coal mining

211 Oil and gas extraction

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

311 Food and kindred products

3122 Tobacco products

314 Textile and mill products

315 Apparel and other finished products made from fabrics and similar materials

321 Lumber and wood products, except furniture

337 Furniture and fixtures

322 Paper and allied products (other than 322122 or 32213)

322122 Paper mills, except building paper

32213 Paperboard mills

323 Printing and publishing

325 Chemicals and allied products (other than

325188, 325211, 32512, or 325311)

325188 Industrial Inorganic Chemicals

325211 Plastics materials and resins

32512 Industrial organic chemicals

325311 Nitrogenous fertilizers

324 Petroleum refining and related industries (other than 32411)

32411 Petroleum refining

326 Rubber and miscellaneous plastic products

316 Leather and leather products

327 Stone, clay, glass, and concrete products (other than 32731)

32731 Cement, hydraulic

331 Primary metal industries (other than 331111 or 331312)

331111 Blast furnaces and steel mills

331312 Primary aluminum

332 Fabricated metal products, except machinery and transportation equipment

333 Industrial and commercial equipment and components except computer equipment

335 Electronic and other electrical equipment and components except computer equipment

336 Transportation equipment

3345 Measuring, analyzing, and controlling instruments, photographic, medical, and optical goods, watches and clocks

339 Miscellaneous manufacturing industries

Transportation and Public Utilities

482 Railroad transportation

485 Local and suburban transit and interurban highway passenger transport

484 Motor freight transportation and warehousing

491 United States Postal Service

483 Water transportation

481 Transportation by air

486 Pipelines, except natural gas

487 Transportation services

513 Communications

22 Electric, gas, and sanitary services

2212 Natural gas transmission

2213 Water supply

22132 Sewerage systems

562212 Refuse systems

22131 Irrigation systems

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

721 Hotels

812 Personal services

514 Business services

8111 Automotive repair, services, and parking

811 Miscellaneous repair services

512 Motion pictures

713 Amusement and recreation services

622 Health services

541 Legal services

611 Education services

624 Social services

712 Museums, art galleries, and botanical and zoological gardens

813 Membership organizations

561 Engineering, accounting, research, management, and related services

814 Private households

514199 Miscellaneous services

92 Public Administration

Table C1. Average Heat Content of Fossil-Fuel Receipts, April 2003

Census Division and State	Coal (Million Btu per Ton) ¹	Petroleum (Million Btu per Barrel) ²	Natural Gas (Million Btu per Thousand Cubic Feet) ³	
New England	23.53	6.22	1.03	
Connecticut	20.32	6.14	1.04	
Maine	26.08	6.39	1.04	
Massachusetts	24.47	6.35	1.03	
			1.03	
New Hampshire	25.41	6.34		
Rhode Island			1.03	
Vermont				
Aiddle Atlantic	24.79	6.23	1.03	
New Jersey	26.25	6.21	1.04	
New York	25.21	6.25	1.03	
Pennsylvania	24.52	6.16	1.04	
ast North Central	20.50	5.98	1.02	
Illinois	18.34	6.12	1.02	
Indiana	21.08	6.09	1.02	
Michigan	20.52	6.23	1.02	
Ohio	24.89	5.86	1.03	
Wisconsin	17.85	5.69	1.01	
Vest North Central	16.55	6.17	1.01	
Iowa	17.74	5.88	1.00	
Kansas	16.89	6.58	1.00	
Minnesota	17.70	5.63	1.01	
Missouri	18.11	5.92	1.01	
Nebraska	17.09	5.80	1.00	
North Dakota	13.08	5.84		
South Dakota	17.02	==		
outh Atlantic	24.64	6.35	1.04	
Delaware	25.66	6.27	1.04	
District of Columbia		5.88		
Florida	24.48	6.37	1.05	
Georgia	23.75	5.82	1.02	
Maryland	25.31	6.30	1.05	
North Carolina	24.81	5.95		
			1.03	
South Carolina	25.40	6.25	1.03	
Virginia	25.76	6.31	1.04	
West Virginia	24.48	5.91	1.03	
ast South Central	22.03	5.79	1.05	
Alabama	21.61	5.98	1.06	
Kentucky	22.87	5.60	1.01	
Mississippi	18.46	6.59	1.04	
Tennessee	22.11	5.88	1.02	
Vest South Central	16.00	5.98	1.03	
Arkansas	17.56	5.90	1.03	
Louisiana	16.65	5.96	1.03	
Oklahoma	17.76	5.36	1.03	
Texas	15.12	6.28	1.03	
Iountain	19.68	5.79	1.02	
Arizona	20.12	5.83	1.03	
Colorado	19.62	5.14	1.01	
		J.14		
Idaho	16.05		1.02	
Montana	16.95	5.92	1.12	
Nevada	22.83		1.04	
New Mexico	19.09	5.71	.99	
Utah	22.79	5.84	1.06	
Wyoming				
Wyoming	17.75	5.90	.99	
acific Contiguous	17.30	5.76	1.02	
California	24.10	5.74	1.02	
Oregon	16.75		1.02	
Washington	16.49	5.83	1.03	
acific Noncontiguous	23.17	5.91	1.00	
Alaska			1.00	
Hawaii	23.17	5.91		
.S. Total	20.68	6.27	1.03	

¹ Data represents weighted values. Lignite, bituminous coal, subbituminous coal, anthracite, waste coal and synthetic coal..

oil.

