# Monthly Flash Estimates of

# **Electric Power Data**

# Data for: June 2006

# **Section 1. Commentary**

According to the National Climatic Data Center, the first half of 2006 was the warmest on record in the U.S. since recordkeeping began in 1895. Year-to-date cooling degree days through June 2006 were 11.7% higher than in 2005, and June cooling degree days were 12.7 percent higher than normal. As a result, retail sales of electricity through June were up 1.0 percent year-to-date, and increased 1.1 percent compared to June 2005. The average retail price of electricity was up 11.3 percent year-to-date, largely due to higher fuel prices.

Year-to-date net generation through June was 0.7 percent higher than in 2005. June 2006 generation was up 0.5 percent compared to June 2005, and up 10.3 percent compared to May 2006. The increase in net generation was influenced by continued economic growth. Real gross domestic product increased at an annualized rate of 2.5 percent in the second quarter of 2006, and was 3.5 percent higher comparing the second quarters of 2005 and 2006. The index of industrial production increased by 0.8 percent between May and June of 2006, and was 4.4 percent higher comparing June of 2005 and 2006.

Year-to-date coal generation was down 1.6 percent, and June coal generation was down 3.4 percent over June 2005. Milder winter weather contributed to the decline in coal generation. Year-to-date, heating degree days were 10.2 percent lower. The further decline in June 2006, compared to the previous June, was due to a much cooler June in the eastern part of the Nation, which depends more heavily on coal-fired generation than the western States. Coal-fired generation was lower in Illinois, Indiana, Ohio, Georgia, Michigan, and West Virgiria, all major contributors to coal-fired generation. Natural gas-fired generation, benefiting from a moderation in gas prices in 2006, increased by 11.5 percent comparing June 2005 to June 2006, and was up a strong 4.9 percent year-to-date. In contrast, as a consequence of high global oil prices, petroleum liquid-fired generation declined 52.7 percent year-to-date and dropped by 53.7 percent comparing June 2005 to June 2006. Natural gas and petroleum liquid fueled generation are largely used to meet peak demands. Consistent with the generation data, coal burn (consumption) was down 1.6 percent year-to-date, and was down 3.2 percent comparing June 2005 and June 2006. Year-to-date, natural gas consumption was up 4.3 percent and petroleum liquids consumption dropped 51.6 percent.

Coal and petroleum liquids stockpiles started to level off after reaching their seasonal peaks in May 2006. Electric power sector coal inventories in June were 15.3 percent ahead of June 2005, and registered an unusual 0.2 percent growth from May 2006. This growth in coal inventories was the first increase between May and June since 1985. The increase was due to continued build up of subbituminous coal stocks, which were up 1.0 percent from May 2006, and were 20.7 percent above the June 2005 level. Similarly, bituminous stocks were 11.2 percent above the 2005 levels. Petroleum liquids inventories were 20.3 percent higher than in June 2005, but were down 3.2 percent from May 2006.

Nuclear generation, which continues to experience fewer days lost to planned and forced maintenance than in 2005, was 2.9 percent higher through June. Hydroelectric generation was 13.3 percent higher year-to-date. The strong increase in hydroelectric 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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Table 2.1 Key Generation Indicators									
	Total Generation	Nuclear Generation	Hydroelectric Generation						
Total Change From:									
May 2006	10.3%	8.9%	-6.1%						
June 2005	0.5%	3.4%	7.5%						
Year to Date	0.7%	2.9%	13.3%						
Latest 12 Month Period*	2.3%	2.1%	3.5%						

# Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks	
Total Change From:				
May 2006	25.5%	7.9%	0.2%	
June 2005	10.5%	-3.2%	15.3%	
Year to Date	4.3%	-1.6%	n/a	
Latest 12 Month Period*	7.5%	0.7%	n/a	

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

# Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)											
Net Generation (thousand megawatthours)	Jun-06	Jun-05	% Change	May-06	% Change						
Coal	168,726	174,691	-3.4%	156,831	7.6%						
Petroleum Liquids	4,057	8,763	-53.7%	2,867	41.5%						
Natural Gas	83,020	74,452	11.5%	65,595	26.6%						
Nuclear	68,391	66,144	3.4%	62,776	8.9%						
Hydroelectric Conventional	28,187	26,215	7.5%	30,013	-6.1%						
All Other	10,963	11,207	-2.2%	11,393	-3.8%						
Total (All Energy Sources)	363,346	361,472	0.5%	329,475	10.3%						

# 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	Jun-06	Jun-05	% Change	May-06	% Change					
Coal (Thousand Short Tons)	87,785	90,649	-3.2%	81,367	7.9%					
Petroleum Liquids (Thousand Barrels)	6,957	15,094	-53.9%	5,013	38.8%					
Natural Gas (Million Cubic Feet)	715,770	647,853	10.5%	570,193	25.5%					

# Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)										
Fossil Fuel Stocks Jun-06 Jun-05 % Change May-06 % Change										
Coal (Thousand Short Tons)	133,455	115,772	15.3%	133,254	0.2%					
Petroleum Liquids (Thousand Barrels)										

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.

