

# Monthly Flash Estimates of Electric Power Data

Data for:  
October 2006

## Section 1. Commentary

As the transition from the summer into the fall season continues, October 2006 total net generation declined 2.9 percent from September 2006 due to declining cooling needs. Similarly, October 2006 retail sales of electricity were down 8.4 percent from September 2006. Comparing October 2006 to October 2005, however, net generation increased by 1.8 percent, due to a cooler October in 2006, leading to higher heating demand. October 2006 heating degree days were up 27.4 percent from October 2005.

Year-to-date, through October 2006, both total net generation and retail sales of electricity were up 0.3 percent, compared to the first ten months of 2005. The October 2006 average retail price of electricity was down 4.6 percent from September 2006, but was up 5.5 percent from October 2005. Year-to-date, through October 2006, the average retail price of electricity was up 9.6 percent.

Comparing October 2006 to October 2005, natural gas fired generation was up 25.1 percent due to declining fuel costs. Lower 2006 natural gas prices from the previous year caused generators to switch from expensive petroleum liquids to natural gas. Hence, petroleum liquids generation declined 60.9 percent from October 2005 to October 2006. Similarly, October 2006 coal generation was down 0.8 percent from October 2005. For the first ten months of 2006, generation from coal and petroleum liquids was down 1.3 percent and 55.7 percent, respectively, when compared to the same period in 2005, while natural gas generation was up 6.8 percent over the same period. Comparing October 2006 to September 2006, nuclear generation was down 13.7 percent, partially as a result of higher outages for refueling and maintenance. Conventional hydroelectric generation was up 5.3 percent over the same period. Year-to date, through October 2006, nuclear generation was up 1.2 percent and hydroelectric generation was up 7.9 percent compared to the first ten months of 2005.

The coal stock build-up for the winter of 2006, which began in September, has continued into October. Bituminous and subbituminous coal stocks for October 2006 were 8.7 percent and 4.8 percent higher, respectively, when compared to September 2006, and were 23.7 percent and 42.0 percent higher, respectively, when compared to October 2005. At the end of October 2006, subbituminous coal stocks, which continued their recovery from the problems associated with rail delivery constraints during the summer of 2005, were sharply above the 2004 and 2005 levels. The October 2006 subbituminous coal stocks were above the annual high levels typically experienced in the spring. In October 2006, bituminous stocks were 65.3 million tons and subbituminous stocks were 63.5 million tons. Petroleum liquids stocks in October 2006 were 2.4 percent lower than September 2006 levels.

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## Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:  
October 2006

### Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
<b>Total Change From:</b>			
September 2006	-2.9%	-13.7%	5.3%
October 2005	1.8%	-6.1%	1.1%
<b>Year to Date</b>	<b>0.3%</b>	<b>1.2%</b>	<b>7.9%</b>
<b>Latest 12 Month Period*</b>	<b>0.5%</b>	<b>1.9%</b>	<b>4.4%</b>

### Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
<b>Total Change From:</b>			
September 2006	-3.4%	-0.7%	6.5%
October 2005	23.7%	-0.2%	32.2%
<b>Year to Date</b>	<b>6.1%</b>	<b>-1.0%</b>	<b>n/a</b>
<b>Latest 12 Month Period*</b>	<b>5.2%</b>	<b>-0.9%</b>	<b>n/a</b>

\* Change in total consumption or generation for the latest 12 month period (November 2005 to October 2006) compared to the prior 12 month period (November 2004 to October 2005).

**Note: The 2005 data presented in this publication have been revised to be consistent with the recently published Electric Power Annual 2005. For the remainder of this publication, references to September 2005 EIA data are appended with an "R".**

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

**Table 3.1 Total Net Generation (All Sectors)**

Net Generation (thousand megawatthours)	Oct-06	Oct-05	% Change	Sep-06	% Change
Coal	161,166	162,462	-0.8%	161,424	-0.2%
Petroleum Liquids	3,286	8,411	-60.9%	2,945	11.6%
Natural Gas	69,932	55,885	25.1%	72,119	-3.0%
Nuclear	57,509	61,236	-6.1%	66,642	-13.7%
Hydroelectric Conventional	18,083	17,890	1.1%	17,176	5.3%
All Other	11,917	10,399	14.6%	11,080	7.6%
Total (All Energy Sources)	321,893	316,282	1.8%	331,387	-2.9%