Notes: *See Glossary for definitions.*Data for 2003 are preliminary.

Sources: Energy Information Administration, Form EIA-423 "Monthly Report of Cost and Quality of Fuels for Electric Plants;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants;" and Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants Report."

² Includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, and petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), and waste

Table C2. Comparison of Preliminary Versus Final Published Data at the U.S. Level, 1995 Through 1999

To an	Mean Absolute Value of Change					
Item	1995	1996	1997	1998	1999	
onutility						
Generation (million kilowatthours)						
Coal	NA	NA	NA	NA	2,272	
Petroleum	NA	NA	NA	NA	1,205	
Gas	NA	NA	NA	NA	811	
Hydroelectric	NA NA	NA NA	NA NA	NA NA	936	
Nuclear	NA NA	NA NA	NA NA	NA NA	28	
Other ¹	NA	NA	NA	NA	504	
Total	NA	NA	NA	NA	4,559	
Consumption						
Coal (thousand short tons)	NA	NA	NA	NA	1,767	
Petroleum (thousand barrels)	NA	NA	NA	NA	2,694	
Gas (million cubic feet)	NA	NA	NA	NA	17,168	
Stocks ¹					•	
Coal (thousand short tons)	NA	NA	NA	NA	316	
Petroleum (thousand barrels)	NA	NA	NA	NA	40	
tility					.0	
Generation (million kilowatthours)						
Coal	49	162	201	201	288	
Petroleum	6	64	53	39	103	
Gas	38	84	168	102	147	
Hydroelectric	6	298	325	322	354	
Nuclear	0	4	65	0	0	
Other	0	0	0	0	0	
Total	11	462	285	504	695	
Consumption						
Coal (thousand short tons)	27	105	169	114	147	
Petroleum (thousand barrels)	1	94	43	76	228	
Gas (million cubic feet)	300	899	1,243	1,084	1,668	
Stocks ¹			-,=	-,	-,000	
Coal (thousand short tons)	310	233	501	229	118	
Petroleum (thousand barrels)	239	201	130	98	165	
Retail Sales (million kilowatthours)	237	201	150	70	103	
Residential	79	345	250	626	454	
			350	626		
Commercial	780	476	1,265	175	2,233	
Industrial	141	1,129	257	771	654	
Other ²	167	267	363	33	553	
Total	694	1,153	1,724	1,466	3,894	
Revenue (million dollars)						
Residential	17	2	3	42	27	
Commercial	51	29	60	17	214	
Industrial	23	46	32	30	34	
Other ²	5	1	31	2	3	
Total	22	46	62	79	277	
Average Revenue per Kilowatthour (cents) ³						
Residential	.01	.03	.03	.02	.01	
Commercial	.01	.01	.05	.01	.06	
Industrial	.03	.01	.02	.01	.01	
Other ³	.20	.22	.07	.02	.39	
Total	.01		.02			
	.01	.01	.02	.01	.03	
Receipts	2.4	<i>C</i> 1	71	0.4	1.40	
Coal (thousand short tons)	34	61	71	84	148	
Petroleum (thousand barrels)	2	77	28	20	89	
Gas (million cubic feet)	227	566	122	365	157	
Cost (cents per million Btu) ³						
Coal	.10	.06	.16	.23	.22	
Petroleum	.01	.01	*	*	.01	
Gas	.15	.87	.68	.35	.09	

Stocks are end of month values.

Includes public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Data represents weighted values.

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

NA = Not Available.

Notes: • Change refers to the difference between estimates or preliminary monthly data published in the *Electric Power Monthly* (EPM) and the final monthly data published in the EPM. • Mean absolute value of change is the unweighted average of the absolute changes.

Sources: • Energy Information Administration: Form EIA-900, "Monthly Nonutility Power Plant Report;" Form EIA-759, "Monthly Power Plant Report;" Form EIA-826,

[&]quot;Monthly Electric Utility Sales and Revenue Report with State Distributions;" and Form EIA-861, "Annual Electric Utility Report."

Table C3. Comparison of Sample Versus Census Published Data at the U.S. Level, 1998 and 1999

