## Monthly Flash Estimates of

# **Electric Power Data**

# Data for: May 2006

### **Section 1. Commentary**

The weather through May 2006 continued to be warmer than in 2005. According to the National Climatic Data Center, the first half of 2006 was the warmest on record in the U.S. since record keeping began in 1895. Year-to-date, heating degree days were down 10.2 percent and cooling degree days were up 44.7 percent through May. For May alone heating degree days were down 22.5 percent, and cooling degree days were 38.5 percent higher than last May.

Year-to-date net generation through May was 0.7 percent higher than in 2005. Because of the advent of the summer cooling season and strong seasonal economic activity, May 2006 generation was up 5.1 percent compared to May 2005, and up 11.5 percent compared to April 2006. Retail sales of electricity through May were up 0.9 percent year-to-date, and increased 5.1 percent compared to May 2005. The average retail price of electricity was up 11.3 percent year-to-date, largely due to higher fuel prices.

Coal generation year-to-date was down 1.2 percent, but May 2006 generation was up 1.9 percent over May 2005. Natural gas-fired generation, benefiting from a moderation in gas prices in 2006, increased by 21.4 percent comparing May 2005 to May 2006, and was up a modest 3.1 percent year-to-date. In contrast, as a consequence of high oil prices, petroleum liquid-fired generation declined 52.4 percent year-to-date and dropped by 42.3 percent comparing May 2005 to May 2006. Natural gas and petroleum liquid fueled generation are largely used to meet peak demands. Consistent with the generation data, coal burn was down 1.3 percent year-to-date, but was up 1.3 comparing May 2005 and May 2006. Year-to-date, natural gas consumption was up 2.6 percent and petroleum liquids consumption dropped 51.0 percent.

Reduced consumption of coal and petroleum liquids continued to contribute to stockpile builds. Electric power sector coal inventories reached their highest level since the middle of 2003, growing 6.4 percent from April 2006, and they were 11.1 percent ahead of May 2005. May 2006 subbituminous coal stocks continued their surge and were up 9.2 percent from April 2006, and 10.6 percent above the May 2005 level. Similarly, bituminous stocks were 11.3 percent above the 2005 levels. Petroleum liquids inventories were the highest since early 2002, and were 18.1 percent higher than in May 2005, due to the continuing drop in oil-fired generation.

Nuclear generation, which continues to experience fewer days lost to planned and forced maintenance than in 2005, was 2.8 percent higher through May. Hydroelectric generation was 14.6 percent higher year-to-date. The strong increase in hydro output reflects heavy precipitation which has put water supplies at or above normal in the Northwestern States, the largest hydroelectric production region.

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Data for: May 2006

Table 2.1 Key Generation Indicators										
	Total Generation	Nuclear Generation	Hydroelectric Generation							
Total Change From:										
April 2006	11.5%	9.0%	6.7%							
May 2005	5.1%	-0.3%	12.6%							
Year to Date	0.7%	2.8%	14.6%							
Latest 12 Month Period*	2.7%	1.6%	3.1%							

## **Table 2.2 Key Consumption and Stocks Indicators**

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
April 2006	22.2%	11.0%	6.4%
May 2005	21.0%	1.3%	11.1%
Year to Date	2.6%	-1.3%	n/a
Latest 12 Month Period*	8.1%	1.4%	n/a

Change in total consumption or generation for the latest 12 month period (June 2005 to May 2006) compared to the prior 12 month period (June 2004 to May 2005).

Data for: May 2006

#### **Net Generation (Total, All Sectors)**

Table 3.1 Total Net Generation (All Sectors)												
Net Generation (thousand megawatthours)	May-06	May-05	% Change	Apr-06	% Change							
Coal	156,773	153,885	1.9%	140,852	11.3%							
Petroleum Liquids	2,877	4,984	-42.3%	2,898	-0.7%							
Natural Gas	65,836	54,211	21.4%	55,042	19.6%							
Nuclear	62,776	62,971	-0.3%	57,567	9.0%							
Hydroelectric Conventional	30,001	26,641	12.6%	28,104	6.7%							
All Other	11,397	11,080	2.9%	11,106	2.6%							
Total (All Energy Sources)	329,660	313,773	5.1%	295,570	11.5%							

