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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

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, April 2003

Generation and Consumption of Fuels. Total generation of electric power in April 2003 was 2 percent less than in April 2002. For the month coal generation was flat compared to April 2002, natural gas generation was down 11.2 percent and nuclear generation was down 2.8 percent.

Year-to-date, nuclear generation is down 2.8 percent and gas generation is down 6 percent compared to 2003. The slack has been taken up by coal generation (a 5.3 percent increase year to date), petroleum-fired power (a 54.3 percent jump) and hydroelectric power (a 1.3 percent increase).

During the month, 66 percent of electric power generation was produced at utility power plants, 30 percent by independent power producers, and the remainder at industrial and commercial combined heat and power plants. Utility-operated power plants consumed 78 percent of the coal for electric power generation in April 2003, compared to 21 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 37 percent by utilities. The balance of coal and gas consumption is attributable to combined heat and power plants.

Fuel Costs and Receipts, March 2003

Average crude oil prices in March fell about \$2-\$3 per barrel from the February average as spot prices declined at the onset of the war in Iraq. Nonetheless, for the first quarter of 2003, the average price of West Texas Intermediate (WTI) was about \$13-14 per barrel higher than the corresponding quarter one year ago. The volatility in oil prices reflects shifting perceptions about the progress of the Iraq War and civil unrest in Nigeria and Venezuela which disrupted oil shipments from those nations.

The spot price of natural gas remained historically and unseasonably high in March, in the \$7.00 to \$8.00 per million btu (mmbtu) range, as underground natural gas storage hit new lows for the end of March. By the end of the month, working natural gas in storage stood about 54 percent below end-March 2002 (the lowest end-March level in EIA records, which go back to 1976) and 42 percent below the previous 5-year March average.

Consistent with the factors described above, in March 2003, the average price paid by the electric power industry for natural gas was \$7.07 per mmbtu, compared to \$3.19 per mmbtu a year earlier (a 122 percent increase). The average price paid for petroleum was \$5.46 per mmbtu, compared to \$2.72 per mmbtu a year earlier (a 101 percent jump). Apparently in response to the relatively high price of natural gas, March 2003 receipts of natural gas by the electric power industry were down 14 percent from March 2002, while petroleum receipts rose 143 percent from their March 2002 level. The decrease in gas receipts also likely reflects the greater efficiency of new combined cycle gas-fired stations compared to older steam electric plants.

Receipts of coal were essentially flat compared to March 2002. Relative to March 2002, the cost of coal to the electric power industry rose by 2.6 percent.

Retail Sales, Revenue, and Average Revenue, April 2003

1

- Sales: April 2003 retail sales decreased by 1.4 percent compared to April 2002. The sales decrease was due to a warmer than normal weather pattern for most of the continental United States excluding the New England and Middle Atlantic regions. The residential, commercial, and industrial sectors declined by 2.4 percent, 1.7 percent, and 0.1 percent, respectively, compared to April 2002.
- **Revenue:** Despite the decrease in retail sales in April 2003 compared to April 2002, revenue grew by 3.1 percent. Residential, commercial, and industrial sector revenues grew by 2.8 percent, 3.3 percent, and 3.1 percent, respectively, over April 2002.
- Average Revenue: Average revenue (cents per kilowatt hour) in April 2003 increased by a significant 4.6 percent over April 2002. The residential sector average revenue increased by 5.4 percent, commercial sector by 5.1 percent, and industrial sector by 3.2 percent over the same period in 2002. The increases were mainly due to the higher cost of fuel.

Total Electric Power Industry Summary Statistics Table ES1.A.

					April							
			N	et Generatio	n and Consu	mption of Fu	els					
					Electric Po	wer Sector ¹		Combin	ed Heat and	Power Pro	ducers	
Items	Total	(All Sectors)		Electric	Electric Utilities		Independent Power Producers		Commercial ²		Industrial ³	
	Apr 2003	Apr 2002	% Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	
Net Generation (Thousand												
Coal ⁴	141,676	141,669	*	111,086	110,735	28,813	29,249	81	66	1,696	1,618	
Petroleum ⁵	8,148	7,497	8.7	4,694	5,155	3,049	1,934	23	22	381	386	
Natural Gas ⁶	43,341	48,793	-11.2	14,341	16,996	22,961	25,287	341	329	5,698	6,181	
Other Gases ⁷	734	1,000	-26.6	1	*	122	105	*	0	610	894	
Nuclear	56,776	58,437	-2.8	34,524	39,054	22,251	19,383					
Hydroelectric ⁸	24,448	23,900	2.3	21,836	21,164	2,187	2,335	12	14	414	387	
Other Renewables9	7,100	6,928	2.5	198	135	4,364	4,222	172	143	2,365	2,429	
Other Energy Sources10	498	379	31.3		0	67	*	2	*	428	379	
All Energy Sources	282,721	288,603	-2.0	186,681	193,239	83,815	82,516	632	575	11,593	12,274	
Consumption of Fossil Fuels												
Coal (1000 tons) ⁴	72,784	72,275	.7	56,547	55,929	15,266	15,413	36	37	934	896	
Petroleum (1000 bbls) ⁵	14,732	12,429	18.5	8,059	8,516	5,791	3,122	53	41	829	751	
Natural Gas (1000 Mcf) ⁶	365,031	437,164	-16.5	133,514	169,337	178,841	211,601	2,688	2,842	49,988	53,384	
Fuel Stocks (end-of-month)												
Coal (1000 tons) ¹¹	139,857	152,505	-8.3	113,077	124,147	25,818	26,945	139	109	822	1,303	
Petroleum (1000 bbls) ⁵	47,060	49,837	-5.6	29,077	29,729	16,604	18,572	130	147	1,248	1,389	
·		·			March	·		·			· <u></u>	

Receints	and	Cost	of For	scil Fuels	,

				Receipts	s and Cost of	rossii rucis					
					Electric Po	wer Sector		Combined Heat and Power Producers			
Items	Items Total (All Sectors)) Electric Utilitie		Utilities	Independent Power Producers		Commercial		Industrial	
	Mar 2003	Mar 2002	% Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002
Receipts											
Coal (1000 tons)4	72,055	72,214	2	55,723	57,216	15,205	13,961	29	35	1,098	1,002
Petroleum (1000 bbls) ⁵	19,781	8,152	142.7	13,329	4,661	5,885	2,843	50	5	517	642
Natural Gas (1000 Mcf) ⁷	355,470	414,914	-14.3	93,978	118,372	191,721	211,409	986	1,715	68,784	83,418
Cost (cents/million Btu) ¹²											
Coal ⁴	128.55	125.32	2.6	123.78	121.13	144.53	140.59	W	W	W	W
Petroleum ⁵	546.20	271.61	101.1	517.90	258.29	618.01	282.67	W	W	W	W
Natural Gas ⁷	706.93	318.99	121.6	728.35	343.22	683.27	321.99	492.54	342.11	749.66	273.89

April

Items	Total U.S. Electric Power Industry								
Items	Residential Commercial Industrial				All Sectors				
Retail Sales (Million kWh) ¹³									
Apr 2003	84,102	83,470	80,561	7,924	256,057				
Apr 2002	86,185	84,922	80,674	7,861	259,643				
Percent Change	-2.4	-1.7	1	.8	-1.4				
Retail Revenue (Million Dollars)									
Apr 2003	7,417	6,704	3,919	571	18,611				
Apr 2002	7,215	6,488	3,800	544	18,046				
Percent Change	2.8	3.3	3.1	5.0	3.1				
Average Revenue/kWh (Cents)									
Apr 2003	8.82	8.03	4.86	7.20	7.27				
Apr 2002	8.37	7.64	4.71	6.91	6.95				
Percent Change	5.4	5.1	3.2	4.2	4.6				

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. 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 Ouality 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.

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 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**

					ary through						
			N	et Generatio	n and Consui	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	
	2003	2002	% Change	2003	2002	2003	2002	2003	2002	2003	2002
Net Generation (Thousand											
Coal ⁴	633,062	601,052	5.3	491,213	473,712	134,279	120,478	343	317	7,227	6,545
Petroleum ⁵	41,368	26,814	54.3	21,313	17,259	17,910	7,839	239	110	1,906	1,605
Natural Gas ⁶	181,217	192,766	-6.0	54,093	63,540	100,130	100,677	1,366	1,380	25,628	27,170
Other Gases ⁷	3,272	3,772	-13.3	3	1	426	524	*	*	2,842	3,247
Nuclear	246,862	254,062	-2.8	152,176	168,592	94,686	85,469				
Hydroelectric8	85,810	84,705	1.3	77,481	76,837	6,585	6,542	32	32	1,712	1,293
Other Renewables9	26,824	27,354	-1.9	816	641	16,285	16,464	596	545	9,128	9,705
Other Energy Sources ¹⁰	1,631	1,576	3.5	0	0	201	141	4	*	1,426	1,435
All Energy Sources	1,220,046	1,192,102	2.3	797,096	800,583	370,501	338,134	2,581	2,384	49,869	51,000
Consumption of Fossil Fuels											
Coal (1000 tons) ⁴	324,073	306,102	5.9	249,412	240,090	70,550	62,292	165	162	3,946	3,557
Petroleum (1000 bbls) ⁵	73,555	46,342	58.7	36,608	28,791	32,529	14,198	556	207	3,862	3,145
Natural Gas (1000 Mcf) ⁶	1,528,762	1,685,312	-9.3	509,119	617,749	786,663	823,470	11,071	11,908	221,910	232,184

January	through	March
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				Receipts	and Cost of	Fossil Fuels					
					Electric Po	wer Sector		Combined Heat and Power Producers			
Items	Items Total (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	213,209	219,193	-2.7	167,159	173,786	43,169	42,123	106	110	2,775	3,175
Petroleum (1000 bbls) ⁵	49,821	22,427	122.1	31,862	12,686	16,353	8,076	202	32	1,405	1,633
Natural Gas (1000 Mcf) ⁷	1,036,429	1,151,130	-10.0	279,103	314,716	551,064	588,514	2,445	2,950	203,817	244,951
Cost (cents/million Btu) ¹¹											
Coal ⁴	127.13	126.55	.5	123.45	122.33	139.95	141.71	W	W	W	W
Petroleum ⁵	500.44	258.28	93.8	467.26	243.75	569.95	274.96	W	W	W	W
Natural Gas ⁷	615.55	298.33	106.3	627.28	321.89	615.80	296.86	492.88	326.47	599.17	269.00

January	

	Retail Sales, Retail Revenue and Average Revenue per Kilowatthour											
Items		Total U.	S. Electric Power Industr	y								
items	Residential	Commercial	Industrial	Other	All Sectors							
Retail Sales (Million kWh)12												
2003	421,585	348,550	317,728	33,259	1,121,122							
2002	397,453	339,987	316,951	31,766	1,086,157							
Percent Change	6.1	2.5	.2	4.7	3.2							
Retail Revenue (Million Dollars)												
2003	34,706	27,356	15,293	2,324	79,678							
2002	32,545	25,934	15,045	2,160	75,684							
Percent Change	6.6	5.5	1.7	7.6	5.3							
Average Revenue/kWh (Cents)												
2003	8.23	7.85	4.81	6.99	7.11							
2002	8.19	7.63	4.75	6.80	6.97							
Percent Change	.5	2.9	1.3	2.8	2.0							

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...

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."

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 Co	mbined Heat a	nd Power Prod	ucers1		
Items	Total Fuel Consumption		Fuel Consumption for Electric Generation		Fuel Consumption for Useful Thermal Output		Fuel Stocks End-of-Month	
	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
Current Month								
Coal (1000 tons) ²	17,644	17,722	16,237	16,346	1,408	1,375	26,780	28,357
Petroleum (1000 bbls) 3	8,043	5,066	6,673	3,913	1,371	1,153	17,982	20,108
Natural Gas (1000 Mcf) 4	291,868	334,750	231,517	267,827	60,351	66,923	NA	NA
Year to Date								
Coal (1000 tons) 2	80,801	72,126	74,661	66,011	6,140	6,115	26,780	28,357
Petroleum (1000 bbls) 3	43,526	22,551	36,947	17,550	6,579	5,000	17,982	20,108
Natural Gas (1000 Mcf) 4	1,279,619	1,348,364	1,019,644	1,067,563	259,975	280,801	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** Apr 2002 Apr 2003 Apr 2002 Apr 2003 Apr 2003 Apr 2002 Apr 2003 Apr 2002 **Current Month** 15,266 5,791 178,841 15,446 5,901 15,566 15,413 153 25,818 26,945 Coal (1000 tons) Petroleum (1000 bbls)³ 3,182 229,242 3,122 211,601 110 20,557 16,604 18,572 Natural Gas (1000 Mcf) 4

Year to Date 199,398 17,641 NA NA 71,298 33,206 872,679 Coal (1000 tons) 2 63,012 62,292 748 678 720 25,818 26,945 18,572 Petroleum (1000 bbls) 3....... 16,604 NA 32,529 14,198 444 14.642 Natural Gas (1000 Mcf) 4...... 899,423 786,663 823,470 86,016 75,953

			Commercia	ai Combined H	eat and Power	Producers		
Items	Total Fuel Consumption		Fuel Consumption for Electric Generation		Fuel Consumption for Useful Thermal Output		Fuel Stocks End-of-Month	
<u>, </u>	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
Current Month								
Coal (1000 tons) ²	110	102	36	37	74	65	139	109
Petroleum (1000 bbls) 3	86	74	53	41	34	34	130	147
Natural Gas (1000 Mcf) 4	5,085	5,923	2,688	2,842	2,397	3,081	NA	NA
Year to Date								
Coal (1000 tons) 2	508	474	165	162	343	312	139	109
Petroleum (1000 bbls) 3	833	336	556	207	276	129	130	147
Natural Gas (1000 Mcf) 4	22,333	24,508	11,071	11,908	11,261	12,599	NA	NA

			Industrial	l Combined He	at and Power I	Producers		
Items	Total Fuel C	onsumption	Fuel Consumption for Electric Generation		Fuel Consumption for Useful Thermal Output		Fuel Stocks End-of-Month	
	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
Current Month								
Coal (1000 tons) ²	2,089	2,054	934	896	1,154	1,158	822	1,303
Petroleum (1000 bbls) ³ .,	2,056	1,810	829	751	1,227	1,059	1,248	1,389
Natural Gas (1000 Mcf) 4	87,385	99,585	49,988	53,384	37,397	46,201	NA	NA
Year to Date								
Coal (1000 tons) ²	8,995	8,640	3,946	3,557	5,049	5,083	822	1,303
Petroleum (1000 bbls) 3	9,487	7,573	3,862	3,145	5,624	4,428	1,248	1,389
Natural Gas (1000 Mcf) 4	384,608	424,433	221,910	232,184	162,698	192,249	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

	Producer			Generating	Net Summer	Fnoray	Prime
Year/Month/Company	Type	Plant	State	Unit ID	Capacity (megawatts) 1	Energy Source	Mover
January							
Basin Electric Power Coop	Elec. Utility	Minot Wind Project	ND	MWP	26	WND	WT
Black Hills Corp		WYGEN	WY	1	85	SUB	ST
Black Hills Nevada Ops LLC		Las Vegas Cogeneration LP II	NV	GEN3	52	NG	CT
Black Hills Nevada Ops LLC		Las Vegas Cogeneration LP II	NV	GEN4	52	NG	CT
Black Hills Nevada Ops LLC		Las Vegas Cogeneration LP II	NV	GEN5	52	NG NG	CT
Black Hills Nevada Ops LLC		Las Vegas Cogeneration LP II	NV NV	GEN6 GEN7	52 24	NG NG	CT CA
Black Hills Nevada Ops LLC		Las Vegas Cogeneration LP II Las Vegas Cogeneration LP II	NV	GEN7 GEN8	24	NG NG	CA
Calpine Corp-Yuba City		Creed Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City		Feather River -Peaker	CA	CTG1	40	NG	GT
Calpine Corp-Yuba City		Goose Haven Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City		Lambie Energy Facility	CA	CT1	40	NG	GT
Calpine Corp-Yuba City		Wolfskill Energy Center	CA	CTG1	40	NG	GT
Conectiv Bethlehem Inc	IPP	Bethlehem Power Plant	PA	CTG5	102	NG	CT
Granger Electric Co		Grand Blanc	MI	4-5	1	LFG	IC
La Paloma Generating Co LLC		La Paloma Generating	CA	GEN1	258	NG	GT
La Paloma Generating Co LLC		La Paloma Generating	CA	GEN3	258	NG	GT
Mirant Las Vegas LLC		Apex Generating Station	NV	CTG1	150	NG	CT
Mirant Las Vegas LLC		Apex Generating Station	NV	CTG2	150	NG	CT
Mirant Las Vegas LLC		Apex Generating Station	NV MO	STG1	195	NG	CA
Monroe City City of		Monroe Monroe	MO MO	11 12	2 2	DFO DFO	IC IC
Panda Gila River LP	•	Panda Union Power Partners LP	AZ	CTG7	150	NG	GT
Panda Gila River LP		Panda Union Power Partners LP	AZ	CTG8	150	NG	GT
Panda Gila River LP		Panda Union Power Partners LP	AZ	ST9	237	NG	ST
RS Cogen		RS Cogen	LA	RS-4	60	NG	GT
RS Cogen		RS Cogen	LA	RS-5	168	NG	GT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG1	151	NG	CT
TPS-Arkansas Operations		Union Power	AR	CTG2	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	STG1	219	NG	CA
February	IDD	Dalla B Bl	D.4	GTIG (120	NG	C/T
Conectiv Bethlehem Inc.		Bethlehem Power Plant	PA	CTG6	120	NG NG	CT
Deer Park Energy Center LP		Deer Park Energy Center	TX TX	CTG1 U1	155 146	NG NG	CT CT
FPLE Forney LP		Forney Energy Center Forney Energy Center	TX	U2	146	NG	CT
FPLE Forney LP		Forney Energy Center	TX	U3	146	NG 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
University of Massachusetts		University of Massachusetts Me	MA	GEN3	5	NG	ST
March							
AES Granite Ridge		AES Granite Ridge	NH	CT11	262	NG	CT
AES Granite Ridge		AES Granite Ridge	NH	CT12	262	NG	CT
AES Granite Ridge		AES Granite Ridge	NH	STG	273	NG	CA
Calpine Corp		Los Esteros Critical Energy Ct	CA	CTG1	38	NG	GT
Calpine Corp		Los Esteros Critical Energy Ct	CA	CTG2	38	NG	GT
Calpine Corp		Los Esteros Critical Energy Ct Los Esteros Critical Energy Ct	CA CA	CTG3 CTG4	38 38	NG NG	GT GT
Calpine Corp La Paloma Generating Co LLC		La Paloma Generating	CA	GEN2	258	NG NG	GT
La Paloma Generating Co LLC	IPP	La Paloma Generating	CA	GEN2 GEN4	255	NG	GT
Redwood Falls Public Util Comm		South Generation	MN	3	2	DFO	IC
Redwood Falls Public Util Comm		South Generation	MN	4	2	DFO	IC
Redwood Falls Public Util Comm		South Generation	MN	5	2	DFO	IC
Reliant Energy Renewables Inc		Reliant Energy Renewables - Co	TX	UNT1	1	LFG	OT
Reliant Energy Renewables Inc		Reliant Energy Renewables - Co	TX	UNT2	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Energy Renewables - Co	TX	UNT3	1	LFG	OT
Reliant Energy Renewables Inc		Reliant Energy Renewables - Co	TX	UNT4	1	LFG	OT
Reliant Energy Renewables Inc		Reliant Energy Renewables Atas	TX	GEN2	1	LFG	OT
Sierra Pacific Industries Inc		Aberdeen	WA	GEN1	17	WDS	ST
Tri-State G & T Assn Inc		Pyramid	NM	1	40	NG	GT
Tri-State G & T Assn Inc	,	Pyramid	NM	2	40	NG	GT
		Scott Wood	VA	ST2	1	WDS	ST

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

	1						
Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) ¹	Energy Source	Prime Mover
Wood Scott	IPP	Scott Wood	VA	ST3	3	WDS	ST
April							
Anita City of	Elec. Utility	Anita	IA	6	2	DFO	IC
Colorado Springs City of	Elec. Utility	Front Range Power Co., LLC	CO	1	132	NG	CT
Colorado Springs City of	Elec. Utility	Front Range Power Co., LLC	CO	2	132	NG	CT
Colorado Springs City of	Elec. Utility	Front Range Power Co., LLC	CO	3	200	NG	CA
Conectiv Bethlehem Inc	IPP	Bethlehem Power Plant	PA	CTG7	120	NG	CT
FPLE Forney LP	IPP	Forney Energy Center	TX	ST1	344	NG	CA
Grand Island City of	Elec. Utility	C W Burdick	NE	GT2	34	NG	GT
Grand Island City of	Elec. Utility	C W Burdick	NE	GT3	34	NG	GT
GWF Power Systems LP	IPP	Tracy Peaker	CA	TPP1	85	NG	GT
GWF Power Systems LP	IPP	Tracy Peaker	CA	TPP2	85	NG	GT
High Desert Power Project LLC	IPP	High Desert Power Project LLC	CA	CTG1	149	NG	CT
High Desert Power Project LLC	IPP	High Desert Power Project LLC	CA	CTG2	149	NG	CT
High Desert Power Project LLC	IPP	High Desert Power Project LLC	CA	CTG3	149	NG	CT
High Desert Power Project LLC	IPP	High Desert Power Project LLC	CA	STG1	284	NG	CA
Sithe New England Holdings LLC	IPP	Mystic	MA	G81	224	NG	CT
Sithe New England Holdings LLC	IPP	Mystic	MA	G82	224	NG	CT
Sithe New England Holdings LLC	IPP	Mystic	MA	G85	241	NG	CA
Tri-State G & T Assn Inc	Elec. Utility	Pyramid	NM	4	40	NG	GT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG3	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG4	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	STG2	219	NG	CA
May	IDD	0 0 15 0 1		CT01	07	NG	CT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT01	97	NG	GT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT02	97	NG	GT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT03	97	NG	GT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT04	97	NG	GT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT05	97	NG	GT
Aquila Services Inc	IPP	Goose Creek Energy Center	IL	CT06	97	NG	GT
Attica City of	Elec. Utility	Attica	KS	4A	7	DFO	IC CT
Blue Spruce Energy Center LLC	IPP	Blue Spruce Energy Center	CO	CT01	199	NG NG	GT
Blue Spruce Energy Center LLC	IPP	Blue Spruce Energy Center	CO	CT02	199		GT
Brazos Valley Energy	IPP IPP	Brazos Valley Generating Facil	TX TX	CTG1 CTG2	166	NG NG	GT GT
Brazos Valley Energy	IPP	Brazos Valley Generating Facil	TX	STG1	166 193	NG NG	CA
Brazos Valley Energy	IPP	Brazos Valley Generating Facil		CTG1	40	NG NG	GT
Calpine Corp - Riverview	IPP	Riverview Energy Center Bethlehem Power Plant	CA PA	STG4	198	NG NG	CA
Duke Energy Corp		Mill Creek	SC	5	70	NG	GT
Duke Energy Corp	Elec. Utility Elec. Utility	Mill Creek	SC	6	70	NG NG	GT
	Elec. Utility	Mill Creek	SC	7	70	NG	GT
Duke Energy Corp	Elec. Utility	Mill Creek	SC	8	70	NG NG	GT
FPLE Forney LP	IPP	Forney Energy Center	TX	U4	146	NG	CT
FPLE Forney LP	IPP	Forney Energy Center	TX	U5	146	NG NG	CT
FPLE Forney LP	IPP	Forney Energy Center Forney Energy Center	TX	U6	146	NG	CT
Granite Falls City of	Elec. Utility	Granite Falls 2	MN	1	2	DFO	IC
Granite Falls City of	Elec. Utility	Granite Falls 2 Granite Falls 2	MN	2	2	DFO	IC
Granite Falls City of	Elec. Utility	Granite Falls 2 Granite Falls 2	MN	3	2	DFO	IC
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	CTG1	158	NG	CT
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	CTG2	158	NG	CT
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	CTG3	158	NG	CT
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	CTG4	158	NG	CT
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	STG1	273	NG	CA
Kiowa Power Partners LLC	IPP	Kiamichi Energy Facility	OK	STG2	273	NG	CA
MidAmerican Energy Co	Elec. Utility	Greater Des Moines	IA	GT1	181	NG	GT
MidAmerican Energy Co	Elec. Utility	Greater Des Moines Greater Des Moines	IA	GT2	180	NG	GT
MDU Resources Group Inc	Elec. Utility	Glendive	MT	GT-2	36	NG	GT
Ocean Peaking Power LP	IPP	Ocean Peaking Power LP	NJ	OPP3	163	NG	GT
Ocean Peaking Power LP	IPP	Ocean Peaking Power LP	NJ	OPP4	163	NG	GT
Oglethorpe Power Corp	Elec. Utility	Talbot County Energy	GA	5	103	NG	GT
				6			GT
	Elec Utility	Talbot County Energy	(TA				
Oglethorpe Power Corp Omaha Public Power District	Elec. Utility Elec. Utility	Talbot County Energy Cass County	GA NE	CT-1	103 176	NG NG	GT

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

(Continuea)	,						
Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) 1	Energy Source	Prime Mover
Panda Gila River LP	IPP	Panda Union Power Partners LP	AZ	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	IPP	Washington County	GA	101G	173	NG	GT
Progress Energy Ventures	IPP	Washington County	GA	102G	173	NG	GT
Progress Energy Ventures	IPP	Washington County	GA	103G	173	NG	GT
Progress Energy Ventures	IPP	Washington County	GA	104G	173	NG	GT
Progress Energy Ventures	IPP	Washington County	GA	105G	173	NG	GT
Reliant Energy Renewables Inc	IPP	Reliant Energy Renewables Atas	TX	GEN1	1	LFG	IC
Reliant Energy Renewables Inc	IPP	Reliant Energy Renewables Atas	TX	GEN3	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Energy Renewables Atas	TX	GEN4	1	LFG	OT
Reliant Energy Renewables Inc	IPP	Reliant Energy Renewables Atas	TX	GEN5	1	LFG	OT
Salt River Proj Ag I & P Dist	Elec. Utility	Arizona Falls	AZ	AH1	1	WAT	HY
St Louis City of	Elec. Utility	St Louis	MI	8	2	DFO	IC
St Louis City of	Elec. Utility	St Louis	MI	9	1	DFO	IC
Story City City of	Elec. Utility	Story City	IA	4A	3	DFO	IC
Tampa Electric Co	Elec. Utility	Bayside Power	FL	1	685	NG	CC
Tenaska Alabama II Partners LP	IPP	Tenaska Central Alabama Genera	AL	CTG1	158	NG	CT
Tenaska Alabama II Partners LP	IPP	Tenaska Central Alabama Genera	AL	CTG2	158	NG	CT
Tenaska Alabama II Partners LP	IPP	Tenaska Central Alabama Genera	AL	CTG3	158	NG	CT
Tenaska Alabama II Partners LP	IPP	Tenaska Central Alabama Genera	AL	ST1	336	NG	CA
Tri-State G & T Assn Inc	Elec. Utility	Pyramid	NM	3	40	NG	GT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG5	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	CTG6	151	NG	CT
TPS-Arkansas Operations	IPP	Union Power	AR	STG3	219	NG	CA
Williams Energy Services	CHP	Williams Refining & Marketing	TN	PO36	72	NG	GT
Wisconsin Public Service Corp June	Elec. Utility	Pulliam	WI	31	7	NG	GT
Alabama Power Co	Elec. Utility	Autaugaville	AL	1CT	159	NG	CT
Alabama Power Co	Elec. Utility	Autaugaviile	AL AL	1CT1	159	NG	CT
Alabama Power Co	Elec. Utility	Autaugaviile	AL	1ST	243	NG	CA
Alabama Power Co	Elec. Utility	Goat Rock	AL	2CT	149	NG	CT
Alabama Power Co	Elec. Utility	Goat Rock 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.	CHP	Domino Sugar Arabi	LA	TG2	5	NG	ST
Caledonia Operating Serv LLC	IPP	Caledonia	MS	CTG1	137	NG	CT
Caledonia Operating Serv LLC	IPP	Caledonia	MS	CTG2	137	NG	CT
Caledonia Operating Serv LLC	IPP	Caledonia	MS	CTG3	137	NG	CT
Caledonia Operating Serv LLC	IPP	Caledonia	MS	STG1	91	NG	CA
Caledonia Operating Serv LLC	IPP	Caledonia	MS	STG2	91	NG	CA
Caledonia Operating Serv LLC	IPP	Caledonia	MS	STG3	91	NG	CA
Calhoun Power Co LLC	IPP	Calhoun Power Co I LLC	AL	CAL1	162	NG	GT
Calhoun Power Co LLC	IPP	Calhoun Power Co I LLC	AL	CAL2	162	NG	GT
Calhoun Power Co LLC	IPP	Calhoun Power Co I LLC	AL	CAL3	162	NG	GT
Calhoun Power Co LLC	IPP	Calhoun Power Co I LLC	AL	CAL4	162	NG	GT
Calpine Construction F Corp LP	IPP	Morgan Energy Center	AL	CTG1	154	NG	CT
Calpine Construction F Corp LP	IPP	Morgan Energy Center	AL	CTG2	154	NG	CT
Calpine Construction F Corp LP	IPP	Morgan Energy Center	AL	CTG3	154	NG	CT
Calpine Construction F Corp LP	IPP	Morgan Energy Center	AL	STG1	195	NG	CA
Calpine Construction Fin Co LP	IPP	Decatur Cogen	AL	CTG3	155	NG	CT
Calpine Corp- Oneta	IPP	Oneta Energy Center	OK	CTG3	151	NG	CT
Calpine Corp- Oneta		Oneta Energy Center	OK	CTG4	151	NG	CT
	IPP	Oneta Energy Center	OK	STG2	219	NG	CA
Calpine Corp- Oneta	IPP						
Calpine Corp- Oneta	Elec. Utility	Coggon	IA	IC5	2	DFO	IC
Calpine Corp- Oneta						DFO NG	

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

(Continueu)	ı	1	1	1			1
Year/Month/Company	Producer Type	Plant	State	Generating Unit ID	Net Summer Capacity (megawatts) ¹	Energy Source	Prime Mover
Duke Energy Fayette LLC	IPP	Fayette Energy Facility	PA	STG1	271	NG	CA
Duke Energy Hanging Rock LLC	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
Florida Power & Light Co	Elec. Utility	Fort Myers	FL	CT1	154	NG	GT
			FL FL	CT2		NG NG	GT
Florida Power & Light Co	Elec. Utility	Fort Myers			154		
Geneseo City of	Elec. Utility	Geneseo	IL	6A	3	NG	IC CT
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	Elec. Utility	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
	Elec. Utility	Pella Peaking	IA	1	2	DFO	IC
Pella City of	2	2	IA IA	10	2	DFO	IC IC
Pella City of	Elec. Utility	Pella Peaking		10			IC IC
Pella City of	Elec. Utility	Pella Peaking	IA		2	DFO	
Pella City of	Elec. Utility	Pella Peaking	IA	12	2	DFO	IC
Pella City of	Elec. Utility	Pella Peaking	IA	13	2	DFO	IC
Pella City of	Elec. Utility	Pella Peaking	IA	14	2	DFO	IC
Pella City of	2	Pella Peaking	IA	2	2	DFO	IC
Pella City of		Pella Peaking	IA	3	2	DFO	IC
Pella City of	Elec. Utility	Pella Peaking	IA	4	2	DFO	IC
Pella City of	Elec. Utility	Pella Peaking	IA	5	2	DFO	IC
Progress Energy Ventures	IPP	Rowan	NC	STG	168	NG	CA
Progress Energy Ventures	IPP	Rowan	NC	4	172	NG	CT
Progress Energy Ventures	IPP	Rowan	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	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 Southaven Energy LLC	MS	STG3	91	NG NG	CA CA
					2		IC IC
TBS Properties	CHP	CNN Center	GA	D4_3		DFO	
TBS Properties	CHP	CNN Center	GA	D5_2	2	DFO	IC 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
Year-to-Date Capacity of New Units		-	-	-	27,481		
Year-to-Date Capacity of Retired Units		. 		_			
Year-to-Date U.S. Capacity		-	-	-	930,207		

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
Planned							
0003							
July					14,042		
August		 			5,210		
September					3,777		
October					5,218		
November					1,278		
December					4,248		
004					1,210		
January					1,656		
February					226		
March					4,459		
April					3,082		
May					4,707		
June					11,457		

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 April 2003 (Thousand Megawatthours)

\	i ilousailu ivi	1	1			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
1998	1,873,516	128,800	531,257	13,492	673,702	318,868	77,088	3,571	3,620,295
1999	1,881,087	118,061	556,396	14,126	728,254	313,439	79,423	4,024	3,694,810
2000	1,966,265	111,221	601,038	13,955	753,893	270,034	80,906	4,794	3,802,105
2001	1,900,203	111,221	001,036	13,733	133,073	270,034	00,700	4,794	3,002,103
	177 207	10 112	42 200	710	69.707	10.262	6.625	201	222.402
January		18,112	42,389	718	68,707	18,263	6,635	381	332,493
February		10,342	37,967	676	61,272	16,766	5,850	332	282,940
March		11,733	44,364	769	62,141	19,704	6,386	341	300,707
April		10,863	45,843	698	56,003	17,217	6,422	362	278,079
May		10,390	50,934	785	61,512	18,553	6,353	371	300,492
June		11,823	57,603	733	68,023	19,954	6,580	362	327,694
July		11,042	73,030	840	69,166	17,208	6,872	394	357,614
August		14,229	78,410	848	68,389	18,199	6,913	428	370,533
September		7,342	60,181	767	63,378	14,328	6,356	417	306,929
October		6,534	56,376	737	60,461	14,619	6,644	431	294,734
November		5,931	44,491	699	62,342	14,602	6,305	448	278,934
December		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		6,079	48,656	995	70,926	20,893	7,168	415	319,385
February		5,314	44,343	809	61,658	19,552	6,282	391	280,118
March		7,924	50,975	969	63,041	20,360	6,977	391	303,995
April		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									
January	180,632	12,338	48,684	908	69,211	18,954	6,432	344	337,504
February		10,560	43,291	730	60,942	18,856	6,038	256	296,735
March		10,323	45,901	900	59,933	23,552	7,254	533	303,087
April		8,148	43,341	734	56,776	24,448	7,100	498	282,721
Total		41,368	181,217	3,272	246,862	85,810	26,824	1,631	1,220,046
Year to Date	,	-,	- ,	- /	-,	,		,	, -,
2001	622,962	51,050	170,563	2,861	248,123	71,950	25,294	1,416	1,194,219
2002		26,814	192,766	3,772	254,062	84,705	27,354	1,576	1,192,102
2003		41,368	181,217	3,272	246,862	85,810	26,824	1,631	1,220,046
		71,500	101,417	3,414	270,002	03,010	20,027	1,031	1,220,040
Rolling 12 Months		100 (44	661 222	0.050	774765	220 002	00.046	4 050	2 724 527
2002	, ,	100,644 104,411	661,333 674,290	9,950 11,615	774,765 772,864	220,893 255,977	80,046 83,278	4,850 5,607	3,734,527 3,866,496
2003									

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.

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

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 April 2003 (Thousand Megawatthours)

	Thousand 11	legawattilouis	,		ı				
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		111,463	264,172		612,565	275,519	10,137		2,825,023
1992		88,916	263,872		618,776	239,559	10,200		2,797,219
1993		99,539	258,915		610,291	265,063	9,565		2,882,525
1994		91,039	291,115		640,440	243,693	8,933		2,910,712
1995		60,844	307,306		673,402	293,653	6,409		2,994,529
1996		67,346	262,730		674,729	327,970	7,214		3,077,442
1997		77,753	283,625		628,644	337,234	7,462		3,122,523
1998	, ,	110,158	309,222		673,702	304,403	7,206		3,212,171
1999		86,929	296,381		725,036	293,932	3,716		3,173,674
2000		72,180	290,715		705,433	248,195	2,241		3,015,383
	1,090,019	72,100	290,/15		705,433	240,195	2,241		3,015,363
2001	1.42.056	11.074	15.550		40.076	16.501	217		226.467
January		11,374	15,553		48,876	16,591	217		236,467
February		5,985	13,533		43,547	15,099	184		199,802
March		6,742	16,649		43,477	17,865	206		211,942
April		6,822	20,528		39,042	15,107	199		197,499
May		6,968	22,552		43,312	16,682	153		215,508
June		7,753	25,724		47,850	18,097	178		233,622
July		7,215	34,660		48,447	15,816	168		253,400
August		8,929	34,997		48,266	17,032	183		258,901
September		5,204	25,258		43,857	13,343	171		214,236
October	,	4,245	23,085		41,177	13,634	181		204,307
November		3,746	15,778		41,415	13,555	155		192,518
December		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		4,005	15,797	*	46,960	19,585	167		217,754
February		3,140	14,198	*	40,348	17,839	156		188,303
March		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									
January	139,501	6,204	13,994	1	42,871	17,153	209		219,933
February		4,899	12,299	1	37,995	17,349	189		193,289
March		5,515	13,460	1	36,786	21,143	220		197,193
April		4,694	14,341	1	34,524	21,836	198		186,681
Total		21,313	54,093	3	152,176	77,481	816		797,096
Year to Date	· ·								
2001	508,115	30,923	66,263	0	174,941	64,663	806		845,711
2002		17,259	63,540	1	168,592	76,837	641		800,583
2003		21,313	54,093	3	152,176	77,481	816		797,096
Rolling 12 Months		21,010	5-1,075	J	152,170	77,701	010		171,070
2002		65,244	261,710	1	527,858	202,274	1,987		2,584,818
2003	, ,	61,448	221,496	5	490,964	233,665	2,214		2,542,430
4003	1,332,030	01,440	221,470	3	470,704	233,003	4,414		4,344,430

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.

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

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 April 2003 (Thousand Megawatthours)

	(Thousand IV	legawatthours)						
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		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		7,302	111,873	1,927		9,033	36,213	213	199,702
1996		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		24,610	176,615	1,607	3,218	14,635	44,548	139	356,309
2000		33,012	227,263	2,028	48,460	17,604	47,162	125	622,146
2001									
January	31,447	6,022	19,707	40	19,831	1,431	3,789		82,269
February		3,832	18,103	42	17,725	1,425	3,436		71,169
March		4,465	20,804	45	18,664	1,495	3,837		75,758
April		3,594	18,886	43	16,961	1,820	3,820		68,356
May		2,965	21,731	51	18,200	1,570	3,936		72,658
June		3,660	25,130	51	20,173	1,559	4,085		81,526
July		3,373	30,886	59	20,719	1,145	4,205		90,434
August		4,842	35,696	57	20,123	847	4,128		97,251
September		1,722	27,754	47	19,521	738	3,816		79,646
October		1,836	26,062	44	19,284	775	3,849		77,084
November		1,774	21,716	46	20,927	846	3,725		73,637
December		2,157	24,031	60	22,490	1,176	4,022		80,320
Total		40,241	290,506	586	234,619	14,826	46,648		950,107
2002	,,,,,,	14,2.12				- 1,0_0	10,010		,
January	31,190	1,604	25,196	179	23,966	1,024	4,266	45	87,470
February		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		2,015	34,598	95	23,384	2,093	4,601	36	98,918
July		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		2,062	37,281	105	22,622	691	4,085	56	100,873
October		2,367	30,317	154	21,260	916	4,046	21	91,712
November		2,030	24,625	124	22,943	1,377	3,829	13	88,128
December		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
Total	134,279	17,910	100,130	426	94,686	6,585	16,285	201	370,501
Year to Date									
2001		17,913	77,500	171	73,182	6,171	14,882		297,552
2002		7,839	100,677	524	85,469	6,542	16,464	141	338,134
2003	134,279	17,910	100,130	426	94,686	6,585	16,285	201	370,501
Rolling 12 Months	Ending in April								
2002		30,168	313,683	938	246,907	15,198	48,230	141	990,690
2003	403,403	37,291	369,034	1,356	281,900	17,785	50,569	514	1,161,852

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.

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

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 April

(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									
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
August	107	41	829			7	138	*	1,121
September	91	29	665			4	164		953
October	81	29	390			3	178		681
November	83	26	267			3	149		528
December	91	49	309			4	154		607
Total 2003	1,031	379	5,442	*		84	1,778	*	8,714
January	90	98	376	*		6	133	*	703
February	86	77	293	*		6	122	*	584
March	85	42	356	*		9	168	2	662
April	81	23	341	*		12	172	2	632
Total	343	239	1,366	*		32	596	4	2,581
Year to Date									
2001	322	170	1,324	*		26	438	*	2,280
2002	317	110	1,380	*		32	545	*	2,384
2003	343	239	1,366	*		32	596	4	2,581
Rolling 12 Months E	nding in April								
2002	990	379	4,490	*		73	1,589	*	7,520
2003	1,057	508	5,428	*		84	1,829	4	8,911

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.