	1998			1999		
Item	Sample	Census	Difference (percent)	Sample	Census	Difference (percent)
tility						
Generation (million kilowatthours)						
Coal	1,808,070	1,807,480	*	1,773,499	1,767,679	-0.3
Petroleum		105,440	-0.3	85,737	82,981	-3.3
Gas	308.858	309,222	0.1	297.346	296.381	-0.3
Other ¹		990.029	-0.1	1.026.354	1.026.632	
Total		3,212,171	*	3,182,936	3,173,674	-0.3
Consumption	, .,.	-, ,		-, - ,	-, -,-	
Coal (1,000 short tons)	912.060	910.867	-0.1	896.616	894.120	-0.3
Petroleum (1,000 barrels)		178,614	-0.4	148,868	143,830	-3.
Gas (1,000 Mcf)	,	3,258,054	-0.1	3,125,417	3,113,419	-0.4
Stocks ²	,	-,,		-,,	-,,	
Coal (1,000 short tons)	121,384	120.501	-0.7	128,929	129.041	0.
Petroleum (1,000 barrels)		53.790	-0.2	45,191	44,312	-2.
Retail Sales (million kilowatthours)		,		-,-	,-	
Residential	1.131.520	1.127.735	-0.3	1,139,481	1.140.761	0.
Commercial		968.528	1.9	975,196	970.601	-0.
Industrial		1,040,038	-1.5	1,050,363	1,017,783	-3.
Other ³		103.518	3.1	100,316	106.754	6
All Sectors		3,239,818	0.1	3,265,356	3,235,899	-0.
Revenue (million dollars)	0,20.,.10	0,20>,010	•••	0,200,000	0,200,0>>	•
Residential	93,511	93.164	-0.4	93,148	93,142	
Commercial		71.769	1.6	70.190	70.492	0.4
Industrial		46,550	-1.8	46,442	45,056	-3.
Other ³		6,863	0.7	6,763	6,783	0.
All Sectors		218,346	*	216,544	215,473	-0.
Average Revenue per Kilowatthour (cents) ⁴	210,010	210,010		210,011	210,170	•
Residential	8.26	8.26	*	8.17	8.16	-0.
Commercial		7.41	-0.3	7.20	7.26	0.
Industrial		4.48	-0.3	4.42	4.43	0.
Other ³		6.63	-2.5	6.74	6.35	-6.
All Sectors		6.74	-0.1	6.63	6.66	0.

¹ Includes geothermal, wood, waste, wind, and solar.

Sources: Energy Information Administration, Form EIA-900, "Monthly Nonutility Power Report;" Form EIA-867, "Annual Nonutility Power Producer Report;" Form EIA-759, "Monthly Power Plant Report;" Form EIA-861, "Annual Electric Utility Report;" and Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions"

Stocks are end-of-month values.

Includes public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Data represent weighted values.

^{* =} For detailed data, the absolute value is less than 0.5; for percentage calculations, the absolute values is less than 0.05 percent. NA = Not Available.

Notes: • The average revenue per kilowatthour is calculated by dividing revenue by sales. • Totals may not equal sum of components because of independent rounding. • Percent difference is calculated before rounding.

Sources: Energy Information Administration, Form EIA-900, "Monthly Nonutility Power Report," Form EIA-867, "Annual Nonutility Power Producer Report," Form EIA-867, "Annual Nonutility Power Report,"

Table C4. Unit-of-Measure Equivalents for Electricity

Unit	Equivalent			
Kilowatt (kW)	1,000 (One Thousand) Watts			
Megawatt (MW)	1,000,000 (One Million) Watts			
Gigawatt (GW)				
Terawatt (TW)	1,000,000,000,000 (One Trillion) Watts			
Gigawatt	1,000,000 (One Million) Kilowatts			
Gigawatt	1,000,000,000 (One Billion) Kilowatts			
Kilowatthours (kWh)	1,000 (One Thousand) Watthours			
Megawatthours (MWh)	1,000,000 (One Million) Watthours			
Gigawatthours (GWh)	1,000,000,000 (One Billion) Watthours			
Terawatthours (TWh)				
Gigawatthours	1,000,000 (One Million) Kilowatthours			
Gigawatthours				

Source: Energy Information Administration.

Appendix D

Estimating and Presenting Power Sector Fuel Use

I. Background

The Energy Information Administration (EIA) has comprehensively reviewed and revised how it collects, estimates, and reports fuel use for facilities producing electricity. The review addressed inconsistent reporting of the fuels used for electric power and changes in the electric power marketplace that have been inconsistently represented in various EIA survey forms and publications. For example:

- In some cases fuel use by combined-heat-and-power (CHP) plants¹ has been reported as industrial sector fuel use. while in other cases it has been reported as electric power sector fuel use.
- Electricity generation and fuel consumption have been categorized and reported in several different ways, such as (1) utility only; (2) utility and independent power producers; or (3) utility, independent power producers, and CHP plants. The restructuring of the power industry is making some of these categories less meaningful.

The goal of EIA's comprehensive review was to improve the quality and consistency of its electric power data throughout all data and analysis products. Because power facilities operate in all sectors of the economy (e.g., in commercial buildings, such as hospitals and college campuses, and industrial facilities, such as paper mills and refineries) and use many fuels, any change to electric power data affects data series in nearly all fuel areas and causes changes in a wide variety of EIA publications.

As a result of the comprehensive review, EIA has made the following changes:

- EIA has adjusted all presentations of data on electric power to a consistent format and defined the electric power sector to include electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public.
- EIA is providing details within the electric power sector, commercial sector, and industrial sector on fuel used by CHP plants in those sectors.
- EIA has changed the sources of data on fuel used by components of the electric power sector. All tabulations and publications will use data obtained from EIA's surveys of electric power generators. This change in data source contributes to changes in total fuel consumption of natural gas.
- EIA has revised its historical data on electric power to resolve data anomalies. The revisions contribute to changes in EIA's electricity series as well as the fuel-use series.