### Section 4. Net Generation Trends

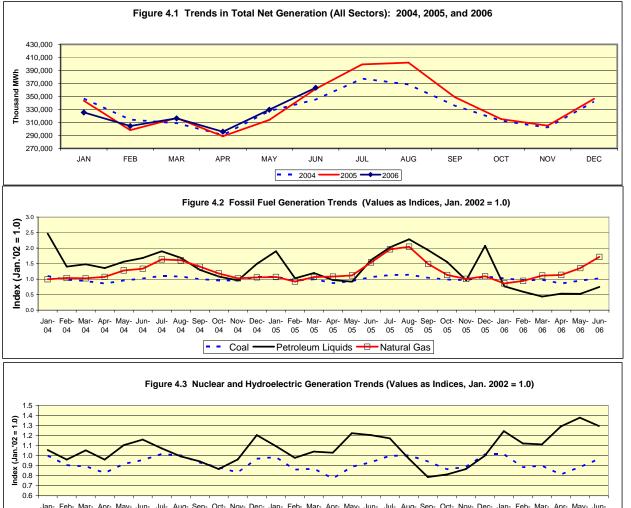
Data for: June 2006

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

Year-to-Date Comparison													
	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total				
Current Period	January 2006	June 2006	954,156	19,594	345,148	386,982	162,037	66,415	1,934,332				
Prior Period	January 2005	June 2005	969,208	41,393	329,054	376,177	143,035	62,892	1,921,759				
Percent Difference			-1.6%	-52.7%	4.9%	2.9%	13.3%	5.6%	0.7%				

#### Comparison to Prior Twelve-Month Period

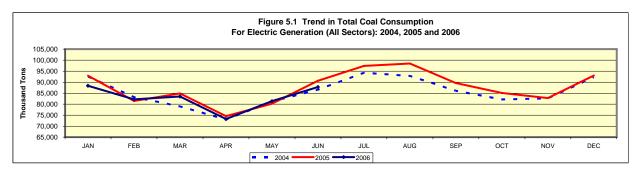
	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric	All Other	Total
	•••••• <b>j</b>						Conventional		
Current Period	July 2005	June 2006	1,999,121	78,483	767,643	791,270	284,080	129,964	4,050,561
Prior Period	July 2004	June 2005	1,985,098	87,169	711,758	775,240	274,481	125,906	3,959,652
Percent Difference			0.7%	-10.0%	7.9%	2.1%	3.5%	3.2%	2.3%

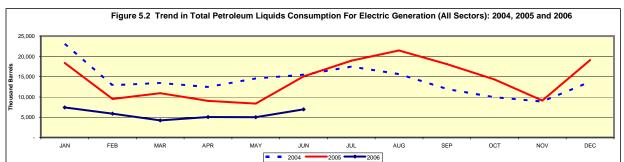


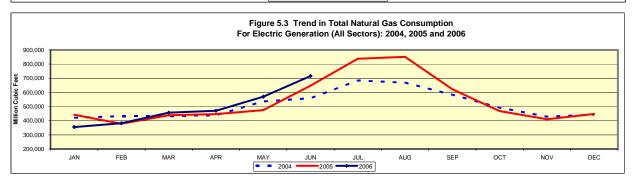
### Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison											
	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)						
Current Period	January 2006	June 2006	496,487	34,547	2,950,074						
Prior Period	January 2005	June 2005	504,758	71,362	2,828,919						
Percent Difference			-1.6%	-51.6%	4.3%						

Comparison to Prior 12 Month Period											
	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)						
Current Period	July 2005	June 2006	1,042,906	135,593	6,587,127						
Prior Period	July 2004	June 2005	1,035,151	149,058	6,125,150						
Percent Difference			0.7%	-9.0%	7.5%						