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

(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		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									
January	1,895	654	6,767	678		234	2,518	381	13,128
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
October	1,773	430	5,996	817		320	2,432	706	12,475
November	1,709	413	6,012	784		460	2,413	353	12,144
December	1,812	438	5,904	798		550	2,320	389	12,211
Total	20,672	4,863	79,874	10,659		4,025	29,244	5,098	154,435
2003									
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
Total	7,227	1,906	25,628	2,842		1,712	9,128	1,426	49,869
Year to Date									
2001	6,791	2,045	25,475	2,690		1,091	9,168	1,416	48,676
2002	6,545	1,605	27,170	3,247		1,293	9,705	1,435	51,000
2003	7,227	1,906	25,628	2,842		1,712	9,128	1,426	49,869
Rolling 12 Months I			- , -	,-			., .		. ,
2002	19.889	4,853	81,450	9,011		3,348	28,240	4,709	151,499
2003	21,354	5,164	78,332	10,255		4,444	28,666	5,089	153,303

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.

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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.

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

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	Tot	tal (All Secto		Electric	Utilities		ent Power ucers	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	9,721	9,284	4.7	414	1,510	8,795	7,063	NM	NM	472	650
Connecticut	,	2,280	16.7	NM	NM	2,640	2,258	NM	NM	NM	NM
Maine	,	1,655	-8.5	NM	NM	1,099	1,068	17	18	397	569
Massachusetts		3,042	10.8	NM	NM	3,319	2,966	NM	NM	NM	NM
New Hampshire		1,395	3	362	1,131	1,001	235	NM	NM	NM	NM
Rhode Island		458	-45.7	NM	NM	244	455	NM	NM	NM	NM
Vermont		456	17.8	43	373 5 359	491	82			NM 504	NM
Middle Atlantic	28,877	29,771	-3.0	5,388	5,258	22,827	23,642	78	92	584	779 NM
New Jersey New York		4,129	-8.0	122	103	3,547	3,732	NM NM	NM NM	NM 174	NM 180
Pennsylvania		10,217 15,425	-4.8 5	3,125 2,142	3,000 2,155	6,397 12,883	6,990 12,920	NM	NM	290	319
East North Central	45,966	47,400	-3.0	30,856	31,373	14,220	14,942	93	84	798	1,001
Illinois		14,027	1.5	1,394	1,186	12,620	12,575	NM	NM	214	248
Indiana		8,849	5.8	8,852	7,989	292	468	NM	NM	204	375
Michigan	,	9,085	-11.9	7,034	7,700	793	1,210	50	37	123	138
Ohio		11,101	-10.8	9,453	10,495	421	561	NM	NM	NM	NM
Wisconsin		4,337	2.6	4,124	4,003	94	128	NM	NM	223	196
West North Central	21,477	21,360	.5	20,626	20,535	447	462	NM	NM	373	334
Iowa		2,987	6.5	2,952	2,776	118	111	NM	NM	103	93
Kansas		3,076	17.6	3,567	3,023	49	50	NM	NM	NM	NM
Minnesota		4,022	2.4	3,695	3,635	173	172	NM	NM	241	205
Missouri		5,911	-3.5	5,576	5,757	107	129	11	10	NM	NM
Nebraska		2,446	-20.3	1,944	2,443	NM	NM	NM	NM	NM	NM
North Dakota		2,248	6	2,224	2,231					NM	NM
South Dakota	. 671	670	*	671	670						
South Atlantic	58,222	57,198	1.8	46,799	46,934	9,573	8,468	61	55	1,788	1,742
Delaware		479	13.1	3	21	504	426			NM	NM
District of Columbia		23	-96.7			1	23				
Florida		15,242	6	13,413	13,315	1,269	1,408	NM	NM	457	511
Georgia		9,111	5.7	8,663	8,439	544	201	NM	NM	426	471
Maryland		3,248	18.8	NM	NM	3,807	3,239	NM	NM	47	200
North Carolina		9,525	-3.6	8,265	8,659	548	564	NM	NM	358	298
South Carolina		7,100 5,539	7.3 -11.4	7,448 3,855	6,903 4,529	16 836	74 800	NM 39	NM 34	152 177	119 176
Virginia West Virginia		6,930	5.8	5,150	5,065	2,048	1,733		34 	NM	NM
East South Central	. 7,330 26,257	28,371	-7.5	23,909	26,046	1,443	1,733	NM	NM	897	983
Alabama		9,260	.5	8,601	8,696	215	47	14141		487	517
Kentucky		7,428	-4.6	6,215	6,427	852	950		3	NM	NM
Mississippi	,	3,943	-6.5	3,153	3,439	369	312	NM	NM	165	190
Tennessee	,	7,740	-20.2	5,939	7,484	NM	NM	NM	NM	223	228
West South Central	41,664	43,508	-4.2	19,972	22,334	16,554	16,068	154	44	4,984	5,062
Arkansas	,	3,772	-11.0	2,916	3,479	261	122	NM	NM	179	170
Louisiana		6,401	-4.7	2,675	3,637	1,396	1,347	119	2	1,910	1,414
Oklahoma		4,313	1.0	3,753	3,904	499	312	NM	NM	105	96
Texas	,	29,022	-4.0	10,627	11,314	14,399	14,287	NM	NM	2,791	3,382
Mountain	23,306	23,979	-2.8	19,937	20,493	3,175	3,288	NM	NM	173	175
Arizona	6,416	6,905	-7.1	5,503	6,242	880	646	NM	NM	32	16
Colorado	3,436	3,483	-1.3	3,182	3,143	235	319	NM	NM	NM	NM
Idaho		990	6.9	910	815	95	120			53	55
Montana		2,123	-23.0	396	363	1,233	1,754			6	5
Nevada		1,939	2.7	1,420	1,600	571	339				
New Mexico	,	2,542	4.0	2,594	2,492	34	27	NM	NM	NM	NM
Utah		2,908	3.2	2,957	2,860	25	26	NM	NM	NM	NM
Wyoming		3,089	1.1	2,976	2,978	102	56			NM	NM
Pacific Contiguous	25,809	26,356	-2.1	17,773	17,684	6,478	7,066	NM	NM	1,421	1,442
California		13,724	-8.1	6,196	6,376	5,019	5,902	NM	NM	1,272	1,298
Oregon		3,930	7.0	3,756	3,483	380	374	NM NM	NM NM	67	71
Washington		8,703	3.4	7,821	7,825	1,079	789	NM NM	NM NM	82	73
Pacific Noncontiguous	1,423	1,374	3.5 .7	1,004	1,072	303 NM	186 NM	NM NM	NM NM	105	105 70
Alaska		561 813	5.5	464 540	463 610	NM 285	NM 168	NM 	NM 	73 32	70 35
Hawaii	282,721	288,603	-2.0	186,681	193,239	83,815	82,516	632	575	11,593	12,274
U.S. IUIAI	202,721	200,003	-2.0	100,001	173,439	03,013	02,510	032	3/3	11,595	12,2/4

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.

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

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

	Total (All Sectors) 2003 2002 Percent Change				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	Indus	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	40,961	38,882	5.3	2,300	6,354	36,156	29,773	231	282	2,274	2,473
Connecticut	10,332	9,514	8.6	NM	NM	10,238	9,420	NM	NM	NM	NM
Maine	6,545	6,870	-4.7	NM	NM	4,523	4,658	54	60	1,967	2,150
Massachusetts		12,864	13.4	117	46	14,189	12,481	130	196	NM	NM
New Hampshire Rhode Island	5,890 1,574	5,492	7.3	1,967 NM	4,734 NM	3,834 1,549	655 2,257	NM NM	NM NM	NM NM	NM NM
Vermont	2,036	2,269 1,873	-30.6 8.7	202	1,563	1,823	301	INIVI	NM 	NM 11	NM 8
Middle Atlantic	129,909	127,108	2.2	22,868	22,523	104,293	101,112	324	336	2,424	3,137
New Jersey		18,570	1.3	689	386	17,568	16,986	NM	NM	508	1,143
New York	44,118	44,977	-1.9	13,306	12,720	29,998	31,379	160	146	655	731
Pennsylvania	66,979	63,561	5.4	8,874	9,417	56,726	52,747	118	134	1,261	1,263
East North Central	205,137	195,301	5.0	138,111	135,600	63,102	55,404	355	347	3,569	3,950
Illinois	63,164	56,730	11.3	6,625	8,990	55,459	46,745	NM	NM	1,011	916
Indiana	40,401	38,232	5.7	38,119	35,103	1,220	1,554	NM	NM	989	1,501
Michigan		35,921	2	31,058	30,493	4,129	4,720	163	141	508	566
Ohio		46,683	2	44,545	44,552	1,912	1,946	NM	NM	NM	NM 700
Wisconsin	19,108	17,734	7.7	17,763	16,461	382	439	NM	NM	918	789
West North Central Iowa	96,557	91,837	5.1 1.4	93,449	88,877	1,373	1,569 420	NM NM	NM NM	1,607 350	1,273 376
Kansas	,	13,557 14,360	7.0	12,967 15,126	12,720 14,150	386 159	197	NM	NM	80	11
Minnesota	17,602	17,036	3.3	15,120	15,489	642	761	NM	NM	1,046	743
Missouri	27.410	24,139	13.6	27,122	23,856	183	188	41	28	NM	NM
Nebraska	9,552	10,160	-6.0	9,528	10,136	NM	NM	NM	NM	NM	NM
North Dakota	10,510	10,219	2.8	10,459	10,159					NM	NM
South Dakota	2,371	2,367	.2	2,371	2,367						
South Atlantic	249,008	234,389	6.2	199,632	191,799	42,001	35,136	332	247	7,043	7,206
Delaware	2,779	1,512	83.9	32	59	2,579	1,320			169	132
District of Columbia	36	38	-4.6			36	38				
Florida	59,230	57,802	2.5	52,543	50,611	5,177	5,057	NM	NM	1,478	2,101
Georgia	39,047	37,518	4.1	36,225	35,200	1,157	445	NM	NM	1,664	1,872
Maryland	17,217	13,488	27.6	NM	NM	17,016	13,461	NM	NM NM	176	1 202
North Carolina South Carolina	42,790 31,978	38,234 31,140	11.9 2.7	38,972 31,260	34,599 30,283	2,137 103	2,319 277	NM NM	NM NM	1,646 600	1,282 563
Virginia	23,906	23,701	.9	19,020	20,371	3,932	2,505	241	152	713	672
West Virginia	32,025	30,956	3.5	21,564	20,668	9,864	9,713	2.1		597	575
East South Central	115,225	118,302	-2.6	106,494	109,017	4,911	5,188	NM	NM	3,775	4,021
Alabama	41,824	39,757	5.2	39,246	37,458	651	190			1,927	2,108
Kentucky	30,621	30,992	-1.2	27,290	26,982	3,177	3,776	9	37	146	197
Mississippi		15,852	-14.9	11,864	13,949	1,055	1,185	NM	NM	567	712
Tennessee	29,287	31,701	-7.6	28,095	30,628	NM	NM	NM	NM	1,135	1,003
West South Central	175,006	174,971	*	82,499	89,651	70,165	63,276	393	164	21,950	21,880
Arkansas		14,826	-3.0	12,544	13,674	1,077	461	NM 220	NM	761	688
Louisiana	26,756	26,793	1	12,308	14,885	6,699	5,697	239	7	7,510	6,203
Oklahoma	17,522	17,297	1.3	15,365	15,427	1,666	1,440	NM NM	NM NM	483	423
Texas Mountain	116,343 98,971	116,055 99,914	.2 9	42,281 84,407	45,665 85 608	60,722 13,754	55,678 13,454	NM NM	NM NM	13,195 722	14,565 756
Arizona	,	28,746	9 -3.1	24,390	85,608 25,847	3,334	2,797	NM NM	NM NM	114	94
Colorado	14,408	14,270	1.0	13,286	13,036	1,037	1,148	NM	NM	NM	NM
Idaho	2,829	3,123	-9.4	2,366	2,618	238	282			225	223
Montana		8,101	-5.4	1,445	1,612	6,195	6,466			26	22
Nevada		9,813	-4.6	7,087	7,568	2,270	2,245				
New Mexico	10,478	9,688	8.2	10,255	9,412	157	164	NM	NM	NM	NM
Utah	11,700	11,777	7	11,480	11,558	131	133	NM	NM	NM	NM
Wyoming	14,687	14,396	2.0	14,097	13,957	392	219			199	220
Pacific Contiguous	103,452	105,634	-2.1	63,266	67,019	33,547	32,067	627	671	6,013	5,876
California		55,220	-2.3	22,484	24,287	25,451	25,049	581	604	5,424	5,280
Oregon		17,136	1.3	14,315	14,497	2,759	2,365	NM	NM	280	270
Washington		33,278	-3.4	26,466	28,235	5,337	4,653	NM	NM	308	326
Pacific Noncontiguous	5,819	5,764	.9	4,070	4,134	1,200	1,155 NM	NM NM	NM NM	490	428
Alaska	2,462	2,443	.8	1,997	2,027	NM 1 115	NM 1.078	NM	NM	321 NM	293 NM
HawaiiU.S. Total	3,357 1,220,046	3,321 1,192,102	1.1 2.3	2,073 797,096	2,108 800,583	1,115 370,501	1,078 338,134	2,581	2,384	NM 49,869	NM 51,000
U.S. IUIAI	1,220,040	1,192,102	2.3	191,090	000,505	370,301	330,134	2,301	2,304	47,007	31,000

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.

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

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

	_				Electric Po	wer Sector		Combin	ed Heat and	Power Pro	oducers
Census Division and State	То	otal (All Secto		Electric	Utilities		ent Power ucers	Comm	ercial	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	1,477	1,490	8	129	239	1,307	1,206	-	-	42	45
Connecticut		289	18.1			342	289				
Maine		58	-8.0			14	17			39	40
Massachusetts		903	5.6	120		951	899			NM	NM
New Hampshire Rhode Island		239	-46.3	129	239						
Vermont											
Middle Atlantic	10,832	10,717	1.1	1,638	1,116	9,012	9,408	NM	NM	180	192
New Jersey		574	-54.0	124	74	141	500				
New York		1,631	6.8	123	139	1,559	1,420	NM	NM	58	69
Pennsylvania		8,512	3.7	1,391	902	7,312	7,487	NM	NM	122	123
East North Central	33,542	32,190	4.2	27,946	25,883	5,244	5,935	NM	NM	310	341
Illinois	6,194	6,472	-4.3	1,362	1,166	4,684	5,137	NM	NM	146	166
Indiana	9,011	8,134	10.8	8,781	7,859	NM	NM	NM	NM	NM	NM
Michigan		4,726	18.1	5,493	4,612	19	38	24	12	NM	NM
Ohio		10,005	-3.9	9,267	9,486	325	501	NM	NM	NM	NM
Wisconsin		2,852	10.3	3,043	2,760	2		NM	NM	97	89
West North Central	16,396	16,105	1.8	16,081	15,854	NM	NM	NM	NM	291	228
Iowa		2,357	20.0	2,716	2,259	NM	NM	NM	NM	96	84
Kansas		2,868	-9.5	2,596	2,868						
Minnesota		2,422	9.8	2,487	2,304					173	119
Missouri		4,562	.4	4,559	4,538			9	9	NM	NM
Nebraska		1,444	-4.4	1,378	1,444					NM	NM
North DakotaSouth Dakota		2,156 297	-3.6 -8.3	2,072 272	2,145 297					NM 	NM
South Atlantic	28,814	30,159	-6.5 - 4.5	22,819	24,695	5,662	5,165	NM	NM	326	295
Delaware		296	12.4	22,019	24,093	327	290	14141	14141	NM	NM
District of Columbia		290	12.4			321	290				
Florida		3,803	9.4	3,876	3,430	261	354			NM	NM
Georgia	,	6,349	-9.7	5,662	6,266	201				74	83
Maryland		2,105	10.2	-,		2,286	2,105			33	
North Carolina		5,334	-11.1	4,435	5,048	261	228	NM	NM	38	53
South Carolina		2,890	-18.6	2,313	2,865					39	25
Virginia		2,654	-23.4	1,439	2,074	534	522		*	61	58
West Virginia	7,142	6,728	6.2	5,095	5,011	1,993	1,666			NM	NM
East South Central	17,121	17,862	-4.1	16,230	16,754	725	949	NM	NM	163	155
Alabama		4,883	4.0	5,035	4,842	13	14			NM	NM
Kentucky		6,754	-7.0	5,766	5,818	516	936				
Mississippi		1,129	75.0	1,777	1,129	195				4	
Tennessee		5,097	-25.8	3,652	4,965			NM	NM	128	127
West South Central	16,541	16,079	2.9	11,366	11,444	4,894	4,362	-	-	281	273
Arkansas		2,099	-37.8	1,292	2,093	742				13	6
Louisiana		1,253	-12.3	352	577	743	673			NM	NM
Oklahoma	,	2,389	18.5 9.3	2,670	2,275	123	83			40 224	32 232
Texas Mountain	11,304 15,507	10,338 16,035	-3.3	7,052	6,500	4,028 979	3,607 1,460			NM	NM
Arizona		3,110	-12.9	14,467 2,677	14,531 3,095	9/9	1,400			31	14
Colorado		2,636	7.4	2,810	2,616	NM	NM			31	14
T 1 1	373.6	2,030 NM	7.4	2,610	2,010		INIVI			NM	NM
Montana		1,421	-37.6	12	4	875	1,417				
Nevada		957	-1.0	948	957						
New Mexico		2,216	7.3	2,377	2,216						
Utah		2,755	.1	2,727	2,726	22	23			NM	NM
Wyoming		2,935	2.0	2,917	2,917	59				NM	NM
Pacific Contiguous	1,268	877	44.6	398	204	833	629	NM	NM	37	44
California	84	158	-46.6			52	118			33	40
Oregon	398	204	95.5	398	204					NM	NM
Washington		515	52.4			781	511	NM	NM	4	4
Pacific Noncontiguous	176	155	13.9	14	14	149	127	NM	NM	NM	NM
Alaska		NM		14	14	NM	NM	NM	NM		
Hawaii		112	20.1	111.006	110 525	131	109			NM	NM
U.S. Total	141,676	141,669	*	111,086	110,735	28,813	29,249	81	66	1,696	1,618

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 April (Thousand Megawatthours)

	_		Į.		Electric Po	wer Sector	T	Combine	d Heat and	Power Pro	ducers
Census Division and State	Tot	tal (All Secto	,	Electric \	Utilities	Independe Produ		Comme	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	6,797	6,337	7.3	1,177	1,260	5,468	4,881		-	152	197
Connecticut	1,443	1,174	22.9			1,443	1,174				
Maine	200	261	-23.3			62	81			138	180
Massachusetts	3,977	3,643	9.2		1.260	3,962	3,626			NM	NM
New Hampshire Rhode Island	1,177	1,260	-6.6	1,177	1,260						
Vermont											
Middle Atlantic	49,743	47,917	3.8	5,988	5,783	42,970	41,367	NM	NM	774	757
New Jersey	3,166	2,710	16.8	640	375	2,526	2,335				
New York	8,312	9,028	-7.9	559	446	7,501	8,320	NM	NM	243	254
Pennsylvania	38,264	36,179	5.8	4,788	4,962	32,943	30,712	NM	NM	531	502
East North Central	146,118	134,878	8.3	119,672	113,734	24,892	19,691	163	155	1,393	1,298
Illinois		26,061	12.5	6,494	8,732	22,131	16,729	NM	NM	677	589
Indiana	38,538	35,483	8.6	37,479	34,355	983	1,052	NM	NM	NM	NM 242
Michigan	21,950	20,106	9.2 4.5	21,527	19,678	128	116 1,793	77 NM	69 NM	217 NM	242 NIM
Ohio Wisconsin	43,389 12,927	41,533 11,696	4.5 10.5	41,655 12,516	39,658 11,311	1,645 5	1,/93	NM NM	NM NM	NM 393	NM 370
West North Central	75,885	70,287	8.0	74,561	69,365	NM	NM	NM	NM	1,213	827
Iowa	11,934	11,144	7.1	11,543	10,738	NM	NM	NM	NM	317	338
Kansas		11,198	*	11,194	11,198						
Minnesota	11,334	10,969	3.3	10,542	10,593					792	376
Missouri	23,533	19,638	19.8	23,438	19,550			37	27	NM	NM
Nebraska	6,851	6,294	8.9	6,835	6,279					NM	NM
North Dakota	9,875	9,795	.8	9,846	9,758					NM	NM
South Dakota	1,163	1,250	-6.9	1,163	1,250	26.522	22 102	NIM	NM.	1 420	1 420
South Atlantic Delaware	134,384 1,617	128,170 831	4.8 94.7	106,381	103,536	26,533 1,589	23,182 804	NM	NM	1,438 NM	1,420 NM
District of Columbia	1,017	651	94.7			1,369					INIVI
Florida	18,191	17,672	2.9	16,641	15,891	1,503	1,694			NM	NM
Georgia	24,350	25,082	-2.9	24,062	24,771					288	311
Maryland	10,368	8,316	24.7			10,259	8,316			110	
North Carolina	24,815	22,838	8.7	23,385	21,513	1,137	1,000	NM	NM	261	294
South Carolina		11,468	2.7	11,613	11,328					167	140
Virginia	11,984	11,646	2.9	9,318	9,552	2,416	1,856		2	250	236
West Virginia	31,278	30,317	3.2	21,361	20,481	9,629	9,511			287	326
East South Central	74,846	72,285	3.5	70,788	67,842	3,358	3,788 54	NM	NM	683 130	639
Alabama Kentucky	23,049 28,569	19,773 28,788	16.6 8	22,854 25,753	19,596 25,054	65 2,815	3,734			130	123
Mississippi	5,778	3,710	55.8	5,291	3,710	478	3,734			9	
Tennessee	17,450	20,015	-12.8	16,889	19,483			NM	NM	543	516
West South Central	71,252	67,866	5.0	49,145	49,068	20,967	17,804		- 1112	1,140	994
Arkansas	6,053	7,243	-16.4	6,005	7,216					48	27
Louisiana	6,867	6,617	3.8	2,987	3,214	3,840	3,389			39	14
Oklahoma	11,995	10,915	9.9	11,145	10,181	674	589			176	145
Texas	46,338	43,091	7.5	29,008	28,458	16,453	13,826			877	808
Mountain	67,632	67,439	.3	61,906	61,719	5,473	5,494	-		253	227
Arizona		12,181	-6.7	11,254	12,090	07				113	92
Colorado	3.73.6	11,177 NM	3.9	11,517	11,085	97	92			NM	NM
Montana	5,192	5,366	-3.2	97	89	5,095	5,277			INIVI	INIVI
Nevada	4,906	5,146	-4.7	4,906	5,146	3,093	3,211				
New Mexico	9,423	8,518	10.6	9,423	8,518						
Utah	10,955	11,220	-2.4	10,801	11,059	123	125			NM	NM
Wyoming	14,148	13,808	2.5	13,906	13,732	159				NM	NM
Pacific Contiguous	5,670	5,180	9.5	1,531	1,337	3,969	3,666	NM	NM	167	175
California	685	761	-10.0			531	602			154	158
Oregon	1,535	1,335	15.0	1,531	1,337	2 420	2.064	 >D/4	 ND (NM	NM
Washington	3,450	3,084	11.9			3,438	3,064	NM NM	NM NM	9 NM	18 NM
Pacific Noncontiguous Alaska	736 197	693 188	6.2 4.5	66	68 68	607 NM	567 NM	NM NM	NM NM	NM 	NM
Hawaii	539	505	6.8	66		525	191	NIVI	NIVI 	NM	NM
		505	0.0			343	771			TATAT	TATAT

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 "*").

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

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pro	ducers
Census Division and State	Т	otal (All Secto	rs)	Electric	Utilities		ent Power lucers	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	961	627	53.2	198	20	688	526	NM	NM	69	65
Connecticut		125	42.4	NM	NM	175	123	NM	NM	NM	NM
Maine		73	119.0			111	12	*	*	48	60
Massachusetts		407	3.9	NM	NM	402	391	NM	NM	NM	NM
New Hampshire Rhode Island		19 NM	924.2	192 NM	17 NM	NM *	NM *	NM NM	NM NM	NM NM	NM NM
Vermont		NM NM		NM	NM		· 	INIVI	INIVI	INIVI	INIVI
Middle Atlantic	1,748	1,187	47.3	717	550	986	583	NM	NM	39	50
New Jersey		63	-54.5	7	23	9	34	NM	NM	13	5
New York		949	44.8	707	525	651	411	NM	NM	NM	NM
Pennsylvania		175	97.4	4	2	326	138	NM	NM	NM	NM
East North Central	234	257	-8.8	114	193	79	15	NM	NM	40	48
Illinois		20	318.0	NM	NM	79	15	NM	NM	NM	NM
Indiana		74 91	-52.7	28	55 91	*		NM	NM	6	19
Michigan		29	-62.1 29.0	32 36	28	NM	NM	NM NM	NM NM	NM NM	NM NM
Ohio Wisconsin		43	4.1	15	17	NM	NM	NM	NM	30	26
West North Central	109	128	-15.3	106	126	NM	NM	NM	NM	NM	NM
Iowa		NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas		37	53.3	57	37						*
Minnesota		33	.2	32	32		*	NM	NM	NM	NM
Missouri		47	-82.9	8	47			NM	NM	NM	NM
Nebraska		NM		NM	NM			NM	NM		
North Dakota		NM		4	2					NM	NM
South Dakota		*	237.4	1						120	1.42
South Atlantic	3,473 116	3,939 74	-11.8 56.7	2,769 NM	3,505 NM	569 105	289 41	8	1	128 NM	143 NM
Delaware District of Columbia		23	-96.7	INIVI	11171	103	23			INIVI	10101
Florida		3,196	-22.4	2,369	3,064	95	111			18	21
Georgia		103	-20.0	13	27	3	1	NM	NM	66	75
Maryland		108	209.8	NM	NM	330	102	NM	NM	NM	NM
North Carolina	44	51	-13.8	27	36	2	*	NM	NM	15	14
South Carolina		21	.9	9	11			NM	NM	13	10
Virginia		342	8.8	327	325	33	11	7	*	4	7
West Virginia		21	2.9	21	20	1	1	NIM.	NIM.	NM 12	NM
East South Central	388	58 18	563.1 12.3	46 12	43	329 NM	3 NM	NM 	NM 	12 8	12 9
Alabama Kentucky		21	1537.6	20	18	329	3			o 	
Mississippi		7	-2.5	5	6	327		NM	NM	NM	NM
Tennessee		12	-1.2	10	10					NM	NM
West South Central	329	284	16.1	129	19	166	252	NM	NM	34	13
Arkansas	7	5	29.2	7	5					*	*
Louisiana		148	61.9	95	9	142	137			2	2
Oklahoma		3	70.0	1	1			NM	NM	4	2
Texas		127	-38.9	25	3	24	115	NM	NM	28	9
Mountain	63	102	-37.9	22	22	40	78	NM	NM	NM	NM
Arizona Colorado		6 NM	-56.1	3 3	5 2	NM	NM	NM 	NM 	NM NM	NM NM
7.1.1	-1-	1NIVI *	-47.6	*	*	INIVI	INIVI			INIVI	INIVI
Montana		77	-47.8	NM	NM	40	77				
Nevada		3	-20.3	2	3						
New Mexico		2	251.9	6	1		*			NM	NM
Utah		NM		NM	NM	NM	NM				
Wyoming		NM		4	6					NM	NM
Pacific Contiguous	135	202	-33.0	4	6	87	148	NM	NM	44	48
California		196	-32.9	4	5	87	147	NM	NM	NM	NM
Oregon		NM NM			1	NM	NM	NM NM	NM NM	NM NM	NM NM
Washington	NM	NM 714	-1.0	590	670	103	NM 38	NM NM	NM NM	NM NM	NM NM
Pacific Noncontiguous Alaska		65	-1.0 -15.4	50	61	NM	NM	NM	NM	NM	NM
Hawaii		649	.5	540	609	103	37			NM	NM
U.S. Total	8,148	7,497	8.7	4,694	5,155	3,049	1,934	23	22	381	386

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 "*").

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

	-	. 1 / 4 12 0			Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	Tot	tal (All Secto		Electric	Utilities	Independe Produ		Commo	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	5,962	3,165	88.4	821	54	4,684	2,717	NM	NM	381	323
Connecticut		895	28.6	NM	NM	1,129	887	NM	NM	NM	NM
Maine		302	256.9			819	45	1	1	258	256
Massachusetts		1,909	55.5	109	11	2,730	1,784	NM	NM	NM	NM
New Hampshire Rhode Island		44 NM	1540.4	691 NM	36 NM	NM 5	NM *	NM NM	NM NM	NM NM	NM NM
Vermont		NM		NM	NM						
Middle Atlantic	10,022	3,937	154.5	3,599	2,028	6,137	1,706	NM	NM	243	190
New Jersey		108	827.6	88	30	836	53	NM	NM	NM	NM
New York		3,112	115.9	3,502	1,993	3,107	1,059	NM	NM	71	48
Pennsylvania		717	221.0	NM	NM	2,194	594	NM	NM	NM	NM
East North Central Illinois	1,551 750	859 77	80.5 873.8	645 NM	622 NM	736 726	58 57	NM NM	NM NM	158 NM	176 NM
Indiana		252	-33.7	123	170	3		NM	NM	39	81
Michigan		271	12.6	298	268		*	NM	NM	NM	NM
Ohio		120	30.2	147	119	NM	NM	NM	NM	NM	NM
Wisconsin		139	23.6	63	54	1	1	NM	NM	103	84
West North Central	688	738	-6.9	662	728	NM	NM	NM	NM	NM	NM
Iowa		NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas		284	2.8	292	284					*	*
Minnesota		193	33.3	246	188	7	1	NM	NM	NM	NM
Missouri Nebraska		226 NM	-74.7 	56 NM	226 NM			NM NM	NM NM	NM 	NM
North Dakota		NM NM		14	9			INIVI	INIVI	NM	NM
South Dakota		1	941.8	6	í						
South Atlantic	16,042	12,571	27.6	11,717	10,999	3,682	1,003	87	15	556	554
Delaware		251	236.3	NM	NM	756	139			NM	NM
District of Columbia		38	-4.6			36	38				
Florida		9,735	.9	9,306	9,371	466	278			NM	NM
Georgia		384	17.1	101	92	NM	NM	NM	NM	273	276
Maryland North Carolina		498 267	248.4 49.5	NM 230	NM 188	1,717 82	486 5	NM NM	NM NM	NM 88	NM 73
South Carolina		88	49.3 97.5	112	53	82 11		NM	NM	00 49	35
Virginia		1,219	103.0	1,842	1,141	520	38	84	13	NM	NM
West Virginia		91	16.2	83	86	20	3			NM	NM
East South Central	916	265	245.8	508	210	347	5	NM	NM	NM	NM
Alabama		104	11.4	72	67	NM	NM			NM	NM
Kentucky		46	806.8	74	42	345	4				
Mississippi		13	1638.1	216	8	 ND 6	 >D/4	NM	NM	NM	NM
Tennessee	. 158 2,265	102 1,301	55.6 74.2	146 918	93 87	NM 1,185	NM 1,164	NM	NM	10 160	9 48
Arkansas		57	91.5	99	56	1,105	1,104	INIVI	INIVI	100	1
Louisiana		625	56.9	403	19	556	598			21	7
Oklahoma		14	774.9	105	3			NM	NM	16	11
Texas		605	74.3	312	9	629	566	NM	NM	113	30
Mountain	253	325	-22.2	NM	NM	160	235	NM	NM	NM	NM
Arizona		NM		12	22			NM	NM	NM	NM
Colorado		NM		10	10	NM	NM			NM	NM
Idaho		224	-46.2	NIM	NIM.	157	222				
Montana Nevada		234 10	-32.3 -33.7	NM 7	NM 10	157	233				
New Mexico		NM	-33.7	19	8		1			NM	NM
Utah		NM		NM	NM	NM	NM				
Wyoming		NM		13	16					NM	NM
Pacific Contiguous	773	823	-6.1	46	22	540	587	NM	NM	187	214
California		787	-10.3	13	17	539	583	NM	NM	153	186
Oregon		5	592.8	30	3			NM	NM	NM	NM
Washington		NM		3	2 425	NM	NM 262	NM	NM	NM	NM
Pacific Noncontiguous Alaska	2,896 NM	2,828 NM	2.4	2,314 NM	2,425 NM	431 NM	363 NIM	NM NM	NM NM	NM NM	NM NM
Hawaii		2,490	4.0	2,072	NM 2,104	NM 429	NM 363	NM 	NM 	NM NM	NM NM
U.S. Total	41,368	26,814	54.3	21,313	17,259	17,910	7,839	239	110	1,906	1,605
		-0,011	2 110	21,010	-1,000	2.,9210	7,007	207	110	2,700	-,003

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, April 2003 and 2002 (Thousand Megawatthours)

	Total (All Sectors)				Electric Po	wer Sector		Combine	ed Heat and	l Power Pr	oducers
Census Division and State	Tot	tal (All Secto	rs)	Electric	Utilities		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	2,916	2,832	3.0	NM	NM	2,792	2,615	NM	NM	108	189
Connecticut		540	-8.0			482	521	NM	NM	NM	NM
Maine		806	-14.0	NM	NIM	611	666	NM NM	NM NM	82 NM	140
Massachusetts New Hampshire		1,032 NM	43.9	NIVI *	NM 1	1,463	981	INIVI	NM 	NM NM	NM NM
Rhode Island		447	-47.3			235	447	NM	NM	14141	
Vermont		*	-6.3	*	*						
Middle Atlantic	3,428	3,813	-10.1	548	593	2,611	2,802	NM	NM	237	368
New Jersey		1,260	-17.1	1	13	933	998	NM	NM	NM	NM
New York	,	2,290	-11.4	546	580	1,398	1,618	NM	NM	75	68
Pennsylvania East North Central	354 1,327	263 2,597	34.6 -48.9	NM 270	NM 356	281 940	185 2,067	NM NM	NM NM	61 99	63 147
Illinois		792	-72.9	NM	NM	138	720	NM	NM	NM	NM
Indiana		308	-72.2	3	45	70	202	NM	NM	NM	NM
Michigan		1,175	-36.7	112	147	613	1,003	NM	NM	NM	NM
Ohio		107	-14.1	32	59	56	44	NM	NM	NM	NM
Wisconsin		215	-10.5	99	90	64	99	NM	NM	25	21
West North Central	554	536	3.2	355	317	171	176	NM	NM	NM	NM
Iowa		NM 79	-25.2	17 59	27 76			NM NM	NM NM	NM NM	NM NM
Kansas Minnesota		88	42.6	45	12	64	47	NM	NM	NM	NM
Missouri		305	4.3	209	175	107	129	2	*	NM	NM
Nebraska		23	-3.2	21	22	NM	NM	NM	NM	NM	NM
North Dakota	NM	NM		*	*					NM	NM
South Dakota		4	16.4	5	4						
South Atlantic	6,944	6,518	6.5	5,103	4,671	1,705	1,635	NM	NM	130	198
Delaware District of Columbia		NM 		3		NM 	NM 				
Florida		4,879	8.7	4,652	4,053	581	672	NM	NM	NM	NM
Georgia		342	76.0	32	115	539	198			NM	NM
Maryland		117	-36.2	NM	NM	72	115			NM	NM
North Carolina		395	-30.9	NM	NM	244	294	NM	NM	NM	NM
South Carolina		345	-44.9	178	275	11	69	NM	NM	1	1
Virginia		316	28.6	211	130	172	169	*	8	NM	NM
West Virginia East South Central	19 1,800	29 2,894	-33.5 - 37.8	1,256	2,315	13 368	22 357	NM	NM	NM 173	NM 215
Alabama		1,023	-17.8	555	872	186	17		14141	100	134
Kentucky		NM		9	38	7	11		3	NM	NM
Mississippi		1,767	-50.9	645	1,404	172	311	NM	NM	NM	NM
Tennessee		37	71.2	46	1	NM	NM	NM	NM	NM	NM
West South Central	17,969	20,636	-12.9	4,615	6,430	9,400	10,299	150	42	3,804	3,864
Arkansas		261 3 505	30.5	1.078	121	261	122	NM	NM 2	NM 1 484	NM 1.058
Louisiana Oklahoma		3,505 1,636	-11.8 -20.5	1,078 892	2,034 1,367	410 375	412 230	119 NM	2 NM	1,484 33	1,058 38
Texas	,	15,233	-13.1	2,585	2,908	8,354	9,536	NM	NM	2,267	2,751
Mountain	2,918	2,732	6.8	1,247	1,418	1,599	1,219	NM	NM	NM	NM
Arizona	1,167	921	26.7	285	274	880	646	NM	NM	NM	NM
Colorado	531	726	-26.9	316	422	200	286	NM	NM	NM	NM
Idaho		NM		*	1	NM *	NM			NM	NM
Montana		1	-21.1		* 391		*		 	*	1
Nevada New Mexico		631 295	18.3 -20.0	280 188	246	467 33	240 25	NM	NM	NM	NM
Utah		87	105.6	166	71			NM	NM	NM	NM
Wyoming		52	-16.7	12	14	10	8			NM	NM
Pacific Contiguous	5,157	5,907	-12.7	684	641	3,374	4,107	NM	NM	1,007	1,027
California		5,350	-12.6	655	553	2,973	3,687	NM	NM	961	981
Oregon		326	-2.3	-2	30	285	262	NM	NM	36	34
Washington		231	-30.0	31	59	117	159	NM	NM	11	12
Pacific Noncontiguous Alaska	329 329	329 318	3.4	261 261	252 252		11 			69 69	67 67
Hawaii		11	3.4	201	232		11				
U.S. Total	43,341	48,793	-11.2	14,341	16,996	22,961	25,287	341	329	5,698	6,181

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

	Total (All Sectors) 2003 2002 Percent Change				Electric Po	wer Sector		Combine	d Heat and	Power Pro	oducers
Census Division and State	Tota	al (All Sector	rs)	Electric	Utilities	Independe Produ		Comm	ercial	Indus	strial
	2003	2002		2003	2002	2003	2002	2003	2002	2003	2002
New England	11,637	13,005	-10.5	NM	NM	10,773	12,100	91	143	766	723
Connecticut	1,698	2,292	-25.9			1,634	2,211	NM	NM	NM	NM
Maine	3,041	3,818 4,643	-20.4 15.6	NM	NM	2,386	3,251	NM 81	NM 131	654 NM	567 NM
Massachusetts New Hampshire	5,369 NM	4,043 NM	13.0	1NIVI *	3	5,244	4,415			NM	NM
Rhode Island	1,510	2,224	-32.1			1,509	2,223	NM	NM		
Vermont	*	1	-67.2	*	1		-,				
Middle Atlantic	13,223	16,719	-20.9	2,000	2,578	10,166	12,416	141	175	916	1,550
New Jersey	3,954	5,144	-23.1	6	20	3,499	4,100	NM	NM	406	969
New York	8,091	10,274	-21.2	1,993	2,558	5,813	7,350	NM	NM	238	309
Pennsylvania	1,177 6,900	1,301 8,779	-9.5 -21.4	NM 1 403	NM 1.607	854 4,846	965	NM 85	NM 103	272 565	271 628
East North Central Illinois	1,202	1,963	-38.8	1,403 NM	1,697 NM	835	6,351 1,486	NM	NM	217	179
Indiana	768	1,212	-36.6	408	470	206	471	NM	NM	150	268
Michigan	3,862	4,698	-17.8	418	631	3,374	3,972	NM	NM	60	85
Ohio	246	238	3.5	71	129	162	94	NM	NM	NM	NM
Wisconsin	822	669	22.9	406	235	269	328	NM	NM	129	85
West North Central	1,642	1,987	-17.3	1,062	1,374	397	444	NM	NM	146	122
Iowa	108	162	-33.5	71	117			NM	NM	NM	NM
Kansas Minnesota	348 436	342 425	1.6 2.6	268 163	331 64	213	256	NM NM	NM NM	80 31	11 69
Missouri	683	975	-30.0	495	784	183	188	2	1	NM	NM
Nebraska	59	64	-7.9	56	60	NM	NM	NM	NM	NM	NM
North Dakota	NM	NM		*	*					NM	NM
South Dakota	9	17	-50.8	9	17						
South Atlantic	23,083	21,482	7.5	17,392	15,708	5,022	4,813	NM	NM	605	908
Delaware	240	377	-36.4	6	1	234	376			*	
District of Columbia Florida	18,355	16,629	10.4	16,011	14,018	1,989	1,967	NM	NM	337	624
Georgia	1,280	793	61.5	NM	NM	1,075	423		14141	NM	NM
Maryland	292	298	-2.0	NM	NM	280	292			NM	NM
North Carolina	1,004	1,308	-23.3	241	149	755	1,151	NM	NM	NM	NM
South Carolina	647	1,139	-43.2	568	861	75	261	NM	NM	3	16
Virginia	1,209	857	41.1	477	494	584	292	43	29	105	41
West Virginia	56	81	-30.6	1	10.726	30	50	NM.	NM	NM (76	NM
East South Central Alabama	7,586 3,523	13,012 4,645	-41.7 -24.1	5,755 2,617	10,736 4,011	1,130 524	1,310 67	NM	NM 	676 382	910 566
Kentucky	150	257	-41.7	74	115	16	38	9	37	NM	NM
Mississippi	3,695	7,997	-53.8	2,924	6,601	574	1,179	NM	NM	191	211
Tennessee	218	113	92.6	141	10	NM	NM	NM	NM	NM	NM
West South Central	73,891	75,615	-2.3	16,390	20,854	40,070	37,104	377	158	17,054	17,498
Arkansas	1,294	838	54.5	125	301	1,077	461	NM	NM	91	75
Louisiana	11,947	12,705	-6.0	3,910	6,354	1,944	1,336	239	7	5,855	5,007
Oklahoma Texas	4,793 55,857	5,564 56,508	-13.9 -1.2	3,619 8,735	4,542 9,656	993 36,057	850 34,457	NM NM	NM NM	174 10,934	164 12,252
Mountain	11,787	11,778	-1.2 .1	5,147	5,499	6,332	5,885	NM NM	NM NM	233	313
Arizona	4,282	3,834	11.7	944	1,031	3,334	2,797	NM	NM	NM	NM
Colorado	2,526	2,682	-5.8	1,568	1,602	890	1,007	NM	NM	NM	NM
Idaho	66	130	-48.8	3	37	NM	NM			21	40
Montana	6	4	62.8	3	*	*	*			2	3
Nevada	3,250	3,570	-9.0	1,387	1,734	1,863	1,836		 ND (ND (>D/4
New Mexico	957	1,043	-8.2	741 426	776	151	158	NM NM	NM NM	NM NM	NM NM
Utah Wyoming	494 205	304 213	62.6 -3.6	436 64	253 66	1 52	33	NM 	NM 	NM 90	NM 114
Pacific Contiguous	30,069	28,965	-3.0 3.8	3,808	4,005	21,392	20,157	471	563	4,398	4,239
California	25,099	24,273	3.4	2,831	2,715	17,590	16,999	454	527	4,224	4,032
Oregon	2,934	2,952	6	426	833	2,365	1,988	NM	NM	141	128
Washington	2,037	1,740	17.1	550	457	1,438	1,170	NM	NM	33	80
Pacific Noncontiguous	1,400	1,425	-1.7	1,131	1,049		97	-		269	279
Alaska	1,400	1,328	5.4	1,131	1,049					269	279
Hawaii	191 217	97 102 766	 6 0	54 003	63 540	100,130	97	1 266	1 290	25 629	27 170
U.S. Total	181,217	192,766	-6.0	54,093	63,540	100,130	100,677	1,366	1,380	25,628	27,170