Appendix D describes the reasoning behind the changes and their effect on electric power publications. It is organized as follows:

- Section II provides an overview of the key changes.
- Section III provides specific information for electric power publications.

The Annual Energy Review (AER) 2001, the first of the annual publications to be released with the new formats, provides details on changes for publications on coal, natural gas, petroleum, renewable energy, and greenhouse gas emissions.

II. Overview of Key Changes

The many changes that will occur because of the fuel review generally fall into three broad categories: (1) the categorization of electric power facilities, (2) the reporting of combined-heat-and-power plant fuel use, and (3) data series revisions resulting from revised electric power fuel use estimates. Each of these areas is discussed below.

Categorization of Electric Power Facilities

Until the 1990s, most electric power generation and fuel use data could be meaningfully categorized into electric utilities and nonutility power producers.² Electric utilities were generally structured as vertically integrated³ power companies that were responsible for generating, transmitting, and distributing power to consumers within their franchised service territory.

¹ Combined-heat-and-power plants (CHPs) produce both electricity and useful thermal output. EIA formerly referred to these plants as cogenerators, but has determined that CHP better describes the facilities because some of the plants included in EIA's data do not produce heat and power in a sequential fashion, and as a result do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

For an example of this, see *Electric Power Annual 1998, Volume II*, DOE/EIA-0348(98)/2, December 1999.

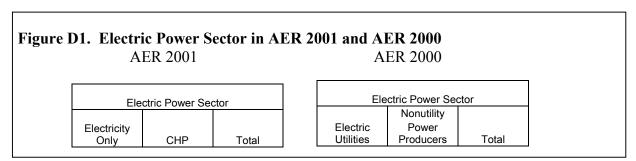
³ In this context "integrated" means that the company is involved in the three main sectors of the electric power business—generation, transmission, and distribution.

Nonutility power producers were generally independent generators—mostly combined-heat-and-power plants—that produced some power for their own use and sold the remainder to utilities for distribution to consumers. However, in recent years, many formerly integrated utilities have split apart, spinning off the generating part of their business into separate companies. Independent developers have built most of the new generating capacity that has been installed in recent years. As a result, the distinction between utility and nonutility power plants has become much less meaningful. In fact, a large portion of the growth in nonutility generation in recent years is due to the reclassification of utility power plants as nonutility power plants.

To reflect the changing industry structure, EIA is now organizing electric power generation and fuel use data into two new categories: electricity-only and combined-heat-and-power (CHP) plants. These categories separate power plants by function; i.e., power only or power plus thermal, rather than by ownership class.

Electricity-only plants represent all plants, whether owned by utilities or nonutilities that produce only electricity. CHP plants represent entities that produce both electricity and some form of thermal energy. Both categories will have some facilities that are owned by traditional utilities and independent companies.

In addition, EIA is now presenting data for an electric power sector that includes electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public (North American Industry Classification System code 22). This contrasts with some previous data presentations in which the electric power sector included non-NAICS code 22 industrial and commercial CHP plants. Figure D1 provides an example from the Annual Energy Review (AER).



In some tables and publications, the electric power sector will continue to be broken down into electric utilities and independent power producers for customers who have expressed an interest in this breakout. For example, Table 8.1 of AER 2001 presents an electricity overview and shows data on net generation for electric utilities and independent power producers separately. It is the only table in AER 2001 that has this break-out (Figure D2).

Figure D2. Electric Utilities and Independent Power Producers are shown separately in Electricity Overview

Table 8.1 Electricity Overview, 1949-2001

(Billion Kilowatthours)

	Net Generation						
	Electric Power Sector 1			Commercial	Industrial		
Year	Electric Utilities	Independent Power Producers	Total	Sector ²	Sector ³	Total	

The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public—i.e., NAICS 22 plants. Due to the restructuring of the electric power sector, the sale of generation assets is resulting in a reclassification of plants from electric utilities to independent power producers.

Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Appendix G for commercial sector NAICS codes.
Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, includes industrial hydroelectric power only. See Appendix G for industrial sector NAICS codes.

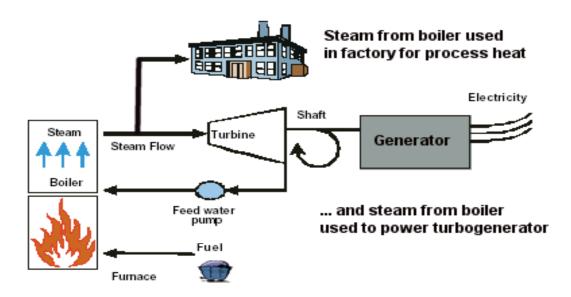
Reporting of CHP Facility Fuel Use

Historically, fuel consumption in CHP plants has been combined with other uses in many EIA publications. For example, in some tables the use of natural gas in commercial and industrial CHP plants was included with other commercial and industrial uses. Further, some of the fuel consumption (the portion associated with electricity production) at these same facilities was also reported under the column labeled "Nonutility Power Producers." Based on questions received, it became clear that this categorization led to confusion for many EIA customers.