#### Fossil Fuel Consumption for Electric Generation (Total, All Sectors)

Table 3.2 Total Consumption of Fossil Fuels for Electric Generation (All Sectors)										
Consumption of Fossil Fuels May-06 May-05 % Change Apr-06 % Change										
Coal (Thousand Short Tons)	81,335	80,270	1.3%	73,275	11.0%					
Petroleum Liquids (Thousand Barrels) 5,020 8,363 -40.0% 5,039 -0.4%										
Natural Gas (Million Cubic Feet)	574,252	474,486	21.0%	469,849	22.2%					

#### **Fossil Fuel Stocks (Electric Power Sector)**

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)									
Fossil Fuel Stocks	Fossil Fuel Stocks May-06 May-05 % Change Apr-06 % Change								
Coal (Thousand Short Tons)	Coal (Thousand Short Tons) 133,223 119,916 11.1% 125,202 6.4%								
Petroleum Liquids (Thousand Barrels)	53,619	45,390	18.1%	52,042	3.0%				

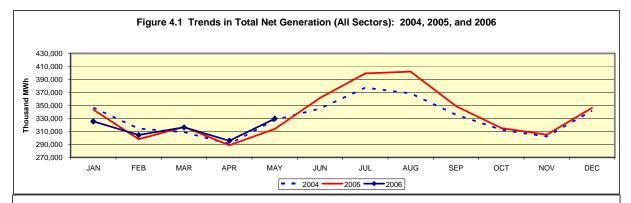
#### Notes:

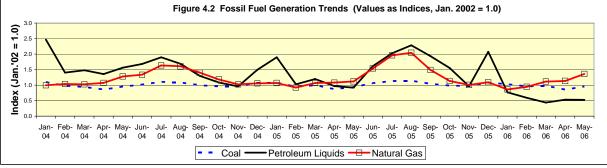
- Coal consumption and generation includes subbituminous coal, bituminous coal, anthracite, lignite, waste coal and coal synfuel.
- **Coal stocks** include the coal categories listed immediately above except for waste coal. The bituminous category includes anthracite and coal synfuel.
- Petroleum Liquids consumption and generation includes distillate oil, residual oil, jet fuel, kerosene and waste oil.
- **Petroleum Liquids stocks** includes the oil categories listed immediately above, except waste oil is excluded from data collected for January 2004 and subsequently. Data prior to 2004 contains small quantities of waste oil.
- The "All Other" generation category includes biomass, solar, wind, geothermal, hydroelectric pumped storage, petroleum coke, other gases, and other miscellaneous energy sources.

Table 4.1 Trends in Total Generation by Fuel (All Sectors)
Millions of Kilowatthours

Year-to-Date Compa	Year-to-Date Comparison												
Starting Month Ending Month Coal Petroleum Liquids Natural Gas Nuclear Hydroelectric Conventional All Other T													
Current Period	January 2006	May 2006	785,372	15,547	262,369	318,591	133,838	55,454	1,571,171				
Prior Period	January 2005	May 2005	794,518	32,631	254,601	310,032	116,820	51,685	1,560,287				
Percent Change			-1.2%	-52.4%	3.1%	2.8%	14.6%	7.3%	0.7%				

Comparison to Prior	Comparison to Prior Twelve-Month Period													
Starting Month Ending Month Coal Petroleum Liquids Natural Gas Nuclear Hydroelectric Conventional All Other Total														
Current Period	June 2005	May 2006	2,005,028	83,198	759,316	789,023	282,095	130,212	4,048,872					
Prior Period	June 2004	May 2005	1,978,046	87,547	701,885	776,830	273,519	125,438	3,943,265					
Percent Change														





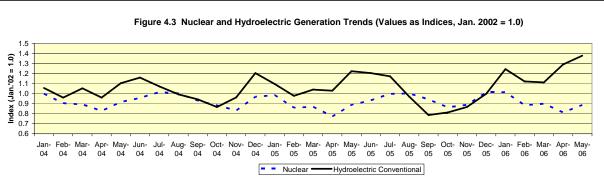
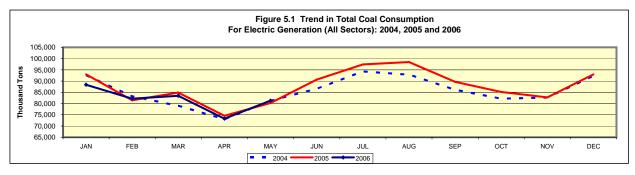
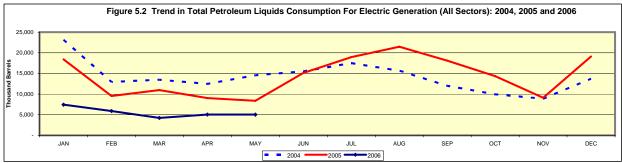


Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison										
Starting Month Ending M		Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)					
Current Period	January 2006	May 2006	408,670	27,597	2,238,363					
Prior Period	January 2005	May 2005	414,109	56,268	2,181,066					
Percent Change			-1.3%	-51.0%	2.6%					

Comparison to Prior 12 Month Period											
	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)						
Current Period	June 2005	May 2006	1,045,739	143,737	6,523,268						
Prior Period	June 2004	May 2005	1,031,085	149,460	6,035,884						
Percent Change			1.4%	-3.8%	8.1%						





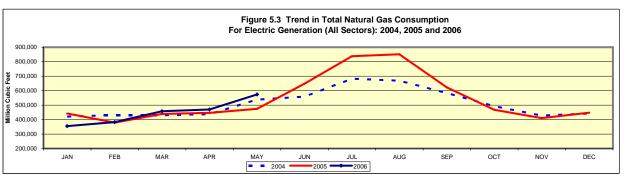
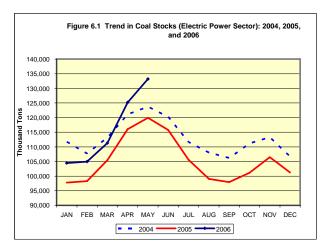
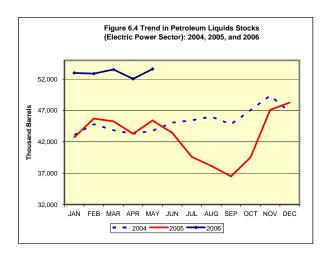
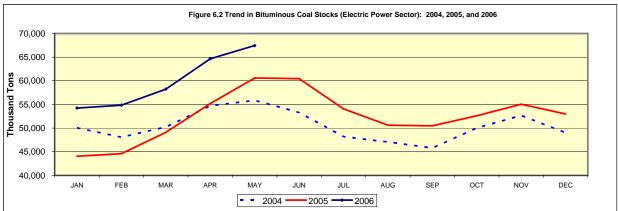
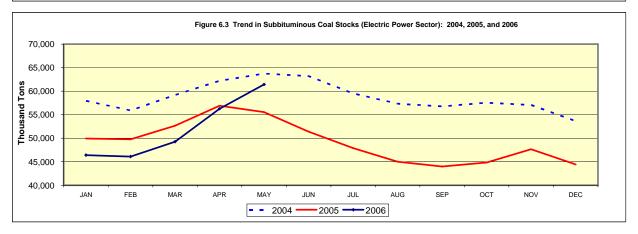


Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)											
Fossil Fuel Stocks	Fossil Fuel Stocks May-06 May-05 % Change Apr-06 % Change										
Coal, Total (Thousand Short Tons)	133,223	119,916	11.1%	125,202	6.4%						
Bituminous (includes anthracite and coal synfuel)	67,447	60,577	11.3%	64,641	4.3%						
Subbituminous	61,434	55,529	10.6%	56,252	9.2%						
Lignite	Lignite 4,342 3,810 14.0% 4,309 0.8%										
Petroleum Liquids (Thousand Barrels)	53,619	45,390	18.1%	52,042	3.0%						









# Section 7. Month-to-Month Comparisons: Electric Power Retail Sales and Average Prices

Data for: May 2006

#### **Retail Sales**

Table 7.1 Retail Sales (Million kWh)												
Ultimate Customer	May-06	May-05	% Change	Apr-06	% Change							
Residential	94,352	87,729	7.5%	89,628	5.3%							
Commercial	105,776	98,831	7.0%	95,915	10.3%							
Industrial	86,225	85,905	0.4%	81,292	6.1%							
Transportation	Transportation 630 621 1.5% 641 -1.7%											
All Sectors	286,982	273,086	5.1%	267,477	7.3%							