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

	Total (All Sectors) Apr. 2002 Percent			Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers	
Census Division and State	Tot	tal (All Secto	rs)	Electric	Utilities		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		*	-100.0				*				
Connecticut		*	-100.0				*				
Maine		*	-100.0				*				
Massachusetts											
New Hampshire Rhode Island											
Vermont											
Middle Atlantic	NM	NM		-		*	*			NM	NM
New Jersey	NM	NM					*			NM	NM
New York		NM								NM	NM
Pennsylvania		NM				*	*			NM	NM
East North Central	161	349	-54.0			NM	NM		-	154	338
Illinois		NM 202	 55 0			NIM	NIM			NM 120	NM
Indiana Michigan		292 1	-55.8 -70.8			NM *	NM 1			129	292
Ohio		NM	-/0.8			NM	NM			NM	NM
Wisconsin											
West North Central	NM	NM		*			_			NM	NM
Iowa											
Kansas											
Minnesota											
Missouri				*							
Nebraska		NIM								NIM	NIM
North DakotaSouth Dakota		NM 								NM 	NM
South Atlantic	27	65	-58.4			*	43			27	23
Delaware		14	28.7							18	14
District of Columbia											
Florida	1	1	-10.8			*	*			1	1
Georgia											
Maryland		43	-100.0				43				
North Carolina		*	-97.7			*	*				
South Carolina											
Virginia West Virginia		8	7.9							9	8
East South Central	NM	NM	7.9							NM	NM
Alabama		NM								NM	NM
Kentucky											
Mississippi											
Tennessee		1	-84.0							*	1
West South Central	261	281	-7.3			45	25		-	216	256
Arkansas			 0 5							07	
Louisiana Oklahoma		89 NM	8.5							97 NM	89 NM
Texas		NM 185	-14.5			45	25			NM 114	NM 160
Mountain	NM	NM	-14.5	1	*	1	1			NM	NM
Arizona							-				
Colorado	1	*	178.9	1	*						
Idaho											
Montana		1	99.6			1	1				
Nevada											
New Mexico											
Utah		NM								NIM	NM
Wyoming Pacific Contiguous	NM 208	NM 164	27.1			69	25	NM	NM	NM 140	NM 139
California		139	.4		 	*	*	NM	NM	140	139
Oregon											
Washington		25	175.9			69	25				
Pacific Noncontiguous	NM	NM					_		-	NM	NM
Alaska											
Hawaii		NM								NM	NM
U.S. Total	734	1,000	-26.6	1	*	122	105	*		610	894

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 1.10.B. Net Generation from Other Gases by State, Year-to-Date through April (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	Indus	lustrial		
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002		
New England	*	9	-99.9		-	*	9	-		-			
Connecticut	*	9	-100.0			*	9						
Maine Massachusetts			-61.1 			•	*						
New Hampshire													
Rhode Island													
Vermont													
Middle Atlantic	NM	NM	-		-	*	1		-	NM	NM		
New Jersey	NM	NM					*			NM	NM		
New York	NM	NM				*	*			NM	NM NM		
Pennsylvania East North Central	NM 807	NM 1,353	-40.3			NM	NM			NM 777	NM 1,310		
Illinois	NM	NM								NM	NM		
Indiana	672	1,136	-40.8			NM	NM			671	1,134		
Michigan	1	3	-61.5			1	3						
Ohio	NM	NM				NM	NM			NM	NM		
Wisconsin		272.5											
West North Central Iowa	NM	NM		1			-		-	NM	NM 		
Kansas													
Minnesota													
Missouri	1			1									
Nebraska	*			*									
North Dakota	NM	NM								NM	NM		
South Dakota													
South Atlantic	211	251	-15.9		-	93	158			118	93		
Delaware District of Columbia	77 	53	46.6							77 	53		
Florida	7	6	18.6			*	*			6	5		
Georgia													
Maryland	92	157	-41.4			92	157						
North Carolina	*	*	-80.7			*	*						
South Carolina	*	*	-65.7							*	*		
Virginia		25									25		
West Virginia East South Central	34 47	35 85	7 -45.2							34 47	35 85		
Alabama	46	81	-43.2 -42.9							46	81		
Kentucky													
Mississippi													
Tennessee	1	5	-84.4							1	5		
West South Central	1,286	1,042	23.4	-	-	148	210	-	-	1,138	832		
Arkansas	400	205	04.8							400	205		
LouisianaOklahoma	400 NM	205 NM	94.8							400 NM	205 NM		
Texas	860	812	5.8			148	210			712	603		
Mountain	NM	NM		2	1	10	1			NM	NM		
Arizona													
Colorado	2	1	88.5	2	1								
Idaho			4066										
Montana	7 2	1	486.6			7 2	1						
Nevada New Mexico						2 							
Utah													
Wyoming	NM	NM								NM	NM		
Pacific Contiguous	654	601	8.8	-	-	145	102	NM	NM	508	499		
California	509	500	1.9			NM	NM	NM	NM	508	499		
Oregon													
Washington	145	101	43.0			145	101			NM.	NM.		
Pacific Noncontiguous	NM	NM					-			NM	NM 		
Alaska Hawaii	NM	NM								NM	NM		
U.S. Total	3,272	3,772	-13.3	3	1	426	524	*	*	2,842	3,247		
	3,2.2	2,2		-		.20	Ü2.			=, 0 :=	-,,		

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

					Electric Po	wer Sector		Combin	ed Heat and	Power Pro	oducers
Census Division and State	To	otal (All Secto	rs)	Electric	Utilities		ent Power ucers	Comm	ercial	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	2,955	2,814	5.0		1,172	2,955	1,642	-			-
Connecticut		1,160	25.7			1,458	1,160				
Maine		482	-41.2			283	482				
Massachusetts New Hampshire		834	-41.2		834	833	402				
Rhode Island											
Vermont		338	12.3		338	380					
Middle Atlantic	10,168	10,968	-7.3	960	1,256	9,208	9,712	-	-		
New Jersey New York		2,098	12.2	357	 111	2,354	2,098				
Pennsylvania	,	2,881 5,989	-13.4 -11.2	603	1,145	2,138 4,716	2,770 4,844				
East North Central	9,793	11,193	-12.5	2,132	4,576	7,661	6,616	-	_		
Illinois	7,661	6,616	15.8			7,661	6,616				
Indiana											
Michigan		2,794	-52.4	1,331	2,794						
Ohio Wisconsin		897 885	-91.2 -18.4	79 723	897 885						
West North Central	3,234	3,347	-3.4	3,234	3,347						
Iowa		416	-68.8	130	416						
Kansas		42	1958.6	855	42						
Minnesota		1,180	-12.7	1,030	1,180						
Missouri		828 881	-6.6 -49.3	774 446	828 881						
Nebraska North Dakota		881	-49.3	446	881						
South Dakota											
South Atlantic	15,664	14,327	9.3	14,880	13,707	785	620	-			
Delaware											
District of Columbia		2.720		2.402	2.720						
Florida Georgia		2,739 1,831	-9.4 43.1	2,482 2,621	2,739 1,831						
Maryland		620	26.6	2,021	1,651	785	620				
North Carolina		3,330	.3	3,342	3,330						
South Carolina		3,732	23.1	4,596	3,732						
Virginia		2,075	-11.4	1,838	2,075						
West Virginia East South Central	4,522	5,216	-13.3	4,522	5,216						
Alabama		2,309	-13.3 -5.0	2,193	2,309						
Kentucky		2,505									
Mississippi		899	-19.3	726	899						
Tennessee		2,008	-20.1	1,603	2,008						
West South Central	5,039	4,489	12.3	3,396	3,695	1,643	794		-		
Arkansas Louisiana		875 1,018	53.2 13.0	1,340 1,150	875 1,018						
Oklahoma		1,016	13.0	1,130	1,016						
Texas		2,596	-1.8	906	1,802	1,643	794				
Mountain	1,801	2,170	-17.0	1,801	2,170	- 1	-	-	-		
Arizona		2,170	-17.0	1,801	2,170						
Colorado											
Idaho Montana											
Nevada		 	 								
New Mexico											
Utah											
Wyoming		2.014		2 500	 2 01 4						
Pacific Contiguous	3,599 2,805	3,914	-8.1 -9.8	3,599 2,805	3,914						
California Oregon		3,111	-9.8 	2,805	3,111						
Washington		803	-1.2	793	803						
Pacific Noncontiguous								-	-		
Alaska											
Hawaii											
U.S. Total	56,776	58,437	-2.8	34,524	39,054	22,251	19,383			-	

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 April (Thousand Megawatthours)

	_				Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	Tot	tal (All Secto	rs)	Electric	Utilities	Independe Produ		Comme	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	11,763	11,192	5.1	-	4,759	11,763	6,433	- 1	-		-
Connecticut	5,359	4,507	18.9			5,359	4,507				
Maine											
Massachusetts	1,561	1,925	-18.9			1,561	1,925				
New Hampshire	3,332	3,335	1		3,335	3,332					
Rhode Island Vermont	1,511	1,424	6.1		1,424	1,511					
Middle Atlantic	46,436	46,938	-1.1	5,030	5,115	41,406	41,823				
New Jersey	10,285	10,075	2.1			10,285	10,075				
New York	12,677	13,130	-3.4	1,418	957	11,260	12,173				
Pennsylvania	23,474	23,734	-1.1	3,612	4,158	19,862	19,575				
East North Central	46,851	46,586	.6	15,313	18,401	31,537	28,185		-		-
Illinois	31,537	28,185	11.9			31,537	28,185				
Indiana	8,700	0.774	-11.0	8,700	0.774						
Michigan		9,774 4,471	-11.0 -42.9	2,553	9,774 4,471						
Wisconsin	4,061	4,156	-2.3	4,061	4,156						
West North Central	14,439	14,584	-1.0	14,439	14,584						
Iowa	1,046	1,565	-33.2	1,046	1,565						
Kansas	3,373	2,338	44.2	3,373	2,338						
Minnesota	4,638	4,325	7.2	4,638	4,325						
Missouri	3,016	2,855	5.7	3,016	2,855						
Nebraska	2,366	3,500	-32.4	2,366	3,500						
North Dakota											
South Atlantia	63,616	63,512	.2	 60.010	 60.006	3,597	2.416				
South Atlantic Delaware	03,010	03,512	.Z 	60,019	60,096	3,397	3,416		-		
District of Columbia											
Florida	10,460	11,217	-6.7	10,460	11,217						
Georgia	10,697	9,423	13.5	10,697	9,423						
Maryland	3,597	3,416	5.3			3,597	3,416				
North Carolina	13,493	12,106	11.5	13,493	12,106						
South Carolina		17,861	1.4	18,105	17,861						
Virginia	7,264	9,488	-23.4	7,264	9,488						
West Virginia	20,864	22.004	-9.3	20,864	23,004						
East South Central Alabama	9,505	23,004 10,611	-10.4	9,505	10,611			-		-	
Kentucky),505 	10,011	-10.4	7,505	10,011						
Mississippi	3,433	3,630	-5.4	3,433	3,630						
Tennessee	7,926	8,763	-9.6	7,926	8,763						
West South Central	20,694	22,919	-9.7	14,312	17,306	6,382	5,613	-	-	-	
Arkansas	5,379	4,759	13.0	5,379	4,759						
Louisiana	5,008	5,297	-5.5	5,008	5,297						
Oklahoma	10.207	12.062	10.0	2.025	7.240		5 (12				
Texas	10,307	12,863	-19.9	3,925	7,249	6,382	5,613				
Mountain Arizona	9,726 9,726	9,925 9,925	-2.0 -2.0	9,726 9,726	9,925 9,925						
Colorado	9,720	9,923	-2.0	9,720	9,923						
Idaho											
Montana											
Nevada											
New Mexico											
Utah											
Wyoming											
Pacific Contiguous	12,473	15,403	-19.0	12,473	15,403				-		
California		12,454	-22.3	9,679	12,454						
Oregon Washington	2,795	2,949	-5.2	2,795	2,949						
Pacific Noncontiguous	2,193	2,949	-5.2	2,793	2,949						
Alaska											
Hawaii											
U.S. Total	246,862	254,062	-2.8	152,176	168,592	94,686	85,469		_		

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, April 2003 and 2002 (Thousand Megawatthours)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pro	oducers
Census Division and State	То	otal (All Secto	,	Electric	Utilities	-	ent Power ucers	Comm	ercial	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	701	780	-10.1	79	75	526	555	1		95	150
Connecticut		32	63.7	NM	NM	51	31				
Maine		380	-18.2	NM	NM	232	245			79	134
Massachusetts New Hampshire		54 212	-14.9 -26.0	NM 41	NM 41	45 103	53 158	1		NM 13	NM 14
Rhode Island		NM	-20.0	41	41	NM	NM				
Vermont		101	32.7	35	32	96	67			NM	NM
Middle Atlantic	2,104	2,438	-13.7	1,525	1,743	570	688	NM	NM	NM	NM
New Jersey		-4	99.6	-10	-6	NM	NM				
New York		2,251	-16.2	1,392	1,645	486	598	NM	NM	NM	NM
Pennsylvania		191	17.4	144	105	81	87				
East North Central	409 NM	385 NM	6.1	361	342	21	21	NM NM	NM NM	26	21
Illinois Indiana		NM 29	35.8	NM 40	NM 29	NM 	NM 	NM 	NM 		
Michigan		67	33.8 16.6	40 64	54	NM	NM			NM	NM
Ohio		26	50.4	39	26						
Wisconsin		250	-4.8	213	230	NM	NM	NM	NM	23	18
West North Central	826	880	-6.2	795	850	NM	NM	-	- 1	22	22
Iowa		67	27.5	84	65	NM	NM				
Kansas		NM				NM	NM				
Minnesota		100	-15.1	59	75	NM	NM			22	22
Missouri		164	-88.9	18	164						
Nebraska		93 84	.8	94	93						
North DakotaSouth Dakota		369	75.3 6.4	148 392	84 369						
South Atlantic	1,781	740	140.8	1,213	340	332	258	NM	NM	236	142
Delaware											
District of Columbia											
Florida	23	20	13.7	23	20						
Georgia		206	65.1	335	201	NM	NM			NM	NM
Maryland		201	39.2			279	201				
North Carolina		218	174.4	435	146	NM	NM	NM	NM	161	71
South Carolina		23 -69	1441.2	351 40	18 -75	NM NM	NM NM	NM 	NM 	NM	NM
Virginia West Virginia		-09 141	-166.1 7	30	30	40	45			70	67
East South Central	1,873	1,752	6.9	1,854	1,718	2	2			17	33
Alabama		664	21.5	807	664						
Kentucky		554	-24.5	418	554						
Mississippi		2	1.5			2	2				
Tennessee		532	21.2	628	500					17	33
West South Central	564	872	-35.3	466	746	98	126	_	-	-	
Arkansas		385	-43.5	217	385	NM 05	NM				
Louisiana		121	-21.8	100	 261	95	121				
Oklahoma Texas		261 106	-27.0 -41.4	190 58	261 101	4	5				
Mountain	62 2,778	2,701	2.9	2,372	2,327	406	374				
Arizona	,	694	5.5	732	694						
Colorado		103	-49.7	48	98	NM	NM				
Idaho		919	8.0	910	814	82	105				
Montana	700	619	13.2	383	359	317	260				
Nevada	191	250	-23.6	190	248	NM	NM				
New Mexico		29	-22.0	22	29						
Utah		47	-5.7	43	46	NM	NM				
Wyoming Pacific Contiguous	43 13,259	39 13,196	8.9 . 5	43 13,031	39 12,888	217	295	NM	NM	NM	NM
California		2,887	-1.0	2,716	2,690	142	197	INIVI	NIVI	INIVI	INIVI
Oregon		3,311	3.0	3,360	3,248	48	63				
Washington		6,999	1	6,954	6,950	27	36	NM	NM	NM	NM
Pacific Noncontiguous	154	155	9	140	136	NM	NM	-	-	NM	NM
Alaska		136	3.1	140	136						
Hawaii		20	-28.5	*	*	NM	NM			NM	NM
U.S. Total	24,448	23,900	2.3	21,836	21,164	2,187	2,335	12	14	414	387

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 April (Thousand Megawatthours)

	-	1 (41) 6	,		Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	Tot	tal (All Sector		Electric	Utilities	Independe Produ		Comme	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	1,865	2,014	-7.4	217	200	1,365	1,397	2	-	281	417
Connecticut		107	65.5	NM	NM	170	102				
Maine		992	-10.8	NM	NM	639	623			244	368
Massachusetts		82 491	-23.1 -24.6	NM 99	NM 100	57 244	76 351	2		NM 27	NM 40
New Hampshire Rhode Island		NM	-24.0	99	100	NM	NM			27	40
Vermont		341	7.9	108	93	254	243			NM	NM
Middle Atlantic	8,200	9,091	-9.8	6,252	7,018	1,929	2,047	NM	NM	19	26
New Jersey		-32	18.4	-46	-39	NM	NM				
New York		8,613	-12.8	5,834	6,767	1,658	1,820	NM	NM	19	26
Pennsylvania	726	510	42.4	463	291	263	219				
East North Central	1,124	1,190	-5.6	953 NIM	1,043	76	72 31	NM	NM NM	91	73
Illinois Indiana	52 109	46 108	11.9 .4	NM 109	NM 108	33	31 	NM 	NM 		
Michigan		180	-12.6	109	134	38	35			NM	NM
Ohio		175	-31.4	120	175						
Wisconsin	686	681	.8	599	612	NM	NM	NM	NM	80	62
West North Central	2,627	2,776	-5.4	2,528	2,677	29	27	-	-	69	72
Iowa		278	-5.2	257	272	NM	NM				
Kansas		NM				NM	NM				
Minnesota		285	-15.1	161	203	NM	NM			69	72
Missouri		425	-79.8	86	425						
Nebraska North Dakota		289 391	-18.5 52.9	235 598	289 391						
South Dakota		1,097	8.5	1,190	1,097						
South Atlantic	6,093	2,685	126.9	4,063	1,401	1,076	779	NM	NM	954	504
Delaware											
District of Columbia											
Florida		71	15.1	82	71						
Georgia		742	73.9	1,277	729	NM	NM			13	12
Maryland		592	49.4	1.622		884	592	 >D/	 ND (200
North Carolina	2,321 872	956 189	142.7 360.3	1,623 855	642 174	NM 16	NM 15	NM NM	NM NM	693	309
Virginia		-288	-147.4	118	-305	18	17	INIVI	11111	NM	NM
West Virginia		422	20.1	108	90	152	150			247	182
East South Central	8,853	7,407	19.5	8,574	7,225	4	6	-		275	177
Alabama	4,198	3,173	32.3	4,198	3,173						
Kentucky		1,771	-21.9	1,383	1,771						
Mississippi		6	-29.1			4	6				
Tennessee	3,268	2,457	33.0	2,993	2,280					275	177
West South Central	2,084	2,705	-23.0	1,733	2,336	352 NM	369 NM	-	-		-
Arkansas Louisiana		1,343 353	-30.3 -3.8	936	1,343	NM 339	NM 353				
Oklahoma		701	-29.2	496	701	339					
Texas		309	1.5	301	292	13	16				
Mountain	8,571	9,462	-9.4	7,432	8,271	1,139	1,191	-			
Arizona	2,443	2,761	-11.5	2,443	2,761						
Colorado	173	324	-46.7	163	313	NM	NM				
Idaho		2,798	-9.0	2,362	2,581	185	218				
Montana		2,477	-8.0	1,343	1,523	936	954				
Nevada		683	15.9	787	678	NM	NM				
New Mexico		111 172	-34.9 -8.4	72 154	111 168	NM	NM				
Utah Wyoming	107	135	-8.4	107	135	INIVI	INIVI				
Pacific Contiguous	45,798	46,743	-2.0	45,172	46,075	600	638	NM	NM	NM	NM
California		9,436	8.9	9,894	9,029	378	408				
Oregon		12,478	*	12,327	12,325	150	153				
Washington	23,048	24,829	-7.2	22,951	24,722	71	78	NM	NM	NM	NM
Pacific Noncontiguous	595	633	-5.9	559	592	NM	NM	-	-	NM	NM
Alaska	558	589	-5.1	558	589	 >D.(ND (ND 4	 ND 4
Hawaii	37 95 910	44 94 705	-16.6	* 77 491	3 76 937	NM 6 595	NM 6 542	 22	22	NM 1.712	NM 1 202
U.S. Total	85,810	84,705	1.3	77,481	76,837	6,585	6,542	32	32	1,712	1,293

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 Glossay 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, April 2003 and 2002 (Thousand Megawatthours)

	_				Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	otal (All Secto	<i></i>	Electric	Utilities		lent Power lucers	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	711	743	-4.2	7	1	528	520	19	19	158	202
Connecticut		134	3			133	134				
Maine		339	-12.1			132	127	16	17	150	195
Massachusetts		162 84	9.1 -13.2			175 66	160 77	2	2	NM 7	NM 7
New Hampshire Rhode Island		8	3.3			8	8			, 	,
Vermont		16	37.9	7	1	14	15			NM	NM
Middle Atlantic	533	538	-1.0			439	450	39	36	56	53
New Jersey		100	9.6			108	99	NM	NM	NM	NM
New York		207	-3.9			164	172	20	20	15	15
Pennsylvania		232	-2.9			166	179	19	16	40	37
East North Central Illinois	417	430 83	-2.9 -31.2	33	22	239 50	276 76	NM	25 NM	114 7	1 07
Indiana		11	-1.2			7	70	NM	NM	*	*
Michigan		230	-1.2 .9	1	2	151	159	26	19	55	51
Ohio		12	-11.7			5	5	NM	NM	NM	NM
Wisconsin	106	93	13.9	32	21	26	28	NM	NM	46	43
West North Central	350	354	-1.1	55	41	259	268	NM	NM	34	42
Iowa		104	6.5	3	4	107	100	NM	NM	NM	NM
Kansas		47	-2.5	 41		46	47	 NIM	NIM		
Minnesota		196 5	-7.6 59.9	41 7	32 4	106	121	NM *	NM *	33 NM	41 NM
Missouri Nebraska		2	125.6	3	*	NM	NM	NM	NM	INIVI	INIVI
North Dakota				1						NM	NM
South Dakota		1	18.6	1	1						
South Atlantic	1,314	1,278	2.8	16	16	520	458	41	35	736	769
Delaware											
District of Columbia											165
Florida		448 280	13.9 -9.8	11	10	332 NM	270 NM	NM 	NM 	164 251	165 278
Georgia Maryland		55	23.3			55	53	NM	NM	11	276
North Carolina		182	-10.4			39	40			124	142
South Carolina		89	17.7	2	2			NM	NM	98	83
Virginia		220	-4.2			92	94	31	26	88	101
West Virginia		3	26.2	3	3	NM	NM				
East South Central	538	567	-5.1	2		14	19	NM	NM	522	547
Alabama Kentucky		343 33	2.0 -63.2	2		11	17 			338 10	326 33
Mississippi		139	-03.2							110	139
Tennessee		53	26.4			NM	NM	NM	NM	63	49
West South Central	782	683	14.4			274	210	NM	NM	504	472
Arkansas		137	6.0					NM	NM	145	137
Louisiana		226	12.2			5	4			249	222
Oklahoma		17	35.0			260	206			23	17
Texas Mountain	359 221	303 223	18.6 -1.3	27	23	269 149	206 157	3	1 3	87 41	96 40
Arizona		4	32.3	5	3	149		NM	NM	41	40
Colorado		15	13.1	5	5	9	7	3	3		
Idaho		38	6			NM	NM			36	36
Montana		4	29.4							6	4
Nevada	101	97	4.7			101	97				
New Mexico		NM	24.5			NM	NM				
Utah		14 49	24.5	16	13 2	NM 33	NM 48				
Wyoming Pacific Contiguous	34 2,177	2, 094	-31.2 4.0	1 58	31	33 1,898	1,860	32	19	190	184
California		1,883	1.4	16	18	1,765	1,754	32	19	96	93
Oregon		87	-11.2			47	50			30	37
Washington		124	54.0	43	13	85	57			64	54
Pacific Noncontiguous	57	17	224.5	NM	NM	45	3	-	-	NM	NM
Alaska		NM		NM	NM						
Hawaii	56	17	225.9	*	*	45	3	172	142	NM	NM 2.420
U.S. Total	7,100	6,928	2.5	198	135	4,364	4,222	172	143	2,365	2,429

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.

^{* =} 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 1.13.B. Net Generation from Other Renewables by State, Year-to-Date through April (Thousand Megawatthours)

	-	1 (41) 6	,		Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	Tot	tal (All Sector		Electric	Utilities	Independe Prod		Commo	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	2,936	3,159	-7.1	78	42	2,102	2,237	62	67	693	814
Connecticut		530	-4.8			504	530				
Maine		1,497	-10.4			615	658	53	59	672	779
Massachusetts		662	-2.8			634	654	9	8	NM	NM
New Hampshire Rhode Island		335 32	-18.6 2.6			257 33	304 32			15	31
Vermont	142	104	36.6	78	42	59	58			NM	NM
Middle Atlantic	2,036	2,105	-3.3			1,683	1,753	129	137	224	215
New Jersey		420	1			415	414	NM	NM	NM	NM
New York		782	4			658	658	65	68	55	56
Pennsylvania		903	-7.2			610	680	63	68	165	155
East North Central	1,622	1,656	-2.0	125	102	934	1,005	93	84	470	465
Illinois		283	-20.8			197	257	NM	NM	25	24
Indiana		42	.9			26	29	9	12	8	225
Michigan		889 48	8 -8.3	6	8	589 20	594 21	76 NM	62 NM	212 24	225 27
Ohio Wisconsin	44 429	48 394	-8.3 9.1	119	94	102	105	NM NM	NM NM	202	188
West North Central	1.244	1,429	-13.0	197	149	896	1,058	12	11	138	212
Iowa	365	391	-6.6	26	14	336	375	NM	NM	NM	NM
Kansas	148	187	-20.7			148	187				
Minnesota	679	824	-17.6	127	116	410	493	NM	NM	136	209
Missouri		20	75.2	31	16			1	*	NM	NM
Nebraska		6	137.3	10	1	NM	NM	NM	NM		
North Dakota		*	371.8	2						NM	NM
South Dakota		2	23.6	2	2	1.000	1 506				2.020
South Atlantic Delaware	4,873	5,019	-2.9	60	58	1,998	1,786	148	147	2,667	3,028
District of Columbia											
Florida	1,677	1,843	-9.0	43	43	1,219	1,117	NM	NM	402	670
Georgia		1,094	-10.4			NM	NM			973	1,087
Maryland		211	17.4			186	202	8	9	53	
North Carolina	687	689	3			159	158			528	532
South Carolina		394	1.7	7	6			NM	NM	381	372
Virginia		778	7.7			394	303	114	108	330	367
West Virginia		9	368.6	10	9	33					2.150
East South Central	2,107 1,380	2,243 1,370	-6.1	6		66 56	80 69	NM 	NM 	2,032 1,324	2,158 1,301
Alabama Kentucky		1,370	-22.0	6						95	1,301
Mississippi		497	-27.4							361	497
Tennessee	265	247	7.3			10	11	NM	NM	252	231
West South Central	2,877	2,741	5.0	1		921	870	14	5	1,942	1,866
Arkansas		545	12.7					NM	NM	613	544
Louisiana		891	4.2			20	21			909	870
Oklahoma		79	13.7							89	79
Texas	1,245	1,226	1.5	1		901	849	12	3	331	374
Mountain	936	917	2.0	111	111	637	649	NM NM	NM NM	176	145
ArizonaColorado	12 73	20 73	-39.7 *	11 25	19 24	37	39	NM 11	NM 11		
Idaho	163	137	18.9	43 		11	11			152	125
Montana		19	23.7							24	19
Nevada	398	405	-1.7			398	405				
New Mexico		NM				NM	NM				
Utah		64	10.3	67	60	NM	NM				
Wyoming		193	-2.7	7	8	181	185				
Pacific Contiguous	8,002	7,915	1.1	236	178	6,900	6,916	123	77	743	744
California		7,006	4	68	72	6,412	6,456	123	77	376	402
Oregon		367 542	2.9 18.8	167	106	244 244	225 236			134 233	142 201
Washington Pacific Noncontiguous	192	170	12.6	NM	NM	147	111			43	58
Alaska	NM	NM	12.0	NM	NM	14/				43	
Hawaii	191	170	12.6	*	*	147	111			43	58
U.S. Total	26,824	27,354	-1.9	816	641	16,285	16,464	596	545	9,128	9,705

^{* =} 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.

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

	_	4 1 / A P 0			Electric Po	wer Sector		Combin	ed Heat and	Power Pro	ducers
Census Division and State	То	otal (All Secto		Electric	Utilities	-	ent Power ucers	Comm	ercial	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	*					-		-	-	*	-
Connecticut											
Maine											
Massachusetts										*	
New Hampshire											
Rhode Island											
Vermont											
Middle Atlantic	4	3	23.0			1			-	3 *	3
New Jersey New York	••					1					
Pennsylvania		3	-1.0							3	3
East North Central	82	*	NM			27	*	*	*	55	
Illinois		*	32.6			*	*				
Indiana										53	
Michigan	*	*	.0					*	*		
Ohio						27					
Wisconsin										2	
West North Central	4	3	8.3			-	-		-	4	3
Iowa											
Kansas											
Minnesota		3	8.3							4	3
Missouri											
Nebraska											
North Dakota											
South Dakota		172	10.0							204	172
South Atlantic Delaware	204	173	18.0						-	204	173
District of Columbia											
Florida		157	19.0							187	157
Georgia		*									*
Maryland											
North Carolina	18	16	9.7							18	16
South Carolina											
Virginia											
West Virginia											
East South Central	5	*	2975.6			4	-		-	1	*
Alabama		*	NM			4				*	*
Kentucky											
Mississippi										*	*
Tennessee	••	*	289.3								
West South Central Arkansas	178	184 9	-3.1 -99.6			33				144	184
Louisiana	••	40	-99.6 82.5							74	40
Oklahoma			62.5								40
Texas		134	-22.3			33				71	134
Mountain	15	14	4.6			1		_		14	14
Arizona											
Colorado											
Idaho		7	-1.6							7	7
Montana											
Nevada						1					
New Mexico											
Utah											
Wyoming		7	-8.0							6	7
Pacific Contiguous	5	1	411.6	-	-	*	_	2	-	3	1
California		1	411.6			*		2		3	1
Oregon											
Washington											
Pacific Noncontiguous						-	-	-	-		
Alaska											
Hawaii U.S. Total	498	379	31.3			67	*	2	*	428	379
U.D. IUIAI	470	319	31.3		-	07	^	2		420	3/9

^{* =} 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 April (Thousand Megawatthours)

	_				Electric Po	wer Sector		Combine	ed Heat and	l Power Pro	ducers
Census Division and State	То	otal (All Secto		Electric	Utilities		ent Power ucers	Comm	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	1	-						-	-	1	
Connecticut											
Maine											
Massachusetts	1									1	
New Hampshire											
Rhode Island											
Vermont											
Middle Atlantic	13	12	5.4		-	1	-	-	-	11	12
New Jersey New York	1					1					
Pennsylvania	11	12	-5.8			1				11	12
East North Central	166	12	NM			51	*	*	*	115	
Illinois	*	*	3.1			*	*				
Indiana	104		J.1 							104	
Michigan	*	*	-20.0					*	*		
Ohio	50					50					
Wisconsin	11									11	
West North Central	16	15	12.1							16	15
Iowa											
Kansas											
Minnesota	16	15	12.1							16	15
Missouri											
Nebraska											
North Dakota											
South Dakota											
South Atlantic	705	699	.9			*		-		705	699
Delaware											
District of Columbia											
Florida	635	630	.8			*				635	630
Georgia		*									*
Maryland											
North Carolina	70	68	2.6							70	68
South Carolina											
Virginia											
West Virginia East South Central	8	2	401.4			5				2	2
Alabama	6	*	3385.5			5				*	*
Kentucky											
Mississippi											
Tennessee	2	1	61.0							2	1
West South Central	656	782	-16.1			141	140			516	642
Arkansas	*	42	-99.8							*	42
Louisiana	287	100	185.9							287	100
Oklahoma	*									*	
Texas	369	640	-42.3			141	140			229	500
Mountain	53	63	-15.7			2		-		50	63
Arizona											
Colorado											
Idaho	27	35	-21.8							27	35
Montana											
Nevada	2					2					
New Mexico											
Utah											
Wyoming	23	28	-16.9							23	28
Pacific Contiguous	13	4	232.6			*		4	-	9	4
California	13	4	232.6			*		4		9	4
Oregon											
Washington											
Pacific Noncontiguous Alaska	-		-	-		-			-		
HawaiiU.S. Total	1,631		3.5			201	141	4	*	1,426	
U.S. IUIAI	1,031	1,576	3.3			201	141	4		1,420	1,435

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.

^{* =} 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 2. Consumption of Fossil Fuels

Table 2.1. Consumption of Fossil Fuels for Electricity Generation: Total (All Sectors), 1990 through April 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
995	860,594	132,578	4,737,871
	907,209	144,626	
996	,		4,312,458
1997	931,949	159,715	4,564,770
1998	946,295	222,640	5,081,384
999	949,802	207,871	5,321,984
	994,933	195,228	5,691,481
001			
January	89,136	32,164	380,142
February	76,002	18,020	347,939
March	78,613	20,256	402,383
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
	81,509	11,224	410.005
December	972,691	216,672	5,832,305
2002	972,091	210,072	5,632,303
January	83,361	11.327	422.849
	72,770	9,095	379,447
February		*	,
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
November	79,926	11,456	372,569
December	87,025	13,141	374,034
Total	985,374	156,809	6,064,989
003	703,574	130,009	0,004,707
January	92,030	21,941	407,786
February	79.659	18,679	364,952
March	79,600	18,203	390,993
	79,000	· · · · · · · · · · · · · · · · · · ·	,
April		14,732	365,031
Total	324,073	73,555	1,528,762
Vear to Date		22.472	
001	314,773	89,479	1,552,950
002	306,102	46,342	1,685,312
003	324,073	73,555	1,528,762
Rolling 12 Months Ending in April			
002	964,020	173,534	5,964,667
	1.003.345	184,022	5,908,439

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 April 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
990	773,549	200,152	2,787,332
991	772,268	188,494	2,789,014
992	779,860	152,329	2,765,608
993	813,508	168,556	2,682,440
994	817,270	155,377	2,987,146
995	829,007	105,956	3,196,507
	874,681	116,680	2,732,107
996	*	,	
1997	900,361	132,147	2,968,453
998	910,867	187,461	3,258,054
999	894,120	151,868	3,113,419
2000	859,335	125,788	3,043,094
001			
January	73,363	20,280	156,993
February	62,598	10,240	143,268
March	65,101	11,317	171,278
April	59,019	11,512	210,339
May	64,936	11,739	233,213
June	69,113	13,044	260,189
July	76,352	11,966	353,858
August	77,714	15,072	359,381
September	65,983	8,655	255,222
October	63,130	7,083	229,563
November	61,267	6,112	154,920
	67.694	6.436	
December		-,	158,063
Fotal 2002	806,269	133,456	2,686,287
January	66.705	6,763	150.756
	57,376	,	137,136
February	*	5,264	
March	60,080	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	73,057	9,609	297,947
August	72,050	9,766	291,080
September	65,914	8,725	227,475
October	62,864	8,396	173,187
November	61,546	6,195	122,691
December	67,273	7,326	115,317
Total	770,027	96,519	2,260,213
0003	770,027	70,517	2,200,210
January	70,475	10,643	131,815
February	61,252	8,559	115,308
March	61,138	9,347	128,481
	56,547	8,059	133,514
April	*	,	
Total	249,412	36,608	509,119
Vear to Date	260,000	7 2.240	CO1 088
001	260,080	53,349	681,877
002	240,090	28,791	617,749
003	249,412	36,608	509,119
Rolling 12 Months Ending in April			
002	786,280	108,898	2,622,159
	779,349	104,335	2,151,583

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 2.3. Consumption of Fossil Fuels for Electricity Generation: Independent Power Producers, 1990 through April 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
990	7,752	4,593	359,957
991	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	120,070	30,130	1,570,577
January	14,752	10,475	166,646
February	12,549	6.743	153.697
March	12,560	7,912	175,314
	11,131	6,562	159,562
April	· · · · · · · · · · · · · · · · · · ·	· ·	185,360
May	11,582 12,895	5,245 6,654	216,891
June	,		
July	14,641	5,957	264,141
August	15,229	8,589	309,133
September	12,809	3,186	237,739
October	12,279	3,190	219,151
November	11,931	3,320	178,105
December	12,895	3,830	190,466
Total	155,254	71,663	2,456,206
2002			
January	15,657	3,638	206,837
February	14,541	3,086	184,621
March	16,681	4,353	220,412
April	15,413	3,122	211,601
May	15,410	3,400	208,747
June	16,841	3,847	289,103
July	19,156	5,995	405,769
August	18,697	5,581	379,506
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	,		
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
Fotal	70,550	32,529	786,663
Year to Date	70,000	02,027	700,000
2001	50,992	31,693	655,219
2002	62,292	14.198	823,470
	70,550	32,529	786,663
2003	/0,550	32,329	/80,003
Rolling 12 Months Ending in April	166,554	54,169	2,624,456
2003	211,934	68,245	3,024,039

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.

Table 2.4. Consumption of Fossil Fuels for Electricity Generation: Commercial Combined Heat and Power Producers, 1990 through April 2003

Dowind	Coal	Petroleum	Natural Gas
Period			
	(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
<u> </u>	49	72	3,285
September	36	72 84	3,283 3,173
October	35		
November		68	2,681
December	38	82	2,909
Total 2002	532	1,023	36,248
**	48	51	2,995
January	32	56	2,532
February	45	60	3,540
March	37	41	2,842
April			9 -
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
Total	513	758	45,423
2003			
January	48	228	3,165
February	41	186	2,411
March	40	90	2,808
April	36	53	2,688
Total	165	556	11,071
Year to Date			
2001	169	394	10,361
2002	162	207	11,908
2003	165	556	11,071
Rolling 12 Months Ending in April			
2002	524	836	37,795
2003	516	1.107	44,586

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.