EIA is now distinguishing within the industrial, commercial, and electric power sectors what portion of fuel consumption is used in CHP facilities and non-CHP facilities. For example:

- In tabulations of energy use by economic sector, if a commercial or industrial facility has a CHP unit, the total fuel consumption for that unit will be reported under commercial or industrial, but it will be identified separately from other commercial or industrial consumption. CHP plants that report their primary business is generating and selling power to others will be reported in a separate column in the electric power sector.
- In tabulations of energy use to produce electric power, the total fuel consumption reported by CHP plants will be further separated into that which is used to produce electricity and that which is used to produce thermal energy. Figure D3 shows a schematic for combined heat and power producers.

Figure D3. Schematic for Combined Heat and Power Plant



The separation between electricity and thermal uses is being done because many EIA data users have expressed interest in knowing how much fuel is used to produce electricity in the United States.

Data Series Revisions Resulting From Changes in Electric Power Fuel Use Estimates

The revisions to electric power data affect many areas. For example, to estimate natural gas use EIA has historically surveyed natural gas pipeline-companies and local gas utilities to obtain data on natural gas used by residential, commercial, industrial, and electric utility, and nonutility generators.5 However, EIA also surveyed electric utilities on their natural gas use. These data obtained directly from the end user were generally thought to be more accurate than the data obtained from natural gas suppliers. As a result, total natural gas use was estimated by adding together the data from natural gas companies on residential, commercial, industrial, and nonutility power producer use to the amount reported directly by electric utilities. The data collected for nonutility power producers were included with industrial use in previous EIA natural gas publications.

With the changing structure of the electricity sector, this reporting approach no longer appears reasonable. EIA has decided to follow the procedure described for electric utilities and use data obtained from its direct surveys of nonutility electric generators rather than the natural gas supplier surveys.6

Data changes are also occurring because of the extensive review of reported data that was undertaken in this process. Since it was decided that data reported directly by utilities and nonutility power generators would be the primary source of fuel consumption data for the power sector, an examination of heat rates, 7 capacity factors, 8 and power-to-steam ratios across 12 years of reported data was conducted. As a result, data for nonutility power producers for 1989 through 2000 have been

⁴ For the method used to separate the fuel used at CHP plants between electricity and useful thermal energy production, see Section III.

⁵ Energy Information Administration, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

⁶ Energy Information Administration, Form EIA-759, "Monthly Power Plant Report" for electric utilities and Forms EIA-867 and EIA-860B, "Annual Electric Generator Report-Nonutility" for nonutilities. Starting with 2001, data for both utilities and nonutilities are collected on a new survey, Form EIA-906, "Power Plant Report."

Heat rates are computed by dividing the heat content of the fuel burned to generate electricity by the resulting net kilowatthour generation.

⁸ Capacity factors are the ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period.

revised. The data review procedure is described in Section III under the heading "Efforts to Improve Data." As a result of the review by expert EIA analysts, anomalous values have been investigated and resolved and the result is higher quality data at aggregated levels.

Revisions resulting from changing the source of fuel consumption data for nonutilities and from EIA's data review affect data beyond the category of nonutilities. Appendix H of AER 2001 provides examples.

III. Electric Power Surveys and Publications

Summary of Key Changes

EIA previously presented data on electric power, such as generation and fuel consumption, in the following categories:

- Electric utilities,
- Nonutility power producers (independent power producers and combined-heat-and power plants),
- Electric power industry (sum of electric utilities and nonutility power producers).

Now EIA is organizing data using the following new categories:

- Electricity-only plants,
- Combined-heat-and-power (CHP) plants.

Data on electricity-only plants are disaggregated for utilities and independent power producers, as there are customers who are interested in maintaining this distinction. Data on CHP plants are disaggregated by the end-use category (commercial, industrial, electric power) they report as their major line of business. The categorization is based on their North American Industrial Classification System code. For example, a CHP plant that is part of a hospital will be classified as "commercial." Similarly, a CHP plant that reports that it is part of a paper mill will be classified as "industrial," and a CHP plant that reports that its primary business is selling power to others will be classified as "electric power." In addition, EIA is defining the electric power sector to include electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public.

EIA is presenting data for the following categories:

- Electric Power Sector,
- Commercial and industrial CHP plants,
- Total (sum of Electric Power Sector plus commercial and industrial CHP plants and equal to the prior "electric power industry" category).

Another change is that, EIA has estimated and is presenting data on the amount of fuel used to generate electricity and the amount of fuel used for useful thermal output. Furthermore, during the course of recategorizing the data, EIA performed a thorough data quality review and revised data to resolve anomalies.

Efforts to Improve Data

EIA reviewed electric power data from 1989 through 2001 to determine whether there were anomalies. The 1989–2000 data for nonutilities were from Form EIA-860B, "Annual Electric Generator Report-Nonutility," and its predecessor, Form EIA-867, "Annual Nonutility Power Producer Report." The 2001 data are from Form EIA-906, "Power Plant Report." These forms collect data on fuel consumption, generation, and, with the exception of 1995 through 1997, useful thermal output. When anomalies were identified in the data for the more recent years (1998–2001), EIA contacted selected respondents to resolve the inconsistencies. For the older data it was not practical to contact respondents. In this situation EIA made data adjustments to resolve the anomalies.

