## Monthly Flash Estimates of

# **Electric Power Data**

### Section 1. Commentary

For the second month in a row, record warmth was observed throughout a majority of the country while the heavily populated Northeast experienced near average temperatures. Accordingly, cooling degree days for August 2007 were 26.0 percent above the average for the month of August, and 9.2 percent higher than August 2006.

August 2007 electricity generation and retail sales of electricity were both up when compared to August 2006. Retail sales of electricity were 1.2 percent higher when compared to August 2006. However, residential retail sales of electricity decreased by 0.1 percent compared to August 2006. Generation for electric power was 3.8 percent higher than what was recorded in August 2006. The average U.S. retail price of electricity for August 2007 was 1.3 percent higher than August 2006 and relatively unchanged compared to the previous month, decreasing by only 0.2 percent from July 2007.

The NOAA reported that drought conditions in the Northwest continued in the month of August 2007. Accordingly, conventional hydroelectric generation was 3.9 percent lower than August 2006 and 10.4 percent lower than July 2007. Natural gas generation was up 13.9 percent compared to August 2006, reflecting the increased need for peaking generation due to the above normal temperatures. Petroleum liquids generation decreased by 12.7 percent from August 2006, but was utilized more as a peaking fuel in August 2007 as observed by the increase of 37.0 percent from the prior month. Nuclear generation showed a 1.0 percent-increase from August 2006.

The summer draw-down of coal stocks continued in the month of August 2007, as total coal stocks in the electric power sector decreased 3.5 percent from July 2007. Bituminous coal stocks decreased 4.2 percent and subbituminous coal stocks decreased 2.8 percent from July 2007; however, both were still higher by 16.9 percent and 15.0 percent, respectively, when compared to August 2006. Petroleum liquids stocks were 11.6 percent lower than August 2006 as a result of increased generation attributed to petroleum liquids earlier in 2007.

References for weather data:

http://www.ncdc.noaa.gov/oa/climate/research/2007/aug/aug07.html

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Table 2.1 Key Generation Indicators									
	Nuclear Generation	Hydroelectric Generation							
Total Change From:									
July 2007	7.4%	-0.5%	-10.4%						
August 2006	3.8%	1.0%	-3.9%						
Year to Date	1.7%	1.5%	-12.8%						
Latest 12 Month Period*	0.6%	0.2%	-9.3%						

### Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
July 2007	27.7%	2.6%	-3.5%
August 2006	14.5%	0.8%	15.1%
Year to Date	6.1%	1.5%	n/a
Latest 12 Month Period*	6.5%	0.5%	n/a

\* Change in total consumption or generation for the latest 12 month period (September 2006 to August 2007) compared to the prior 12 month period (September 2005 to Augus 2006).

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

Table 3.1 Total Net Generation (All Sectors)											
Net Generation (thousand megawatthours)	Aug-07	Aug-06	% Change	Jul-07	% Change						
Coal	190,599	189,258	0.7%	185,252	2.9%						
Petroleum Liquids	5,626	6,446	-12.7%	4,106	37.0%						
Natural Gas	120,912	106,116	13.9%	96,518	25.3%						
Nuclear	72,751	72,016	1.0%	73,096	-0.5%						
Hydroelectric Conventional	20,026	20,834	-3.9%	22,349	-10.4%						
All Other	11,860	11,534	2.8%	11,329	4.7%						
Total (All Energy Sources)	421,774	406,205	3.8%	392,651	7.4%						

### 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 Aug-07 Aug-06 % Change Jul-07 % Change											
Coal (Thousand Short Tons)	99,713	98,917	0.8%	97,185	2.6%						
Petroleum Liquids (Thousand Barrels)	9,922	11,139	-10.9%	7,148	38.8%						
Natural Gas (Million Cubic Feet)	Natural Gas (Million Cubic Feet)         1,042,335         909,941         14.5%         816,306         27.7%										

### Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)									
Fossil Fuel Stocks     Aug-07     Aug-06     % Change     Jul-07     % Change									
Coal (Thousand Short Tons)	141,860	123,285	15.1%	146,975	-3.5%				
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