Table 2.5. Consumption of Fossil Fuels for Electricity Generation: Industrial Combined Heat and Power Producers, 1990 through April 2003

Period	Coal	Petroleum	Natural Gas
	(Thousand Tons) ¹	(Thousand Barrels) ²	(Thousand Mcf) ³
1990	\	13,299	516,729
1991	· · · · · · · · · · · · · · · · · · ·	12,283	521,916
1992		14,093	542,081
1993	· · · · · · · · · · · · · · · · · · ·	12,755	546,978
1994	,	13,537	567,836
		,	
1995		12,265	601,397
1996		13,813	610,268
1997		11,723	622,599
1998		12,392	624,878
1999		12,595	639,165
2000	11,706	10,459	640,381
2001			
January		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		782	52,595
July		826	56,512
August		781	59,886
September		746	56,534
October		834	57,124
		770	
November			54,271
December		876	58,566
Total	10,636	10,530	653,565
2002	251	0.75	62.261
January		875	62,261
February		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	-	844	64.734
September		722	59,452
October		858	52,213
November		772	50,992
		938	50,992 50,150
December	985 11,157	938 9,618	698,507
2003	11,15/	9,016	098,507
***	1.092	1 102	61,943
January	-	1,192	,
February		904	54,100
March		938	55,879
April		829	49,988
Γotal	3,946	3,862	221,910
Year to Date			
2001	3,532	4,043	205,492
2002	3,557	3,145	232,184
2003	3,946	3,862	221,910
Rolling 12 Months Ending in April			
.002	10,661	9,631	680,257
2003	,	10,335	688,232

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.

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

	_	. 1			Electric Po	wer Sector		Combin	ed Heat and	l Power Pro	oducers
Census Division and State	To	otal (All Secto		Electric	Utilities		lent Power lucers	Comm	ercial	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	620	594	4.4	56	98	542	475	-		22	21
Connecticut		129	30.8			168	129				
Maine		26	5 0.5			5	6			21	20
Massachusetts		342 98	8.5 -43.1	56	98	370	341			NM	NM
New Hampshire Rhode Island		96 	-43.1	30 	96 						
Vermont											
Middle Atlantic	4,688	4,830	-2.9	670	461	3,939	4,284	NM	NM	77	84
New Jersey		332	-66.1	53	36	60	296				
New York		645	9.6	53	57	634	564	NM	NM	19	23
Pennsylvania		3,853	.4	565	369	3,246	3,424	NM	NM	58	60
East North Central	16,841	15,950	5.6	13,580	12,476	3,075	3,302	NM	NM NM	171 97	160
Illinois Indiana		3,669 3,930	-1.0 12.6	753 4,275	643 3,798	2,781 NM	2,943 NM	NM NM	NM NM	NM	81 NM
Michigan	,	2,401	17.2	2,775	2,351	9	18	6	5	NM	NM
Ohio		4,274	-3.7	3,967	4,049	142	215	NM	NM	NM	NM
Wisconsin		1,676	10.4	1,810	1,635	1		NM	NM	38	40
West North Central	10,599	10,433	1.6	10,416	10,271	NM	NM	NM	NM	171	147
Iowa	1,784	1,527	16.8	1,730	1,481	NM	NM	NM	NM	46	39
Kansas		1,826	-8.9	1,664	1,826						
Minnesota		1,460	9.7	1,495	1,379					106	81
Missouri		2,726	.1	2,720	2,712			5	8	NM	NM
Nebraska North Dakota		884 1,823	-4.4 -1.3	844 1,787	884 1,802					NM NM	NM NM
South Dakota		187	-5.6	176	187						11111
South Atlantic	11,865	12,346	-3.9	9,380	10,064	2,319	2,132	NM	NM	164	149
Delaware		133	11.4			146	131			NM	NM
District of Columbia											
Florida	1,769	1,667	6.1	1,658	1,515	102	141			NM	NM
Georgia		2,634	-7.1	2,406	2,593					40	41
Maryland		825	12.3			898	825			27	
North Carolina		2,119	-9.9	1,768	1,985	117	105	NM	NM	22	28
South Carolina Virginia		1,134 1,076	-16.9 -21.0	921 593	1,118 828	232	225		*	21 24	16 22
West Virginia		2,758	4.3	2,034	2,024	824	705			NM	NM
East South Central	7,929	8,006	-1.0	7,386	7,507	483	427	NM	NM	59	70
Alabama		2,291	5.4	2,387	2,268	7	5			NM	NM
Kentucky		3,081	-6.3	2,627	2,659	260	423				
Mississippi		483	107.2	784	483	216				1	
Tennessee		2,151	-24.4	1,588	2,097			NM	NM	36	52
West South Central	10,979	10,754	2.1	7,144	7,212	3,619	3,322	-	-	216	220
Arkansas		1,287	-38.8	784 240	1,286	492	461			4 NM	2 NIM
Louisiana Oklahoma		839 1,436	-12.6 18.9	1,626	377 1,376	492 62	461			NM 19	NM 18
Texas		7,191	7.8	4,493	4,173	3,065	2,819			19	199
Mountain	8,373	8,709	-3.9	7,678	7,708	655	972	_	_	NM	NM
Arizona	,	1,562	-9.6	1,394	1,555					17	7
Colorado	,	1,447	4.7	1,505	1,437	NM	NM				
Idaho	NM	NM								NM	NM
Montana		934	-37.3	13	4	573	930				
Nevada		434	.8	438	434						
New Mexico		1,270	6.3	1,350	1,270					NIM	NIM
Utah		1,230 1,829	8 1.1	1,188 1,791	1,195 1,814	28 43	32			NM NM	NM NM
Wyoming Pacific Contiguous	1,830 786	559	40.6	225	1,814	548	425	NM	NM	13	15
California		84	-62.5			21	71	14141	14141	10	13
Oregon		118	90.5	225	118					NM	NM
Washington		357	48.4			527	355	NM	NM	2	1
Pacific Noncontiguous	104	94	10.4	13	14	80	69	NM	NM	NM	NM
Alaska		NM		13	14	NM	NM	NM	NM		
Hawaii		48	23.6			58	47			NM	NM
U.S. Total	72,784	72,275	.7	56,547	55,929	15,266	15,413	36	37	934	896

 $[{]m NM}$ = 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, lignite, waste coal, and synthetic coal.

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

	-	. 1 (41) 2	,		Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	Tot	tal (All Sector		Electric	Utilities	Independe Produ		Comme	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	2,838	2,576	10.2	474	509	2,275	1,971		-	89	96
Connecticut		524	30.8			686	524				
Maine	102	118	-13.4			19	27			84	91
Massachusetts	1,576	1,425	10.6			1,571	1,420			NM	NM
New HampshireRhode Island	474 	509	-6.9 	474 	509 						
Vermont											
Middle Atlantic	21,627	20,981	3.1	2,397	2,380	18,876	18,244	NM	NM	350	352
New Jersey	1,284	1,299	-1.2	270	178	1,014	1,121				
New York	3,387	3,514	-3.6	243	189	3,059	3,239	NM	NM	81	83
Pennsylvania	16,957	16,167	4.9	1,884	2,013	14,804	13,884	NM	NM	268	269
East North Central Illinois	72,982 17,063	67,435 15,173	8.2 12.5	57,822 3,613	55,193 4,900	14,352 13,031	11,578 9,993	65 NM	63 NM	744 414	600 276
Indiana	18,821	17,410	8.1	18,232	16,598	552	9,993 776	NM	NM	NM	NM
Michigan		10,212	7.3	10,754	10,398	61	58	29	27	118	103
Ohio	18,389	17,640	4.2	17,642	16,854	705	751	NM	NM	NM	NM
Wisconsin	7,747	7,000	10.7	7,581	6,819	3	*	NM	NM	158	175
West North Central	48,982	45,442	7.8	48,199	44,859	NM	NM	NM	NM	727	526
Iowa	7,575	7,065	7.2	7,375	6,871	NM	NM	NM	NM	164	160
Kansas	7,204	7,136	1.0	7,204	7,136						
Minnesota	6,793	6,560	3.6	6,319	6,303					474	257
Missouri	13,920	11,659	19.4	13,872	11,605			21	24	NM	NM
Nebraska	4,182	3,875	7.9	4,173	3,867					NM	NM
North Dakota	8,593	8,372	2.6	8,540	8,301					NM	NM
South Dakota	716	775	-7.6	716	775	10.053	0.520	 ND4			
South Atlantic Delaware	54,922 717	52,320 382	5.0 88.0	43,307	42,116	10,973 707	9,538 372	NM 	NM 	633 NM	657 NM
District of Columbia	/1/	362	66.0			707	312			11111	11111
Florida	7,721	7,602	1.6	7,112	6,867	588	687			NM	NM
Georgia	10,246	10,531	-2.7	10,095	10,376					152	155
Maryland	4,229	3,262	29.6			4,180	3,262			49	
North Carolina	9,840	8,982	9.6	9,202	8,357	496	460	NM	NM	133	157
South Carolina	4,636	4,517	2.6	4,550	4,429					86	88
Virginia	4,928	4,741	3.9	3,791	3,848	1,044	803		1	93	90
West Virginia	12,605	12,304	2.4	8,557	8,239	3,957	3,954			91	111
East South Central	34,068	32,334	5.4	31,843	30,265	1,920	1,744	NM	NM	299	318
Alabama		9,029	18.3	10,550	8,923	35	23			101	83
Kentucky	13,101 2,790	13,150 1,672	4 66.8	11,746 2,258	11,429 1,672	1,355 530	1,721			2	
Mississippi Tennessee	7,492	8,483	-11.7	7,289	8,241	330		NM	NM	196	235
West South Central	47,808	44,820	6.7	31,399	31,173	15,518	12,842			892	806
Arkansas	3,741	4,430	-15.6	3,711	4,423	13,310	12,042			30	8
Louisiana	4,646	4,426	5.0	2,119	2,162	2,513	2,259			15	5
Oklahoma	7,172	6,565	9.2	6,760	6,171	318	294			95	100
Texas	32,249	29,398	9.7	18,809	18,417	12,687	10,289			752	693
Mountain	36,796	36,507	.8	33,045	32,757	3,597	3,614	-	-	154	136
Arizona	5,891	6,095	-3.4	5,841	6,056					50	39
Colorado	6,210	6,083	2.1	6,164	6,039	47	44				
Idaho	NM	NM				2 272	2 401			NM	NM
Montana	3,371	3,488	-3.3	99	2 527	3,273	3,401				
Nevada New Mexico	2,259 5,329	2,527 4,786	-10.6 11.4	2,259 5,329	2,527 4,786						
Utah	5,072	5,006	1.3	3,329 4,897	4,780	159	169			NM	NM
Wyoming	8,649	8,512	1.6	8,456	8,444	118	109			NM	NM
Pacific Contiguous	3,598	3,267	10.1	863	772	2,681	2,437	NM	NM	52	56
California	289	357	-19.1			243	308			46	49
Oregon	865	772	12.0	863	772					NM	NM
Washington	2,444	2,138	14.3			2,438	2,129	NM	NM	4	7
Pacific Noncontiguous	450	416	8.3	63	65	336	303	NM	NM	NM	NM
Alaska	212	203	4.6	63	65	NM	NM	NM	NM		
Hawaii	238	213	11.9			231	207			NM	NM
U.S. Total	324,073	306,102	5.9	249,412	240,090	70,550	62,292	165	162	3,946	3,557

 $[{]m NM}$ = 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. • 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, April 2003 and 2002 (Thousand Barrels)

	T	4.1741164	`		Electric Po	wer Sector		Combin	ed Heat and	Power Pro	oducers
Census Division and State	10	otal (All Secto		Electric	Utilities	_	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	1,991	1,046	90.4	347	49	1,509	864	NM	NM	109	104
Connecticut		221	41.5	NM	NM	305	217	NM	NM	NM	NM
Maine		121	118.1			195	24	1	1	67	96
Massachusetts		647	62.7	NM	NM	1,009	623	NM	NM	NM	NM
New Hampshire		48	620.6	336	42	NM *	NM *	NM	NM	NM	NM
Rhode Island		NM		NM	NM	•		NM	NM	NM	NM
Vermont	. NM 3,092	NM 1,781	73.7	NM 1,247	NM 937	1 766	740	NM	NM	69	98
Middle Atlantic New Jersey		122	-45.0	25	43	1,766	69	NM NM	NM	24	10
New York		1,330	78.2	1,216	890	1,127	408	NM	NM	NM	NM
Pennsylvania		328	99.5	6	4	621	263	NM	NM	NM	NM
East North Central	498	468	6.4	255	381	164	27	NM	NM	77	59
Illinois		35	386.9	NM	NM	162	27	NM	NM	NM	NM
Indiana		115	-40.6	56	107	1	*	NM	NM	11	7
Michigan		186	-59.5	68	185			NM	NM	NM	NM
Ohio		50	84.8	90	50	NM	NM	NM	NM	NM	NM
Wisconsin	. 90	81	11.1	36	34	NM	NM	NM	NM	53	46
West North Central	203	235	-13.7	197	230	NM	NM	NM	NM	NM	NM
Iowa		NM		NM	NM	NM	NM	NM	NM	NM	NM
Kansas		66	49.8	98	66						*
Minnesota		60	7.6	62	58		1	NM	NM	NM	NM
Missouri		86	-79.6	17	86			NM	NM	NM	NM
Nebraska		NM		NM	NM			NM	NM		
North Dakota		NM		8	3					NM	NM
South Dakota		1	143.1	3	1						
South Atlantic	5,831	6,434	-9.4	4,553	5,599	993	526	11	2	275	307
Delaware		134	42.0	NM	NM	174	71			NM	NM
District of Columbia		51	-94.8	2.072	4.056	3	51				
Florida		5,098	-20.1	3,872	4,876	166	184	 ND 4	 ND (38	38
Georgia		228 204	-18.3	28	56	9	2	NM	NM	149	171
Maryland North Carolina		106	185.9 -9.0	NM 60	NM 74	577 2	198	NM NM	NM NM	NM 35	NM 31
South Carolina		50	-9.0 .2	19	22			NM	NM	31	28
Virginia		533	14.6	532	504	62	19	10	1NIVI *	7	11
West Virginia		30	25.7	35	29	1	1			NM	NM
East South Central	862	114	659.4	170	79	652	6	NM	NM	40	28
Alabama		36	56.6	28	14	NM	NM			29	22
Kentucky		38	1728.4	42	32	652	6				
Mississippi		21	269.3	70	18			NM	NM	NM	NM
Tennessee		19	88.0	30	15					NM	NM
West South Central	624	550	13.4	222	37	302	467	NM	NM	100	47
Arkansas	-	10	22.2	13	10					*	*
Louisiana		265	57.1	158	17	253	242			4	5
Oklahoma		6	34.8	2	3			NM	NM	6	3
Texas	187	269	-30.5	50	7	48	224	NM	NM	89	38
Mountain	136	205	-33.4	41	41	94	161	NM	NM	NM	NM
Arizona	. 5	11	-54.5	5	9			NM	NM	NM	NM
Colorado	. NM	NM		5	5	NM	NM			NM	NM
Idaho		*	-56.4	*	*						
Montana		160	-41.3	NM	NM	94	160				
Nevada		5	-9.2	5	5					 >D.	 >TD 4
New Mexico		3	255.9	10	2	 >D.6	1			NM	NM
Utah		NM		NM	NM	NM	NM			 ND 4	 >D.6
Wyoming		NM	10.3	8	12			 ND#	 ND4	NM	NM
Pacific Contiguous	315	386	-18.2	12	15	166	277	NM	NM	137	94
California		374	-17.0	12	12	166	275	NM	NM	NM	NM
Oregon		NM NM			3	NIM	NIM	NM NM	NM NM	NM NM	NM NM
Washington		NM	2.7	1.016		NM 144	NM 53	NM NM	NM NM	NM NM	NM NM
Pacific Noncontiguous	1,179 102	1,211 117	-2.7	1,016 94	1,148	144 NM	53 NM	NM NM	NM NM	NM NM	NM NM
Alaska		1,094	-13.0 -1.6	94 922	110 1,038	143	NM 53	NM 	NM 	NM NM	NM NM
Hawaii U.S. Total	14,732	12,429			8,516	5,791		53	41	829	751
U.S. IUIAI	14,/32	12,429	18.5	8,059	0,310	3,/91	3,122	53	41	049	/31

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

^{* =} 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 2.7.B. Consumption of Petroleum 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	To	tal (All Secto		Electric	Utilities	Independe Produ		Comme	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	10,428	6,072	71.7	1,475	121	8,059	5,244	NM	NM	649	574
Connecticut		1,508	29.4	NM	NM	1,907	1,491	NM	NM	NM	NM
Maine		544	229.7			1,365	101	4	3	423	440
Massachusetts		3,868	36.1	206	21	4,780	3,652	NM	NM	NM	NM
New Hampshire		104	1147.1	1,222	80	NM	NM	NM	NM	NM	NM
Rhode Island		NM NM		NM NM	NM NM	7	1	NM 	NM 	NM 	NM
Vermont Middle Atlantic	17,777	6,636	167.9	6,049	3,500	11,179	2,737	NM	NM	473	374
New Jersey		246	685.0	178	57	1,601	138	NM	NM	NM	NM
New York		5,069	126.5	5,856	3,434	5,435	1,493	NM	NM	124	119
Pennsylvania		1,322	230.4	NM	NM	4,143	1,105	NM	NM	NM	NM
East North Central	3,176	1,619	96.2	1,414	1,263	1,456	138	NM	NM	287	213
Illinois	. 1,484	178	732.4	NM	NM	1,436	136	NM	NM	NM	NM
Indiana	. 319	368	-13.4	251	336	6	*	NM	NM	60	32
Michigan		598	5.2	614	593		*	NM	NM	NM	NM
Ohio		193	97.5	355	191	NM	NM	NM	NM	NM	NM
Wisconsin		281	28.8	161	115	2	2	NM	NM	189	163
West North Central	1,300	1,345	-3.3	1,249	1,321	NM NM	NM NM	NM NM	NM NIM	NM NM	NM NIM
Iowa		NM 508	1.2	NM 514	NM 508	NM 	NM 	NM 	NM 	NM 1	NM *
Kansas Minnesota		308 341	39.4	314 449	328	10	1	NM	NM	NM	NM
Missouri		414	-68.3	130	414		1 	NM	NM	NM	NM
Nebraska		NM	-06.3	NM	NM			NM	NM	11111	INIVI
North Dakota		NM		30	17					NM	NM
South Dakota		3	443.8	15	3						
South Atlantic	27,795	20,676	34.4	19,491	17,639	6,912	1,811	177	29	1,215	1,195
Delaware	. 1,371	460	198.2	NM	NM	1,216	246			NM	NM
District of Columbia	. 100	92	9.0			100	92				
Florida		15,591	4.3	15,316	14,967	837	470			NM	NM
Georgia		841	15.4	215	192	NM	NM	NM	NM	609	615
Maryland		900	268.2	NM	NM	3,284	883	NM	NM	NM	NM
North Carolina		561	67.6	539	388	169	12	NM	NM	232	161
South Carolina		223	68.2	240	114	21	72	NM 170	NM 27	113 NM	109
Virginia West Virginia		1,882 126	126.8 54.1	2,956 143	1,743 121	1,104 38	4	170	27	NM NM	NM NM
East South Central	1,937	500	287.5	1,058	372	692	8	NM	NM	NM NM	NM NM
Alabama		206	38.5	147	117	NM	NM	14141	14141	NM	NM
Kentucky		85	889.8	156	78	687	7				
Mississippi		36	1139.3	419	23			NM	NM	NM	NM
Tennessee		173	112.0	336	155	NM	NM			28	19
West South Central	4,269	2,510	70.1	1,622	165	2,221	2,178	NM	NM	424	166
Arkansas		103	76.3	174	101					7	2
Louisiana		1,090	59.6	676	38	1,018	1,035			45	17
Oklahoma		27	627.0	173	7	1.202		NM	NM	26	21
Texas		1,290	66.6	598	19	1,203	1,143	NM	NM	345	126
Mountain	555 NM	665	-16.5	NM 22	NM 20	381	496	NM NM	NM NM	NM NM	NM NIM
Arizona		NM NM		23 19	39	NM	NM	NM	NM 	NM NM	NM NM
Colorado		NM *	-13.2	19	23	NM	NM			NM	NM
Montana		494	-13.2	NM	NM	374	494				
Nevada		19	-23.7	14	19	3/4	494				
New Mexico		NM	-23.2	33	14		2			NM	NM
Utah		NM		NM	NM	NM	NM				
Wyoming		NM		25	30					NM	NM
Pacific Contiguous	1,538	1,581	-2.7	107	40	1,032	1,114	NM	NM	398	426
California		1,507	-6.2	28	30	1,029	1,106	NM	NM	356	371
Oregon	. 76	11	615.0	73	8			NM	NM	NM	NM
Washington		NM		7	3	NM	NM	NM	NM	NM	NM
Pacific Noncontiguous	4,780	4,739	.9	3,984	4,214	583	469	NM	NM	NM	NM
Alaska		NM		NM	NM	NM	NM	NM	NM	NM	NM
Hawaii		4,126	2.4	3,533	3,628	578	467	 EE(207	NM	NM
U.S. Total	73,555	46,342	58.7	36,608	28,791	32,529	14,198	556	207	3,862	3,145

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

^{* =} 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 2.8.A. Consumption of Natural Gas for Electricity Generation by State, April 2003 and 2002 (Thousand Mcf)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pro	ducers
Census Division and State	Т	otal (All Secto	rs)	Electric	Utilities		ent Power lucers	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	21,092	21,769	-3.1	NM	NM	19,973	19,629	NM	NM	997	1,884
Connecticut		4,020	-10.9			3,436	3,836	NM	NM	NM	NM
Maine		5,917	-16.3			4,207	4,513	NM	NM	745	1,404
Massachusetts		8,182	31.3	NM *	NM	10,566	7,706	NM	NM	NM	NM
New Hampshire Rhode Island		NM 3,580	-50.6		11	1,764	3,575	NM	NM	NM 	NM
Vermont		2,380	27.4	2	2	1,704	5,575	11111	11111		
Middle Atlantic	28,155	37,342	-24.6	5,588	6,230	20,188	27,378	NM	NM	2,056	3,212
New Jersey	8,452	11,476	-26.3	15	149	7,425	9,074	NM	NM	NM	NM
New York		23,685	-27.9	5,571	6,079	10,671	16,702	NM	NM	722	656
Pennsylvania		2,182	20.6	NM	NM	2,092	1,603	NM	NM	425	435
East North Central	13,048	24,891	-47.6	3,335	4,925	8,348	18,151	NM	NM	1,226	1,602
Illinois		7,448 3,434	-72.4 -68.5	NM 77	NM 776	1,441 838	6,729 2,006	NM NM	NM NM	NM NM	NM NM
Indiana Michigan	,	3,434 10,426	-08.5 -35.0	1,403	1,995	4,906	2,006 8,150	NM NM	NM NM	NM NM	NM NM
Ohio		1,375	-18.9	374	809	677	506	NM	NM	NM	NM
Wisconsin		2,208	-8.3	1,274	1,178	486	760	NM	NM	237	236
West North Central	5,367	5,614	-4.4	3,561	3,508	1,303	1,332	NM	NM	NM	NM
Iowa		NM		280	499			NM	NM	NM	NM
Kansas		973	-18.7	780	946			NM	NM	NM	NM
Minnesota		1,011	30.7	579	196	499	370	NM	NM	NM	NM
Missouri		2,506	-3.3	1,596	1,532	803	962	20	8	NM	NM
Nebraska		286	-6.3	261	273	NM	NM	NM	NM	NM	NM
North DakotaSouth Dakota		NM 62	6.2	66	62					NM 	NM
South Atlantic	54,037	57,972	-6.8	38,503	41,329	14,053	15,071	NM	NM	1,444	1,468
Delaware		NM	-0.0	38	5	NM	NM				1,400
District of Columbia											
Florida	40,313	42,333	-4.8	34,761	35,551	4,969	5,914	NM	NM	NM	NM
Georgia		3,825	22.3	368	1,377	3,905	2,041			NM	NM
Maryland		1,297	-48.6	NM	NM	630	1,273			NM	NM
North Carolina		3,236	-32.2	NM	NM	1,939	2,251	NM	NM	NM	NM
South Carolina		2,921	-50.4 17.0	1,303 1,789	2,267 1,158	129 1,439	638	NM 4	NM	13 NM	14 NM
Virginia West Virginia		2,971 317	7	3	1,138	1,439	1,638 249	4	66	NM	NM
East South Central	17,436	27,105	-35.7	12,119	21,773	2,839	2,672	NM	NM	2,453	2,597
Alabama		9,116	-20.9	4,400	7,190	1,422	167			1,390	1,759
Kentucky		NM		111	463	78	124	*	35	NM	NM
Mississippi	9,144	16,783	-45.5	7,017	14,102	1,290	2,166	NM	NM	NM	NM
Tennessee		456	72.4	591	18	NM	NM	NM	NM	NM	NM
West South Central	156,129	185,371	-15.8	48,799	68,321	73,294	83,658	1,134	371	32,902	33,022
Arkansas		2,308	11.9	737	1,472	1,635	636	NM oss	NM 27	NM 12.860	NM
Louisiana Oklahoma		35,387 15,516	-16.9 -23.0	12,565 8,903	22,072 13,535	3,114 2,728	3,315 1,613	855 NM	27 NM	12,860 290	9,973 346
Texas	,	132,160	-23.0 -15.1	8,903 26,594	31,242	65,816	78,094	NM NM	NM NM	19,543	22,506
Mountain	25,002	24,476	2.1	12,137	14,079	12,066	9,301	NM	NM	NM	NM
Arizona	,	7,610	23.8	2,896	3,037	6,509	4,562	NM	NM	NM	NM
Colorado		6,307	-28.4	2,671	3,650	1,746	2,541	NM	NM	NM	NM
Idaho	NM	NM		*	3	NM	NM			NM	NM
Montana		12	-35.1	2	*	*	2			6	10
Nevada		5,711	7.9	2,745	3,877	3,417	1,833	 >D.f			
New Mexico	,	2,924	-21.6	1,914	2,489	210	170	NM NM	NM NM	NM NM	NM
Utah		1,059 580	80.7 -20.6	1,773 135	882 141	102	90	NM 	NM 	NM NM	NM NM
Wyoming Pacific Contiguous	41,209	49,193	-20.6 - 16.2	6,732	6,556	26,777	34,410	NM	NM	7,043	7,207
California		44,623	-16.1	6,426	5,577	23,843	31,313	NM	NM	6,556	6,737
Oregon		2,667	-10.7		461	2,002	1,889	NM	NM	375	309
Washington		1,903	-27.2	306	519	933	1,209	NM	NM	113	161
Pacific Noncontiguous	3,555	3,431	3.6	2,712	2,582	- 1	-	-	-	843	849
Alaska		3,431	3.6	2,712	2,582					843	849
Hawaii		425.164		122 514	160.225	170.041	211 (01	2 (00	2.042	40.000	F2 20.4
U.S. Total	365,031	437,164	-16.5	133,514	169,337	178,841	211,601	2,688	2,842	49,988	53,384

^{* =} 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.

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

	_	. 1 (41) 0	,		Electric Po	wer Sector		Combine	d Heat and	l Power Pro	ducers
Census Division and State	То	tal (All Secto	,	Electric	Utilities	Independe Produ		Comm	ercial	Indu	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	87,419	99,866	-12.5	NM	NM	79,691	91,075	817	1,198	6,826	7,168
Connecticut	. 12,635	17,416	-27.5			11,998	16,617	NM	NM	NM	NM
Maine		28,195	-21.2			16,453	22,511	NM	NM	5,772	5,684
Massachusetts		36,281	11.0	NM	NM	39,172	34,297	708	1,062	NM	NM
New Hampshire		NM		*	42					NM	NM
Rhode Island		17,672	-31.6			12,068	17,650	NM	NM		
Vermont		11	-52.9	5	11		107.050	1 401	1.024	 7 021	14240
Middle Atlantic	110,356	150,397	-26.6	19,943 80	27,176	81,010	107,050	1,481 NM	1,824	7,921	14,348
New Jersey New York		44,459 95,422	-27.6 -27.5	19,857	237 26,933	28,035 46,418	34,576 64,761	NM NM	NM NM	3,612 2,404	9,084 3,085
Pennsylvania		10,516	-27.3 -14.8	19,837 NM	20,933 NM	6,558	7,713	NM	NM	1,905	2,179
East North Central	64,188	83,419	-23.1	15,842	18,865	41,991	56,882	712	785	5,643	6,886
Illinois		18,844	-36.6	NM	NM	8,559	14,542	NM	NM	2,153	1,827
Indiana		12,172	-43.8	3,339	3,823	2,657	5,443	NM	NM	827	2,881
Michigan		42,386	-20.7	5,382	8,020	26,797	33,309	NM	NM	1,308	975
Ohio		3,191	-2.4	1,012	1,834	1,898	1,104	NM	NM	NM	NM
Wisconsin		6,825	26.7	5,260	3,198	2,080	2,484	NM	NM	1,187	997
West North Central	18,189	20,954	-13.2	11,509	14,386	3,167	3,543	NM	NM	2,817	2,153
Iowa	,	2,953	-26.3	1,184	1,774			NM	NM	NM	NM
Kansas		4,193	5.7	3,373	4,080			NM	NM	1,039	91
Minnesota		4,664	11.4	2,090	1,011	1,728	2,013	NM	NM	823	947
Missouri	. 5,517	8,073	-31.7	4,030	6,509	1,436	1,530	28	17	NM	NM
Nebraska	. 702	776	-9.6	669	725	NM	NM	NM	NM	NM	NM
North Dakota		NM		*	*					NM	NM
South Dakota	. 162	286	-43.3	162	286						
South Atlantic	183,717	185,871	-1.2	135,532	136,614	42,304	41,809	NM	NM	5,380	7,041
Delaware		4,230	-36.1	83	22	2,621	4,207			*	
District of Columbia											
Florida		141,367	.5	123,402	121,544	16,619	16,280	NM	NM	1,972	3,403
Georgia		9,247	14.3	NM	NM	7,986	4,513			NM	NM
Maryland		3,088	-25.6	NM	NM	2,136	3,011			NM	NM
North Carolina		9,928	-15.1	2,274	1,575	6,054	8,275	NM	NM	NM	NM
South Carolina		9,365	-43.1	4,607	6,874	683	2,207	NM	NM 240	35	276
Virginia		7,800	45.4	4,075	4,310	5,900	2,785	357	248	1,011	457
West Virginia East South Central	. 916 73,509	847 112,535	8.2 - 34.7	13 55,512	91,334	306 8,811	530 9,869	NM	NM	NM 8,978	NM 10,795
Alabama		39,191	-34.7 -23.1	21,111	31,223	4,114	673	INIVI	INIVI	4,926	7,295
Kentucky		2,829	-38.2	959	1,456	184	420	97	395	4,920 NM	7,293 NM
Mississippi		69,181	-43.7	31,628	58,512	4,325	8,481	NM	NM	2,937	2,142
Tennessee		1,335	100.6	1,814	142	NM	NM	NM	NM	NM	NM
West South Central	636,795	671,848	-5.2	173,805	226,109	312,323	298,659	2,914	1,492	147,752	145,587
Arkansas		7,089	38.2	1,544	3,460	7,017	2,767	NM	NM	1,227	852
Louisiana		128,113	-11.9	45,126	70,894	14,800	10,397	1,767	110	51,166	46,712
Oklahoma		53,680	-14.9	36,276	45,751	7,595	6,171	NM	NM	1,706	1,659
Texas		482,966	-3.0	90,860	106,004	282,911	279,323	NM	NM	93,654	96,365
Mountain	98,721	102,173	-3.4	49,713	53,670	45,629	43,687	NM	NM	2,922	4,317
Arizona		30,862	4.5	9,894	11,297	22,301	19,524	NM	NM	NM	NM
Colorado		22,631	-7.8	12,766	13,213	7,659	8,938	NM	NM	NM	NM
Idaho	. 972	1,991	-51.2	48	432	NM	NM			570	1,115
Montana	. 85	52	63.6	50	2	*	6			35	44
Nevada	. 27,210	30,075	-9.5	13,434	16,760	13,776	13,315				
New Mexico		10,568	-7.7	8,057	8,185	970	1,106	NM	NM	NM	NM
Utah		3,694	46.0	4,745	3,134	19		NM	NM	NM	NM
Wyoming		2,301	-4.1	719	647	549	354			938	1,300
Pacific Contiguous	240,844	244,243	-1.4	35,497	38,655	171,738	170,896	3,283	4,295	30,327	30,397
California		207,458	-1.8	27,882	27,148	144,100	148,098	3,121	3,929	28,678	28,284
Oregon		22,662	-6.8	3,256	7,511	16,562	13,900	NM	NM	1,290	1,215
Washington		14,122	12.9	4,359	3,996	11,076	8,898	NM	NM	358	898
Pacific Noncontiguous	15,025	14,006	7.3	11,680	10,515	-		-	-	3,345	3,492
Alaska		14,006	7.3	11,680	10,515					3,345	3,492
Hawaii		1 (05 212	-9.3			 					232,184
U.S. Total	1,528,762	1,685,312		509,119	617,749	786,663	823,470	11,071	11,908	221,910	

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

^{* =} 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 April 2003

	Electric Po	ower Sector ¹	Electric	Utilities	Independent Pow	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	157,876	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	126,304	50,821	126,304	50,821	NA	NA
1996	114,623	48,146	114,623	48,146	NA	NA
1997	98,826	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	102,296	40,932	90,115	30,502	12,180	10,430
2001						
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	130,470	37,031	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	14,903
2003	142,020	44,037	110,409	30,041	23,017	14,190
	125 771	20.051	112 140	26 779	22.622	11 272
January		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	138,895	45,681	113,077	29,077	25,818	16,604

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. • 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.

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.

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

Census Division	Elec	tric Power Sector	1	Electric	Utilities	Independent Po	wer Producer
and State	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	1,284	1,035	24.0	277	267	1,007	768
Connecticut, Maine,							
New Hampshire, Rhode Island,							
Vermont ²	704	480	46.5	W	W	W	W
Massachusetts	580	555	4.6	W	W	W	W
Middle Atlantic	6,013	8,642	-30.4	1,505	1,595	4,509	7,047
New Jersey	166	768	-78.4	W	W	W	W
New York	686	1,399	-51.0	W	W	W	W
Pennsylvania	5,162	6,475	-20.3	W	W	W	W
East North Central	36,776	39,253	-6.3	28,327	32,490	8,448	6,763
Illinois	9,811	8,145	20.5	W	W	W	W
Indiana	9,009	9.706	-7.2	W	W	W	W
Michigan	7,676	9,663	-20.6	W	W	W	W
Ohio	6.054	7,067	-14.3	W	W	W	W
Wisconsin	4.226	4.672	-9.5	W	W	W	W
West North Central	22,331	22,347	1	22,331	22,347	0	0
Iowa	3,848	3,849	*	W	W	W	W
Kansas	5.074	5.252	-3.4	W	W	W	W
Minnesota	2.098	1.743	20.3	W	W	W	W
Missouri	6,857	7.170	-4.4	w	w	w	w
Nebraska	2.677	2.719	-1.6	w	w	W	w
North Dakota, South Dakota ²	1.777	1.613	10.2	w	w	W	w
South Atlantic	23,924	30,501	-21.6	19,945	26,133	3,979	4,368
Delaware, District of Columbia,	20,721	50,501	21.0	17,715	20,100	5,517	1,000
Maryland ²	1,731	1,964	-11.9	W	W	W	W
	,	,					
Florida	4,477	5,270	-15.0	W W	W	W W	W W
Georgia	3,875	6,161	-37.1	W W	W W	W	W W
North Carolina	4,434	6,120	-27.6				
South Carolina	3,030	3,326	-8.9	W	W	W	W
Virginia	2,038	2,759	-26.1	W	W	W	W
West Virginia	4,338	4,901	-11.5	W	W	W	W
East South Central	13,337	14,778	-9.7	12,632	13,226	705	1,552
Alabama	2,992	3,114	-3.9	W	W	W	W
Kentucky	6,629	7,366	-10.0	W	W	W	W
Mississippi	1,067	1,898	-43.8	W	W	W	W
Tennessee	2,649	2,400	10.4	W	W	W	W
West South Central	21,444	20,626	4.0	15,788	15,409	5,656	5,217
Arkansas	2,358	2,317	1.8	W	W	W	W
Louisiana	3,686	3,920	-6.0	W	W	W	W
Oklahoma	4,127	4,585	-10.0	W	W	W	W
Texas	11,273	9,803	15.0	W	W	W	W
Mountain	12,779	12,827	4	12,076	12,278	702	550
Arizona	2,926	3,005	-2.7	W	W	W	W
Colorado	2,672	2,966	-9.9	W	W	W	W
Idaho							
Montana, New Mexico ²	1,512	1,355	11.6	W	W	W	W
Nevada	866	728	19.0	W	W	W	W
Utah	3,232	3,249	5	W	W	W	W
Wyoming	1,571	1,525	3.1	W	W	W	W
Pacific ³	1,007	1,083	-6.9	195	402	812	681
California, Oregon, Washington,							
Hawaii, Alaska ²	1,007	1,083	-6.9	W	W	W	W
U.S. Total	138,895	151,092	-8.1	113,077	124,147	25,818	26,945

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

electricity and heat to the public.
² States were aggregated to protect individual states proprietary information.

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 "*").

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, and lignite.

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

Census Division	Elec	tric Power Sector	1	Electric	Utilities	Independent Po	wer Producer
and State	Apr 2003	Apr 2002	Percent Change	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	1,886	3,625	-48.0	358	669	1,528	2,956
Connecticut, Maine,							
New Hampshire, Rhode Island,							
Vermont ²	1,176	2,167	-45.7	W	W	W	W
Massachusetts	710	1.458	-51.3	W	W	W	W
Middle Atlantic	6,115	10,116	-39.6	2,792	3,055	3,324	7.061
New Jersey	533	1,941	-72.5	W	W	W	W
New York	3,681	5,778	-36.3	W	W	W	W
Pennsylvania	1,901	2,397	-20.7	W	W	W	W
East North Central	2,850	4,647	-38.7	1,591	2,797	1,259	1,851
Illinois	1.166	1.859	-37.3	W	W	W	W
Indiana	287	413	-30.6	W	W	W	W
Michigan	743	1,621	-54.1	W	W	W	W
Ohio	372	455	-18.2	W	W	W	W
Wisconsin	282	300	-5.9	W	W	W	W
West North Central	1,824	1,927	-5,3	1,809	1,910	15	17
Iowa	96	104	-7.9	W	W	W	W
Kansas	709	787	-9.9	W	W	W	W
Minnesota	366	237	54.1	W	W	W	W
Missouri	315	387	-18.7	w	w	w	w
Nebraska	211	238	-11.2	w	w	w	w
North Dakota, South Dakota ²	128	174	-26.4	w	w	w	w
South Atlantic	17,730	17,066	3.9	14,459	13,077	3,272	3,989
Delaware, District of Columbia,	17,750	17,000	3.7	14,437	13,077	5,272	3,707
Maryland ²	1,738	2,506	-30.6	W	W	W	W
	,	9.791	16.6	W	W	W	W
Florida	11,415 843		-21.2	W	W W	W W	W W
Georgia North Carolina	843 816	1,071 893	-21.2 -8.6	W	W W	W W	W W
South Carolina	673	619	8.6	W	W	W	W
Virginia	2,091	2,054	1.8	W	W	W	W
West Virginia	154	132	16.4	W	W	W	W
East South Central	7,393	1,732	326.9	1,812	1,721	5,581	10
Alabama	146	204	-28.4	W	W	W	W
Kentucky	5,729	201	2757.3	W	W	W	W
Mississippi	819	620	32.0	W	W	W	W
Tennessee	699	707	-1.2	W	W	W	W
West South Central	3,729	4,497	-17.1	2,903	3,275	825	1,222
Arkansas	146	148	-1.6	W	W	W	W
Louisiana	1,361	1,564	-13.0	W	W	W	W
Oklahoma	414	521	-20.6	W	W	W	W
Texas	1,808	2,263	-20.1	W	W	W	W
Mountain	1,246	1,298	-4.0	1,103	1,219	143	79
Arizona	447	480	-6.8	W	W	W	W
Colorado	161	215	-24.9	W	W	W	W
Idaho	*	*	-34.9	W	W	W	W
Montana, New Mexico ²	201	150	34.3	W	W	W	W
Nevada	379	387	-1.9	W	W	W	W
Utah	33	24	35.9	W	W	W	W
Wyoming	23	42	-44.7	W	W	W	W
Pacific ³	2,908	3,392	-14.3	2,250	2,005	658	1,387
California, Oregon, Washington,							
Hawaii, Alaska ²	2,908	3,392	-14.3	W	\mathbf{W}	W	W
U.S. Total	45,681	48,301	-5.4	29,077	29,729	16,604	18,572

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 States were aggregated to protect individual states proprietary information.