The review included an examination of both respondent-level data and aggregate-level data. EIA reviewed data for facilities with heat rates greater than 40,000 Btu per kilowatthour and less than 5,000 Btu per kilowatthour. The upper limit was chosen to allow for the heat rates of older non-electricity boilers. In addition, EIA reviewed data for facilities with overall efficiency of greater than 100 percent and identified facilities with thermal output that were not designated as CHP plants. To ensure consistency, EIA compared North American Industry Classification System (NAICS) codes, cogenerator status, fuel consumption, electric generation, and thermal output levels over time.

EIA analysts reviewed and evaluated aggregate-level data by State, NAICS code, fuel type, and generator type. For the historical data (1989–1997), EIA also:

- Estimated a value for useful thermal output for 1995 through 1997 (when useful thermal output was not included on the survey form) that produced a heat rate and an efficiency consistent with that observed in other years (see discussion below on CHP fuel use methodology).
- Corrected errors in units reported for fuel consumption.
- Compared data on fuel consumption with data on electric generation and adjusted data on fuel consumption or generation to maintain a consistent ratio.
- Adjusted data on useful thermal output for those respondents with heat rates outside the 5,000-to-40,000 Btu per kilowatthour range and an efficiency consistent with other years.

For the 1998-2000 data, the review also included a comparison for consistency with data reported by manufacturing plants on Form EIA-3, "Quarterly Coal Consumption—Manufacturing Plants," since a subset of the EIA-3 manufacturing plants generate electricity and also reported on the electric generator survey Form EIA-860B. In general, there was good correspondence between the data submissions. In situations where there were inconsistencies, selected respondents were contacted to explain the differences.

Allocating CHP Fuel Use

EIA developed the following method for estimating how the total fuel consumed in the boiler is split between electricity generation and useful thermal output:

- First, a steam boiler efficiency rate of 80 percent was assumed.⁹
- Then the reported or estimated value for useful thermal output (in Btu) was divided by 0.8 to estimate the fuel used to generate this amount of thermal output.
- Next, this value was subtracted from total fuel consumption and the remainder was assumed to be the amount used for electric generation.

Electric Power Publication Tables Affected

In both the *Electric Power Monthly* and the *Monthly Energy Review*:

- Data will be shown for the following categories throughout most of the report: (1) all U.S. power producers, (2) electric power sector, and (3) commercial and industrial CHP plants. Data on fuel consumption are shown for both electric generation and thermal output.
- The lowest level of aggregation is at the State level.
- Data on petroleum coke are converted to barrels and included in petroleum consumption and stocks tables.
- Fuel types are revised to be consistent with the *Annual Energy Review*.

⁹ Arthur D. Little, Report to the Energy Information Administration, *Industrial Model: Update on Energy Use and Industrial Characteristics*, (September 2001), Appendix C, "Average Boiler Efficiencies."

Glossary

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

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

Ash Content: The amount of ash contained in the fuel (except gas) in terms of percent by weight.

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

Barrel: A unit of volume equal to 42 U.S. gallons.

Biomass: Organic non-fossil material of biological origin constituting a renewable energy resource.

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

British Thermal Unit: The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water

has its greatest density (approximately 39 degrees Fahrenheit).

Btu: The abbreviation for British thermal unit(s).

Capacity: See <u>Generator Capacity</u> and <u>Generator Name Plate Capacity (Installed)</u>.

Census Divisions: Any of nine geographic areas of the United States as defined by the U.S. Department of Commerce, Bureau of the Census. The divisions, each consisting of several States, are defined as follows:

- 1) *New England:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont;
- 2) *Middle Atlantic*: New Jersey, New York, and Pennsylvania;
- 3) East North Central: Illinois, Indiana, Michigan, Ohio, and Wisconsin;
- West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota;
- 5) South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia;
- 6) East South Central: Alabama, Kentucky, Mississippi, and Tennessee;
- 7) West South Central: Arkansas, Louisiana, Oklahoma, and Texas;
- 8) *Mountain:* Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming;
- 9) *Pacific:* Alaska, California, Hawaii, Oregon, and Washington.

Note: Each division is a sub-area within a broader Census Region. In some cases, the Pacific division is subdivided into the Pacific Contiguous area (California, Oregon, and Washington) and the Pacific Noncontiguous area (Alaska and Hawaii).

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

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

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

Combined Heat and Power (CHP): Includes plants designed to produce both heat and electricity from a single heat source. *Note:* This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the abovementioned commercial establishments.

Consumption (Fuel): The use of energy as a source of heat or power or as a raw material input to a manufacturing process.