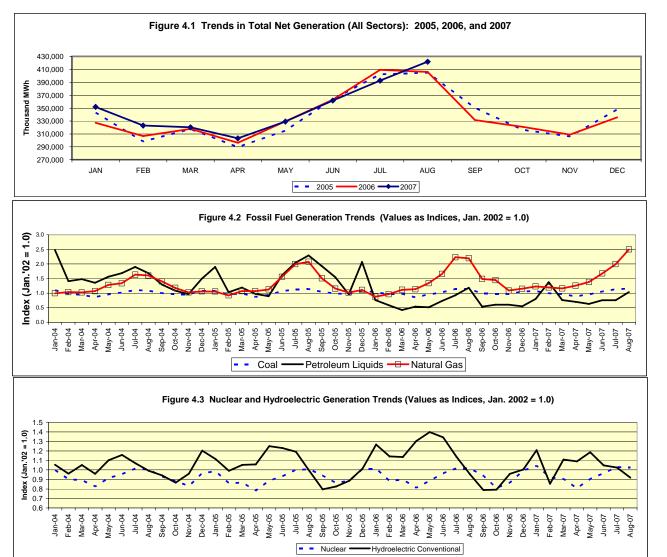
#### Data for: August 2007

#### 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 2007	August 2007	1,350,613	37,040	599,547	539,328	183,971	93,501	2,804,000				
Prior Period	January 2006	August 2006	1,332,078	30,823	557,372	531,185	211,055	93,507	2,756,020				
Percent Difference			1.4%	20.2%	7.6%	1.5%	-12.8%	0.0%	1.7%				

#### Comparison to Prior Twelve-Month Period

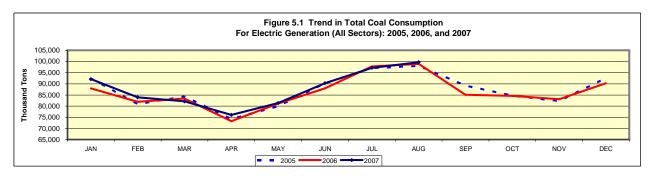
	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	September 2006	August 2007	2,005,759	49,560	849,772	795,361	261,222	139,274	4,100,948
Prior Period	September 2005	August 2006	2,003,029	66,155	789,407	793,807	287,919	136,535	4,076,852
Percent Difference			0.1%	-25.1%	7.6%	0.2%	-9.3%	2.0%	0.6%

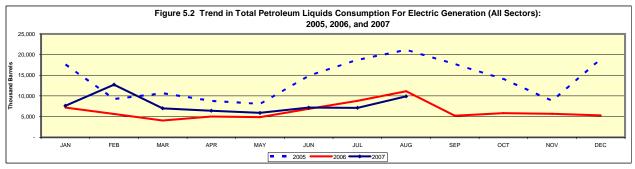


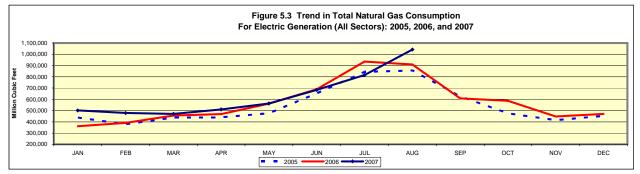
#### Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison											
	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)						
Current Period	January 2007	August 2007	702,941	63,907	5,061,741						
Prior Period	January 2006	August 2006	692,349	53,603	4,768,980						
Percent Difference			1.5%	19.2%	6.1%						

Comparison to Prior 12 Month Period											
	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)						
Current Period	September 2006	August 2007	1,046,061	85,938	7,170,848						
Prior Period	September 2005	August 2006	1,041,079	113,087	6,735,747						
Percent Difference			0.5%	-24.0%	6.5%						