### **Average Retail Price**

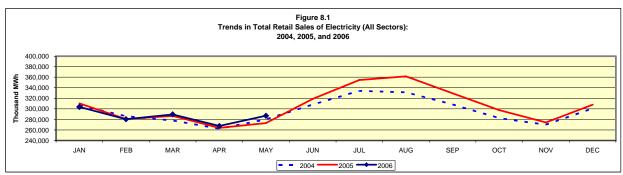
Table 7.2 Average Retail Price (Cents/kWh) U.S. Total								
Ultimate Customer May-06 May-05 % Change Apr-06 % Change								
Residential	10.60	9.55	11.0%	10.31	2.8%			
Commercial	9.20	8.48	8.5%	9.13	0.8%			
Industrial	5.83	5.29	10.2%	5.78	0.9%			
Transportation	7.61	7.08	7.5%	7.41	2.7%			
All Sectors	8.64	7.82	10.5%	8.50	1.6%			

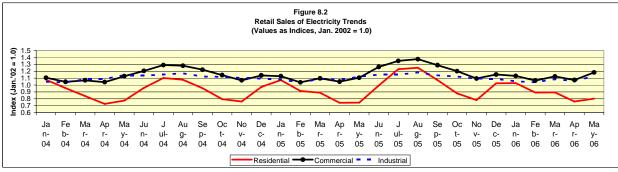
Table 7.3 Average Retail Price (Cents/kWh) by Census Division									
Census Division		Residential		All Sectors					
	May-06	May-05	% Change	May-06	May-05	% Change			
New England	16.59	13.40	23.8%	13.95	11.41	22.3%			
Middle Atlantic	13.07	12.35	5.8%	10.81	10.28	5.2%			
East North Central	9.72	8.76	11.0%	7.54	6.79	11.0%			
West North Central	8.49	8.13	4.4%	6.64	6.40	3.7%			
South Atlantic	9.96	8.98	10.9%	8.21	7.38	11.2%			
East South Central	8.49	7.65	11.0%	6.72	6.01	11.8%			
West South Central	11.30	9.82	15.1%	9.12	7.87	15.9%			
Mountain	9.44	8.99	5.0%	7.50	7.31	2.6%			
Pacific Contiguous	11.44	10.12	13.0%	10.25	9.23	11.1%			
Pacific Noncontiguous	20.34	17.71	14.9%	18.03	15.66	15.1%			
U.S. Total	10.60	9.55	11.0%	8.64	7.82	10.5%			

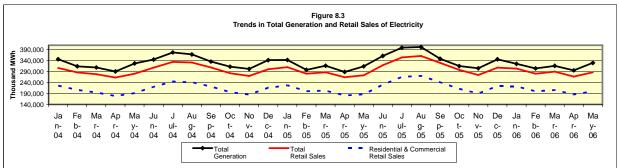
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison								
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)	
Current Period	January 2006	May 2006	514,991	498,676	411,150	3,388	1,428,205	
Prior Period	January 2005	May 2005	513,101	484,584	413,731	3,425	1,414,840	
Percent Change			0.4%	2.9%	-0.6%	-1.1%	0.9%	

Comparison to Prior Twelve-Month Period								
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)	
Current Period	June 2005	May 2006	1,366,678	1,279,247	1,018,732	8,234	3,672,892	
Prior Period	June 2004	May 2005	1,292,140	1,231,404	1,018,640	7,595	3,549,778	
Percent Change			5.8%	3.9%	0.0%	8.4%	3.5%	







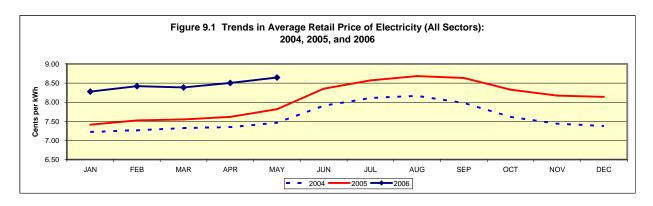
Data for: May 2006

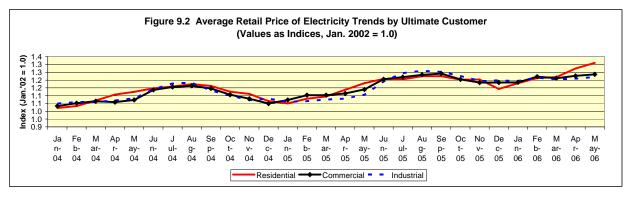
Table 9.1 Trends in Average Retail Price of Electricity (All Sectors)

Cents per Kilowatthours

Year-to-Date Comparison								
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)	
Current Period	January 2006	May 2006	9.99	9.05	5.78	7.38	8.44	
Prior Period	January 2005	May 2005	8.92	8.23	5.15	7.05	7.58	
Percent Change			12.0%	10.0%	12.2%	4.7%	11.3%	