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

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

Diesel: A distillate fuel oil that is used in diesel engines such as those used for transportation and for electric power generation.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1,

No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

- 1) No. 1 Distillate: A light petroleum distillate that can be used as either a diesel fuel (see No. 1 Diesel Fuel) or a fuel oil. See No. 1 Fuel Oil.
 - No. 1 Diesel Fuel: A light distillate fuel oil that has distillation temperatures of 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines, such as those in city buses and similar vehicles. See No. 1 Distillate above.
 - No. 1 Fuel Oil: A light distillate fuel oil that
 has distillation temperatures of 400 degrees
 Fahrenheit at the 10-percent recovery point
 and 550 degrees Fahrenheit at the 90-percent
 point and meets the specifications defined in
 ASTM Specification D 396. It is used
 primarily as fuel for portable outdoor stoves
 and portable outdoor heaters. See No. 1
 Distillate above.
- 2) No. 2 Distillate: A petroleum distillate that can be used as either a diesel fuel (see No. 2 Diesel Fuel definition below) or a fuel oil. See No. 2 Fuel oil below.
 - No. 2 Diesel Fuel: A fuel that has distillation temperatures of 500 degrees Fahrenheit at the 10-percent recovery point and 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See No. 2 Distillate above.
- 3) No. 4 Fuel: A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.
 - No. 4 Diesel Fuel and No. 4 Fuel Oil: See No. 4 Fuel above.

Electric Industry Restructuring: The process of replacing a monopolistic system of electric utility suppliers with competing sellers, allowing individual retail customers to choose their supplier but still receive delivery over the power lines of the local

utility. It includes the reconfiguration of vertically integrated electric utilities.

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

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public-- i. e., North American Industry Classification System 22 plants.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. *Note:* Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundle their generation, transmission, and distribution operations, "electric utility" currently has inconsistent interpretations from State to State.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity Generation: The process of producing electric energy or the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatthours (kWh) or megawatthours (MWh).

Electricity Generators: The facilities that produce only electricity, commonly expressed in kilowatthours (kWh) or megawatthours (MWh).

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

Energy Conservation Features: This includes building shell conservation features, HVAC conservation features, lighting conservation features,

any conservation features, and other conservation features incorporated by the building. However, this category does not include any demand-side management (DSM) program participation by the building. Any DSM program participation is included in the DSM Programs.

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

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

Energy Source: Any substance or natural phenomenon that can be consumed or transformed to supply heat or power. Examples include petroleum, coal, natural gas, nuclear, biomass, electricity, wind, sunlight, geothermal, water movement, and hydrogen in fuel cells.

Energy-Only Service: Retail sales services for which the company provided only the energy consumed, where another entity provides delivery services.

Fossil Fuel: An energy source formed in the earths crust from decayed organic material. The common fossil fuels are petroleum, coal, and natural gas.

Franchised Service Area: A specified geographical area in which a utility has been granted the exclusive right to serve customers. A franchise allows an entity to use city streets, alleys and other public lands in order to provide, distribute, and sell services to the community.

Fuel: Any material substance that can be consumed to supply heat or power. Included are petroleum, coal, and natural gas (the fossil fuels), and other consumable materials, such as uranium, biomass, and hydrogen.

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

Gas Turbine Plant: An electric generating facility in which the prime mover is a gas (combustion) turbine.

A gas turbine typically consists of an air compressor and one or more combustion chambers where either liquid or gaseous fuel is burned. The resulting hot gases are passed through the turbine where they expand to drive both an electric generator and the compressor.

Generating Unit: Any combination of physically connected generators, reactors, boilers, combustion turbines, or other prime movers operated together to produce electric power.

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

Generator Capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.

Generator Nameplate Capacity (Installed): The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

Geothermal: Pertaining to heat within the Earth.

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust. Water or steam extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

Gross Generation: The total amount of electric energy produced by generating units and measured at the generating terminal in kilowatthours (kWh) or megawatthours (MWh).

Heat Content: The amount or number of British thermal units (Btu) produced by the combustion of fuel, measured in Btu/unit of measure.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Generation: Electricity generated by an electric power plant whose turbines are driven by falling water. It includes electric utility and industrial generation of hydroelectricity, unless otherwise specified. Generation is reported on a net basis, i.e., on the amount of electric energy generated after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

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

Hydrogen: A colorless, odorless, highly flammable gaseous element. It is the lightest of all gases and the most abundant element in the universe, occurring chiefly in combination with oxygen in water and also in acids, bases, alcohols, petroleum, and other hydrocarbons.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an electric utility.

Industrial Sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31-33); agriculture, forestry, and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); natural gas distribution (NAICS code 2212); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the abovementioned industrial activities.

Interdepartmental Service (Electric): Interdepartmental service includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.

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

Investor-Owned Utility (IOU): A privately-owned electric utility whose stock is publicly traded. It is rate

regulated and authorized to achieve an allowed rate of return.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Kerosene: A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wickfed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

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

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

Manufactured Gas: A gas obtained by destructive distillation of coal, or by thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, and carbureted water gas

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One million watthours.

Municipal Utility: A nonprofit utility, owned by a local municipality and operated as a department thereof, governed by a city council or an independently elected or appointed board; primarily involved in the distribution and/or sale of retail electric power.

Natural Gas: A gaseous mixture of hydrocarbon compounds, the primary one being methane. *Note:* The Energy Information Administration measures wet

natural gas and its two sources of production, associated/dissolved natural gas and nonassociated natural gas, and dry natural gas, which is produced from wet natural gas.