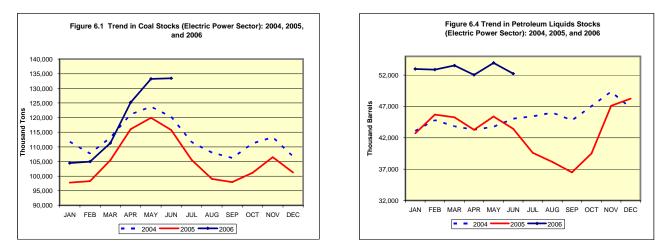


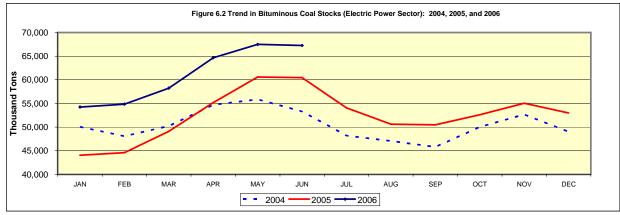


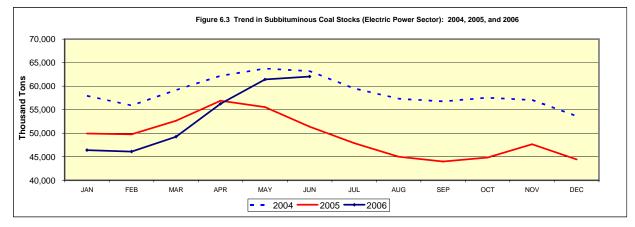


## Section 6. Fossil Fuel Stock Trends

Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)										
Fossil Fuel Stocks	Jun-06	Jun-05	% Change	May-06	% Change					
Coal, Total (Thousand Short Tons)	133,455	115,772	15.3%	133,254	0.2%					
Bituminous (includes anthracite and coal synfuel)	67,244	60,450	11.2%	67,479	-0.3%					
Subbituminous	62,053	51,399	20.7%	61,433	1.0%					
Lignite	4,158	3,923	6.0%	4,342	-4.2%					
Petroleum Liquids (Thousand Barrels)	52,227	43,427	20.3%	53,954	-3.2%					







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

# **Retail Sales**

	Table 7.1 Retail Sales (Million kWh)											
Ultimate Customer	Jun-06	Jun-05	% Change	May-06	% Change							
Residential	119,168	117,055	1.8%	94,352	26.3%							
Commercial	115,402	112,986	2.1%	105,778	9.1%							
Industrial	87,215	88,175	-1.1%	86,230	1.1%							
Transportation	671	683	-1.7%	630	6.5%							
All Sectors	322,456	318,899	1.1%	286,990	12.4%							

# **Average Retail Price**

Table 7.2 Average Retail Price (Cents/kWh) U.S. Total									
Ultimate Customer Jun-06 Jun-05 % Change May-06 % Change									
Residential	10.84	9.77	11.0%	10.60	2.3%				
Commercial	9.77	8.97	8.9%	9.20	6.2%				
Industrial	6.26	5.69	10.0%	5.83	7.4%				
Transportation	8.05	7.33	9.8%	7.61	5.8%				
All Sectors	9.21	8.35	10.3%	8.64	6.6%				

Table 7.3 Average Retail Price (Cents/kWh) by Census Division									
Census Division		Residential			All Sectors				
	Jun-06	Jun-05	% Change	Jun-06	Jun-05	% Change			
New England	16.37	13.40	22.2%	14.54	11.85	22.7%			
Middle Atlantic	14.04	12.85	9.3%	11.96	11.20	6.8%			
East North Central	9.58	8.88	7.9%	7.70	7.21	6.8%			
West North Central	8.84	8.57	3.2%	7.30	7.02	4.0%			
South Atlantic	10.00	9.03	10.7%	8.57	7.64	12.2%			
East South Central	8.61	7.58	13.6%	7.37	6.44	14.4%			
West South Central	11.88	10.29	15.5%	9.76	8.59	13.6%			
Mountain	9.42	9.09	3.6%	7.80	7.62	2.4%			
Pacific Contiguous	12.58	10.94	15.0%	11.36	10.26	10.7%			
Pacific Noncontiguous	21.05	17.88	17.7%	18.56	16.00	16.0%			
U.S. Total	10.84	9.77	11.0%	9.21	8.35	10.3%			

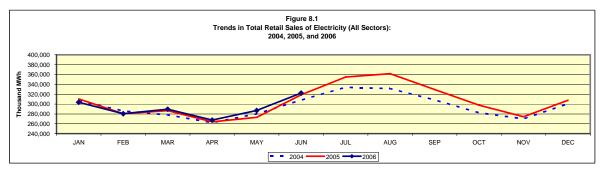
### Section 8. Retail Sales Trends

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

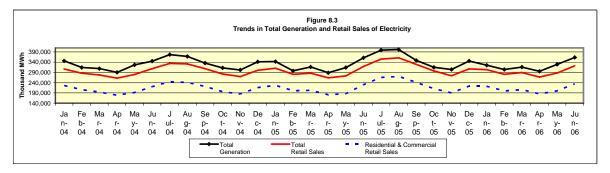
Year-to-Date Comparison									
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)		
Current Period	January 2006	June 2006	634,159	614,081	498,371	4,059	1,750,669		
Prior Period	January 2005	June 2005	630,155	597,570	501,906	4,108	1,733,739		
Percent Difference			0.6%	2.8%	-0.7%	-1.2%	1.0%		

#### Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)		
Current Period	July 2005	June 2006	1,368,791	1,281,665	1,017,777	8,223	3,676,457		
Prior Period	July 2004	June 2005	1,296,461	1,236,633	1,019,783	7,710	3,560,586		
Percent Difference			5.6%	3.6%	-0.2%	6.7%	3.3%		





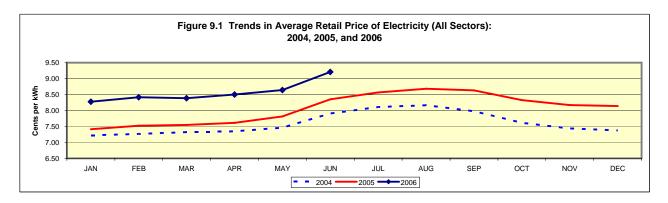


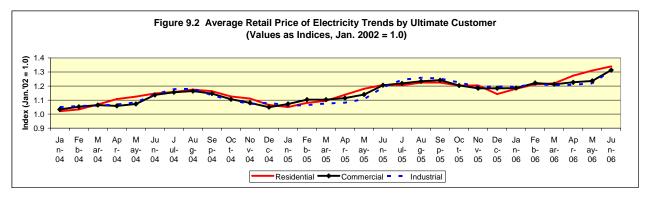
# Section 9. Average Retail Price Trends

# Table 9.1 Trends in Average Retail Price of Electricity (All Sectors) Cents per Kilowatthour

Year-to-Date Comparison									
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)		
Current Period	January 2006	June 2006	10.15	9.19	5.86	7.49	8.59		
Prior Period	January 2005	June 2005	9.08	8.37	5.25	7.09	7.72		
Percent Difference			11.8%	9.8%	11.6%	5.6%	11.3%		

Comparison to Prior 12 Month Period									
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)		
Current Period	July 2005	June 2006	9.92	9.10	5.87	7.61	8.51		
Prior Period	July 2004	June 2005	9.14	8.35	5.31	7.21	7.76		
Percent Difference			8.5%	9.0%	10.5%	5.5%	9.7%		





### Section 10. Heating and Cooling Degree Days

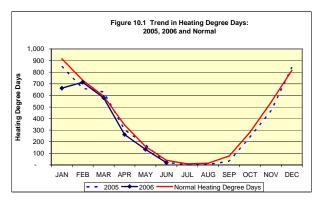
### Table 10.1 Degree Days

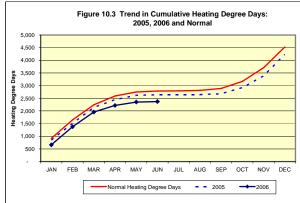
		He	eating Degree Day	'S	Cooling Degree Days			
	Month	Heating Degree Days	Normal Heating Degree Days	Deviation From the Normal	Cooling Degree Days	Normal Cooling Degree Days	Deviation From the Normal	
Current Period	June 2006	19	39	-20	240	213	27	
Previous Period	June 2005	21	39	-18	259	213	46	
Percent Difference		-9.5%			-7.3%			

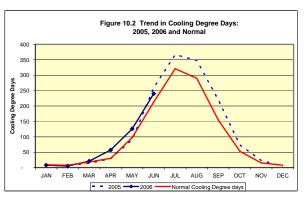
### Table 10.2 Trends in Heating and Cooling Degree Days

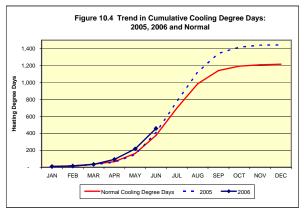
Year-to-Date Comparison								
	Starting Month	Ending Month	Heating Degree Days	Cooling Degree Days				
Current Period	January 2006	June 2006	2,371	457				
Prior Period	January 2005	June 2005	2,639	409				
Percent Difference			-10.2%	11.7%				

Comparison to Prior 12 Month Period								
	Starting Month	Ending Month	Heating Degree Days	Cooling Degree Days				
Current Period	July 2005	June 2006	3,961	1,493				
Prior Period	July 2004	June 2005	4,215	1,243				
Percent Difference			-6.0%	20.1%				









# Section 11. Documentation

**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 *Flash 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).