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).

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 March 2003

		C	oal¹			Petro	leum ²		Natura	al Gas ³	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)
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
June		124.78	25.04	.89	12,107	369.68	23.17	1.36	212,536	425.10	178.34
		122.50	24.42	.86	12,169	349.15	22.12	1.49	282,929	374.31	176.41
July		122.30	24.42	.90	10,049	349.13	20.84	1.49	282,929	355.79	169.55
August											
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 ⁴											
January		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	67,493	126.01	25.58	.92	11,718	335.05	20.95	1.61	409,681	366.37	187.73
June	68,556	126.33	25.55	.90	10,926	335.52	21.04	1.48	499,160	347.65	190.64
July	77,185	124.76	25.35	.91	9,537	328.68	20.35	1.70	628,944	337.98	193.03
August	78,238	127.34	26.25	.94	13,601	349.95	21.73	1.64	633,874	330.31	192.17
September	74,504	125.74	25.72	.94	7,321	342.11	21.07	1.70	515,731	359.33	188.57
October	79,339	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					,				1,100,000		
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		128.55	26.33	.98	19,781	546.20	34.25	1.16	355,470	706.93	260.96
Total		127.13	26.05	1.05	49,821	500.44	31.27	1.15	1,036,429	615.55	236.00
Year to Date	213,207	147.13	20.03	1.03	77,021	300.77	31.27	1.13	1,030,729	010.00	230.00
y ear to Date 2001	189,225	122.90	24.81	.92	38,359	438.22	27.45	1.20	390,240	728.77	194.49
2001 2002		126.55	25.91	.92 .99		438.22 258.28	27.45 15.95			298.33	164.07
	219,193				22,427			1.82	1,151,130		
2003	213,209	127.13	26.05	1.05	49,821	500.44	31.27	1.15	1,036,429	615.55	236.00
Rolling 12 Months I					100.55						
2002	792,783	124.17	24.99	.91	108,686	322.38	20.20	1.58	2,913,256	351.97	165.51
2003	874,075	125.46	25.88	.96	148,478	403.17	25.13	1.43	5,318,953	416.56	200.75

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. • 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

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."

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 EIA-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.

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

			oal ¹	V	OSSII F UCI		leum ²	,	Natur		All Fossil Fuels
Period	Receipts	Avera	ge Cost	Avg.	Receipts	Avera	ge Cost	Avg. Sulfur	Receipts	Average Cost	Average Cost
	(1000 tons)	(cents/ 10 ⁶ Btu)	(dollars/ ton)	Sulfur %	(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	,	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
June	,	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	176.34
August		122.30	24.42	.90	12,169	331.23	20.84	1.49	282,929	355.79	169.55
				.86							156.39
September		123.44	24.53		8,454	316.00	19.73	1.85	207,491	295.47	
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		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	. 51,499	121.11	24.61	.86	7,289	324.42	20.29	1.56	120,934	379.77	155.12
May	. 51,574	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
September		123.03	25.09	.86	5,124	320.10	19.88	1.75	165,108	367.62	157.31
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		121.81	24.74	.87	77,194	325.13	20.35	1.68	1,640,650	367.02	153.50
2003	. 007,747	121.01	47./7	.07	//,1/4	343.13	20.33	1.00	1,040,030	307.02	133.30
January	. 58,692	123.26	25.11	1.06	6,520	402.30	25.03	1.77	99,142	530.69	161.04
		123.20	25.59	1.00	12,012	402.30	28.12	.80	85,983	620.80	177.65
February		123.31	25.39 25.27	.91	13,329	517.90	32.67	.80 1.19	93,983	728.35	177.65
March											
Total	. 167,159	123.45	25.31	1.00	31,862	467.26	29.39	1.16	279,103	627.28	177.32
Year to Date	400.44-										10.1.10
2001	189,225	122.90	24.81	.92	38,359	438.22	27.45	1.20	390,240	728.77	194.49
2002	173,786	122.33	24.93	.92	12,686	243.75	15.10	1.93	314,716	321.89	141.06
2003	167,159	123.45	25.31	1.00	31,862	467.26	29.39	1.16	279,103	627.28	177.32
Rolling 12 Months End	ding in March										
2002	747,376	123.02	24.70	.89	98,945	326.71	20.51	1.57	2,076,841	376.57	160.55
2003	681,120	122.09	24.83	.89	96,369	382.80	24.03	1.48	1,605,038	420.42	162.32

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

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

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.

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

till	Jugii Mai	cn 2000							1		
		Co	oal ¹			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)	Sullur %	(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		143.78	29.88	1.2	1,928	260.13	15.84	1.8	184,809	270.35	196.91
March		140.59	29.14	1.2	2,843	282.67	17.33	1.8	211,409	321.99	220.12
April		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		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	15,205	144.53	29.86	1.2	5,885	618.01	38.39	1.0	191,721	683.27	369.23
Total	43,169	139.95	28.49	1.2	16,353	569.95	35.24	1.1	551,064	615.80	341.38
Year to Date											
2002	42,123	141.71	29.43	1.2	8,076	274.96	16.88	1.7	588,514	296.86	207.11
2003	43,169	139.95	28.49	1.2	16,353	569.95	35.24	1.1	551,064	615.80	341.38

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. • More thousand cubic feet. • Monetary values are expressed in nominal

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

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

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

		Co	oal ¹			Petro	leum ²		Natura	al Gas³	All Fossil Fuels
Period	Receipts	Averaş	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	41	W	W	2.2	19	W	W	*	588	327.67	318.17
February	34	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		W	W	2.5	11	W	W	*	593	379.26	294.56
June		W	W	2.4	3	W	W		887	362.48	301.26
July		W	W	3.8	4	W	W	*	3,281	174.93	182.94
August		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}	W	2.6	91	W	W	*	16,889	240.99	241.81
2003											
January	45	W	W	2.2	58	W	W	*	825	486.76	378.35
February	32	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
Total	106	\mathbf{W}	W	2.4	202	W	\mathbf{W}	*	2,445	492.88	433.44
Year to Date											
2002	110	W	W	2.2	32	W	W	*	2,950	326.47	309.14
2003	106	\mathbf{W}	W	2.4	202	\mathbf{W}	\mathbf{W}	*	2,445	492.88	433.44

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. •Mof = 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.

^{* =} 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 "*".)

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

	·	Co	oal ¹			Petro	leum ²		Natura	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	1,140	W	W	1.5	512	W	W	1.9	84,310	285.23	252.71
February		W	W	3.2	479	W	W	1.8	77,223	245.87	223.66
March	1,002	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	1,097	W	W	1.4	321	W	W	2.1	86,074	347.07	301.66
June	1,172	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	1,164	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	\mathbf{W}	\mathbf{W}	1.5	5,184	\mathbf{W}	\mathbf{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	806	W	W	1.2	490	W	W	2.3	68,474	550.26	463.47
March	1,098	W	W	1.6	517	W	W	2.4	68,784	749.66	584.10
Total	2,775	\mathbf{W}	\mathbf{W}	1.4	1,405	W	\mathbf{W}	2.1	203,817	599.17	489.70
Year to Date											
2002	3,175	W	W	2.0	1,633	W	W	1.6	244,951	269.00	242.19
2003	2,775	W	\mathbf{w}	1.4	1,405	W	W	2.1	203,817	599.17	489.70

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. • More thousand cubic feet. • Monetary values are expressed in nominal

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.

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

	_				Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	To	tal (All Secto	rs) Percent	Electric	Utilities ¹	-	ent Power ucers	Comn	nercial	Indu	strial
	Mar 2003	Mar 2002	Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002
New England	669	634	5.5	147	150	511	484		-	11	1
Connecticut		163	-28.0			117	163				
Maine		15	54.0	45		13	15			11	1
Massachusetts New Hampshire		306 150	39.0 -31.5	45 103	150	381	306				
Rhode Island		130	-51.5	103	130						
Vermont											
Middle Atlantic	4,249	4,461	-4.7	186	147	3,946	4,220			118	93
New Jersey		120	78.1	52	23	163	97				
New York		533	56.6	68	45	709	438			57	50
Pennsylvania		3,807	-15.9	66	79	3,074	3,685			60	43
East North Central	14,977	15,451	-3.1 10.8	10,951 779	12,485	3,727	2,679	18	25	282 224	262 197
Illinois Indiana		3,985 4,469	-5.8	4,087	1,466 4,335	3,410 124	2,322 135			224	197
Michigan		1,916	2.3	1,942	1,891	124	133	18	25		
Ohio		3,379	-19.5	2,503	3,127	193	223			26	29
Wisconsin		1,703	-1.8	1,640	1,667					31	36
West North Central	12,219	11,627	5.1	12,099	11,531	-	_	12	10	108	86
Iowa		1,861	2.1	1,792	1,775					108	86
Kansas		1,761	4.5	1,841	1,761						
Minnesota		1,563	-3.6	1,506	1,563						
Missouri		3,179 950	13.1 2.3	3,585 972	3,169 950			12	10		
Nebraska North Dakota		2,114	6.0	2,241	2,114						
South Dakota		199	-18.1	163	199						<u></u>
South Atlantic	13,226	13,309	6	10,204	11,090	2,880	2,056			141	163
Delaware	,	66	132.5			154	66				
District of Columbia											
Florida		2,019	-9.4	1,593	1,812	236	207				
Georgia		2,356	21.1	2,826	2,337					26	19
Maryland		696	63.9	1 420	2.200	1,142	696				
North Carolina		2,486	-35.9	1,430	2,288	134	114			30	84
South Carolina Virginia		1,369 1,162	-24.1 10.6	1,013 981	1,348 1,032	279	113			26 25	22 17
West Virginia		3,155	5.5	2,362	2,273	935	860			33	22
East South Central	9,141	7,477	22.2	8,314	7,339	679	7		_	148	131
Alabama	. 2,366	1,884	25.6	2,354	1,877	12	7				
Kentucky		2,756	21.5	3,006	2,756	343					
Mississippi		366	114.7	462	366	323					
Tennessee		2,471	6.8	2,493	2,340					148	131
West South Central	7,608	9,926	-23.4	5,062	6,340	2,333	3,394			213	192
Arkansas		1,308	-24.7	986 556	1,308		699			2	
LouisianaOklahoma		1,344 1,906	-58.5 -32.3	556 1,153	645 1,787	87	72			49	47
Texas	,	5,368	-32.3 -11.0	2,368	2,600	2,245	2,623			162	145
Mountain	8,933	8,300	7.6	8,526	7,898	371	382			36	20
Arizona	,	1,126	10.0	1,202	1,105					36	20
Colorado	. 1,482	1,431	3.6	1,482	1,431						
Idaho											
Montana		952	-3.2	551	571	371	382				
Nevada		569	19.5	680	569						
New Mexico		623	111.5	1,317	623						
Utah Wyoming		1,308 2,291	-13.8 -5.4	1,127 2,167	1,308 2,291						
Pacific Contiguous	974	968	.7	233	236	698	678			42	54
California		133	-19.2			65	79			42	54
Oregon		236	-1.3	233	236						
Washington	. 633	598	5.8			633	598				
Pacific Noncontiguous	60	61	-1.4			60	61	-	-		
Alaska											
Alaska		61 72,214	-1.4 2	55,723	57,216	60 15,205	61 13,961	29	35	1,098	1,002

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

					Electric Po	wer Sector		Combine	d Heat and	Power Pro	ducers
Census Division and State	Tota	ıl (All Sector		Electric l	U tilities ¹	Independe Produ		Comm	ercial	Indus	trial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	1,919	1,618	18.5	383	382	1,511	1,222		-	25	14
Connecticut	395	418	-5.5			395	418				
Maine	64	58	10.7			39	44			25	14
Massachusetts	1,165	761	53.1	88	292	1,076	761				
New Hampshire Rhode Island	295	382	-22.8	295	382						
Vermont											
Middle Atlantic	11,566	13,086	-11.6	410	503	10,841	12,285			315	299
New Jersey	743	699	6.3	110	99	633	600				
New York	2,251	2,022	11.3	145	131	1,943	1,725			163	166
Pennsylvania	8,572	10,366	-17.3	154	272	8,265	9,961			153	132
East North Central	50,042	47,081	6.3	38,617	38,269	10,832	7,952	67	78	526	781
Illinois	12,314	11,777	4.6	1,882	4,207	10,083	6,989			350	582
Indiana	12,707	14,182	-10.4	12,325	13,809	383	374				
Michigan	5,336	5,691	-6.3	5,269	5,614			67	78		
Ohio	14,626	10,303	41.9	14,184	9,619	366	590			76	94
Wisconsin	5,059	5,127	-1.3	4,959	5,021					100	105
West North Central Iowa	34,366 5,164	34,954 4,988	-1.7 3.5	34,219 5,056	34,678 4,744			40	32	108 108	244 244
Kansas	5,164 4,653	4,988 5,509	-15.6	5,056 4,653	5,509					108	244
Minnesota	4,481	4,935	-9.2	4,481	4,935						
Missouri	10,184	9,487	7.3	10,144	9,455			40	32		
Nebraska	2,655	3,066	-13.4	2,655	3,066						
North Dakota	6,731	6,432	4.7	6,731	6,432						
South Dakota	498	537	-7.3	498	537						
South Atlantic	38,595	40,549	-4.8	30,489	32,813	7,674	7,153			431	583
Delaware	440	221	99.3			440	221				
District of Columbia											
Florida	5,343	5,992	-10.8	4,733	5,358	610	634				
Georgia	7,835	7,850	2	7,767	7,771					68	79
Maryland	2,823	2,815	.3			2,823	2,815				
North Carolina	6,251	6,508	-4.0	5,741	5,904	387	352			122	252
South Carolina	3,064 3,777	4,033 3,591	-24.0	3,006 2,897	3,976	813	513			58 67	57 58
Virginia West Virginia	9,062	9,540	5.2 -5.0	6,345	3,019 6,784	2,602	2,619			116	137
East South Central	23,979	23,891	-3.0 . 4	22,546	23,460	994	2,019			439	407
Alabama	5,723	6,289	-9.0	5,689	6,265	35	24				
Kentucky	9,368	8,992	4.2	8,732	8,992	636					
Mississippi	1,541	1,105	39.4	1,217	1,105	323					
Tennessee	7,347	7,506	-2.1	6,908	7,099					439	407
West South Central	26,802	30,453	-12.0	17,901	19,546	8,198	10,292			702	615
Arkansas	2,986	2,840	5.1	2,986	2,840						
Louisiana	1,803	4,194	-57.0	1,796	1,937		2,258			7	
Oklahoma	4,946	5,496	-10.0	4,509	5,150	292	218			144	128
Texas	17,067	17,922	-4.8	8,610	9,619	7,906	7,816			551	487
Mountain	23,132	24,604	-6.0	21,942	23,468	1,100	1,054			91	82
Arizona	3,525	3,770	-6.5	3,434	3,688					91	82
Colorado	4,438	4,757	-6.7	4,438	4,757						
Idaho	2,750	2,559	7.5	1,651	1,505	1,100	1,054				
Montana Nevada	2,730	1,262	124.2	2,829	1,303	1,100	1,034				
New Mexico	2,518	1,769	42.3	2,518	1,769						
Utah	2,847	3,697	-23.0	2,847	3,697						
Wyoming	4,225	6,790	-37.8	4,225	6,790						
Pacific Contiguous	2,631	2,777	-5.3	652	668	1,840	1,959			138	150
California	310	406	-23.8			171	256			138	150
Oregon	652	668	-2.4	652	668						
Washington	1,669	1,703	-2.0			1,669	1,703				
Pacific Noncontiguous	179	180	7			179	180				
Alaska	170	100				170					
Hawaii	179	180	7	167.150	172 706	179	180	106	110	2.775	2 175
U.S. Total	213,209	219,193	-2.7	167,159	173,786	43,169	42,123	106	110	2,775	3,175

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, March 2003 and 2002 (Thousand Barrels)

	_				Electric Po	wer Sector		Combin	Combined Heat and Power Producers			
Census Division and State	Tot	tal (All Sector		Electric	Utilities ¹		ent Power ucers	Comn	nercial	Indu	strial	
	Mar 2003	Mar 2002	Percent Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	
New England	7,307	1,194	512.2	5,522	2	1,760	1,032			25	159	
Connecticut		179	5.5			188	179					
Maine	503	159	217.0			478				25	159	
Massachusetts	6,107	854 2	615.3	5,014 508	2	1,093	854					
New Hampshire Rhode Island	508		NM 	308								
Vermont												
Middle Atlantic	4,476	1,057	323.6	1,992	230	2,392	825	8		83	1	
New Jersey		27	706.8	169		50	27			2		
New York	3,306	770	329.2	1,823	229	1,459	540	8		16	1	
Pennsylvania	949	259	266.5	*	341	883	258			66	1	
East North Central Illinois	482 186	651 29	-26.0 538.0	165 1	4	193 185	37 25			123	273	
Indiana	93	247	-62.4	32	16					61	231	
Michigan		248	-68.8	78	248							
Ohio		60	-86.5	5	54	3	*			1	5	
Wisconsin	117	67	75.1	50	18	5	12			61	36	
West North Central	220	258	-14.5	220	258		-					
Iowa	12	4	166.6	12	4							
Kansas Minnesota	73 125	85 70	-14.1 79.4	73 125	85 70							
Missouri		94	-91.4	8	94							
Nebraska	*	*	89.4	*	*							
North Dakota	2	4	-52.1	2	4							
South Dakota												
South Atlantic	5,515	4,173	32.2	4,219	3,770	1,031	217	41	5	224	182	
Delaware	551	144	282.7	14	25	439	10			98	109	
District of Columbia	37 4,060	1 3,498	3973.1 16.1	3,853	3,495	37 166	1 3			41		
Florida		3,498 18	-47.7	3,833 5	3,493	2	8			3		
Maryland		174	20.6			210	174					
North Carolina	60	72	-16.7	17	36	28	7			15	29	
South Carolina	35	12	184.9	3	11					32	1	
Virginia		217	139.8	296	163	147	12	41	5	36	38	
West Virginia	32	36	-11.3	30	30	2	2				4	
East South Central Alabama	333	34 7	864.7 -11.7	301 6	32 5	32		-			2	
Kentucky	53	10	408.9	21	10	32						
Mississippi				258								
Tennessee	15	17	-10.5	15	17							
West South Central	1,159	512	126.4	825	4	286	504			47	4	
Arkansas	6	3	69.6	6	3					10		
Louisiana	1,066 14	334	219.5	784 14		273	329			10	4	
Texas	72	175	-58.6	21		13	175			37		
Mountain	87	31	178.8	84	25	3	6			-	_	
Arizona	8			8								
Colorado	5	3	68.9	5	3							
Idaho												
Montana	8	12	-29.6	6	6	3	6					
Nevada New Mexico	55 4	2	87.4	55 4	2							
Utah	3	4	-15.5	3	4							
Wyoming	3	10	-69.7	3	10							
Pacific Contiguous	107	97	10.6			93	77			14	20	
California	93	77	21.2			93	77					
Oregon												
Washington		20	-30.1				145			14	20	
Pacific Noncontiguous Alaska	96	145	-33.6			96	145				 	
Hawaii	96	145	-33.6			96	145					
		1.0	22.0			5,885	2,843	50	5		642	

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. • 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."

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

					Electric Po	wer Sector		Combine	d Heat and	d Power Producers		
Census Division and State	Tota	ıl (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	11,481	3,589	219.8	6,120	11	5,259	3,126	-		102	453	
Connecticut	682	601	13.5			682	601					
Maine	1,682	453	271.5	 5 220		1,580	2.525			102	453	
Massachusetts New Hampshire	8,217 900	2,527 9	225.2 9692.0	5,220 900	1 9	2,997	2,525					
Rhode Island			9092.0									
Vermont												
Middle Atlantic	17,738	3,258	444.5	11,580	1,678	5,969	1,561	15		174	19	
New Jersey	543	197	175.8	192	100	348	98			4		
New York	14,384	2,670	438.7	11,388	1,578	2,932	1,083	15		49	10	
Pennsylvania	2,810	391	619.6		1	2,689	380			122	9	
East North Central Illinois	951 208	1,293 83	-26.4 150.0	393	688 43	261 204	59 40	-		297	547	
Indiana	245	441	-44.4	76	70	204				169	370	
Michigan	196	417	-53.1	196	417							
Ohio	77	105	-26.4	30	93	42	4			5	8	
Wisconsin	226	248	-8.8	87	64	15	15			123	168	
West North Central	554	805	-31.2	554	805	-	-			*		
Iowa	31	13	127.6	31	13							
Kansas Minnesota	181 315	185 280	-2.7 12.6	181 315	185 280					*		
Missouri	19	314	-94.0	19	314							
Nebraska	1	1	22.7	1	1							
North Dakota	8	11	-32.3	8	11							
South Dakota												
South Atlantic	15,128	10,937	38.3	11,582	9,286	2,733	1,092	186	32	626	528	
Delaware	1,174	680	72.6	28	79	912	272			234	329	
District of Columbia	83	9 6 4 7	1907.0	9,392	9 462	83 297	4 185			 116		
FloridaGeorgia	9,805 81	8,647 48	13.4 69.2	9,392 35	8,462 34	41	13			5	1	
Maryland	725	554	30.7			725	554					
North Carolina	329	214	53.9	166	107	94	7			69	99	
South Carolina	122	28	328.8	21	24					102	5	
Virginia	2,670	693	285.3	1,827	529	557	50	186	32	100	82	
West Virginia	138	68	102.7	114	51	24	5				13	
East South Central	743 28	117 36	533.7 -21.4	527 13	108	202				14 14	10 10	
Alabama Kentucky	272	23	1086.0	71	26 23	202				14		
Mississippi	400	9	4419.5	400	9	202						
Tennessee	42	50	-14.9	42	50							
West South Central	2,373	1,556	52.5	994	20	1,219	1,514	-		160	22	
Arkansas	14	9	44.4	14	9							
Louisiana	1,760	899	95.8	900	*	824	884			36	15	
Oklahoma	27	647	11.0	27	10	205	620			124	 o	
Texas Mountain	571 137	647 123	-11.8 11.8	52 111	10 91	395 24	630 29			124 2	8 2	
Arizona	10	8	26.4	8	6					2	2	
Colorado	7	7	6.0	7	7							
Idaho												
Montana	39	45	-12.7	15	15	24	29					
Nevada	55	5	999.5	55	5							
New Mexico	15	8	102.2	15	8							
Utah	6 4	12 38	-48.1 -89.5	6 4	12 38							
Pacific Contiguous	298	211	-89.3 41.2	4		269	158			29	53	
California	269	158	69.9			269	158					
Oregon												
Washington	29	53	-44.9				*			29	53	
Pacific Noncontiguous	418	537	-22.2			418	537	-			-	
Alaska	410					410	 527					
Hawaii	418	537 22,427	-22.2 122.1	31,862	12 686	418	537 8 076	202	32	1,405	1 633	
U.S. Total	49,821	22,42/	122.1	31,002	12,686	16,353	8,076	202	32	1,405	1,633	

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. •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."

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

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	Tot	tal (All Sector		Electric	Utilities ¹		ent Power ucers	Comm	nercial	Indu	strial
	Mar 2003	Mar 2002	Percent Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002
New England	19,371	26,520	-27.0	16	405	19,355	26,115	-	-	-	-
Connecticut		4,293	-7.9			3,954	4,293				
Maine		7,568	-40.5			4,503	7,568				
Massachusetts		9,570	-17.1	16	403	7,916	9,167				
New Hampshire Rhode Island		5,086	 -41.4			2,982	5,086				
Vermont		2,080	-41.4		2	2,962	3,080				
Middle Atlantic	26,137	36,970	-29.3	2,810	5,000	21,662	28,146	83	117	1,582	3,707
New Jersey		11,132	-48.2			5,724	9,546			41	1,586
New York		21,876	-23.8	2,810	5,000	13,455	16,290	83	117	313	469
Pennsylvania	3,711	3,963	-6.4			2,483	2,310			1,228	1,653
East North Central	13,154	21,032	-37.5	1,122	3,227	9,878	14,923	8	10	2,146	2,873
Illinois		6,414	-65.1	20	660	1,540	4,979			681	775
Indiana		2,192	-39.5	22	16	10	244			1,296	1,932
Michigan		10,938 255	-24.2 -43.2	838 7	2,287 14	7,450 47	8,641 163	8	10	90	 77
Ohio Wisconsin		255 1,234	-43.2 -7.2	235	248	831	163 896			90 79	77 89
West North Central	1,815	3,232	-43.9	1,201	1,912	610	1,305	*	8	3	7
Iowa	,	553	-24.1	223	301	197	252				
Kansas		685	-31.5	469	685						
Minnesota		622	-30.6	134	15	294	600			3	7
Missouri		1,347	-63.6	371	886	119	453	*	8		
Nebraska		25	-87.0	3	25						
North Dakota		*			*						
South Dakota		42.500	10.0	22 720	24.000	0.104	9.726		026	2 121	0.027
South Atlantic Delaware	34,963 2,059	43,589 1,855	-19.8 11.0	23,738	24,889 5	9,104 1,260	8,736 1,143		926	2,121 799	9,037 707
District of Columbia		1,055	11.0		<i>-</i> -	1,200	1,143			199	707
Florida		29,656	-5.9	23,100	24,521	3,928	3,867			865	1,268
Georgia		779	-19.9		140	490	554			134	85
Maryland		730	-74.1			189	730				
North Carolina		1,520	-21.9		157	1,173	1,363			14	
South Carolina		457	-73.4		7	118	292			4	158
Virginia		1,988	41.2	622	50	1,881	632		926	303	380
West Virginia		6,603	-98.8	16	9	66	155		210	0.007	6,440
East South Central	16,043 11,574	18,389 6,970	-12.8 66.1	6,549 3,731	14,078	1,407 190	2,959 320	-	219	8,087 7,654	1,133 692
Alabama Kentucky		539	-91.0	3,/31	5,958 34	190	286		219	7,034	092
Mississippi		10,843	-59.7	2,778	8,086	1,180	2,342			414	414
Tennessee	,	38	30.2	2,770		30	11			19	26
West South Central	164,817	171,634	-4.0	34,297	42,187	81,502	72,591	895	435	48,124	56,421
Arkansas	2,784	1,975	40.9	125	676	2,659	1,299				
Louisiana	32,008	39,346	-18.6	9,510	19,076	2,451	254	556		19,492	20,016
Oklahoma		11,546	-17.0	8,444	9,281	480	1,590			663	675
Texas		118,767	1.4	16,218	13,154	75,912	69,447	339	435	27,968	35,730
Mountain	27,272	24,151	12.9	13,236	13,945	13,774	9,826			262	380
Arizona Colorado	,	5,595	92.8	3,007	3,015	7,761	2,567			18	14
Idaho		5,683 1,128	15.1 -40.6	4,896	3,626	1,648 670	2,057				
Montana		1,128	216.4	1	1	1	1,128				
Nevada		8,500	-25.6	3,128	4,448	3,200	4,052				
New Mexico		2,458	2.8	2,038	2,293	490	23				143
Utah	,	524	-69.9	153	524	5					
Wyoming	257	262	-1.8	13	38					244	223
Pacific Contiguous	49,912	68,173	-26.8	9,023	11,505	34,430	46,809			6,459	9,859
California		57,755	-28.1	8,276	9,387	27,536	39,406			5,702	8,963
Oregon		6,636	-26.0	747	2,119	3,603	3,952			559	565
Washington		3,781	-7.7	1 096	1 222	3,291	3,450			198	331
Pacific Noncontiguous Alaska	1,986 1,986	1,223 1,223	62.3 62.3	1,986 1,986	1,223 1,223		-				
		1,223	02.3	1,980	1,223						
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 March **Table 4.8.B.** (Thousand Mcf)

					Electric Po	wer Sector		Combine	ed Heat and	l Power Pr	oducers
Census Division and State	Tot	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	59,867	77,795	-23.0	219	727	59,647	77,068				
Connecticut		12,027	-33.6			7,983	12,027				
Maine	14,102	23,179	-39.2			14,102	23,179				
Massachusetts		25,471	1.3	219	718	25,570	24,753				
New Hampshire		17 100	20.0			11.001	17 100				
Rhode Island Vermont	11,991	17,109 9	-29.9 		9	11,991	17,109				
Middle Atlantic	76,808	107,639	-28.6	7,119	16,846	64,191	79,544	542	363	4,956	10,886
New Jersey	20,272	32,083	-36.8			20,055	27,276			217	4,808
New York	47,051	64,922	-27.5	7,119	16,846	38,719	46,392	542	363	670	1,320
Pennsylvania	9,485	10,634	-10.8			5,417	5,876			4,068	4,758
East North Central	39,358	54,087	-27.2	3,980	7,533	29,151	38,986	43	17	6,184	7,551
Illinois	6,972	13,557	-48.6	68	1,547	5,456	10,229			1,449	1,782
Indiana	4,462	6,489	-31.2	68	152	170	1,102			4,223	5,235
Michigan		30,166	-19.6	3,133	5,053	21,075	25,096	43	17		
Ohio		608	-14.6	35	59	226	328			258	221
Wisconsin	3,154	3,266	-3.4	676	722	2,224	2,232			254	312
West North Central	7,766	7,106	9.3	5,129	4,134	2,619	2,900	9	34	9	38
Iowa	1,222	1,685	-27.5	720	787	502	898				
Kansas	1,523	1,740 1,543	-12.5	1,523	1,740 65	1,490	1 441			9	38
Minnesota Missouri		1,900	36.3 12.6	605 1,505	1,304	626	1,441 562	9	34		36
Nebraska	2,140 777	238	227.1	777	238		302				
North Dakota		*	-93.2	*	*						
South Dakota											
South Atlantic	106,019	123,749	-14.3	75,148	70,025	24,268	22,756		926	6,603	30,042
Delaware	4,437	5,051	-12.1	10	17	2,034	2,995			2,393	2,038
District of Columbia											
Florida	86,187	84,013	2.6	72,964	69,051	10,401	11,012			2,822	3,949
Georgia		2,242	-7.6		242	1,705	1,618			368	383
Maryland		1,801	-7.7			1,662	1,801				
North Carolina	2,953	2,610	13.1	11	263	2,928	2,347			15	
South Carolina		1,883	-80.3	*	8	354	1,244			16	631
Virginia		3,817	108.4	2,126	372	4,840	1,431		926	989	1,088
West Virginia East South Central	382 52,889	22,332 50,879	-98.3 4.0	38 25,640	71 39,172	345 3,106	309 8,005		452	24,143	21,952 3,250
Alabama		17,806	109.8	13,372	14,336	1,173	1,486		432	22,810	1,984
Kentucky	259	958	-72.9	197	121	62	385		452	22,010	1,704
Mississippi		32,002	-52.8	12,071	24,715	1,782	6,088			1,267	1,199
Tennessee	154	113	36.8			89	45			66	68
West South Central	471,826	490,288	-3.8	101,104	119,110	227,585	207,723	1,852	1,157	141,285	162,298
Arkansas	10,092	5,783	74.5	408	2,030	9,684	3,753				
Louisiana	93,529	106,475	-12.2	32,598	47,845	6,793	457	852		53,286	58,172
Oklahoma	27,338	34,399	-20.5	23,124	28,370	2,688	4,264			1,527	1,765
Texas	340,867	343,631	8	44,973	40,865	208,421	199,249	1,000	1,157	86,472	102,360
Mountain	66,641	63,319	5.2	32,347	29,993	33,535	31,713			759	1,613
Arizona	19,778	16,887	17.1	5,289	4,859	14,432	11,698			57	329
Colorado	16,859	14,593	15.5	11,923	9,582	4,936	5,011				
Idaho	2,149 4	2,930 3	-26.7 39.1	2	2	2,149 1	2,930				
Montana Nevada	20,071	21,661	-7.3	9,647	9,632	10,424	12,029				
New Mexico		5,145	34.2	5,319	4,718	1,584	12,029				383
Utah	,	1,101	-85.4	153	1,101	8					
Wyoming	715	999	-28.4	13	98					702	901
Pacific Contiguous	149,439	170,885	-12.5	22,600	22,280	106,963	119,331			19,877	29,274
California		140,878	-13.5	19,798	17,494	84,357	96,865			17,695	26,519
Oregon	19,529	19,039	2.6	2,802	4,785	15,132	12,672			1,595	1,581
Washington		10,968	-26.5			7,474	9,794			587	1,174
Pacific Noncontiguous	5,816	5,383	8.0	5,816	4,896	-	487			-	
Alaska	5,816	5,383	8.0	5,816	4,896		487				
	5,816 1,036,429	5,383 1,151,130	8.0 - 10.0	5,816 279,103	4,896 314,716	 551,064	487 588,514	2,445	2,950	203,817	244,951

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, March 2003 and 2002 (Cents per Million Btu)

					Electric Po	wer Sector		Combin	ed Heat and	l Power Pr	oducers
Census Division and State	То	tal (All Sector		Electric	Utilities		ent Power ucers ¹	Comn	nercial	Indu	strial
	Mar 2003	Mar 2002	Percent Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002
New England	189.54	200.84	-5.6	192.22	186.05	186.60	205.74			W	W
Connecticut		W	W			W	W				
Maine		W	W	221.00		W	W			W	W
Massachusetts New Hampshire		W 186.05	W -5.4	231.00 175.99	186.05	W	W				
Rhode Island		180.03	-5.4	1/3.99	180.05						
Vermont											
Middle Atlantic	135.31	130.54	3.7	228.38	151.96	129.62	129.01		-	173.40	162.64
New Jersey	W	W	W	464.00	244.87	W	W				
New York		W	W	149.87	159.00	W	W			W	W
Pennsylvania		W	W	121.71	119.20	W	W			W	W
East North Central	120.84	121.40	5	119.91	119.83	122.66	127.28	W	W	W	W
Illinois Indiana		W W	W W	123.02 119.69	119.30 116.45	W W	W W			W	W
Michigan		W	W	135.16	135.53			W	W		
Ohio		w	w	116.59	120.97	W	W			W	W
Wisconsin		W	W	103.92	106.65					W	W
West North Central	89.20	89.46	3	88.70	88.98		_	W	W	W	W
Iowa	W	W	W	83.95	83.19					W	W
Kansas		101.03	-1.8	99.17	101.03						
Minnesota		107.99	1.6	109.69	107.99						
Missouri		W	W	90.33	89.44			W	W		
Nebraska North Dakota	57.74	58.32	-1.0 -2.8	57.74 73.31	58.32						
South Dakota		75.43 131.06	-2.8 2.7	134.62	75.43 131.06						
South Atlantic	159.12	157.84	.8	158.78	158.45	159.75	153.29			170.07	173.65
Delaware	W	W	W			W	W				
District of Columbia											
Florida		W	W	178.68	172.53	W	W				
Georgia		W	W	171.86	167.11					W	W
Maryland		W	W			W	W				
North Carolina	W	W	W	169.62	168.97	W	W			W	W
South Carolina		W W	W W	157.67	157.17	W	W			W W	W W
Virginia West Virginia		W	W	151.65 127.17	166.25 124.47	W	W			W	W
East South Central	128.60	125.76	2.3	129.29	125.36	113.51	W			W	W
Alabama		W	W	146.33	139.06	W	W				
Kentucky		115.27	W	119.89	115.27	W					
Mississippi	W	164.62	W	157.77	164.62	W					
Tennessee		W	W	119.53	120.39					W	W
West South Central	141.29	122.92	14.9	119.54	108.59	202.08	154.57	-	-	100.21	93.15
Arkansas		60.51	110.6	127.45	60.51						
Louisiana		W W	W	141.35	132.15	W	W W			W W	W
Oklahoma Texas		W W	W W	98.20 122.42	95.11 138.63	W W	W W			W W	W
Mountain	108.77	97.88	11.1	110.18	99.10	W	W			W	W
Arizona		W	W	138.40	129.37					W	W
Colorado	97.17	93.24	4.2	97.17	93.24						
Idaho											
Montana		W	W	61.24	61.41	W	W				
Nevada		117.37	19.0	139.64	117.37						
New Mexico		164.15	-9.3	148.93	164.15						
Utah		88.53 76.93	9.1 12.7	96.62 86.71	88.53 76.93						
Wyoming Pacific	86.71 160.46	76.93 155.74	12.7 3.0	86.71 126.62	76.93 135.58	170.03	160.15			W	W
California		W	W. W.	120.02	133.36	170.03 W	100.15 W			W	W
Oregon		135.58	-6.6	126.62	135.58						
Washington		W	W			W	W				
Alaska											
Hawaii		W	W			W	W				
U.S. Total	128.55	125.32	2.6	123.78	121.13	144.53	140.59	W	W	W	W

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

					Electric Po	wer Sector		Combine	d Heat and	l Power Producers			
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	196.12	202.61	-3.2	188.29	186.11	196.84	207.37		-	W	W		
Connecticut	W	W	W			W	W						
Maine	W	W	W			W	W			W	W		
Massachusetts	W	W	W	234.16		W	W						
New Hampshire Rhode Island	174.88	186.11	-6.0 	174.88	186.11								
Vermont													
Middle Atlantic	133.60	134.14	4	193.17	148.11	130.00	132.63			174.91	169.58		
New Jersey	W	W	W	345.27	214.04	W	W						
New York	W	W	W	150.34	158.50	W	W			W	W		
Pennsylvania	W	W	W	122.93	118.29	W	W			W	W		
East North Central	120.59	121.75	-1.0	119.71	120.20	122.88	127.21	W	W	W	W		
Illinois	W	W	W	115.91	118.84	W	W			W	W		
Indiana	W	W	W	118.79	116.63	W	W						
Michigan	W	W	W	136.34	137.13			W	W	 XX7	 ****		
Ohio	W W	W W	W W	119.45 103.98	121.02 108.75	W	W			W W	W W		
Wisconsin West North Central	89.05	88.50	.6	88.78	88.01			W	W	W	W		
Iowa	W	W	W	83.36	82.81					W	W		
Kansas	103.47	98.70	4.8	103.47	98.70								
Minnesota	108.18	104.56	3.5	108.18	104.56								
Missouri	W	W	W	89.77	89.95			W	W				
Nebraska	58.02	57.56	.8	58.02	57.56								
North Dakota	72.95	74.66	-2.3	72.95	74.66								
South Dakota	134.31	130.64	2.8	134.31	130.64								
South Atlantic	159.34	158.40	.6	159.30	158.95	158.94	155.09			168.69	168.63		
Delaware	W	W	W			W	W						
District of Columbia	 W	W	W	176.07	172.20	W	W						
Florida	W	W	W	176.97 170.82	173.20 168.32	vv 	vv 			W	W		
Maryland	W	W	W	170.82	100.52	W	w						
North Carolina	W	w	w	171.59	170.40	W	W			W	W		
South Carolina	W	W	W	156.89	159.48					W	W		
Virginia	W	W	W	150.78	164.13	W	W			W	W		
West Virginia	W	W	W	126.59	124.23	W	W			W	W		
East South Central	129.68	130.80	9	130.06	130.37	111.09	W			W	W		
Alabama	W	W	W	148.12	156.66	W	W						
Kentucky	W	114.60	W	121.71	114.60	W							
Mississippi	W	163.46	W	157.31	163.46	W							
West South Central	W 124.03	121 00	W	121.07	122.51	152 94	149.00			102 04	W 02 66		
Arkansas	124.03 102.26	121.88 73.12	1.8 39.9	113.04 102.26	109.60 73.12	153.84	148.90			103.04	92.66		
Louisiana	W	W	W	134.70	131.11		W			W			
Oklahoma	W	w	W	95.59	93.10	W	w			W	W		
Texas	W	W	W	122.46	126.46	W	W			W	W		
Mountain	108.57	101.24	7.2	110.24	102.58	W	W			W	W		
Arizona	W	W	W	128.25	129.39					W	W		
Colorado	96.89	95.27	1.7	96.89	95.27								
Idaho													
Montana	W	W	W	60.78	56.23	W	W						
Nevada	142.57	130.64	9.1	142.57	130.64								
New Mexico	159.07 103.77	166.91	-4.7	159.07 103.77	166.91								
Utah Wyoming	72.97	96.31 80.41	7.7 -9.2	72.97	96.31 80.41								
Pacific	152.13	159.50	-9.2 - 4.6	129.86	135.42	157.43	165.48			W	W		
California	W	W	W	127.00	133.42	W	W			W	W		
Oregon	129.86	135.42	-4.1	129.86	135.42								
Washington	W	W	W			W	W						
Alaska													
Hawaii	W	W	W			W	W						
U.S. Total	127.13	126.55	.5	123.45	122.33	139.95	141.71	W	W	W	W		