- 1) Wet Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentane. Typical nonhydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, hydrogen sulfide, nitrogen and trace amounts of helium. Under reservoir conditions, natural gas and its associated liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil and are not distinguishable at the time as separate substances. Note: The Securities and Exchange Commission and the Financial Accounting Standards Board refer to this product as natural gas.
 - Associated-dissolved natural gas: Natural gas that occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved gas).
 - Nonassociated natural gas: Natural gas that is not in contact with significant quantities of crude oil in the reservoir.
- 2) Dry Natural Gas: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Net Generation: The amount of gross generation less the electrical energy consumed at the generating station(s) for station service or auxiliaries. *Note*: Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross generation.

Net Summer Capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of May 1 through October 31). This output reflects a reduction in

capacity due to electricity use for station service or auxiliaries.

Net Winter Capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of peak winter demand (period of November 1 though April 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

North American Electric Reliability Council (NERC): A council formed in 1968 by the electric utility industry to promote the reliability and adequacy of bulk power supply in the electric utility systems of North America. The NERC Regions are:

- ECAR East Central Area Reliability Coordination Agreement
- 2) ERCOT Electric Reliability Council of Texas
- 3) FRCC Florida Reliability Coordinating Council
- 4) MAIN Mid-America Interconnected Network
- 5) MAAC Mid-Atlantic Area Council
- 6) MAPP Mid-Continent Area Power Pool
- 7) NPCC Northeast Power Coordinating Council
- 8) SERC Southeastern Electric Reliability Council
- 9) SPP Southwest Power Pool
- 10) WSCC Western Systems Coordinating Council

North American Industry Classification System (NAICS): A set of codes that describes the possible purposes of a facility.

Nuclear Electric Power: Electricity generated by an electric power plant whose turbines are driven by steam produced by the heat from the fission of nuclear fuel in a reactor.

Other Customers: Includes public street and highway lighting, other sales to public authorities, sales to railroads and railways, sales for irrigation, and interdepartmental sales.

Other Generation: Electricity originating from these sources: manufactured, supplemental gaseous fuel, propane, and waste gasses, excluding natural gas; biomass; geothermal; wind; solar thermal; photovoltaic; synthetic fuel; purchased steam; and waste oil energy sources.

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

value of the previous value; then this new number is multiplied by 100.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. *Note:* Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See Coke (Petroleum).

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Plant: A term commonly used either as a synonym for an industrial establishment or a generation facility or to refer to a particular process within an establishment.

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

Power Production Plant: All the land and land rights, structures and improvements, boiler or reactor vessel equipment, engines and engine-driven generator, turbo generator units, accessory electric equipment, and miscellaneous power plant equipment are grouped together for each individual facility.

Production (Electric): Act or process of producing electric energy from other forms of energy; also, the amount of electric energy expressed in watthours (Wh).

Propane: A normally gaseous straight-chain hydrocarbon, (C3H8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D 1835.

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

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

Receipts: Purchases of fuel.

Relative Standard Error: The standard deviation of a distribution divided by the arithmetic mean, sometimes multiplied by 100. It is used for the purpose of comparing the variabilities of frequency distributions but is sensitive to errors in the means.

Residential: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

Residual Fuel Oil: A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

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

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

Sales: The transfer of title to an energy commodity from a seller to a buyer for a price or the quantity transferred during a specified period.

Service Classifications (Sectors): Consumers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial and other.

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

Solar Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity. Electricity produced from solar energy heats a medium that powers an electricity-generating device.

State Power Authority: A nonprofit utility owned and operated by a state government agency, primarily involved in the generation, marketing, and/or transmission of wholesale electric power.

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

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

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

Sulfur: A vellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

Sulfur Content: The amount of sulfur contained in the fuel (except gas) in terms of percent by weight.

Supplemental Gaseous Fuel Supplies: Synthetic natural gas, propane-air, coke oven gas, refinery gas,

biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Fuel: A gaseous, liquid, or solid fuel that does not occur naturally. Synfuels can be made from coal (coal gasification or coal liquefaction), petroleum products, oil shale, tar sands, or plant products. Among the synfuels are various fuel gases, including but not restricted to substitute natural gas, liquid fuels for engines (e.g., gasoline, diesel fuel, and alcohol fuels) and burner fuels (e.g., fuel heating oils).

Terrawatt: One trillion watts.

Terrawatthour: One trillion kilowatthours.

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

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

Ultimate Consumer: A consumer that purchases electricity for its own use and not for resale.

Useful Thermal Output: The thermal energy made available in a combined heat or power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

Waste Coal: As a fuel for electric power generation, waste coal includes anthracite refuse or mine waste, waste from anthracite preparation plants, and coal recovered from previously mined sites.

Waste Gases: As a fuel for electric power generation, waste gasses are those gasses that are produced from gasses recovered from a solid-waste or wastewater treatment facility, or the gaseous by-products of oil-refining processes.

Waste Oil: As a fuel for electric power generation, waste oil includes recycled motor oil, and waste oil from transformers.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A Watt is equal to 1/746 horsepower.

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

Wind Energy: The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from the hub) that drive generators to produce electricity.

Year to Date: The cumulative sum of each month's value starting with January and ending with the current month of the data.