**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	Oct-06	Oct-05	% Change	Sep-06	% Change
Coal (Thousand Short Tons)	84,557	84,716	-0.2%	85,112	-0.7%
Petroleum Liquids (Thousand Barrels)	5,811	14,084	-58.7%	5,214	11.4%
Natural Gas (Million Cubic Feet)	586,880	474,310	23.7%	607,618	-3.4%

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

**Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)**

Fossil Fuel Stocks	Oct-06	Oct-05	% Change	Sep-06	% Change
Coal (Thousand Short Tons)	133,772	101,218	32.2%	125,572	6.5%
Petroleum Liquids (Thousand Barrels)	48,525	38,615	25.7%	49,739	-2.4%

**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:  
October 2006

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

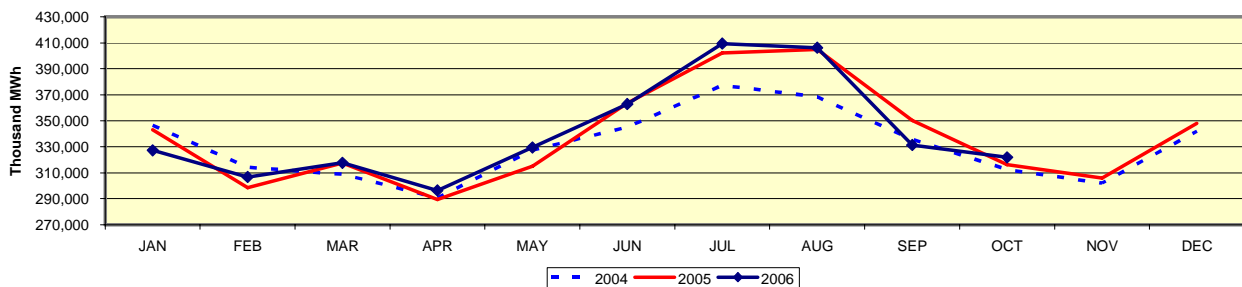
### Year-to-Date Comparison

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
<b>Current Period</b>	January 2006	October 2006	1,654,667	37,055	699,423	655,337	246,314	116,504	3,409,300
<b>Prior Period</b>	January 2005	October 2005	1,676,370	83,653	654,916	647,339	228,277	110,101	3,400,656
<b>Percent Difference</b>			-1.3%	-55.7%	6.8%	1.2%	7.9%	5.8%	0.3%

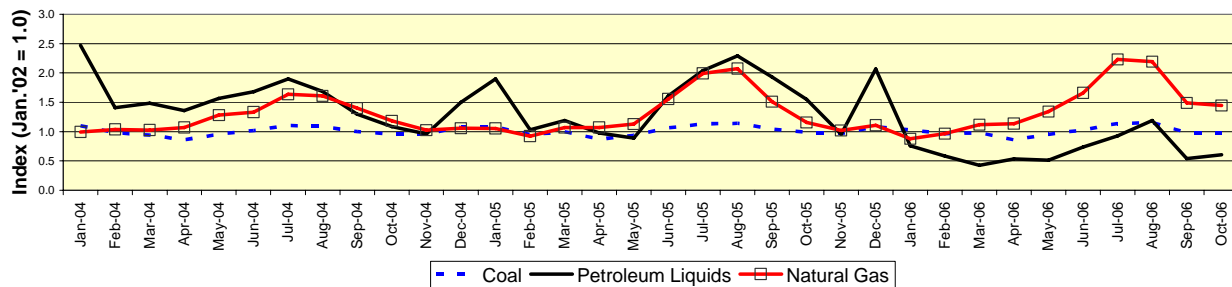
### Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
<b>Current Period</b>	November 2005	October 2006	1,991,476	53,497	802,482	789,984	287,624	138,269	4,063,332
<b>Prior Period</b>	November 2004	October 2005	2,010,591	97,019	755,708	774,896	275,424	131,067	4,044,705
<b>Percent Difference</b>			-1.0%	-44.9%	6.2%	1.9%	4.4%	5.5%	0.5%