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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, March 2003 and 2002 (Cents per Million Btu)

					Electric Po	wer Sector		Combin	ed Heat and	d Power Pr	Power Producers	
Census Division and State	To	tal (All Sector	,	Electric	Utilities		ent Power ucers ¹	Comn	nercial	Indu	strial	
	Mar 2003	Mar 2002	Percent Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	
New England	559.01	315.33	77.3	551.61	494.07	583.07	320.13			W	W	
Connecticut	W	W	W			W	W					
Maine	W	W	W			W				W	W	
Massachusetts	W	W	W	577.94	404.07	W	W					
New Hampshire Rhode Island	292.82	494.07 	-40.7 	292.82	494.07							
Vermont												
Middle Atlantic	565.50	306.57	84.5	442.50	283.60	675.72	313.11	W		W	W	
New Jersey	W	W	W	331.12		W	W			W		
New York	W	W	W	452.75	283.27	W	W	W		W	W	
Pennsylvania	W	W	W	766.60	516.40	W	W			W	W	
East North Central	461.16	290.17	58.9	477.92	241.03	641.06	534.60			147.96	319.65	
Illinois	W	W	W	794.19	544.60	W	W			 W/	 W/	
Indiana	W 543.43	W 176.65	W 207.6	726.39 543.43	534.84 176.65					W	W	
Michigan	343.43 W	1 / 0.03 W	207.6 W	833.27	479.66	W	W			W	W	
Wisconsin	W	W	W	178.66	154.09	W	W			W	W	
West North Central	251.72	166.04	51.6	251.72	166.04							
Iowa	745.86	433.24	72.2	745.86	433.24							
Kansas	378.17	227.39	66.3	378.17	227.39							
Minnesota	68.69	76.49	-10.2	68.69	76.49							
Missouri	755.51	134.38	462.2	755.51	134.38							
Nebraska	760.84	579.10	31.4	760.84	579.10							
North Dakota	676.40	541.49	24.9	676.40	541.49							
South Dakota	 550 14	270.11	106.6	 512.04	260.93	727.22	252 (0	W	W	W	 ***/	
South Atlantic Delaware	558.14 W	270.11 W	106.6 W	513.04 811.11	328.00	727.22 W	353.60 W			W	W W	
District of Columbia	W	W	W	011.11	328.00	W	W					
Florida	W	W	W	509.80	252.47	W	W			W		
Georgia	W	W	W	706.67	528.40	W	W			W		
Maryland	W	W	W			W	W					
North Carolina	W	W	W	796.99	497.83	W	W			W	W	
South Carolina	W	W	W	803.67	463.44					W	W	
Virginia	W	W	W	484.33	306.91	W	W	W	W	W	W	
West Virginia	W	W	W	889.12	532.50	W	W				W	
East South Central Alabama	293.92 684.60	431.12 W	-31.8 W	293.91 684.60	433.50 487.59	W	-				W W	
Kentucky	W	314.95	W	485.34	314.95	W						
Mississippi	243.98	514.95		243.98	514.95							
Tennessee	820.47	488.89	67.8	820.47	488.89							
West South Central	500.53	86.04	481.7	647.56	556.22	67.57	80.09	-	-	524.27	W	
Arkansas	603.39	557.27	8.3	603.39	557.27							
Louisiana	W	W	W	648.03	535.10	W	W			W	W	
Oklahoma	651.40			651.40								
Texas	W	W	W	608.07		W	W			W		
Mountain	680.93	451.91	50.7	673.85	509.96	W	W					
ArizonaColorado	965.12 1009.81	690.40	46.3	965.12 1009.81	690.40							
Idaho	1009.81	090.40	40.3	1009.81	090.40							
Montana	W	W	W	910.26	508.30	W	W					
Nevada	542.10			542.10	500.50							
New Mexico	888.41	572.20	55.3	888.41	572.20							
Utah	794.90	458.86	73.2	794.90	458.86							
Wyoming	920.61	472.90	94.7	920.61	472.90							
Pacific	426.06	312.61	36.3		-	432.06	320.92	_		W	W	
California	W	W	W			W	W					
Oregon	 W	 W	w							W	 W/	
Washington	W 	W	W 							W	W	
Alaska Hawaii	W	W	W			W	W					
U.S. Total	546.20	271.61	101.1	517.90	258.29	618.01	282.67	W	W	W	W	

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

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 March

(Cents per Million Btu)

					Electric Po	wer Sector		Combin	ed Heat and	Power Pro	oducers
Census Division and State	Tot	al (All Secto	rs)	Electric	Utilities	Independ Produ	ent Power ucers ¹	Comm	ercial	Indu	strial
	2003	2002	Percent Change	2003	2002	2003	2002	2003	2002	2003	2002
New England	556.57	292.45	90.3	549.37	445.09	565.45	292.97		-	W	W
Connecticut		W	W			W	W				
Maine	W	W	W			W				W	W
Massachusetts	W	W	W	579.18	437.60	W	W				
New Hampshire		446.22	-15.5	377.12	446.22						
Rhode Island											
Vermont Middle Atlantic	501.70	291.58	72.1	427.14	260.41	652.60	325.12	W		W	W
New Jersey		271.36 W	W	340.51	289.96	W	323.12 W			W	
New York		W	W	428.60	258.51	W	W	W		W	W
Pennsylvania		W	W	505.94	463.55	W	W			W	W
East North Central	428.26	261.38	63.8	473.05	260.42	664.99	505.36			159.67	237.73
Illinois		W	W	755.53	357.14	W	W				
Indiana		W	W	705.01	467.14					W	W
Michigan		189.22	133.8	442.34	189.22						
Ohio		W	W	755.65	463.68	W	W			W	W
Wisconsin	W	W	W	229.07	165.17	W	W			W	W
West North Central	227.44	121.40	87.4	227.41	121.40		-			W	
Iowa Kansas	735.33 328.08	411.67 213.16	78.6 53.9	735.33 328.08	411.67 213.16						
Minnesota	328.08 W	48.87	33.9 W	59.12	48.87					W	
Missouri		94.41	633.7	692.73	94.41						
Nebraska	755.72	480.97	57.1	755.72	480.97						
North Dakota	760.06	483.74	57.1	760.06	483.74						
South Dakota											
South Atlantic	505.41	256.53	97.0	465.22	244.76	651.14	315.62	W	W	W	W
Delaware	W	W	W	807.78	314.84	W	W			W	W
District of Columbia	W	W	W			W	W				
Florida		W	W	439.37	236.01	W	W			W	
Georgia	W W	W W	W W	753.65	458.50	W W	W W			W	W
Maryland North Carolina	W	W	W	736.04	445.52	W	W			W	W
South Carolina	W	W	W	769.76	440.63					W	W
Virginia		W	W	542.33	290.53	W	W	W	W	W	W
West Virginia		W	W	789.44	510.28	W	W				W
East South Central	288.68	427.85	-32.5	343.60	429.98	W				W	W
Alabama	W	W	W	714.45	426.27					W	W
Kentucky		382.01	W	616.93	382.01	W					
Mississippi	247.65	535.74	-53.8	247.65	535.74						
Tennessee	786.87	434.75	81.0	786.87	434.75						
West South Central	339.76	117.57	189.0	621.36	402.67	104.67	109.80		-	352.95	379.72
Arkansas	578.14 W	555.17 W	4.1 W	578.14 611.03	555.17 535.27	 W	 W			W	W
Louisiana Oklahoma				724.51	333.27						
Texas	W	W	W	837.98	254.40	W	W			W	W
Mountain	712.11	454.13	56.8	695.10	474.54	W	W			W	W
Arizona		W	W	965.12	485.40					W	W
Colorado	991.81	633.20	56.6	991.81	633.20						
Idaho											
Montana	W	W	W	800.06	472.57	W	W				
Nevada		463.40	17.0	542.10	463.40						
New Mexico		491.40	75.5	862.34	491.40						
Utah		431.33	67.1	720.55	431.33						
Wyoming		459.43	51.6	696.51	459.43	426.20	226.02				 XX/
Pacific	421.63	328.73	28.3			426.38	336.92			W	W
California		W 	W 			W 	W 				
Oregon Washington		W	W				W			W	W
Alaska											
Hawaii		W	W			W	W				
U.S. Total	500.44	258.28	93.8	467.26	243.75	569.95	274.96	W	W	W	W

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

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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, March 2003 and 2002 (Cents per Million Btu)

					Electric Po	wer Sector		Combin	ed Heat and	d Power Pr	oducers
Census Division and State	То	tal (All Sector	rs)	Electric	Utilities		ent Power ucers ¹	Comn	nercial	Indu	strial
	Mar 2003	Mar 2002	Percent Change	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002	Mar 2003	Mar 2002
New England	775.41	349.45	121.9	828.36	379.16	775.37	348.99				-
Connecticut		W	W			W	W				
Maine		W	W		250 40	W	W				
Massachusetts		W	W	828.36	379.49	W	W				
New Hampshire Rhode Island		 W	W			W	W				
Vermont		311.90			311.90						
Middle Atlantic	855.28	345.08	147.8	1062.63	320.83	844.75	344.77	W	W	650.89	381.73
New Jersey		W	W			W	W			W	W
New York		W	W	1062.63	320.83	W	W	W	W	W	W
Pennsylvania		W	W			W	W			W	W
East North Central	581.93	316.11	84.1	667.32	321.29	500.91	310.33	W	W	863.04	341.45
Illinois		W W	W W	894.10 1145.59	308.81 316.18	W W	W W			W W	W W
Indiana Michigan		W W	W W	614.10	310.18	W W	W W	W	W		vv
Ohio		W	W	694.30	563.75	W	W			W	W
Wisconsin		W	W	774.28	337.26	W	W			W	W
West North Central	756.11	306.76	146.5	736.17	310.21	796.49	301.45	W	W	W	W
Iowa	W	W	W	595.31	317.15	W	W				
Kansas	855.80	293.08	192.0	855.80	293.08						
Minnesota		W	W	957.18	254.13	W	W			W	W
Missouri		W	W	588.50	317.79	W	W	W	W		
Nebraska		457.82	85.1	847.65	457.82						
North DakotaSouth Dakota		263.20			263.20						
South Atlantic	750.08	343.62	118.3	831.69	355.76	533.58	330.40		W	767.49	286.57
Delaware		W	W	648.60	374.00	333.36 W	330.40 W			W	W
District of Columbia											
Florida		W	W	831.55	354.24	W	W			W	W
Georgia		W	W		357.98	W	W			W	W
Maryland		W	W			W	W				
North Carolina		W	W		467.98	W	W			W	
South Carolina		W	W	012.76	435.46	W	W			W	W
Virginia		W W	W W	813.76 1744.16	745.77 343.64	W W	W W		W	W	W W
West Virginia East South Central	637.56	288.90	120.7	684.47	285.19	595.46	311.26		W	475.74	269.36
Alabama		W	W	694.12	296.86	W	W			W	W
Kentucky		W	W	907.32	449.80	W	W		W		
Mississippi		W	W	668.19	275.83	W	W			W	W
Tennessee	W	W	W			W	W			W	W
West South Central	734.76	285.31	157.5	794.72	304.90	695.78	292.64	490.96	W	761.25	260.83
Arkansas		W	W	542.36	372.35	W	W				
Louisiana		W	W	868.33	307.61	W	W	W		W	W
Oklahoma		W W	W W	850.12 724.17	307.10 295.95	W W	W W	W	W	W W	W W
Texas Mountain	536.25	389.05	37.8	518.74	458.75	554.42	296.47			478.96	250.88
Arizona		369.03 W	W W	567.01	339.31	334.42 W	290.47 W			476.90 W	230.88 W
Colorado		W	W	451.33	302.24	W	W				
Idaho		W	W			W	W				
Montana	W	444.70	W	518.50	444.70	W					
Nevada		W	W	562.15	709.32	W	W				
New Mexico		W	W	547.28	340.36	W	W				W
Utah		580.00	W	325.60	580.00	W				 W/	 W/
Wyoming Pacific	623.06	W 348.06	79.0	316.60 493.53	415.90 403.10	645.97	347.03			715.02	W 285.18
California		348.06 W	79.0 W	577.12	437.61	045.97 W	347.03 W			/15.02 W	285.18 W
Oregon		W	W	340.60	323.31	W	W			W	W
Washington		w	w		J2J.J1 	W	W			W	W
Alaska		276.60	-27.1	201.66	276.60						
Hawaii											
U.S. Total	706.93	318.99	121.6	728.35	343.22	683.27	321.99	492.54	342.11	749.66	273.89

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 March

(Cents per Million Btu)

					Electric Po	wer Sector		Combined Heat and Power Producers			
Census Division and State	Tota	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	726.30	327.25	121.9	981.43	351.20	725.36	327.02			-	
Connecticut		W	W			W	W				
Maine		W	W			W	W				
Massachusetts	W	W	W	981.43	351.64	W	W				
New Hampshire											
Rhode Island		W 315.51	W		315.51	W	W				
Vermont Middle Atlantic	729.68	332.63	119.4	872.46	312.53	722.95	329.83	W	W	631.88	385.14
New Jersey		332.03 W	W	6/2.40	512.55	W	32).83 W			W	363.14 W
New York		W	W	872.46	312.53	W	W	W	W	W	W
Pennsylvania		W	W			W	W			W	W
East North Central	516.63	310.54	66.4	643.51	314.50	460.44	307.11	W	W	672.89	325.33
Illinois		W	W	699.46	307.82	W	W			W	W
Indiana		W	W	602.71	311.16	W	W			W	W
Michigan		W	W	643.83	311.92	W	W	W	W		
Ohio		W	W	726.57	490.02	W	W			W	W
Wisconsin		W	W	636.09	329.74	W	W			W	W
West North Central	621.83 W	279.56 W	122.4 W	615.62 609.17	288.94 317.51	633.70 W	264.85 W	W	W	W	W
Iowa Kansas		251.71	160.2	655.01	251.71		w 				
Minnesota		231.71 W	W	634.29	366.87	W	W			W	W
Missouri		w	w	534.13	314.05	W	w	W	W		
Nebraska		306.40	125.2	690.13	306.40						
North Dakota		269.80	178.0	750.00	269.80						
South Dakota											
South Atlantic	649.63	327.34	98.5	689.73	341.33	544.53	310.81	-	W	616.90	269.73
Delaware		W	W	792.55	328.13	W	W			W	W
District of Columbia											
Florida		W	W	687.97	337.08	W	W			W	W
Georgia		W	W		328.34	W	W			W	W
Maryland North Carolina		W W	W W	723.50	455.72	W W	W W			W	
South Carolina	W	W	W	709.98	449.71	W	W			W	W
Virginia		W	W	735.30	1065.48	W	W		W	W	W
West Virginia		W	w	1249.76	342.29	W	w				W
East South Central	597.13	261.56	128.3	627.08	257.35	622.54	276.70		W	413.42	271.09
Alabama		W	W	616.08	263.81	W	W			W	W
Kentucky	W	W	W	690.97	387.13	W	W		W		
Mississippi	W	W	W	638.39	252.94	W	W			W	W
Tennessee		W	W			W	W			W	W
West South Central	626.26	262.71	138.4	665.26	280.18	624.04	257.37	475.38	W	603.79	256.08
Arkansas		W	W	610.60	296.25	W	W				
Louisiana		W W	W W	707.42	275.85	W W	W W	W		W W	W W
Oklahoma		W W	W W	711.16 611.35	296.29 273.26	W W	W W	W	W	W	W W
Texas Mountain	499.14	359.57	38.8	476.59	465.46	522.54	265.40	VV	VV	418.27	261.47
Arizona		339.37 W	W	565.45	316.96	322.34 W	203.40 W			W	201.47 W
Colorado		W	w	403.47	290.53	W	W				
Idaho		W	W			W	W				
Montana	W	W	w	536.75	447.26	W	W				
Nevada		W	W	477.73	745.34	W	W				
New Mexico	W	W	W	544.03	306.76	W	\mathbf{W}				W
Utah		814.94	W	325.60	814.94	W					
Wyoming		W	W	316.60	482.70					W	W
Pacific	539.82	332.09	62.6	441.82	404.91	558.39	328.14		-	576.95	283.24
California		W	W	523.13	470.05	W	W			W	W
Oregon		W	W	361.55	312.93	W	W W			W	W
Washington		W W	W W	201.93	261.87	W 	W W			W	W
Hawaii				201.93	201.87						
U.S. Total	615.55	298.33	106.3	627.28	321.89	615.80	296.86	492.88	326.47	599.17	269.00
	010.00	2,0.00	2002	027120	021.07	010.00	2,0.30	.,2.00	020	.,,,,,	202.00

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

Census Division and State		Bituminous			Subbituminous	ı	Lignite			
	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England	669	.6	6.1							
Connecticut	117	.5	4.5							
Maine	24	.7	5.8							
Massachusetts	425	.6	6.7							
New Hampshire	103	.9	5.6							
Rhode Island										
Vermont										
Middle Atlantic	3,020	2.2	10.6	-			-			
New Jersey	214	1.5	8.2							
New York	834	2.0	8.0							
Pennsylvania	1,972	2.3	11.9							
East North Central	8,304	1.9	8.6	6,673	.3	4.8	-	-		
Illinois	1,705	1.3	7.4	2,709	.3	4.7				
Indiana	2,922	1.9	8.6	1,289	.2	4.7				
Michigan	908	1.4	8.9	1,052	.3	5.0				
Ohio	2,721	2.4	9.1							
Wisconsin	48	1.3	8.7	1,624	.3	5.1				
West North Central	380	1.9	8.3	9,598	.3	5.3	2,241	.7	9.1	
Iowa	112	1.7	7.0	1,787	.3	5.1				
Kansas	37	5.5	19.2	1,804	.4	5.2				
Minnesota	18	.9	8.6	1,488	.5	7.0				
Missouri	213	1.6	7.1	3,383	.3	4.9				
Nebraska				972	.3	4.8				
North Dakota							2,241	.7	9.1	
South Dakota				163	.3	4.5				
South Atlantic	12,430	1.3	10.1	453	.3	5.2	-	-		
Delaware	154	1.0	9.1							
District of Columbia			_ ==							
Florida	1,819	1.6	8.7							
Georgia	2,398	.9	10.0	453	.3	5.2				
Maryland	832	1.1	10.5							
North Carolina	1,594	.9	10.7							
South Carolina	1,039	1.2	8.6							
Virginia	1,285	1.0	9.9							
West Virginia	3,307	1.7	11.3							
East South Central	7,087	1.7	10.8	1,527	.3	5.7	323	.5	14.7	
Alabama	1,666	1.3	11.0	701	.2	4.8				
Kentucky	3,038	2.3	11.9	107	.3	5.7				
Mississippi	462	.6	8.5				323	.5	14.7	
Tennessee	1,921	1.3	9.6	719	.4	6.5				
West South Central	114	2.1	13.5	5,152	.3	5.0	2,342	1.0	12.6	
Arkansas				986	.3	4.7				
Louisiana	2	1.1	9.1	158	.5	5.6	398	.8	14.0	
Oklahoma	87	2.5	15.2	1,202	.3	5.1				
Texas	25	.5	7.8	2,806	.3	4.9	1,944	1.0	12.3	
Mountain	2,910	.5	10.0	5,996	.5	11.1	28	.5	9.3	
Arizona	466	.5	10.3	771	.6	15.4				
Colorado	417	.5	10.3	1,065	.4	5.2				
Idaho										
Montana				895	.6	8.4	28	.5	9.3	
Nevada	680	.5	9.6	1 215						
New Mexico				1,317	.7	21.1				
Utah	1,127	.5	11.0	1.047		7.2				
Wyoming	220	1.0	4.9	1,947	.4	7.2				
Pacific Contiguous	108	.6	8.2	866	.7	14.7				
California	108	.6	8.2							
Oregon				233	.3	4.2				
Washington				633	.8	18.6				
Pacific Noncontiguous				60	.4	5.3				
Alaska						 5 2				
Hawaii	 25 021			60	.4	5.3	4 024			
U.S. Total	35,021	1.5	9.8	30,325	.4	6.6	4,934	.8	11.1	

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, March 2003

Census Division and State		Bituminous			Subbituminous	3	Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England	147	.8	6.3			_				
Connecticut										
Maine										
Massachusetts	45	.7	7.8							
New Hampshire	103	.9	5.6							
Rhode Island										
Vermont										
Middle Atlantic	186	2.1	8.1	-		_	_			
New Jersey	52	2.3	7.5							
New York	68	2.0	8.4							
Pennsylvania	66	2.2	8.2							
East North Central	6,749	2.1	8.9	4,201	.3	4.9	_			
Illinois	395	2.4	9.0	384	.2	4.8				
Indiana	2,922	1.9	8.6	1,165	.2	4.7				
Michigan	891	1.4	8.9	1,052	.3	5.0				
Ohio	2,503	2.5	9.1							
Wisconsin	39	1.0	8.7	1,600	.3	5.1				
West North Central	329	1.7	8.2	9,530	.3	5.3	2,241	.7	9.1	
Iowa	73	.7	6.1	1,719	.3	5.1				
Kansas	37	5.5	19.2	1,804	.4	5.2				
Minnesota	18	.9	8.6	1,488	.5	7.0				
Missouri	202	1.4	7.0	3,383	.3	4.9				
Nebraska				972	.3	4.8				
North Dakota							2,241	.7	9.1	
South Dakota				163	.3	4.5				
South Atlantic	9,751	1.2	10.2	453	.3	5.2	-			
Delaware										
District of Columbia										
Florida	1,593	1.7	8.4			_=				
Georgia	2,372	1.0	10.0	453	.3	5.2				
Maryland										
North Carolina	1,430	.9	11.0							
South Carolina	1,013	1.2	8.6							
Virginia	981	1.1	10.5							
West Virginia	2,362	1.2	11.7							
East South Central	6,787	1.7	10.8	1,527	.3	5.7	_		-	
Alabama	1,653	1.3	11.0	701	.2	4.8				
Kentucky	2,899	2.3	11.8	107	.3	5.7				
Mississippi	462	.6	8.5							
Tennessee	1,773	1.4	9.7	719	.4	6.5				
West South Central	-	-		4,388	.3	5.1	674	.9	13.8	
Arkansas				986	.3	4.7				
Louisiana				158	.5	5.6	398	.8	14.0	
Oklahoma				1,153	.3	5.1	276		12.4	
Texas	2.010			2,091	.3	5.2	276	1.0	13.4	
Mountain	2,910	.5	10.0	5,588	.5	11.4	28	.5	9.3	
Arizona	466	.5	10.3	736	.6	15.6				
Colorado	417	.5	10.3	1,065	.4	5.2				
Idaho				522					0.2	
Montana				523	.6	8.8	28	.5	9.3	
Nevada	680	.5	9.6	1 217		21.1				
New Mexico	1 127			1,317	.7	21.1				
Utah	1,127	.5	11.0	1 047		7.2				
Wyoming	220	1.0	4.9	1,947	.4	7.2				
Pacific Contiguous				233	.3	4.2	_	-		
California						4.2				
Oregon				233	.3	4.2				
Washington										
Pacific Noncontiguous				-	-	-	-		-	
Alaska										
Hawaii		 1.5				 6 5			 10 1	
U.S. Total	26,859	1.5	9.9	25,921	.4	6.5	2,942	.7	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, March 2003

Census Division and State		Bituminous			Subbituminous	8	Lignite			
and state	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England	511	.6	6.1		-	-				
Connecticut	117	.5	4.5							
Maine	13	.7	5.8							
Massachusetts	381	.6	6.6							
New Hampshire										
Rhode Island										
Vermont										
Middle Atlantic	2,740	2.1	10.8	_	-	_	_	-		
New Jersey	163	1.3	8.5							
New York	709	1.7	8.0							
Pennsylvania	1,869	2.3	12.1							
East North Central	1,319	.8	7.2	2,408	.3	4.7	-		-	
Illinois	1,127	.7	6.7	2,284	.3	4.7				
Indiana				124	.3	3.9				
Michigan										
Ohio	193	1.4	9.9							
Wisconsin										
West North Central					-	-				
Iowa										
Kansas										
Minnesota										
Missouri										
Nebraska										
North Dakota										
South Dakota										
South Atlantic	2,537	1.6	10.0	_		_	-			
Delaware	154	1.0	9.1							
District of Columbia										
Florida	227	.9	10.5							
Georgia										
Maryland	832	1.1	10.5							
North Carolina	134	.9	8.4							
South Carolina										
Virginia	279	.8	8.1							
West Virginia	912	2.8	10.4							
East South Central	152	3.1	13.1	-		_	323	.5	14.7	
Alabama	12	.5	8.8							
Kentucky	139	3.3	13.5							
Mississippi							323	.5	14.7	
Tennessee										
West South Central	112	2.1	13.6	714	.3	4.1	1,506	1.0	11.1	
Arkansas										
Louisiana										
Oklahoma	87	2.5	15.2							
Texas	25	.5	7.8	714	.3	4.1	1,506	1.0	11.1	
Mountain	_			371	.5	7.8	-		-	
Arizona										
Colorado										
Idaho										
Montana				371	.5	7.8				
Nevada										
New Mexico										
Utah										
Wyoming										
Pacific Contiguous	65	.7	7.8	633	.8	18.6	-	-		
California	65	.7	7.8							
Oregon										
Washington				633	.8	18.6				
Pacific Noncontiguous				60	.4	5.3				
Alaska										
Hawaii				60	.4	5.3	1.020			
U.S. Total	7,437	1.6	9.6	4,186	.4	7.0	1,830	.9	11.7	

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, March 2003

Census Division and State		Bituminous			Subbituminous	i	Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England				-						
Connecticut										
Maine										
Massachusetts										
New Hampshire										
Rhode Island										
Vermont										
Middle Atlantic	-		-	-		_	-		-	
New Jersey										
New York										
Pennsylvania										
East North Central	18	1.9	10.4	_	-	-	-	-	-	
Illinois										
Indiana										
Michigan	18	1.9	10.4							
Ohio										
Wisconsin		 2.7								
West North Central	12	3.7	8.8	-	-	_	-	-	-	
Iowa Kansas										
Minnesota										
Missouri	12	3.7	8.8							
Nebraska	12	5.1	0.0							
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										
8										
Alaska Hawaii										
1 144 77 4411	29	2.6	9.8							

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, March 2003

Census Division and State		Bituminous			Subbituminous	S	Lignite			
and State	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	Receipts	Sulfur %	Ash %	
New England	11	.7	5.9	_	-	_	_	-	-	
Connecticut										
Maine	11	.7	5.9							
Massachusetts										
New Hampshire										
Rhode Island										
Vermont										
Middle Atlantic	94	3.3	7.6	_	-	-	_	-		
New Jersey	 57									
New York Pennsylvania	37	5.0 .6	8.2 6.8							
· · · · · · · · · · · · · · · · · · ·	218	2.8	8.8	64	.3	4.2				
East North Central Illinois	183	2.7	8.5	41	.3	4.0				
Indiana	103	2.7	6.5	41	.5	4.0				
Michigan										
Ohio	26	4.1	10.5							
Wisconsin	8	2.9	9.0	23	.2	4.5				
West North Central	39	3.5	8.8	68	.3	4.8				
Iowa	39	3.5	8.8	68	.3	4.8				
Kansas										
Minnesota										
Missouri										
Nebraska										
North Dakota										
South Dakota										
South Atlantic	141	.9	7.6	-		_				
Delaware										
District of Columbia										
Florida										
Georgia	26	.7	8.0							
Maryland										
North Carolina	30	.8	6.0							
South Carolina	26	.9	8.2							
Virginia	25	.8	6.9							
West Virginia	33	1.4	8.9							
East South Central	148	.9	7.9	-	-	-	-		-	
Alabama										
Kentucky										
Mississippi	148	9	7.9							
Tennessee West South Central	2	1.1	9.1	49	.2	6.5	162	1.8	21.3	
Arkansas		1.1	7.1	49			102	1.0	21.3	
Louisiana	2	1.1	9.1							
Oklahoma			<i>7.</i> 1	49	.2	6.5				
Texas							162	1.8	21.3	
Mountain				36	.5	12.7				
Arizona				36	.5	12.7				
Colorado										
Idaho										
Montana										
Nevada										
New Mexico										
Utah										
Wyoming										
Pacific Contiguous	42	.5	8.8	-			_	-		
California	42	.5	8.8							
Oregon										
Washington										
Pacific Noncontiguous	-		-	-	-	-	-	-	-	
Alaska										
Hawaii										
U.S. Total	695	2.0	8.2	218	.3	6.3	162	1.8	21.3	

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 April 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		794,573	977,164	94,944	2,861,462
1994		820,269	1,007,981	97,830	2,934,563
1995		862,685	1,012,693	95,407	3,013,287
1996		887,445	1,033,631	97,539	3,101,127
1997	, ,	928,633	1,038,197	102,901	3,145,610
1998		979,401	1,051,203	103,518	3,264,231
1999		1,001,996	1,058,217	106,952	3,312,087
2000		1,055,232	1,064,239	109,496	3,421,414
2001	-,,	-,,,,,,,,,	-,	,	2,122,121
January	128,464	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	128,472	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	1,202,047	1,065,134	304,224	113,730	3,303,781
January	117,854	88,712	78,304	8,162	293.032
February	97,402	81,921	78,113	7,880	265,317
March	96,011	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	133,517	107,299	87,631	9,879	338,327
August	134,080	106,652	88,669	9,996	339,397
September	115.061	99.405	85.978	10.077	310.521
	94,328	94,491	85,647	9,282	283,748
October	94,328 89,012	84,738	80,816	9,282 8,308	262,874
November	109.190	84,738 87,430	79,768	8,389	284.777
December	,	1,108,072			3,475,221
Total	1,268,172	1,100,072	993,800	105,177	3,475,221
	125,307	93,712	80,351	8,743	308,113
January					
February	112,021	84,886	77,901	8,327	283,136
March	100,154	86,482	78,914	8,265	273,816
April	84,102	83,470	80,561	7,924	256,057
Total	421,585	348,550	317,728	33,259	1,121,122
Year to Date	407.004		240.020		1 100 105
2001		339,494	319,950	35,058	1,100,496
2002	,	339,987	316,951	31,766	1,086,157
2003	421,585	348,550	317,728	33,259	1,121,122
Rolling 12 Months Ending i					
2002		1,089,647	961,225	110,464	3,355,442
2003	1,292,304	1,116,635	994,577	106,670	3,510,186

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

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 April 2003
(Million Dollars)

Period	Residential	Commercial	Industrial	Other ¹	All Sectors
1 ci iou	Residential	Commerciai	industrial	Other	All 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	82,814	61,521	47,357	6,528	198,220
1994	84,552	63,396	48,069	6,689	202,706
1995	87,610	66,365	47,175	6,567	207,717
1996	90,503	67,829	47,536	6,741	212,609
1997	90,704	70,497	47,023	7,110	215,334
1998		72,575	47,050	6,863	219,848
1999	93,483	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
Total	103,671	86,354	48,573	7,999	246,597
2002	100,071	00,031	10,575	1,555	210,557
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
Total	107,215	87,380	48,028	7,129	249,752
2003	107,213	87,380	40,020	7,127	249,732
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
Total	34,706	27,356	15,293	2,324	79,678
Year to Date		27,500	20,220	_,	.,,,,,,
2001	33,055	25,730	15,645	2,406	76,835
2002	32,545	25,934	15,045	2,160	75,684
2003	34,706	27,356	15,293	2,324	79,678
Rolling 12 Months Ending i	· · · · · · · · · · · · · · · · · · ·	21,000	13,273	2,327	17,010
2002		86,558	47,974	7,752	245,446
2003	109,376	88,801	48,276	7,732	253,747

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

the calendar month. Totals may not equal sum of components because of independent rounding.

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

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 April 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	8.32	7.74	4.85	6.88	6.93
1994	8.38	7.73	4.77	6.84	6.91
1995	8.40	7.69	4.66	6.88	6.89
1996	8.36	7.64	4.60	6.91	6.86
1997	8.43	7.59	4.53	6.91	6.85
1998	8.26	7.41	4.48	6.63	6.74
1999	8.16	7.26	4.43	6.35	6.64
2000	8.24	7.43	4.64	6.56	6.81
2001					
January	7.78	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	8.52	7.73	4.87	6.98	7.06
May	8.87	7.74	4.99	7.09	7.20
June	9.08	8.10	5.18	7.08	7.56
July	9.06	8.39	5.48	7.23	7.86
August	9.02	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	8.62	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	8.37	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	8.75	8.23	5.05	6.62	7.56
September	8.65	8.07	4.89	6.61	7.36
October	8.50	8.07	4.84	6.80	7.20
November	8.33	7.68	4.68	6.76	6.95
December	8.09	7.64	4.68	7.00	6.97
Average	8.45	7.89	4.83	6.78	7.19
2003					
January	7.98	7.77	4.67	6.68	7.02
February	8.00	7.76	4.82	6.90	7.02
March	8.31	7.84	4.89	7.19	7.14
April	8.82	8.03	4.86	7.20	7.27
Average	8.23	7.85	4.81	6.99	7.11
Year to Date					
2001	8.14	7.58	4.89	6.86	6.98
2002		7.63	4.75	6.80	6.97
2003		7.85	4.81	6.99	7.11
Rolling 12 Months Ending i				3325	
2002		7.94	4.99	7.02	7.31
2003		7.95	4.85	6.84	7.23

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 with State Distributions Report;" 1990-2001: Form EIA-861, "Annual Electric Power Industry Report."

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

C 5	Resid	ential	Comn	nercial	Indu	strial	Otl	her¹	All Sectors	
Census Division and State	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	3,437	3,122	3,892	3,707	1,814	1,947	121	116	9,264	8,893
Connecticut		877	954	980	396	438	43	41	2,357	2,336
Maine		307	289	246	289	303	5	5	900	861
Massachusetts		1,320	1,931	1,813	729	823	50	58	4,172	4,013
New Hampshire Rhode Island		266 200	316 255	278 241	177 100	150 108	11 8	2 7	818 580	696 556
Vermont		152	147	150	123	125	4	4	437	431
Middle Atlantic	8,853	8,650	10,664	10,645	6,635	7,074	1,210	1,269	27,362	27,638
New Jersey		1,807	2,778	2,716	815	966	41	42	5,415	5,531
New York		3,346	4,581	4,704	1,983	2,134	1,058	1,115	11,048	11,298
Pennsylvania		3,496	3,305	3,225	3,837	3,975	111	112	10,900	10,808
East North Central	11,623	12,589	12,117	12,462	17,392	16,589	1,202	1,323	42,333	42,964
Illinois	2,753	3,003	3,288	3,417	3,258	3,087	699	817	9,998	10,324
Indiana		2,088	1,569	1,616	3,930	3,849	57	59	7,483	7,611
Michigan		2,473	2,774	2,876	3,095	2,705	66	65	8,271	8,120
Ohio		3,460	3,048	3,092	4,981	4,834	321	325	11,446	11,710
Wisconsin		1,565	1,438	1,462	2,129	2,114	59	57	5,135	5,198
West North Central	6,164	6,355	6,097	6,104	6,375	6,048	486	476	19,123	18,983
Iowa		878	696	627	1,404	1,303	141	130	3,128	2,938
Kansas		775 1,416	1,016 1,403	978 1,453	821 1,884	816 1,800	30 49	33 46	2,639 4,751	2,602 4,715
Minnesota Missouri		2,073	1,959	2,012	1,064	1,173	95	102	5,249	5,360
Nebraska		623	533	550	646	595	101	96	1,877	1,864
North Dakota		292	255	256	226	227	38	37	797	812
South Dakota		299	236	227	133	134	32	32	683	691
South Atlantic	20,413	20,751	18,258	18,916	14,198	13,607	1,774	1,717	54,644	54,992
Delaware		277	293	284	291	302	5	5	880	867
District of Columbia		105	695	613	21	20	30	28	843	767
Florida		7,412	6,047	5,990	1,582	1,593	473	466	15,633	15,462
Georgia		3,010	2,882	3,007	2,779	2,875	139	135	8,677	9,027
Maryland ²		1,764	1,234	1,959	1,697	827	60	79	4,871	4,629
North Carolina		3,195	2,953	2,937	2,635	2,771	170	167	8,700	9,069
South Carolina		1,637	1,331	1,355	2,595	2,642	75	75	5,539	5,709
Virginia		2,588	2,286	2,235	1,669	1,684	817	757	7,281	7,263
West Virginia East South Central	. 746 6,635	764 7,111	538 5,439	537 5,482	930 10,506	893 10,542	6 477	6 462	2,220 23,057	2,199 23,597
Alabama		1,801	1,456	1,499	2,812	2,832	65	63	6,075	6,195
Kentucky	,	1,613	1,127	1,083	3,651	3,832	262	248	6,529	6,775
Mississippi		1,101	928	864	1,215	1,241	57	60	3,266	3,266
Tennessee		2,596	1,927	2,037	2,829	2,637	92	91	7,187	7,361
West South Central	11,346	11,718	9,296	9,695	12,571	13,074	1,300	1,167	34,513	35,654
Arkansas	. 964	1,005	731	655	1,268	1,242	45	56	3,010	2,958
Louisiana	1,638	1,713	1,448	1,344	2,169	2,472	198	207	5,453	5,736
Oklahoma	1,175	1,241	986	995	1,075	1,092	314	239	3,551	3,567
Texas		7,758	6,130	6,701	8,058	8,269	743	665	22,500	23,393
Mountain	5,056	5,046	5,873	5,852	4,912	5,030	649	602	16,489	16,530
Arizona		1,534	1,677	1,677	863	903	220	216	4,265	4,330
Colorado		1,071	1,427	1,402	813	877	116	84	3,461	3,433
Idaho		506	490	467	449	477	24	24	1,489	1,473 929
Montana		328 579	322 546	301 572	270 895	278 949	21 41	22 45	936 2,004	2,145
Nevada New Mexico		364	546 520	572 564	895 394	949 444	143	129	1,428	1,501
Utah		476	643	634	583	484	75	70	1,819	1,664
Wyoming		188	248	234	645	618	10	14	1,087	1,055
Pacific Contiguous	10,187	10,457	11,395	11,640	5,780	6,368	683	708	28,045	29,172
California		6,024	8,257	8,541	3,584	4,054	374	384	18,007	19,003
Oregon		1,494	1,145	1,143	866	936	37	37	3,527	3,611
Washington		2,939	1,992	1,955	1,330	1,377	272	287	6,511	6,558
Pacific Noncontiguous	389	385	439	419	377	394	21	21	1,227	1,220
Alaska		163	184	173	87	104	16	17	447	456
Hawaii		223	256	247	291	291	5	5	779	765
U.S. Total	84,102	86,185	83,470	84,922	80,561	80,674	7,924	7,861	256,057	259,643

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.