Comparison to Prior 12 Month Period							
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	June 2005	May 2006	9.83	9.03	5.82	7.55	8.43
Prior Period	June 2004	May 2005	9.09	8.30	5.29	7.20	7.72
Percent Change			8.1%	8.8%	10.0%	4.9%	9.2%





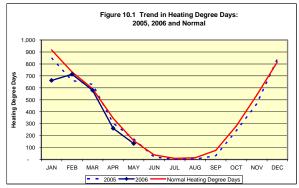
#### Table 10.1 Degree Days

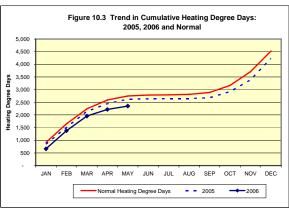
Heating Degree Days					Cooling Degree Days			
	Month	Heating Degree Days	Normal Heating Degree Days	Deviation From the Normal	Cooling Degree Days	Normal Cooling Degree Days	Deviation From the Normal	
Current Period	May 2006	134	159	-25	126	97	29	
Previous Period	May 2005	173	159	14	91	97	-6	
Percent Change		-22.5%			38.5%			

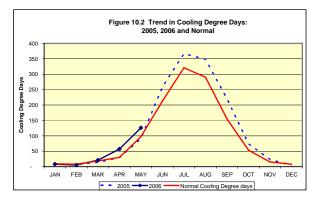
#### Table 10.2 Trends in Heating and Cooling Degree Days

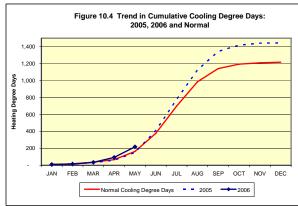
Year-to-Date Comparison							
	Starting Month Ending Month Heating Degree Cooling Deg Days Days						
Current Period	January 2006	May 2006	2,352	217			
Prior Period	January 2005	May 2005	2,618	150			
Percent Change			-10.2%	44.7%			

Comparison to Prior 12 Month Period								
Starting Month Ending Month Days Days  Starting Month Days Days								
Current Period	June 2005	May 2006	3,963	1,512				
Prior Period	June 2004	May 2005	4,222	1,192				
Percent Change		-	-6.1%	26.8%				









#### **Section 11. Documentation**

Data for: May 2006

**General:** The *Monthly Flash Estimates of Electric Power Data* ("*Flash Estimates*") is prepared by the Electric Power Division, Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA), U.S. Department of Energy. Data published in the *Flash Estimates* are compiled from the following sources: Form EIA-826, "Monthly Electric Utility Sales and Revenues with State Distributions Report," Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

The survey data is collected monthly from a statistically-derived sample of power plants and electricity retailers. The nominal sample sizes are: for the Form EIA-826, approximately 450 electric utilities and other energy service providers; for the Form EIA-920, approximately 300 combined heat and power (CHP) plants; and for the Form EIA-906, approximately 1,440 non-CHP plants. With the exception of stocks, a regression-based method is used to estimate totals from the sample. Essentially complete samples are collected for the *Electric Power Monthly*, which includes State-level values. The *Flash Estimates* is based on an incomplete sample and includes only national-level estimates. Stocks data for out-of-sample plants and any monthly non-respondents are estimated by bringing forward the last reported value for a plant.

For complete documentation on EIA monthly electric data collection and estimation, see the Technical Notes to the *Electric Power Monthly*, at: http://www.eia.doe.gov/cneaf/electricity/epm/epm.pdf. Values displayed in the *Elash Estimates* may differ from values published in the *Electric Power Monthly* due to independent rounding. This report represents the EIA's initial release for national level electricity data. Updated information will be released in the *Electric Power Monthly*.

**Sector definitions**: The Electric Power Sector comprises electricity-only and CHP plants within the North American Industrial Classification System 22 category whose primary business is to sell electricity, or electricity and heat, to the public (i.e., electric utility plants and Independent Power Producers (IPP), including IPP plants that operate as combined heat and power producers). The All Sectors totals include the Electric Power Sector and the Commercial and Industrial sectors (Commercial and Industrial power producers are primarily CHP plants).

Composition of fuel categories: See notes on page 3.

**Degree Days:** Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).