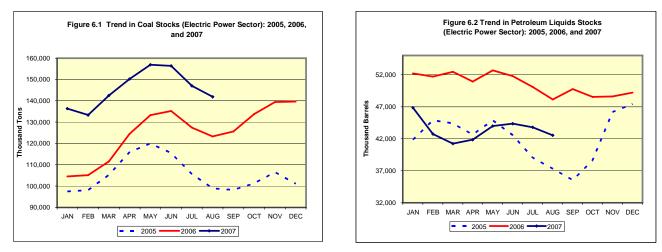


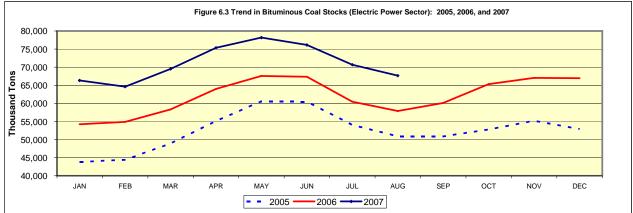


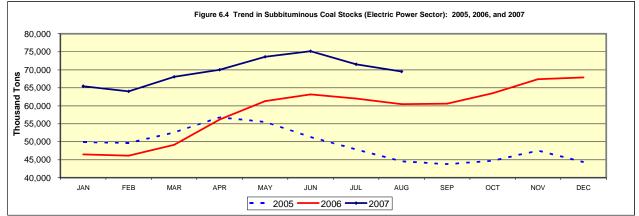


#### Section 6. Fossil Fuel Stock Trends

Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)											
Fossil Fuel Stocks	Aug-07	Aug-06	% Change	Jul-07	% Change						
Coal, Total (Thousand Short Tons)	141,860	123,285	15.1%	146,975	-3.5%						
Bituminous (includes anthracite and coal synfuel)	67,674	57,913	16.9%	70,674	-4.2%						
Subbituminous	69,526	60,455	15.0%	71,538	-2.8%						
Lignite	4,660	4,917	-5.2%	4,763	-2.2%						
Petroleum Liquids (Thousand Barrels)	42,528	48,132	-11.6%	43,782	-2.9%						







### **Retail Sales**

Table 7.1 Retail Sales (Million kWh)												
Ultimate Customer	Aug-07	Aug-06	% Change	Jul-07	% Change							
Residential	150,188	150,384	-0.1%	139,300	7.8%							
Commercial	131,372	127,839	2.8%	127,504	3.0%							
Industrial	90,796	89,824	1.1%	85,300	6.4%							
Transportation	761	698	9.0%	717	6.1%							
All Sectors	373,118	368,744	1.2%	352,821	5.8%							

### **Average Retail Price**

Table 7.2 Average Retail Price (Cents/kWh) U.S. Total										
Ultimate Customer	Aug-07	Aug-06	% Change	Jul-07	% Change					
Residential	11.03	10.94	0.8%	11.06	-0.3%					
Commercial	10.00	9.96	0.4%	10.09	-0.9%					
Industrial	6.84	6.56	4.3%	6.75	1.3%					
Transportation	9.57	9.58	-0.1%	10.46	-8.5%					
All Sectors	9.65	9.53	1.3%	9.67	-0.2%					

Table 7.3 Average Retail Price (Cents/kWh) by Census Division											
Census Division		Residential			All Sectors						
	Aug-07	Aug-06	% Change	Aug-07	Aug-06	% Change					
New England	16.09	16.38	-1.8%	14.81	15.07	-1.7%					
Middle Atlantic	14.96	14.35	4.3%	13.09	12.65	3.5%					
East North Central	10.27	9.65	6.4%	8.47	7.98	6.1%					
West North Central	9.08	8.83	2.8%	7.62	7.40	3.0%					
South Atlantic	10.39	10.17	2.2%	9.14	8.93	2.4%					
East South Central	8.50	8.43	0.8%	7.48	7.40	1.1%					
West South Central	11.25	11.94	-5.8%	9.60	10.13	-5.2%					
Mountain	9.80	9.44	3.8%	8.18	7.85	4.2%					
Pacific Contiguous	12.94	12.88	0.5%	11.78	11.77	0.1%					
Pacific Noncontiguous	21.99	21.65	1.6%	19.21	18.99	1.2%					
U.S. Total	11.03	10.94	0.8%	9.65	9.53	1.3%					

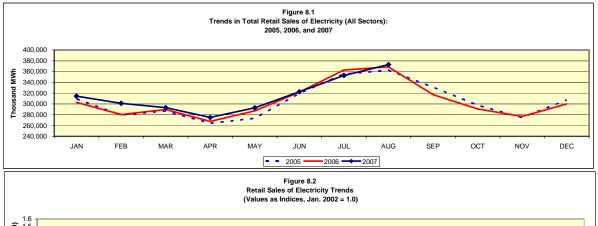
#### Section 8. Retail Sales Trends

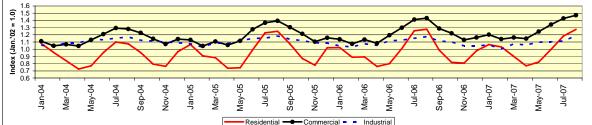
### Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors) Millions of Kilowatthours

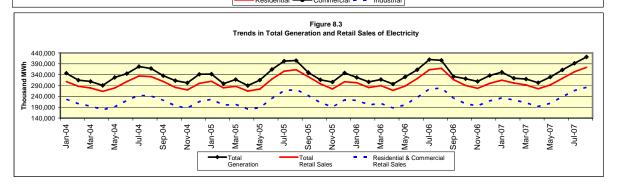
Year-to-Date Comparison										
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)			
Current Period	January 2007	August 2007	947,647	905,473	665,733	5,683	2,524,535			
Prior Period	January 2006	August 2006	931,332	872,089	672,128	5,449	2,480,998			
Percent Difference			1.8%	3.8%	-1.0%	4.3%	1.8%			

#### Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	September 2006	August 2007	1,370,547	1,334,235	995,534	8,320	3,708,636
Prior Period	September 2005	August 2006	1,372,397	1,299,410	1,011,727	7,941	3,691,475
Percent Difference			-0.1%	2.7%	-1.6%	4.8%	0.5%





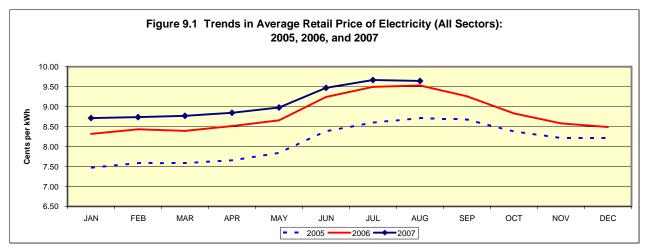


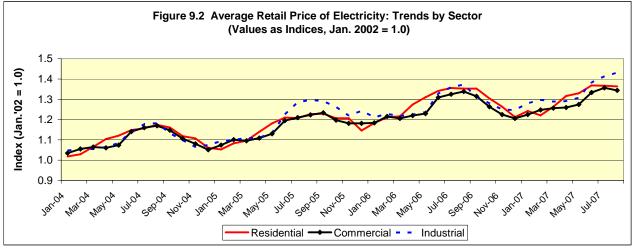
### Section 9. Average Retail Price Trends

### 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 2007	August 2007	10.61	9.61	6.40	9.79	9.14			
Prior Period	January 2006	August 2006	10.41	9.37	6.09	8.93	8.87			
Percent Difference			1.9%	2.6%	5.1%	9.6%	3.0%			

Comparison to Prior 12 Month Period										
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)			
Current Period	September 2006	August 2007	10.54	9.52	6.29	9.63	9.03			
Prior Period	September 2005	August 2006	10.17	9.22	6.06	8.89	8.71			
Percent Difference			3.6%	3.3%	3.8%	8.3%	3.7%			





#### Section 10. Heating and Cooling Degree Days

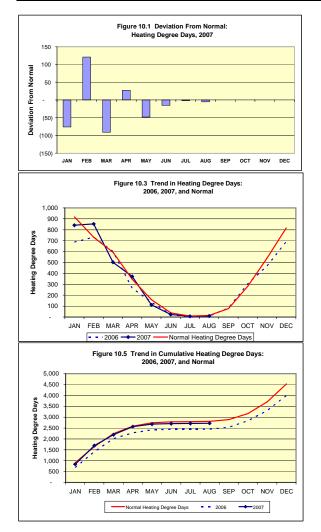
Data for: August 2007

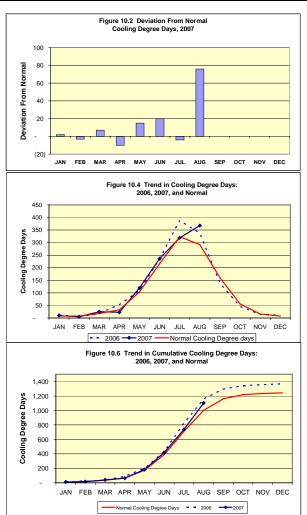
#### Table 10.1 Degree Days

Heating Degree Days				Cooling Degree Days					
	Month	Heating Degree Days	Normal Heating Degree Days	Deviation From Normal	Pecent Difference From Normal	Cooling Degree Days	Normal Cooling Degree Days	Deviation From Normal	Pecent Difference From Normal
Current Period	August 2007	10	15	-5	-33.3%	368	292	76	26.0%
Prior Period	August 2006	9	15	-6	-40.0%	337	292	45	15.4%
Percent Difference		11.1%				9.2%			

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

Year-to-Date Comparison				Comparison to Prior 12 Month Period					
	Starting Month	Ending Month	Heating Degree Days	Cooling Degree Days		Starting Month	Ending Month	Heating Degree Days	Cooling Degree Days
Current Period	January 2007	August 2007	2,720	1,105	Current Period	September 2006	August 2007	4,263	1,314
Prior Period	January 2006	August 2006	2,453	1,159	Prior Period	September 2005	August 2006	4,060	1,453
Percent Difference			10.9%	-4.7%	Percent Difference			5.0%	-9.6%





### 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).