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

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

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

(Million Kilowatthours)

Commun Dininia	Reside	ential	Commo	ercial	Indu	strial	Oth	er¹	All Sectors	
Census Division and State	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
New England	16,219	14,291	16,661	15,567	7,450	7,898	545	508	40,874	38,264
Connecticut		4,023	4,092	3,947	1,637	1,699	197	187	10,515	9,855
Maine		1,380	1,243	1,198	1,103	1,286	19	20	3,842	3,883
Massachusetts		6,089	8,255	7,608	3,092	3,336	231	247	18,459	17,280
New Hampshire		1,188	1,345	1,156	713	620	48	11	3,598	2,974
Rhode Island		899	1,086	1,033	403	423	33	28	2,526	2,382
Vermont		713	640	626	502	533	16	16	1,934	1,888
Middle Atlantic	42,716 8,627	38,405 7,770	45,547 11,568	43,249 10,698	26,809 3,499	27,486 3,701	5,441 187	5,368 191	120,513 23,882	114,508 22,361
New York		14,699	19,805	19,346	8,071	8,444	4,775	4,735	48,461	47,224
Pennsylvania		15,936	14,173	13,205	15,239	15,341	479	442	48,169	44,924
East North Central	61,650	58,027	52,011	50,289	66,946	65,399	5,313	5,338	185,919	179,054
Illinois		13,693	14,221	13,767	12,515	12,292	3,205	3,255	44,367	43,007
Indiana		9,995	6,873	6,612	15,475	14,946	242	235	33,629	31,787
Michigan		10,849	11,719	11,361	11,445	11,108	294	296	34,691	33,613
Ohio		16,585	13,040	12,577	19,061	18,870	1,326	1,310	51,190	49,342
Wisconsin		6,906	6,158	5,972	8,451	8,184	246	242	22,043	21,304
West North Central	31,451	29,467	25,744	24,727	24,992	24,226	2,017	1,881	84,205	80,301
Iowa	,	3,974	2,770	2,601	5,395	5,210	562	533	12,999	12,318
Kansas	3,757	3,572	4,086	3,810	3,244	3,261	128	137	11,215	10,780
Minnesota		6,409	6,135	5,972	7,425	7,108	215	208	20,604	19,698
Missouri	10,774	9,904	8,285	8,023	4,961	4,845	409	372	24,429	23,144
Nebraska		2,898	2,314	2,249	2,503	2,352	406	358	8,210	7,857
North Dakota	1,463	1,385	1,152	1,130	936	909	165	149	3,715	3,573
South Dakota	1,367	1,325	1,003	942	528	541	133	123	3,032	2,931
South Atlantic	106,947	96,263	74,561	75,490	56,734	51,707	7,356	7,030	245,598	230,490
Delaware		1,272	1,254	1,145	1,185	1,307	51	19	4,009	3,744
District of Columbia		479	2,662	2,572	89	84	121	121	3,467	3,256
Florida		31,233	23,691	23,113	6,208	6,065	1,842	1,750	66,073	62,161
Georgia	15,293	14,155	11,829	11,867	11,088	10,793	571	539	38,781	37,355
Maryland ²	9,828	8,148	5,283	8,357	7,906	3,388	278	342	23,295	20,234
North Carolina		15,934	12,262	11,786	10,194	10,229	721	680	40,554	38,629
South Carolina		8,269	5,550	5,342	10,074	10,005	310	295	24,967	23,911
Virginia	14,867	12,988	9,663	9,037	6,309	6,249	3,436	3,257	34,274	31,530
West Virginia East South Central	4,104 37,839	3,786 35,335	2,366 22,598	2,270	3,682 40,699	3,587 40,605	26 1,939	27 1,838	10,178 103,075	9,669 99,464
Alabama	,	9,023	5,967	21,685 5,797	10,519	10,294	263	246	26,230	25,359
Kentucky		8,171	4,677	4,367	14,829	15,198	1,063	979	29,569	28,714
Mississippi	,	5,277	3,698	3,405	4,752	4,806	235	247	14,187	13,735
Tennessee		12,865	8,255	8,116	10,599	10,308	378	366	33,089	31,655
West South Central	54,392	53,295	38,663	38,451	49,004	53,256	4.974	4,508	147,034	149,511
Arkansas		4,837	3,093	2,691	5,097	5,149	186	222	13,529	12,900
Louisiana		7,937	5,981	5,496	8,812	9,471	788	843	23,790	23,747
Oklahoma	,	5,930	3,985	3,991	4,134	4,257	1,265	924	15,562	15,103
Texas	,	34,592	25,604	26,272	30,961	34,379	2,736	2,519	94,153	97,761
Mountain	23,239	24,000	23,228	23,107	19,786	19,840	2,596	2,326	68,848	69,273
Arizona	6,946	7,181	6,505	6,457	3,367	3,473	943	848	17,762	17,959
Colorado	5,041	5,063	5,751	5,672	3,235	3,464	426	325	14,453	14,525
Idaho	2,545	2,744	1,801	1,816	1,854	1,894	108	102	6,307	6,557
Montana	1,518	1,513	1,316	1,283	1,128	1,079	84	82	4,046	3,956
Nevada	2,430	2,650	2,216	2,182	3,441	3,558	163	153	8,250	8,543
New Mexico	1,703	1,720	2,031	2,093	1,612	1,629	549	487	5,896	5,929
Utah		2,247	2,570	2,617	2,432	2,260	284	273	7,478	7,397
Wyoming		882	1,037	987	2,716	2,482	40	55	4,657	4,407
Pacific Contiguous	45,488	46,750	45,817	45,733	23,816	24,986	2,984	2,877	118,105	120,346
California		25,741	32,691	32,603	14,954	15,732	1,636	1,526	75,105	75,601
Oregon		7,211	4,742	4,790	3,644	3,698	161	152	15,302	15,851
Washington		13,798	8,384	8,340	5,219	5,556	1,187	1,199	27,699	28,894
Pacific Noncontiguous	1,644	1,619	3,721	1,687	1,491	1,548	94	93	6,950	4,948
Alaska		732	2,736	736	347	418	74	74	3,890	1,959
Hawaii	911 421,585	888 307 453	985	951	1,144	1,130	20	19	3,060	2,988
U.S. Total	421,585	397,453	348,550	339,987	317,728	316,951	33,259	31,766	1,121,122	1,086,157

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.

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

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, April 2003 and 2002

(Million Dollars)

ļ	Resid	ential	Comn	iercial	Indu	strial	Otl	ier ¹	All S	ectors
Census Division and State	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002
New England	385	362	363	363	139	135	18	17	906	877
Connecticut		97	90	94	33	34	4	4	233	228
Maine		41	26	24	9	9	1	1	78	75
Massachusetts		150	177	179	62	61	8	9	404	399
New Hampshire		34	32	28	17	14	1	*	88	76
Rhode Island		21	21	21	8	8	3	2	54	52
Vermont		20	17	17	10	10	1	1	48	47
Middle Atlantic	1,015	943	1,126	1,064	371	406	113	110	2,624	2,524
New Jersey		187	243	249	58	70	7	7	488	513
New York		423	601	538	96	101	91	89	1,282	1,151
Pennsylvania		334	281	277	216	236	15	13	854	860
East North Central	969	1,012	925	936	785	766	74	77	2,753	2,791
Illinois		250	286 97	279 99	167	161	38 5	41 5	726	730
Indiana		150			156	153			404	407
Michigan		203	202	219	137	136	8	8	541	566
Ohio		283	238	242	225 100	225 93	18	18	743 339	767
Wisconsin	. 132 453	126 448	102 359	97 347		249	5 31	5 31	1,111	321 1,075
West North Central		72	45	40	268 58	50	9	9	1,111	171
Iowa		58	66	60	36 39	37	3	3	168	158
Kansas Minnesota		103	85	81	80	37 77	3	4	274	264
Missouri		137	104	108	51	47	6	6	293	298
Nebraska		39	29	29	25	23	6	7	98	97
North Dakota		18	15	16	NM	NM	2	1	45	45
South Dakota		22	15	14	6	6	1	1	44	43
South Atlantic	1,687	1,658	1,214	1,225	607	571	121	115	3,629	3,569
Delaware	,	23	20	20	12	13	121	113	58	57
District of Columbia		8	44	40	12	1	1	2	53	50
Florida		631	423	416	85	86	37	37	1,216	1,170
Georgia		227	195	197	113	112	12	12	542	548
Maryland ²		127	84	112	72	33	7	7	302	279
North Carolina		262	193	189	118	123	12	11	573	586
South Carolina		130	90	88	100	99	5	5	323	322
Virginia		202	134	133	71	69	45	39	447	444
West Virginia		48	30	30	35	33	1	1	114	112
East South Central	464	476	360	351	396	372	32	29	1,252	1,228
Alabama		132	103	101	111	104	5	4	353	342
Kentucky		93	61	59	110	106	12	12	271	269
Mississippi		82	69	60	56	54	6	5	216	201
Tennessee		169	128	131	120	108	9	8	411	416
West South Central	992	885	689	623	656	619	95	80	2,432	2,207
Arkansas		73	41	37	52	51	3	4	168	166
Louisiana		114	113	85	130	96	17	14	393	309
Oklahoma		79	60	50	44	41	15	12	210	182
Texas		620	476	451	430	431	60	50	1,661	1,551
Mountain	397	380	396	373	238	233	39	36	1,070	1,022
Arizona	. 119	119	115	115	45	45	10	10	290	289
Colorado		77	90	77	39	38	9	6	226	200
Idaho		31	29	27	19	20	1	1	84	80
Montana		22	20	17	12	11	2	2	57	53
Nevada		55	51	49	59	56	3	4	164	164
New Mexico		31	39	39	18	20	9	8	99	98
Utah		32	38	36	23	19	4	3	100	89
Wyoming		13	15	13	23	22	1	1	51	49
Pacific Contiguous	999	999	1,214	1,154	417	410	44	46	2,673	2,609
California	. 714	707	1,017	954	319	303	28	30	2,079	1,994
Oregon	. 102	108	73	79	40	45	3	3	218	235
Washington		184	123	121	58	62	12	13	376	380
Pacific Noncontiguous	58	53	58	51	43	37	3	3	161	144
Alaska		20	18	18	6	8	2	2	46	49
Hawaii	. 39	33	40	33	36	29	1	1	115	95
U.S. Total	7,417	7,215	6,704	6,488	3,919	3,800	571	544	18,611	18,046

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

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 "*").

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.

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

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

(Million Dollars)

	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	1,797	1,631	1,548	1,511	569	574	73	73	3,986	3,789
Connecticut		437	375	363	128	130	19	18	1,011	947
Maine	192	188	125	141	43	57	4	4	364	390
Massachusetts	739	684	747	736	259	258	34	38	1,779	1,717
New Hampshire		141	136	115	67	54	6	2	384	312
Rhode Island	104	91	94	86	31	33	8	8	237	217
Vermont		90	71	70	41	43	3	3	212	206
Middle Atlantic	4,633	4,143	4,566	4,244	1,542	1,600	472	449	11,212	10,435
New Jersey	851 2,124	768 1,879	986	974	249 405	288 405	31 384	23	2,117	2,053
New York Pennsylvania	1,658	1,879	2,398 1,182	2,163 1,106	888	906	57	376 50	5,310 3,785	4,823 3,558
East North Central	4,766	4,503	3,833	3,696	3,075	3,003	321	308	11,995	11,510
Illinois	,	1,088	1,157	1,086	656	640	175	163	3,112	2,977
Indiana	746	681	413	399	613	594	21	21	1,793	1,695
Michigan		892	861	863	544	549	32	33	2,371	2,337
Ohio	1,367	1,291	991	964	878	862	72	73	3,308	3,190
Wisconsin	595	551	411	383	384	359	20	19	1,411	1,312
West North Central	2,150	2,006	1,466	1,389	1,032	985	130	120	4,777	4,500
Iowa	342	312	174	161	215	197	35	33	766	703
Kansas	277	255	259	230	151	147	13	12	699	645
Minnesota	496	459	353	333	313	293	17	16	1,179	1,102
Missouri	671	631	428	427	193	195	24	22	1,317	1,275
Nebraska	179	173	122	118	97	91	29	25	428	408
North Dakota	88	82	66	63	39	37	7	6	199	187
South Dakota	97	93	63	58	24	24	5	5	190	180
South Atlantic	8,249	7,522	4,881	4,874	2,356	2,146	487	462	15,973	15,004
Delaware	119	103	87	78	50	57	5	3	261	241
District of Columbia	44	35	171	165	4	4	4	7	224	211
Florida	2,855	2,671	1,625	1,636	328	327	142	140	4,951	4,774
Georgia	1,125	1,041	787	771	432	405	49	46	2,392	2,264
Maryland ²	676	570	354	464	287	126	28	29	1,345	1,189
North Carolina	1,393	1,271	798	760	459	459	49	46	2,700	2,536
South Carolina		629	371	346	389	374	21	19	1,473	1,369
Virginia		972	559	529	269	258	186	168	2,105	1,926
West Virginia	251	231	130	124	138	136	3	3	522	494
East South Central	2,450	2,250	1,464	1,373	1,514	1,439	127	116	5,555	5,177
Alabama		621	408	387	404	380	19	17	1,497	1,405
Kentucky	500	448	250	230	442	431	50	44	1,242	1,153
Mississippi	398	362	267	230	213	206	24	22	902	821
Tennessee	885	819	538	525	456	422	34	32	1,913	1,799
West South Central	4,285 355	3,984 342	2,784 171	2,613 157	2,460 205	2,582 214	360 14	296 15	9,888 746	9,475 728
Arkansas Louisiana	595	514	425	347	456	367	62	56	1,536	1,284
Oklahoma	425	361	247	195	182	148	66	42	920	746
Texas	2,910	2,767	1,942	1,914	1,617	1,852	218	183	6,686	6,717
Mountain	1,768	1,755	1,542	1,472	946	912	149	135	4,405	4,274
Arizona	523	528	443	440	169	168	44	39	1,178	1,175
Colorado	386	355	352	306	154	150	32	25	924	837
Idaho	170	174	108	106	84	82	6	5	367	367
Montana		104	81	75	49	48	7	8	245	235
Nevada	233	249	206	197	227	217	11	12	677	675
New Mexico		140	151	148	76	74	34	31	405	393
Utah		147	143	146	88	86	13	12	389	390
Wyoming		58	59	55	99	87	3	3	218	202
Pacific Contiguous	4,373	4,534	4,710	4,560	1,635	1,660	193	188	10,910	10,943
California	3,105	3,153	3,885	3,718	1,228	1,234	123	120	8,341	8,225
Oregon	470	516	305	324	171	181	14	13	960	1,034
Washington		866	520	518	236	246	56	55	1,609	1,684
Pacific Noncontiguous	236	217	563	202	164	145	12	12	976	576
Alaska	85	87	413	76	26	32	10	10	534	204
Hawaii	151	130	150	126	138	113	3	2	442	371
U.S. Total	34,706	32,545	27,356	25,934	15,293	15,045	2,324	2,160	79,678	75,684

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.

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

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, April 2003 and 2002

(Cents)

New England	ectors	All Se	ner¹	Oth	strial	Indu	nercial	Comn	ential	Resid	
Maine	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	Apr 2002	Apr 2003	
Connecticut	9.86	9.78	14.86	15.19	6.93	7.65	9.79	9.34	11.60	11.21	New England
Maine	9.76										
Massechusetts	8.71										
Rhode Island	9.94	9.69	16.18	16.14	7.36	8.52	9.85	9.17	11.40		
Vermont 12.87 12.87 11.31 11.17 7.92 7.80 19.91 18.71 11.01 Middle Atlanic 11.46 10.91 10.56 10.00 5.59 5.74 9.34 8.63 9.59 New York 14.42 12.64 13.12 11.43 48.5 4.74 8.59 8.00 11.61 New York 14.42 12.64 13.12 11.13 48.5 4.74 8.59 8.00 11.61 East North Central 8.34 8.04 7.63 7.51 4.51 4.62 6.17 5.85 6.50 Illinois 8.56 8.31 8.68 8.16 5.12 5.00 5.44 5.07 7.26 Ildiana 7.57 7.19 6.20 6.12 3.97 9.28 8.81 5.41 5.57 7.26 Ohio 8.45 8.17 7.81 7.83 4.52 4.63 5.51 5.57 8.53 6.59 West	10.93	10.71	22.10	12.11	9.03	9.42	10.25	10.16	12.61	11.95	New Hampshire
Niddle Atlantic	9.43						8.78		10.41		
New York	10.85										
New York	9.13										
Pennsylvania	9.27										
Rast North Central 8.34 8.14 7.63 7.51 4.51 4.62 6.17 5.85 6.50 Indiana 7.57 7.19 6.20 6.12 3.97 3.97 9.28 8.81 5.41 Michigan 8.32 8.21 7.28 7.63 4.42 5.01 12.05 12.09 6.54 Ohio 8.45 8.17 7.81 7.83 4.52 4.65 5.54 5.57 6.49 Wisconsin 8.72 8.07 7.08 6.61 4.70 4.40 8.61 8.35 6.59 Wisconsin 8.72 8.07 7.08 6.61 4.70 4.40 8.61 8.35 6.59 Wisconsin 8.72 8.07 7.08 6.61 4.70 4.40 8.61 8.35 6.59 Wisconsin 8.72 8.07 7.08 6.61 4.70 4.40 8.61 8.35 6.59 4.21 1.00 8.61 8.35 6.59 4.21 4.12 6.41 6.42 5.81 6.44 6.39 4.11 3.86 6.53 6.54 6.55	10.18 7.96										
Illinois	6.50										
Indiana	7.07										
Michigan	5.34										
Ohio 8.45 8.17 7.81 7.83 4.52 4.65 5.54 5.57 6.49 Wisconsin 8.72 8.07 7.08 6.61 4.70 4.40 8.61 8.15 5.88 5.69 4.21 4.12 6.41 6.42 5.81 Iowa 8.67 8.16 6.44 6.39 4.11 3.36 6.53 6.53 6.53 6.03 Kansas 7.84 7.47 6.45 6.13 4.79 4.54 9.86 8.20 6.33 Minnesota 7.45 7.26 6.04 5.56 4.25 4.26 8.36 8.37 5.77 Missouri 6.67 6.63 5.30 5.37 4.03 4.02 6.21 5.82 5.59 Nebraska 6.41 6.19 5.45 5.26 3.82 3.85 6.23 7.07 5.24 North Dakota 7.52 6.15 6.04 4.27 4.67 MM MM	6.97										
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Nebraska	5.60										
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District of Columbia 7.38 7.19 6.36 6.45 4.54 4.49 3.23 6.52 6.32	6.49										
Florida	6.63										
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Kentucky 5.96 5.74 5.38 5.42 3.00 2.76 4.75 4.70 4.16 Mississippi 7.97 7.42 7.44 6.93 4.59 4.36 10.31 9.05 6.60 Tennessee 6.66 6.53 6.62 6.45 4.23 4.09 9.21 8.45 5.73 West South Central 8.74 7.56 7.41 6.43 5.22 4.73 7.32 6.84 7.05 Arkansas 7.47 7.28 5.58 5.70 4.07 4.15 7.06 6.61 5.57 Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53	5.21	5.43	6.34	6.61	3.53	3.77	6.41	6.63	6.69		
Mississippi 7.97 7.42 7.44 6.93 4.59 4.36 10.31 9.05 6.60 Tennessee 6.66 6.53 6.62 6.45 4.23 4.09 9.21 8.45 5.73 West South Central 8.74 7.56 7.41 6.43 5.22 4.73 7.32 6.84 7.05 Arkansas 7.47 7.28 5.58 5.70 4.07 4.15 7.06 6.61 5.57 Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 <	5.52	5.81	7.14	7.20	3.69	3.95	6.76	7.09	7.33	7.70	Alabama
Tennessee 6.66 6.53 6.62 6.45 4.23 4.09 9.21 8.45 5.73 West South Central 8.74 7.56 7.41 6.43 5.22 4.73 7.32 6.84 7.05 Arkansas 7.47 7.28 5.58 5.70 4.07 4.15 7.06 6.61 5.57 Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 6.88 6.87 5.19 5.01 4.77 4.80 6.79 Colorado 7.87 7.23 6	3.97	4.16									Kentucky
West South Central 8.74 7.56 7.41 6.43 5.22 4.73 7.32 6.84 7.05 Arkansas. 7.47 7.28 5.58 5.70 4.07 4.15 7.06 6.61 5.57 Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Moutain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 6.88 6.87 5.19 5.01 4.77 4.80 6.79 Colorado 7.87 7.23 6.33 5.53 4.83 4.38 7.86 7.74 6.52 Idaho 6.71 6.10 5.89<	6.16										Mississippi
Arkansas 7.47 7.28 5.58 5.70 4.07 4.15 7.06 6.61 5.57 Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 6.88 6.87 5.19 5.01 4.77 4.80 6.79 Colorado 7.87 7.23 6.33 5.53 4.83 4.38 7.86 7.74 6.52 Idaho 6.71 6.10 5.89 5.83 4.15 4.29 5.67 5.04 5.65 Montana 7.36 6.81 6.25	5.66										
Louisiana 8.15 6.64 7.78 6.34 6.00 3.88 8.44 6.53 7.21 Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 6.88 6.87 5.19 5.01 4.77 4.80 6.79 Colorado 7.87 7.23 6.33 5.53 4.83 4.38 7.86 7.74 6.52 Idaho 6.71 6.10 5.89 5.83 4.15 4.29 5.67 5.04 5.65 Montana 7.36 6.81 6.25 5.55 4.27 4.06 8.21 11.38 6.11	6.19										
Oklahoma 7.75 6.33 6.08 5.02 4.08 3.74 4.87 5.19 5.92 Texas 9.19 7.99 7.76 6.73 5.34 5.21 8.08 7.55 7.38 Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona 7.91 7.73 6.88 6.87 5.19 5.01 4.77 4.80 6.79 Colorado 7.87 7.23 6.33 5.53 4.83 4.38 7.86 7.74 6.52 Idaho 6.71 6.10 5.89 5.83 4.15 4.29 5.67 5.04 5.65 Montana 7.36 6.81 6.25 5.55 4.27 4.06 8.21 11.38 6.11	5.60										
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Mountain 7.84 7.53 6.75 6.38 4.85 4.62 6.02 6.04 6.49 Arizona	5.09 6.63										
Arizona	6.18										
Colorado	6.69										
Idaho	5.82										
Montana	5.41										
	5.69										
	7.64										
New Mexico	6.54										New Mexico
Utah	5.37		4.35								
Wyoming	4.62									6.88	Wyoming
Pacific Contiguous 9.80 9.55 10.65 9.91 7.21 6.44 6.45 6.47 9.53	8.94										
California	10.49										
Oregon	6.51										
Washington	5.79										
Pacific Noncontiguous 14.79 13.63 13.18 12.18 11.28 9.45 14.53 14.03 13.13	11.79										
Alaska	10.68										
Hawaii	12.45 6.95										

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.

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

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 April (Cents)

	Reside	ential	Comm	ercial	Indu	strial	Oth	ier ¹	All Se	ectors
Census Division and State	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002
New England	11.08	11.41	9.29	9.71	7.63	7.26	13.43	14.46	9.75	9.90
Connecticut	10.66	10.86	9.18	9.20	7.81	7.63	9.47	9.56	9.62	9.61
Maine	12.97	13.62	10.02	11.73	3.92	4.44	22.06	21.85	9.47	10.04
Massachusetts	10.74	11.23	9.05	9.68	8.38	7.73	14.72	15.53	9.64	9.93
New Hampshire	11.78	11.88	10.11	9.99	9.33	8.66	11.94	20.02	10.67	10.50
Rhode Island	10.37	10.08	8.66	8.34	7.75	7.73	22.70	28.74	9.38	9.12
Vermont	12.52	12.65	11.06	11.16	8.15	8.02	18.57	18.02	10.95	10.89
Middle Atlantic	10.85 9.86	10.79 9.89	10.02 8.52	9.81 9.11	5.75 7.12	5.82 7.77	8.67 16.58	8.36 12.02	9.30 8.86	9.11 9.18
New Jersey New York	13.43	12.78	12.11	11.18	5.02	4.80	8.04	7.93	10.96	10.21
Pennsylvania	9.07	9.38	8.34	8.38	5.83	5.91	11.93	11.32	7.86	7.92
East North Central	7.73	7.76	7.37	7.35	4.59	4.59	6.03	5.78	6.45	6.43
Illinois	7.79	7.94	8.14	7.89	5.24	5.21	5.45	5.01	7.01	6.92
Indiana	6.76	6.81	6.01	6.04	3.96	3.97	8.75	8.86	5.33	5.33
Michigan	8.31	8.23	7.35	7.59	4.75	4.94	10.93	10.99	6.84	6.95
Ohio	7.70	7.79	7.60	7.66	4.61	4.57	5.46	5.54	6.46	6.46
Wisconsin	8.28	7.98	6.67	6.42	4.55	4.38	8.22	8.03	6.40	6.16
West North Central	6.84	6.81	5.69	5.62	4.13	4.06	6.43	6.39	5.67	5.60
Iowa	8.01	7.86	6.28	6.18	3.98	3.78	6.21	6.28	5.89	5.71
Kansas	7.36	7.15	6.33	6.03	4.65	4.51	10.13	9.06	6.23	5.98
Minnesota	7.27	7.17	5.76	5.58	4.21	4.12	7.70	7.70	5.72	5.59
Missouri	6.22	6.37	5.17	5.32	3.90	4.03	5.95	6.01	5.39	5.51
Nebraska	6.00	5.98	5.29	5.24	3.89	3.89	7.16	7.07	5.22	5.19
North Dakota	6.01	5.90	5.69	5.58	4.16	4.05	4.07	3.90	5.36	5.24
South Dakota	7.10	7.02	6.30	6.18	4.60	4.48	3.91	3.91	6.26	6.15
South Atlantic	7.71	7.81	6.55	6.46	4.15	4.15	6.62	6.57	6.50	6.51
Delaware	7.87	8.13	6.92	6.80	4.19	4.34	10.58	15.33	6.52	6.44
District of Columbia	7.45	7.26	6.42	6.42	4.61	4.49	3.61	6.12	6.45	6.48
Florida	8.32	8.55	6.86	7.08	5.29	5.40	7.71	8.02	7.49	7.68
Georgia	7.36	7.35	6.65	6.50	3.90	3.75	8.54	8.62	6.17	6.06
Maryland	6.88	6.99	6.71	5.56	3.63	3.71	9.91	8.49	5.77	5.88
North Carolina	8.02	7.98	6.51	6.45	4.50	4.49	6.84	6.77	6.66	6.57
South CarolinaVirginia	7.68 7.34	7.61 7.48	6.68 5.78	6.48 5.85	3.86 4.27	3.74 4.13	6.69 5.43	6.52 5.15	5.90 6.14	5.73 6.11
West Virginia	6.13	6.11	5.48	5.47	3.76	3.79	10.41	10.21	5.13	5.11
East South Central	6.47	6.37	6.48	6.33	3.72	3.54	6.55	6.32	5.39	5.21
Alabama	7.03	6.88	6.84	6.68	3.84	3.69	7.09	7.11	5.71	5.54
Kentucky	5.56	5.48	5.35	5.27	2.98	2.83	4.69	4.52	4.20	4.02
Mississippi	7.24	6.86	7.22	6.76	4.49	4.29	10.30	8.99	6.36	5.97
Tennessee	6.39	6.37	6.52	6.47	4.30	4.10	9.06	8.79	5.78	5.68
West South Central	7.88	7.48	7.20	6.80	5.02	4.85	7.23	6.57	6.73	6.34
Arkansas	6.90	7.08	5.52	5.83	4.03	4.15	7.76	6.85	5.51	5.64
Louisiana	7.24	6.48	7.10	6.32	5.17	3.88	7.82	6.64	6.46	5.41
Oklahoma	6.88	6.09	6.20	4.88	4.40	3.49	5.22	4.50	5.91	4.94
Texas	8.35	8.00	7.58	7.29	5.22	5.39	7.95	7.28	7.10	6.87
Mountain	7.61	7.31	6.64	6.37	4.78	4.60	5.75	5.80	6.40	6.17
Arizona	7.53	7.35	6.81	6.81	5.01	4.84	4.63	4.61	6.63	6.54
Colorado	7.66	7.01	6.12	5.40	4.77	4.33	7.45	7.82	6.39	5.76
Idaho	6.67	6.34	5.99	5.82	4.52	4.35	5.54	5.17	5.82	5.60
Montana	7.15	6.90	6.14	5.86	4.32	4.42	8.59	9.26	6.06	5.94
Nevada	9.57	9.41	9.31	9.03	6.60	6.11	6.98	7.54	8.21	7.90
New Mexico	8.50	8.13	7.41	7.06	4.72	4.54	6.17	6.34	6.87	6.62
Utah	6.63	6.54	5.56	5.56	3.62	3.80	4.59	4.47	5.21	5.28
Wyoming	6.67	6.53	5.66	5.54	3.64	3.51	6.34	5.19	4.68	4.59
Pacific Contiguous	9.61	9.70	10.28	9.97	6.87	6.64	6.46	6.54	9.24	9.09
California	12.02	12.25	11.88	11.40	8.21	7.84	7.54	7.88	11.11	10.88
Oregon	6.96	7.15	6.43	6.77	4.70	4.89	8.57	8.54	6.27	6.52
Washington Pacific Noncontiguous	6.18 14.35	6.28 13.39	6.20 15.14	6.21 11.95	4.53 11.00	4.42 9.38	4.70 13.13	4.57 12.96	5.81 14.04	5.83 11.64
Alaska	11.56	11.89	15.14	10.27	7.53	7.66	12.85	13.09	13.72	10.43
Hawaii	16.60	14.62	15.11	13.25	12.05	10.02	14.18	12.44	13.72	10.43
		14.02	13.44	13.23	14.03	10.02	14.10	14.44	14.44	12.43

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.

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, April 2003 (Percent)

(1-6)	rcent)								
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	1	3	3	0	0	3	1	0	1
Connecticut	0	6	6	0	0	13	1		1
Maine	0	8	8	0		5	1	0	4
Massachusetts	2	5	2		0	5	2		1
New Hampshire	0	4	301		0	6	8		1
Rhode Island		262	12			232	0		13
Vermont		155	0		0	13	6		3
Middle Atlantic	1	1	3	69	0	1	2		1
New Jersey	0	19	9	355	0	8	4		3
New York	3	1	2	326	0	1	3		1
Pennsylvania	1	4	7	63	0	3	2		1
East North Central	1	6	13	28	0	6	3	0	1
Illinois	2	8	21	188	0	61	13		1
Indiana	2	3	16	4		0	5		2
Michigan	1	18	19	0	0	8	3		2
Ohio	1	6	18	210	0	0	10		1
Wisconsin	1	23	13		0	11	7	0	1
West North Central	1	9	7	394	0	2	3	0	*
Iowa	2	121	73		0	3	7		2
Kansas	0	6	22		0	102	0		*
Minnesota	2	16	24		0	13	3	0	1
Missouri	1	26	2	0	0	14	10		1
Nebraska	1	100	33	0	0	*	29		1
North Dakota	1	128	1,657	427		0	31		1
South Dakota	0	0	0			0	0		0
South Atlantic	*	1	1	0	0	1	3		*
Delaware	7	9	69	0					11
District of Columbia		0							0
Florida	*	*	1	0	0	0	4		*
Georgia	1	6	10		0	1	7		1
Maryland	0	6	14	0	0	0	3		1
North Carolina	*	6	7	0	0	1	8		*
South Carolina	1	3	2	0	0	1	6		*
Virginia	2	7	5	0	0	2	7		1
West Virginia	1	1	44	0		6	26		1
East South Central	*	1	4	72	0	0	4		*
Alabama	*	8	5	73	0	0	4		l .
Kentucky	*	0	76			0	8		*
Mississippi	1	23	6	0	0	0	12		l
Tennessee	1	12	37	0	0	0	5		1
West South Central		1	1 7	12	0	3	2	0	1
Arkansas	0	3	7		0	5	7	0] 1
Louisiana	0	16	2	9 166	0	0	3 10	0	1 *
Oklahoma	1	3	1	186	0	0 19	3		1
Texas Mountain	1 *	8	3	195	0	19	4		1
Arizona	0	19	1	195	0	0	32		*
Colorado	1	71	14	0		4	22		2
Idaho	406	0	138	U		2	7		3
Montana	400	2	0	0		1	0		2
Nevada	0	0	0	0		1	6		*
New Mexico	*	12	18			33	228		2
Utah	*	89	21			33 16	16		1
Wyoming	1	51	27	1,269		7	13		1
Pacific Contiguous	2	29	4	1,209	0	*	13		1
California	22	29	4	*	0	1	2		2
Oregon	2	716	4			*	7		1
Washington	2	149	7	0	0	*	2		*
Pacific Noncontiguous	30	2	11	219		10	17		5
Alaska	120	26	11	219		10	301		12
Hawaii	10	1	0	219		46	17		2
	10	1	U	217		70	1 /		

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.

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

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: Total (All Sectors) by Census Division and State, Year-to-Date through April (Percent)

	rcent)			l					
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	*	3	1	0	0	2	1	0	*
Connecticut	0	5	3	0	0	6	1		1
Maine	0	5	2	0		3	1	0	1
Massachusetts	1	3	1		0	2	1		1
New Hampshire	0	10	109		0	4	4		1
Rhode Island		175	2			120	0		4
Vermont		124	0		0	8	3		2
Middle Atlantic	*	2	1	56	0	1	1	-	*
New Jersey	0	10	3	256	0	3	2		1
New York	1	2	1	235	0	1	2		*
Pennsylvania	*	4	3	53	0	1	1		*
East North Central	*	6	3	20	0	3	2	0	*
Illinois	1	6	7	135	0	31	8		*
Indiana	1	13	3	11		0	4		1
Michigan	*	13	4	0	0	3	2		1
Ohio	*	14	10	161	0	0	11		*
Wisconsin	1	30	4		0	7	5	0	1
West North Central	*	12	5	291	0	1	1	0	*
Iowa	1	152	21		0	2	3		1
Kansas	0	12	17		0	60	0		*
Minnesota	1	14	12		0	8	2	0	1
Missouri	*	50	2	0	0	5	6		*
Nebraska	*	108	27	0	0	*	18		*
North Dakota	*	115	596	307		0	20		1
South Dakota	0	0	0			0	0		0
South Atlantic	*	1	1	0	0	*	1		*
Delaware	3	5	25	0					3
District of Columbia		0							0
Florida	*	*	1	0	0	0	2		*
Georgia	*	20	8		0	1	3		*
Maryland	0	6	6	0	0	0	2		1
North Carolina	*	11	7	0	0	*	4		*
South Carolina	*	9	ĺ	0	0	*	2		*
Virginia	1	6	3	0	0	1	3		1
West Virginia	*	6	23	0		4	3		*
East South Central	*	5	2	34	0	0	2		*
Alabama	*	27	4	35	0	0	2		*
Kentucky	*	0	24			Õ	8		*
Mississippi	*	12	2	0	0	ő	5		1
Tennessee	*	16	17	0	0	0	4		*
West South Central	*	3	1	6	Ö	ı i	1	0	*
Arkansas	0	2	3		0	2	2	0	*
Louisiana	*	1	1	5	0	0	1	ő	1
Oklahoma	0	12	2	81		0	6		1
Texas	*	6	1	7	0	6	2		*
Mountain	*	27	2	118	0	1	3		*
Arizona	0	90	2		0	0	24		*
Colorado	*	249	5	0		3	11		1
Idaho	169	0	48			2	5		3
Montana	1	5	0	0	 	*	0		1
Nevada	0	0	2	0		1	2		1
New Mexico	*	75	14		 	24	107		1
Utah	*	189	21			11	7		1
Wyoming	1	85	9	914	 	5	9		1
Pacific Contiguous	1	15	1	*	0	*	1		*
California	7	15	1	1	0	1	1		1
Oregon	1	20	1			*	3		*
Washington	1	143	1	0	0	*	2		*
Pacific Noncontiguous	14	9	7			6	9		5
	50	64	7	106			132		10
Alaska Hawaii	5	7	0	106		6 48	9		5
11awaii	3	/	U	100		40	9		S

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: Electric Utilities by Census Division and State, April 2003

(Percent)

New England	Census Division and State	Coal ¹	Petroleum ²	Natural Gas ³	Other Gases ⁴	Nuclear	Hydro- electric ⁵	Other Renewables ⁶	Other ⁷	Total
Connecticut	New England	0	3	54		0	22	0		4
Massachusetts	Connecticut		854				266			256
Massachusetts										629
New Hampshire			127	59			1,013			91
Rhode Island		0	*	0		0				*
Vermont			334							334
Middle Atlantic * 1 - 0 1 - 0 - New Persey 0 0 0 - 0 - - 0 - - 0 - - New York 0 1 - 0 1 - 0 1 - 0 1 - Personal Normal 1 - 0 1 - 0 1 - 1 - 1 - 0 1 - 1 - 1 - 0 1 - 1 - 1 - 1 - 1 - 1 1 - 1 1 - 1 1 - 1 1 2 2 2 0 0 0 - 1 1 2 2 0 0 1 1 2 1 1 2 1 1 2 1 1 2 1 1 </td <td></td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td>46</td> <td>0</td> <td></td> <td>38</td>				0			46	0		38
New York		0	*	1		0	1	_		*
New York.		0	0	0			0			0
Pennsylvania		0	*	1		0	1			1
Fast North Central * 6 9 - 0 6 0 0 1 1 1 1 1 1 1 1		0	15	466		0	4			*
Illinois		*	6	9		0	6	0		*
Indiana		7	261	98			143	0		7
Michigan *		*								*
Ohio * 2 2 - 0 0 - Wisconsin * 9 2 - 0 12 0 West North Central * 5 5 0 0 1 2 Iowa 1 138 9 - 0 2 30 Kansas 0 6 18 - 0 - - - Minnesota 1 7 20 - 0 9 0 Missouri 0 26 2 0 0 14 0 North Dakota 0 10 0 - - 0 0 0 South Atlante 1 1 * - 0 0 0 0 Delaware - 160 0 - - - - - - Florida 0 * 1 0 0 0		*		5		0	8	0		*
West North Central * 5 5 0 0 1 2		*	2							*
Nest North Central * 5 5 0 0 1 2 2 30 2 30 30 30 30		*	9					0		1
Iowa		*			0					*
Kansas 0 6 18 0 Minnesota 1 7 20 0 9 0 Minssouri 0 26 2 0 0 14 0 North Dakota 0 101 24 0 0 * 0 0 South Dakota 0 0 0 0 0 0 South Alanic * 1 * 0 1 0 Delaware 160 0 0 1 0 Delaware 160 0		1		-			_			1
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North Dakota		-				-	*	0		*
South Dakota		*			U			0		0
South Atlantic * 1 * - 0 1 0 Delaware		*					0	•		0
Delaware			1				1			*
District of Columbia			1(0				1			
Florida			100	U						35
Georgia * 22 35 0 1										
Maryland			22				0	0		*
North Carolina 0 2 53 0 1 South Carolina 0 1 0 0 1 0 Virginia 3 8 * 0 1 0 West Virginia 0 0 0 0 0 East South Central * 1 2 0 0 0 Alabama 0 0 5 0 0 Kentucky * 0 0 0 0 Kentucky * 0 0 0 0 Mississippi 1 13 * 0 Tennessee 0 0 0 0 0 West South Central 1 2 * 0 0 Lou						0	1			*
South Carolina	•									639
Virginia 3 8 * 0 1 0 West Virginia 0 0 0 0 0 East South Central * 1 2 0 0 Alabama 0 0 5 0 0 Kentucky * 0 0 0 0 Mississippi 1 13 * 0 0 Tennessee 0 0 0 0 0 0 Tennessee 0 0 0 0 0 0 West South Central 1 2 * 0 0 0 Arkansas 0 3 0 0 5 Louisiana 0 3 0 0 5 Coluisiana		*	2				1			*
West Virginia 0 0 0 0 East South Central * 1 2 0 0 0 Alabama 0 0 5 0 0 Kentucky * 0 0 0 0 Mississippi 1 13 * 0 0 Tenesse 0 0 0 0 0 0 0 West South Central 1 2 * 0 0 0 0 West South Central 1 2 * 0 0 0 0 Arkansas 0 3 0 0 5 0 0 0 0 0 0 0 0 <th< td=""><td></td><td>-</td><td>I</td><td>0</td><td></td><td>-</td><td>1</td><td>•</td><td></td><td>*</td></th<>		-	I	0		-	1	•		*
East South Central *			*	*			1	•		1
Alabama			0							0
Kentucky * 0 0 0 0 Mississippi 1 13 * 0 Tennesse 0 0 0 0 0 0 West South Central 1 2 * 0 3 0 Arkansas 0 3 0 0 5 Louisiana 0 * * * 0 Oklahoma 0 39 * 0 Oklahoma 0 39 * 0 0 Texas 1 9 * 0 20 0 Mountain * 17 2 0 0 1 0 Arizona 0 0 0 0 0 0 Colorado <td></td> <td></td> <td>1</td> <td>_</td> <td></td> <td></td> <td>v</td> <td>0</td> <td></td> <td>*</td>			1	_			v	0		*
Mississippi 1 13 * 0 <		0				0				*
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West South Central 1 2 * 0 3 0 Arkansas 0 3 0 0 5 Louisiana 0 * * 0 5 Oklahoma 0 39 * 0 0 Texas 1 9 * 0 20 0 Mountain * 17 2 0 0 1 0 Arizona 0 0 0 0 0 0 Colorado 0 7 3 0 2 0 Idaho 0 0 1 Montana 0 936 0 1 Nevada 0 0 0 1 New Mexico *		1		*						*
West Stufful Central 1 2 0 3 0 0 5 Louisiana 0 * * * 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 1 1 1 0 0 0 1 1 <td< td=""><td>Tennessee</td><td>0</td><td>0</td><td>0</td><td></td><td>0</td><td>0</td><td>0</td><td></td><td>0</td></td<>	Tennessee	0	0	0		0	0	0		0
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Texas 1 9 * 0 20 0 Mountain * 17 2 0 0 1 0 Arizona 0 0 0 0 0 0 Colorado 0 7 3 0 2 0 Idaho 0 0 1 Montana 0 936 0 1 Nevada 0 0 0 0 New Mexico * 0 12 33 Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguos 0 0 2 0 1 1 Oregon 0 <	Louisiana	0	*	*		0				*
Mountain * 17 2 0 0 1 0 Arizona 0 0 0 0 0 0 Colorado 0 7 3 0 2 0 Idaho 0 0 1 Montana 0 936 0 1 Nevada 0 0 0 0 New Mexico * 0 12 33 Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0	Oklahoma	0	39	*			0			*
Arizona	Texas	1	9	*		0	20	0		1
Colorado 0 7 3 0 2 0 Idaho 0 0 1 Montana 0 936 0 1 Mevada 0 0 0 0 New Mexico * 0 12 33 Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0	Tountain	*	17	2	0	0	1	0		*
Idaho	Arizona	0	0	0		0	0	0		0
Montana 0 936 0 1 Nevada 0 0 0 0 New Mexico * 0 12 33 Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0	Colorado	0	7	3	0		2	0		*
Montana 0 936 0 1 Nevada 0 0 0 0 New Mexico * 0 12 33 Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0	Idaho		0	0			1			1
Nevada 0 0 0 0 New Mexico * 0 12 33 14 0 15 16 0 0 16 0 0 0 16 0 0 0 0 7 0 0 Pacific Contiguous 0 0 2 0 * * * California 0 2 0 1 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0		0	936	0			1			1
New Mexico		0	0	0			0			0
Utah 0 89 9 16 0 Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0		*	0	12			33			1
Wyoming 0 0 0 7 0 Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 * 0		0	89	9			16	0		1
Pacific Contiguous 0 0 2 0 * * California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0										*
California 0 2 0 1 1 Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0						0				*
Oregon 0 0 0 * 0 Washington 0 0 0 0 * 0				_			1	1		*
Washington 0 0 0 0 * 0							*			*
8							*			*
	acific Noncontiguous	0	2	6			10	142		3
Alaska										5
Hawaii										0

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 April (Percent)

	icent)	1		1		ı			
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	0	6	53		0	14	0	-	2
Connecticut		1,621				116			178
Maine		·				273			273
Massachusetts		27	57			440			26
New Hampshire	0	2	0		0	0			1
Rhode Island		634							634
Vermont		124	0			26	0		16
Middle Atlantic	0	1	*	_	0	*			*
New Jersey	0	0	0			0			0
New York	0	1	*		0	*			*
Pennsylvania	0	69	299		0	2			*
East North Central	*	8	5	-	0	3	0		*
Illinois	3	260	66			62	0		3
Indiana	*	7	*			0			*
Michigan	*	10	4		0	3	0		*
Ohio	*	5	3		0	0			*
Wisconsin	*	25	1		0	7	0		*
West North Central	*	10	6	0	0	1	1	-	*
Iowa	*	151	6		0	1	8		*
Kansas	0	12	20		0				*
Minnesota	*	10	15		0	6	0		*
Missouri	0	43	3	0	0	5	0		*
Nebraska	0	79	25	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		50	0						42
District of Columbia									
Florida	0	*	1		0	0	0		*
Georgia	*	32	63		0	1			*
Maryland		624	376						615
North Carolina	0	3	28		0	*			*
South Carolina	0	1	0		0	*	0		*
Virginia	1	7	*		0	1	0		1
West Virginia	0	0	0			0	0		0
East South Central	*	2	2	-	0	0	0		*
Alabama	0	0	5		0	0			*
Kentucky	*	0	0			0	0		*
Mississippi	*	4	*		0				*
Tennessee	0	0	0		0	0	0		0
West South Central	*	3	*	-	0	1	0	-	*
Arkansas	0	2	0		0	2			*
Louisiana	0	*	1		0				*
Oklahoma	0	5	*			0			*
Texas	*	8	*		0	6	0		*
Mountain	*	50	3	0	0	*	*	-	*
Arizona	0	0	7		0	0	*		*
Colorado	0	21	3	0		1	0		*
Idaho		0	0			1			1
Montana	0	763	0			*			1
Nevada	0	0	0			0			0
New Mexico	*	0	15			24			1
Utah	0	188	18			10	0		1
Wyoming	0	0	0			5	0		*
Pacific Contiguous	0	0	2	-	0	*	*	_	*
California		0	2		0	*	*		*
Oregon	0	0	0			*	0		*
Washington	0	0	0		0	*	0		*
Pacific Noncontiguous	0	7	8			6	80		4
A 11	0	65	8			6	132		9
Alaska Hawaii		0				0	0		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 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, April 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	3	2	0	0	3	1		1
Connecticut	0	1	4	0	0	8	1		1
Maine	0	2	9	0		6	1		5
Massachusetts	0	4	1		0	5	2		1
New Hampshire		984			0	7	7		1
Rhode Island		0	12			232	0		12
Vermont					0	7	0		1
Middle Atlantic	1	*	3	0	0	3	2	-	1
New Jersey	0	14	8	0	0	97	4		2
New York	3	*	2		0	5	3		1
Pennsylvania	1	*	3	0	0	4	3		1
East North Central	3	2	17	302	0	40	4		2
Illinois	1	0	10		0	60	14		*
Indiana	65	5	2	1,420			37		48
Michigan	0	0	23	0		56	4		18
Ohio	5	439	23	320			8		7
Wisconsin	0	70	27			146	21		20
West North Central	316	446	13			63	3		9
Iowa	316	446				134	7		26
Kansas						102	ó		7
Minnesota		0	34			101	3		13
Missouri			0			101			0
			2,721				139		290
Nebraska North Dakota			2,721				139		290
South Dakota									
	*	*	4	0	0	3	2		
South Atlantic		2			-	-		-	1
Delaware	0		71						10
District of Columbia		0							0
Florida	0	0	7	0		270	2		1
Georgia		0	/			278	221		/
Maryland	0	0	0	0	0	0	2		2
North Carolina	5	21	2	0		133	17		3
South Carolina		0	0			69			21
Virginia	0	4	7	0		66	8		2
West Virginia	0	0	0			22	135		*
East South Central	0		4	-		0	9		1
Alabama	0	2,361	5				0		4
Kentucky	0	0	0						0
Mississippi	0		6			0			3
Tennessee		0	192				61		118
West South Central	0	*	1	13	0	2	4		1
Arkansas		0	0			2,927	0		*
Louisiana	0	0	0			0	0		0
Oklahoma	0		0						0
Texas	0	*	2	13	0	43	4		1
Mountain	4	1	4	0	_	4	6	-	3
Arizona			0						0
Colorado	93	1,944	33			89	42		30
Idaho			206			18	74		27
Montana	4	0	0	0		1			3
Nevada		0	0	0		136	6		1
New Mexico		0	17				228		19
Utah	0	4,156	0			144	298		14
Wyoming	0		0				14		5
Pacific Contiguous	3	37	4	0	-	13	1	-	2
California	29	37	5	0		13	2		3
Oregon			2			24	8		3
Washington	2	130	1	0		36	4		2
Pacific Noncontiguous	28	1	0			73	5		14
	228	457							226
Alaska	220								

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 April (Percent)

					1			1	
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	0	1	1	0	0	2	1		*
Connecticut	0	2	1	0	0	4	1		*
Maine	0	3	3	0		4	1		2
Massachusetts	0	1	*		0	2	1		*
New Hampshire		2,830			0	5	3		*
Rhode Island		0	2			120	0		2.
Vermont					0	4	0		1
Middle Atlantic	*	2	1	0	0	2	1		*
New Jersey	0	4	3	0	0	50	2		1
New York	1	3	1		0	2	2		*
Pennsylvania	1 *	2	1	0	0	2	2		*
East North Central	1	1	4	217	0	23	3		*
	*	1	-		•	-	_		*
Illinois		0	3	1.022	0	35	9		
Indiana	21	23	1	1,022			25		17
Michigan	0	0	5	0		33	2		4
Ohio	2	98	12	231			9		4
Wisconsin	0	50	8			85	18		7
West North Central	132	242	9	-		37	2	-	5
Iowa	132	996				78	3		16
Kansas						60	0		4
Minnesota		0	16			59	2		6
Missouri			0						0
Nebraska			985				93		138
North Dakota									156
South Dakota									
	*	2	2	0	0	2	1		*
South Atlantic				-					
Delaware	0	3	25						2
District of Columbia		0							0
Florida	0	0	*	0			1		*
Georgia		51	6			143	104		6
Maryland	0	0	0	0	0	0	1		*
North Carolina	3	8	1	0		69	7		2
South Carolina		0	0			35			6
Virginia	0	9	4	0		34	3		1
West Virginia	0	0	0			12	5		*
East South Central	0	7	2	_		0	6		1
Alabama	0	4,696	3				0		2
Kentucky	0	0	0						0
Mississippi	Õ		3			0			2
Tennessee		1,379	62				41		95
West South Central	1	5	1	5	0	1	2		1
Arkansas		0	0			1,707	0		*
	0					0	0		1
Louisiana		2	3				-		
Oklahoma	0		9						5
Texas	1	8	1	5	0	25	2		1
Mountain	1	6	2	0		4	3		1
Arizona			0						0
Colorado	45	309	11			91	15		11
Idaho			75			21	49		21
Montana	1	0	0	0		1			1
Nevada		0	3	0		139	2		2
New Mexico		0	7				107		8
Utah	0	8,267	0			146	140		6
Wyoming	Õ		ő				10		4
Pacific Contiguous	1	16	ĭ	2		13	1		1
California	7	16	2	476		13	1		1
Oregon	, 		*	470		21	4		1
			*						
Washington	1	605	T	0		37	3		1 7
Pacific Noncontiguous	13	6	0			74	3		7
Alaska	95	1,022							96
Hawaii	4	4	0			74	3		3

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: Commercial Combined Heat and Power Producers by Census Division and State, April 2003 (Percent)

		1							
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	_	220	172	_		0	8		70
Connecticut		336	449						395
Maine		0	31,482				9		9
Massachusetts		577	187			0	0		146
New Hampshire		398					<u></u>		398
Rhode Island		347	1,579						339
Vermont			1,577						
Middle Atlantic	629	232	109			13,035	3		50
		470	204			15,055	206		197
New Jersey	683						4		
New York		250	171			13,035			67
Pennsylvania	1,609	272	189			105	0		72
East North Central	73	201	146	-		195	8		43
Illinois	611	434	187			297	132		174
Indiana	166	537	464				58		127
Michigan	0	1,050	487				3		9
Ohio	1,493	662	729				1,004		657
Wisconsin	570	276	321			257	75		218
West North Central	160	386	190	_			55		106
Iowa	362	308	594				106		277
Kansas		0	2,650						2,650
Minnesota		846	249				82		198
Missouri	0	576	21				0		5
Nebraska		450	1,034				138		382
North Dakota		450	1,054				156		362
South Dakota			 						
		19					32		44
South Atlantic	163		410	-		280			
Delaware									
District of Columbia									
Florida			463				158		267
Georgia		821	0						821
Maryland		995					74		74
North Carolina	163	450	1,658			321			163
South Carolina		1,039	2,298			572	138		154
Virginia		4	0				33		26
West Virginia									
East South Central	487	1,122	425	_			120		297
Alabama		, <u></u>							
Kentucky			0						0
Mississippi		1,122	830						794
Tennessee	487	1,122	451				120		319
West South Central		624	36				53		35
Arkansas			2,090				421		701
							421		
Louisiana		1 102	10						10
Oklahoma		1,192	767						741
Texas		732	175				0		157
Mountain	-	1,780	230	-	-	-	48		192
Arizona		1,780	947				519		721
Colorado			283				0		223
Idaho									
Montana									
Nevada									
New Mexico			507						507
Utah			834						834
Wyoming									
Pacific Contiguous	1,348	1,271	97	12,244		55	31		66
California	1,546	1,544	100	12,244			31		73
Oregon		2,238	1,157	12,244			J1 		1,134
Washington	1,348	3,433	340			55			107
Pacific Noncontiguous	295	204							275
Alaska Hawaii	295	204							275

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

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 April (Percent)

(1 6	rcent)								
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	_	98	42	_		0	6	_	36
Connecticut		751	163						253
Maine		0	11,401				7		7
Massachusetts		77	43			0	0		35
New Hampshire		319							319
Rhode Island		215	572						208
Vermont									
Middle Atlantic	262	178	39			6,720	2		30
New Jersey		1,051	74				138		83
New York	284	184	58			6,720	3		50
Pennsylvania	669	799	68				0		35
East North Central	36	435	50			113	6		25
Illinois	254	970	68			173	88		74
Indiana	65	1,014	224			1/3	42		60
Michigan	0	2,347	70				3		7
Ohio	621	1,480	264				657		329
Wisconsin	237	616	116			150	50		115
						130			
West North Central	71	382	77	-	-	-	36	-	52
Iowa	151	443	215				71		119
Kansas		0	1,129						1,129
Minnesota		550	90				55		85
Missouri	0	1,448	24				0		33
Nebraska		1,006	375				93		389
North Dakota									
South Dakota									
South Atlantic	78	30	79			144	16		18
Delaware									
District of Columbia									
Florida			197				74		120
Georgia		1,632	0						1,632
Maryland		2,224					50		122
North Carolina	78	1,418	706			166			84
South Carolina		2,341	979			295	80		141
Virginia	0	7	0				16		8
West Virginia									
East South Central	202	2,231	171				81		131
Alabama									
Kentucky			0						0
Mississippi		2,231	354						394
Tennessee	202		163				81		134
West South Central		1,241	22				26		23
Arkansas			890				198		324
Louisiana			9						9
Oklahoma		2,371	327						357
Texas		1,457	60				0		57
Mountain		3,540	98			_	51		85
Arizona		3,540	403				244		347
Colorado		3,340	121				50		99
Idaho			121				50 		
Montana									
Nevada			216						
New Mexico			216						216
Utah			355						355
Wyoming	 5(1	2 525		 5 052		 EE			
Pacific Contiguous	561	2,525	32	5,953		55	15		25
California		3,071	33	5,953			15		26
Oregon		5,002	419						496
Washington	561	7,675	123			55			63
Pacific Noncontiguous	123	456	-	-	-	-	-	-	128
	123	456							128
Alaska 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 ⁷ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

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, April 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	40	29	31	_	_	10	3	0	9
Connecticut		369	181						162
Maine	0	24	10			8	1	0	4
Massachusetts	548	71	208			148	179		93
New Hampshire		277	302			43	46		59
Rhode Island		1,561							1,561
Vermont						111	112		81
Middle Atlantic	27	38	28	69		52	5		16
New Jersey		42	56	355			98		50
New York	30	60	43	326		52	14		24
Pennsylvania	37	81	17	63			4		20
East North Central	27	30	38	25		27	4	0	13
Illinois	18	164	67	188			34		24
Indiana	495	3	111	0			0		11
Michigan	113	258	91			101	3		43
Ohio	221	235	323	260			51		136
Wisconsin	42	34	47			27	10	0	20
West North Central	25	460	123	427		38	11	0	21
Iowa	48	1,118	243				1,453		47
Kansas		0	1,234						1,234
Minnesota	19	274	97			38	11	0	15
Missouri	271	1,649	917				120		250
Nebraska	533		1,498						511
North Dakota	392	636	1,657	427			453		268
South Dakota									
South Atlantic	27	10	47	0	-	2	4		6
Delaware	390	97	0	0					75
District of Columbia									
Florida	80	29	58	0			7		11
Georgia	37	6	135			76	6		12
Maryland	0	1,187	382				0		24
North Carolina	35	14	680			*	9		6
South Carolina	39	0	0	0			0		10
Virginia	43	39	69			354	9		18
West Virginia	130	261	147	0		3			52
East South Central	25	21	37	72		0	4		9
Alabama	61	20	33	73			4		8
Kentucky			189				10		98
Mississippi	0	75	92	0			12		29
Tennessee	28	70	176	0		0	5		18
West South Central	2	2	4	15	_	-	3	0	3
Arkansas	0	0	122				7	0	15
Louisiana	134	8	4	9			3	0	3
Oklahoma	0	0	29	166			10		13
Texas	2	2	5	25			3		4
Mountain	76	352	93	1,269			7		40
Arizona	0	629	111						2
Colorado		341	472						407
Idaho	406	0	59				6		43
Montana			0				0		0
Nevada		1.000							275
New Mexico		1,099	277						275
Utah	164	1.456	274	1.260					180
Wyoming	227	1,456	55	1,269			40		93
Pacific Contiguous	40	49	11	0		312	5		8
California	36	51	11	0			9		9
Oregon	975	771	37				13		26
Washington	0	157	0			312	5		7
Pacific Noncontiguous	244	69	45	219		61	86		33
Alaska		92	45	210					43
Hawaii	244	91		219		61	86		50

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.

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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 April (Percent)

(recent)									
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	21	30	7	_		5	1	0	6
Connecticut		228	65						74
Maine	0	18	2			4	1	0	3
Massachusetts	228	91	79			77	120		64
New Hampshire		400	109			30	34		76
Rhode Island		966							966
Vermont						57	74		46
Middle Atlantic	12	48	10	56		35	3		9
New Jersey		117	18	256			66		26
New York	14	32	20	235		35	6		14
Pennsylvania	16	75	6	53			2		12
East North Central	12	29	12	19		16	3	0	7
Illinois	8	127	20	135			24		13
Indiana	206	17	21	11			0		9
Michigan	48	312	50			59	3		23
Ohio	92	509	139	216			34		66
Wisconsin	20	35	14	210	<u></u>	16	7	0	10
West North Central	11	343	21	307	-	24	8	0	9
Iowa	25	2,661	61	307			951		24
		0	23				951		23
Kansas	8	779	23 41				8	0	23 7
Minnesota						24			
Missouri	113	3,687	332				80		105
Nebraska	159	204	543	207			255		154
North Dakota	157	394	600	307			355		137
South Dakota									
South Atlantic	10	21	19	0		1	2		3
Delaware	162	59	0	0					35
District of Columbia									
Florida	52	74	25	0			4		6
Georgia	16	27	57			39	3		7
Maryland	0	735	138				0		12
North Carolina	11	46	236			*	4		4
South Carolina	19	0	0	0			0		5
Virginia	23	200	28			182	6		12
West Virginia	35	178	53	0		1			18
East South Central	12	59	16	34		0	2		4
Alabama	30	68	16	35			2		4
Kentucky			66				9		24
Mississippi	0	303	41	0			5		15
Tennessee	13	49	62	0		0	3		7
West South Central	1	8	1	6			1	0	1
Arkansas	0	0	36				2	0	5
Louisiana	18	6	2	5			1	0	2
Oklahoma	0	0	10	81			6		6
Texas	1	11	2	9			2		2
Mountain	36	541	41	914			4		20
Arizona	0	965	203						6
Colorado		679	201						244
Idaho	169	0	22				4		20
Montana			0				0		0
Nevada							V		
New Mexico		1,907	120						122
	79	1,907	117				 		78
Utah	94	1,087	21	914			27		42
Wyoming	18			0					42
Pacific Contiguous		40	5		-	317	3		
California	16	36	5	0			4		4
Oregon	406	573	11			217	5		9
Washington	0	161	0			317	3		17
Pacific Noncontiguous	134	143	18	106		63	45		43
Alaska	124	205	18	106					37
Hawaii	134	192		106		63	45		103

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 "*").

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

Census Division					
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	3	*
Connecticut	*	*	0	4	*
Maine	*	*	ő	2	*
Massachusetts	*	*	2	3	1
	*	*	1	<i>3</i>	1 *
New Hampshire	*	·	1	*	*
Rhode Island		*	0	· · · · · · · · · · · · · · · · · · ·	1
Vermont	1	*	1	5	I
Middle Atlantic	*	*	2	20	1
New Jersey	*	*	1	1	*
New York	*	*	6	15	2
Pennsylvania	*	*	0	*	*
East North Central	*	*	1	*	*
Illinois	*	*	1	*	1
Indiana	1	*	1	2	1
Michigan	*	1	1	4	*
Ohio	*	*	1	*	1
Wisconsin	*	1	1	3	*
West North Central	*	1	4	15	1
	1	1	4 7	-	1
Iowa	I 1	3	/	12	1
Kansas	1	2	4	9	l
Minnesota	1	2	4	8	*
Missouri	1	*	4	3	2
Nebraska	2	2	9	34	1
North Dakota	2	2	44	39	2
South Dakota	2	2	16	82	2
South Atlantic	1	1	0	1	×
Delaware	*	*	1	1	*
District of Columbia	0	0	0	0	0
Florida	1	1	1	1	1
Georgia	1	1	1	2	1
	1	I **	1	3	1
Maryland			0	3	1
North Carolina		1	1	1	T .
South Carolina		*	0	1	* .
Virginia		*	0	*	*
West Virginia	*	*	0	1	*
East South Central	*	1	1	1	1
Alabama	1	1	1	4	1
Kentucky	1	1	1	*	1
Mississippi	1	3	2	6	1
Tennessee		1	2	i	1
West South Central	1	4	2	6	1
Arkansas	1	2	5	5	1
	1	2	0	2	*
Louisiana	1	3	0	<u> </u>	
Oklahoma	1	3	2	1_	I .
Texas	1	4	l	7	1
Mountain	1	*	1	25	*
Arizona	1	*	1	33	1
Colorado	2	1	2	16	1
Idaho	1	*	2	31	1
Montana	2	1	5	41	1
Nevada	1	1	0	13	*
New Mexico	2	1	3	25	2
Utah	2	1	1	14	1
Wyoming	1	1	2	50	1
	1	1			1
Pacific Contiguous	I	×	5	31	ļ
California	1	*	0	56	1
Oregon	1	1	7	17	3
Washington	1	1	16	8	4
Pacific Noncontiguous	*	*	0	6	*
Alaska	*	*	1	8	*
				7	

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 April (Percent)

Census Division and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	1	*
Connecticut	*	*	0	1	*
Maine	*	*	0	1	*
Massachusetts	*	*	2	i	*
New Hampshire	*	*	1	*	*
	*	*	1	*	*
Rhode Island		*	1		1
Vermont	1	·	1	2	1
Middle Atlantic	*	*	3	8	1
New Jersey	*	*	1	*	*
New York	*	*	7	6	1
Pennsylvania	*	*	0	*	*
East North Central	*	*	0	*	*
Illinois	*	*	0	*	*
Indiana	1	*	1	2	1
Michigan	*	*	1	2	*
	*	*	1	∠ *	*
Ohio		•	0	-	
Wisconsin	*	1	1	2	τ
West North Central	*	*	2	7	*
Iowa	1	2	3	8	*
Kansas	*	1	2	5	*
Minnesota	1	1	2	5	*
Missouri	1	*	3	2	1
Nebraska	1	1	4	16	1
North Dakota	i	1	19	18	1
	1	1	7	40	1
South Dakota	1	1	/	40	1
South Atlantic	,	*	U	1	*
Delaware	*	*	1	*	Ψ.
District of Columbia	0	0	0	0	0
Florida	1	*	1	1	*
Georgia	1	*	0	2	*
Maryland	*	*	0	1	*
North Carolina	*	*	0	1	*
South Carolina.	1	*	Ö	i	*
Virginia	*	*	0	*	*
	· *	*	0		*
West Virginia			0	1	
East South Central	*	*	1	1	× .
Alabama	1	*	1	3	1
Kentucky	1	*	1	*	1
Mississippi	1	1	1	4	1
Tennessee	1	*	1	1	1
West South Central	1	2	1	4	*
Arkansas	1	1	2	3	1
Louisiana	i	1	0	1	*
	1	1	1	1	*
Oklahoma	1	1	1	1	
Texas	1	2	1		т
Mountain	*	*	0	10	*
Arizona	*	*	0	12	*
Colorado	1	*	1	7	1
Idaho	*	*	1	18	1
Montana	1	*	2	21	*
Nevada	*	*	0	8	*
New Mexico	1	1	1	10	1
	1	*	0		*
Utah	1	•	U	6	T.
Wyoming	I	l l	l l	25	*
Pacific Contiguous	*	*	2	17	1
California	*	*	0	31	*
Oregon	*	*	3	10	1
Washington	*	1	8	5	2.
Pacific Noncontiguous	*	*	0	3	*
			U		
Alaska	*	*	1	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.A. Relative Standard Error for Revenue from Retail Sales of Electricity to Ultimate Consumers by Sector, Census Division, and State, April 2003
(Percent)

Census Division					
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	1	*
Connecticut	*	*	*	1	*
Maine	*	*	*	*	*
Massachusetts	*	*	2	1	1
	*	·	2	I **	1
New Hampshire			1	*	
Rhode Island	•	*	1	•	*
Vermont	1	*	2	2	I
Middle Atlantic	*	*	1	12	1
New Jersey	*	*	1	*	*
New York	*	*	3	10	1
Pennsylvania	*	*	*	*	*
East North Central	*	*	1	1	*
Illinois	*	*	*	*	*
Indiana	1	*	1	2	1
Michigan	1	1	2	2	*
Ohio	*	*	1	1	1
Wisconsin	1	1	3	3	*
West North Central	1	1	6	7	*
	1	1 2	7	11	1
Iowa	1	3	/	5	1
Kansas	1	3	4	3	1
Minnesota	1	2	5	4	I .
Missouri	1	*	2	2	1
Nebraska	2	2	25	19	2
North Dakota	2	2	76	11	2
South Dakota	2	2	26	22	2
South Atlantic	1	*	1	1	*
Delaware	*	*	1	1	1
District of Columbia	0	0	0	0	0
Florida	1	*	2	1	*
Georgia	1	*	1	2	1
Maryland	i	*	*	1	1
North Carolina	1	*	1	1	*
South Carolina	1	*	1	1	*
	1	*	1	*	*
Virginia	I **	·	1 *		
West Virginia				1	1
East South Central	,	1	1	1	1
Alabama	1	•	2	3	1
Kentucky	1	1	1	*	1
Mississippi	1	3	2	4	1
Tennessee	1	1	1	1	1
West South Central	1	4	1	4	1
Arkansas	1	4	4	4	1
Louisiana	1	3	*	2	*
Oklahoma	1	4	2	1	1
Texas	1	5	1	4	1
Mountain	1	1	1	14	1
Arizona	1	1	1	14	1
Colorado	3	1	3	13	2
	1	*	2	27	2
Idaho	2	1	11	12	1
Montana	<u> </u>	l u	11		1
Nevada	1	2	4	9	•
New Mexico	3	2	4	23	2
Utah	2	2	1	11	1
Wyoming	1	1	6	24	1
Pacific Contiguous	1	*	2	12	1
California	1	*	1	19	*
Oregon	1	1	6	13	2
Washington	1	1	12	9	3
Pacific Noncontiguous	*	*	*	6	*
Alaska	1	1	2	7	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."

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 April (Percent)

Census Division					
and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	*	*
Connecticut	*	*	*	*	*
Maine	*	*	*	*	*
Massachusetts.	*	*	2	1	*
	*	*	1	1 *	*
New Hampshire			1	*	
Rhode Island	*	*	1	•	•
Vermont	1	*	2	1	l
Middle Atlantic	*	*	1	5	*
New Jersey	*	*	1	*	*
New York	*	*	3	4	1
Pennsylvania	*	*	*	*	*
East North Central	*	*	*	*	*
Illinois	*	*	*	*	*
	1	*	*	1	*
Indiana	1		,	1	
Michigan	· ·	· ·	1	1	
Ohio	*	*	*	1	*
Wisconsin	*	*	2	1	*
West North Central	*	*	3	3	*
Iowa	1	1	3	6	*
Kansas	1	2	2	5	*
Minnesota	1	1	2.	2	*
Missouri	i	*	2	2	1
Nebraska	1	1	11	0	1
	1	1		9	1
North Dakota	I i	1	33	0	1
South Dakota	1	1	12	13	l
South Atlantic	*	*	*	1	*
Delaware	*	*	2	*	*
District of Columbia	0	0	0	0	0
Florida	1	*	1	1	*
Georgia	1	*	1	1	1
Maryland	*	*	*	*	*
North Carolina	1	*	*	1	*
South Carolina	1	*	*	1	*
	1			1	
Virginia					*
West Virginia	*	*	*	1	•
East South Central	*	*	*	1	*
Alabama	1	*	1	2	*
Kentucky	1	*	1	*	1
Mississippi	1	2	1	5	*
Tennessee	1	*	1	1	1
West South Central	1	2	1	5	*
Arkansas	1	2	2	4	*
	1	1	*	2	*
Louisiana	1	1		2	
Oklahoma	1	2	1	1	· ·
Texas	1	2	1	5	*
Mountain	1	*	1	5	*
Arizona	1	*	1	5	*
Colorado	1	1	1	5	1
Idaho	1	*	1	18	1
Montana	1	1	5	7	1
Nevada	*	i	*	5	*
	2	1	·	0	1
New Mexico	2	1	<u>Z</u>	9	1
Utah	I .	l .	1	5	1
Wyoming	1	<u>l</u>	3	14	*
Pacific Contiguous	*	*	1	7	*
California	*	*	1	10	*
Oregon	1	*	3	9	1
Washington	1	*	6	6	1
		*	*	3	*
Pacific Nonconfiguous					
Pacific Noncontiguous Alaska	*	*	1	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 A8.A. Relative Standard Error for Average Revenue per Kilowatthour from Retail Sales to Ultimate Consumers by Sector, Census Division, and State, April 2003 (Percent)

Census Division and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	1	2	*
Connecticut	*	*	*	3	*
Maine	*	*	*	2	*
Massachusetts	*	*	1	2	*
	*	*	1 *	*	*
New Hampshire	*	*	*	*	**
Rhode Island	1	*	1	4	*
Vermont	1	*	l .	4	*
Middle Atlantic	*	*	1	11	1
New Jersey	*		*	1	*
New York	*	*	3	8	1
Pennsylvania	*	*	*	*	*
East North Central	*	*	*	*	*
Illinois	*	*	*	*	*
Indiana	*	*	*	2	*
Michigan	*	*	1	2	*
Ohio	*	*	*	1	*
Wisconsin	*	*	1	2	*
West North Central	*	*	3	11	*
Iowa	1	1	2	4	1
Kansas	*	1	2	5	1
Minnesota	1	1	1	5	1
	I *	1	1	3	1
Missouri		1	3	21	1
Nebraska	1	1	17	21	1
North Dakota	I	1	34	30	I
South Dakota	1	1	12	64	1
South Atlantic	1	1	1	1	1
Delaware	*	*	1	1	*
District of Columbia	0	0	0	0	0
Florida	1	1	2	1	1
Georgia	1	1	1	3	1
Maryland	*	*	*	2	*
North Carolina	1	1	1	1	1
South Carolina	1	*	1	1	1
Virginia	1	*	1	*	*
West Virginia	*	*	*	1	*
East South Central	*	*	1	1	*
Alabama	1	1	2	3	1
	1	1 *	1	3	*
Kentucky	1	1	1	2	1
Mississippi	1	1	1	3	1
Tennessee	*		1	1	1
West South Central	*	1	1	3	*
Arkansas	1	1	2	2	1
Louisiana	1	1	*	1	*
Oklahoma	*	1	1	1	*
Texas	*	1	1	4	*
Mountain	*	1	1	17	*
Arizona	1	1	1	25	1
Colorado	1	1	1	8	1
Idaho	1	1	1	16	1
Montana	1	*	7	33	1
Nevada	*	1	*	6	*
New Mexico	1	2	2	11	1
Utah	1	1	1	7	1
Wyoming	*	*	1	34	*
	*	*	2	22	1
Pacific Contiguous	*	*	3		1
California	1	1	1	42	1
Oregon	I .	I .	3	11	l
Washington	1	1	7	5	2
Pacific Noncontiguous	*	*	*	5	*
Alaska	1	1	1	6	1
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.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 April (Percent)

Census Division and State	Residential	Commercial	Industrial	Other ¹	All Sectors
New England	*	*	*	1	*
Connecticut	*	*	*	2	*
Maine	*	*	*	1	*
Massachusetts	*	*	1	1	*
New Hampshire	*	*	*	*	*
Rhode Island	*	*	*	*	*
Vermont	*	*	*	2.	*
Middle Atlantic	*	*	1	6	*
New Jersey	*	*	*	*	*
New York	*	*	2	5	1
	*	*	*	*	1 *
Pennsylvania				4	
East North Central	*	*	*	*	*
Illinois	*	*	*		*
Indiana	· ·	*	T.	1	
Michigan	*	* .	*	1	*
Ohio	*	*	*	*	*
Wisconsin	*	*	*	1	*
West North Central	*	*	2	7	*
Iowa	1	1	1	2	*
Kansas	*	1	1	4	*
Minnesota	1	*	1	3	*
Missouri	*	*	2	1	*
Nebraska	*	*	9	15	*
North Dakota	*	*	19	18	1
	*	*	7	40	1
South Dakota	*	*	/ *	40 *	I **
South Atlantic					*
Delaware	·	·	1	1	7
District of Columbia	0	0	0	0	0
Florida	*	*	1	1	*
Georgia	1	*	*	2	*
Maryland	*	*	*	1	*
North Carolina	*	*	*	1	*
South Carolina	1	*	*	1	*
Virginia	*	*	*	*	*
West Virginia	*	*	*	*	*
East South Central	*	*	*	1	*
Alabama	*	*	1	2	*
Kentucky	*	*	*	*	*
Mississippi	*	1	1	3	*
Tennessee	*	*	1	*	*
	*		1	3	*
West South Central	*	1			1
Arkansas	*	1	1	3	1
Louisiana	*	1	*	1	*
Oklahoma	*	1	1	1	*
Texas	*	1	*	4	*
Mountain	*	*	*	10	*
Arizona	*	*	*	14	*
Colorado	1	1	1	5	1
Idaho	1	*	*	10	*
Montana	*	*	4	20	*
Nevada	*	*	*	3	*
New Mexico	1	1	1	7	1
Utah	1	1	1	5	1
	*	*	2	23	*
Wyoming					1
Pacific Contiguous	ж ж		2	13	1
California	*	*	*	25	*
Oregon	1	1	2	7	1
Washington	1	1	4	3	1
Pacific Noncontiguous	*	*	*	3	*
Alaska	*	*	*	4	*
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."

Appendix B

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

Date	Utility/Power Pool (NERC Region)	Time	Area	Type of Disturbance	Loss (megawatts)	Number of 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

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.

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," <u>Proceedings of the Section on Survey Research Methods</u>, 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 =
$$\left(\frac{x(t_2)-x(t_1)}{x(t_1)}\right)x 100$$
,

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

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 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 site 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, March 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	24.50	6.37	1.03	
Connecticut	20.78	6.29	1.01	
Maine	26.10	6.39	1.03	
Massachusetts	24.81	6.37	1.03	
			1.03	
New Hampshire	27.10	6.41		
Rhode Island			1.03	
Vermont				
Aiddle Atlantic	24.74	6.28	1.03	
New Jersey	25.74	6.21	1.04	
New York	26.13	6.32	1.03	
Pennsylvania	24.31	6.15	1.05	
ast North Central	20.66	6.06	1.01	
Illinois	18.44	6.27	1.02	
Indiana	21.17	6.13	1.01	
Michigan	21.45	5.98	1.01	
Ohio	24.89	5.81	1.03	
Wisconsin	17.43	5.76	1.00	
Vest North Central	16.71	5.81	1.02	
Iowa	17.41	5.84	1.00	
Kansas	17.20	6.53	1.02	
Minnesota	17.64	5.40	1.01	
Missouri	17.76	5.76	1.03	
Nebraska	17.34	5.80	1.00	
North Dakota	13.10	5.88		
South Dakota	17.13			
outh Atlantic	24.74	6.25	1.04	
Delaware	25.73	6.13	1.04	
District of Columbia		6.01		
Florida	24.60	6.29	1.04	
Georgia	23.89	5.79	1.03	
Maryland	25.56	6.31	1.06	
North Carolina	24.76	5.94		
			1.03	
South Carolina	25.48	6.29	1.03	
Virginia	25.71	6.12	1.04	
West Virginia	24.62	5.86	1.00	
ast South Central	22.12	6.37	1.04	
Alabama	21.90	5.83	1.04	
Kentucky	23.00	5.64	1.02	
Mississippi	18.21	6.56	1.04	
Tennessee	22.36	5.88	1.02	
Vest South Central	15.85	5.97	1.03	
Arkansas	17.51	5.91	1.03	
Louisiana	14.53	6.05	1.04	
Oklahoma	17.83	5.95	1.03	
Texas	15.12	4.75	1.03	
Iountain	19.29	5.82	1.04	
Arizona	20.08	5.85	1.02	
Colorado	19.71	5.32	1.01	
	17./1			
Idaho			1.02	
Montana	16.83	5.92	1.10	
Nevada	22.57	5.84	1.04	
New Mexico	18.33	5.71	1.22	
** 1	** **		4.06	
Utah	22.32	5.82	1.06	
Wyoming	17.60	5.88	.99	
acific Contiguous	17.16	5.76	1.02	
California	23.73	5.75	1.02	
Oregon	17.46		1.02	
Washington	15.93	5.83	1.03	
acific Noncontiguous	23.35	5.90	1.00	
Alaska			1.00	
Hawaii	23.35	5.90		
.S. Total	20.48	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 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

No.	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
					28
Nuclear	NA	NA	NA	NA	
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		. 11 1	. 11.1	. 11 1	10
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	300	0//	1,213	1,001	1,000
Coal (thousand short tons)	310	233	501	229	118
,	239	201			
Petroleum (thousand barrels)	239	201	130	98	165
Retail Sales (million kilowatthours)					
Residential	79	345	350	626	454
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
	22	-		79	-
Total	22	46	62	19	277
Average Revenue per Kilowatthour (cents) ³	0.1	0.2	0.2	0.2	
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	.01	.02	.01	.03
Receipts					
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	441	500	144	303	137
	10	06	16	22	22
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)
Utility						
Generation (million kilowatthours)						
Coal	1.808.070	1,807,480	*	1,773,499	1.767.679	-0.3
Petroleum	105.743	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	990,948	990.029	-0.1	1,026,354	1,026,632	*
Total	3,213,620	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)	179,401	178,614	-0.4	148,868	143,830	-3.5
Gas (1,000 Mcf)	326,268	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	0.1
Petroleum (1,000 barrels)	53,893	53,790	-0.2	45,191	44,312	-2.0
Retail Sales (million kilowatthours)	,	,		,	,	
Residential	1,131,520	1,127,735	-0.3	1,139,481	1,140,761	0.1
Commercial	950,476	968,528	1.9	975,196	970,601	-0.5
Industrial	1,055,459	1,040,038	-1.5	1,050,363	1,017,783	-3.2
Other ³	100,260	103,518	3.1	100,316	106,754	6.0
All Sectors	3,237,715	3,239,818	0.1	3,265,356	3,235,899	-0.9
Revenue (million dollars)						
Residential	93,511	93,164	-0.4	93,148	93,142	*
Commercial	70,630	71,769	1.6	70,190	70,492	0.4
Industrial	47,391	46,550	-1.8	46,442	45,056	-3.1
Other ³	6,814	6,863	0.7	6,763	6,783	0.3
All Sectors	218,346	218,346	*	216,544	215,473	-0.5
Average Revenue per Kilowatthour (cents)4						
Residential	8.26	8.26	*	8.17	8.16	-0.1
Commercial	7.43	7.41	-0.3	7.20	7.26	0.8
Industrial	4.49	4.48	-0.3	4.42	4.43	0.1
Other ³	6.80	6.63	-2.5	6.74	6.35	-6.1
All Sectors	6.74	6.74	-0.1	6.63	6.66	0.4

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

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 Power Repor

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."

Table C4. Unit-of-Measure Equivalents for Electricity

Table 6 ii 6 iii 6 ii 7 ii 6 ii 6 ii 7 ii 6 ii 7 ii					
Unit	Equivalent				
Kilowatt (kW)	. 1,000 (One Thousand) Watts . 1,000,000 (One Million) Watts . 1,000,000,000 (One Billion) Watts . 1,000,000,000,000 (One Trillion) Watts				
Gigawatt Thousand Gigawatts	. 1,000,000 (One Million) Kilowatts . 1,000,000,000 (One Billion) Kilowatts				
Kilowatthours (kWh)	. 1,000,000,000 (One Billion) Watthours				
Gigawatthours	. 1,000,000 (One Million) Kilowatthours . 1,000,000,000(One Billion Kilowatthours				

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).

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

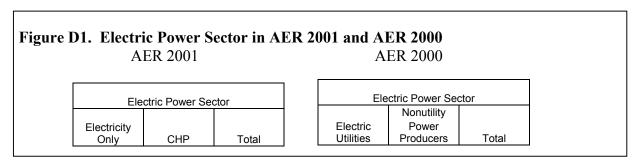
³ In this context "integrated" means that the company is involved in the three main sectors of the electric power business—generation, transmission, and distribution.

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)

Power Producers

	Electric Power Sector 1			Commercial	Industrial	
.,	Electric	Independent	Tatal	Sector ²	Sector ³	Total

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

Utilities

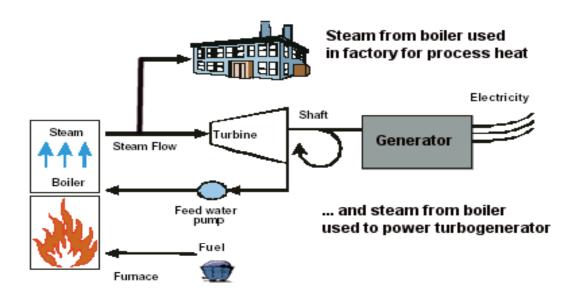
Year

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 Generator Capacity and Generator Name Plate Capacity (Installed).

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:

- 1) 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.