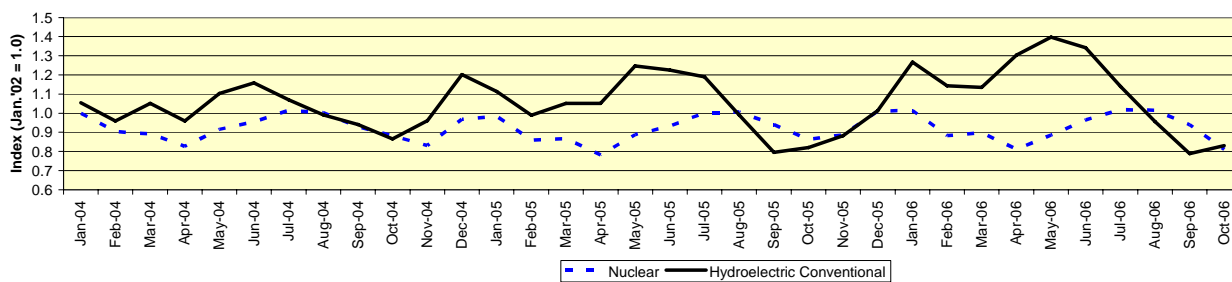
**Figure 4.1 Trends in Total Net Generation (All Sectors): 2004, 2005, and 2006**



**Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)**



**Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)**



# Section 5. Fossil Fuel Consumption Trends

Data for:  
October 2006

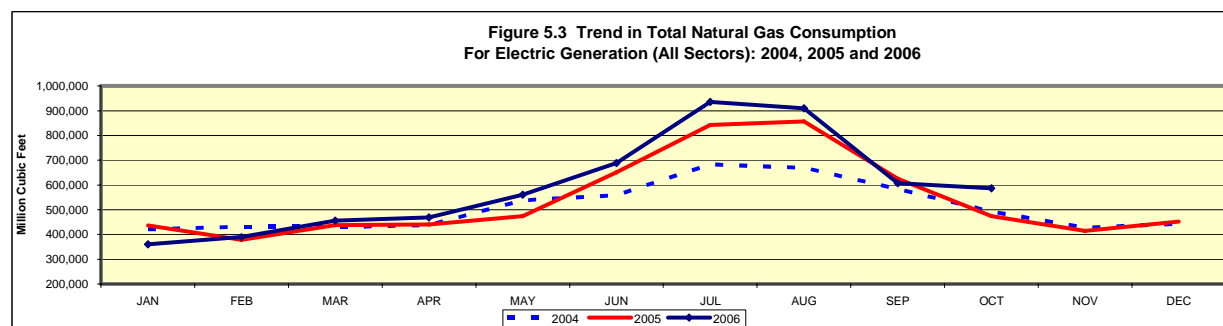
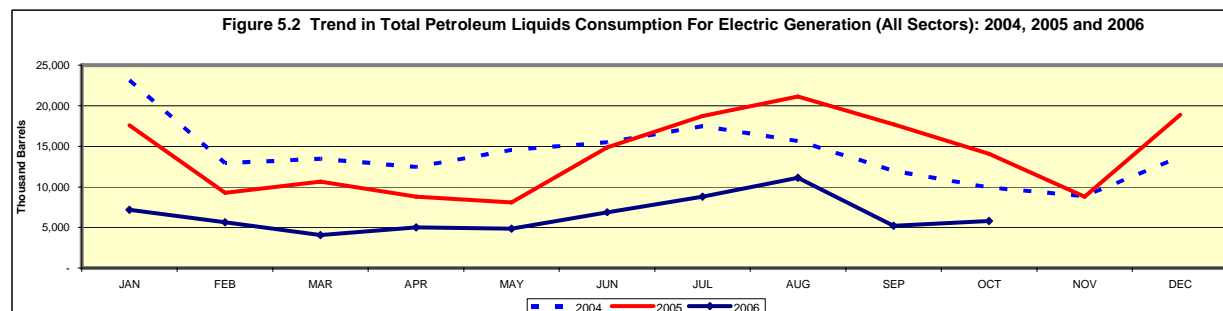
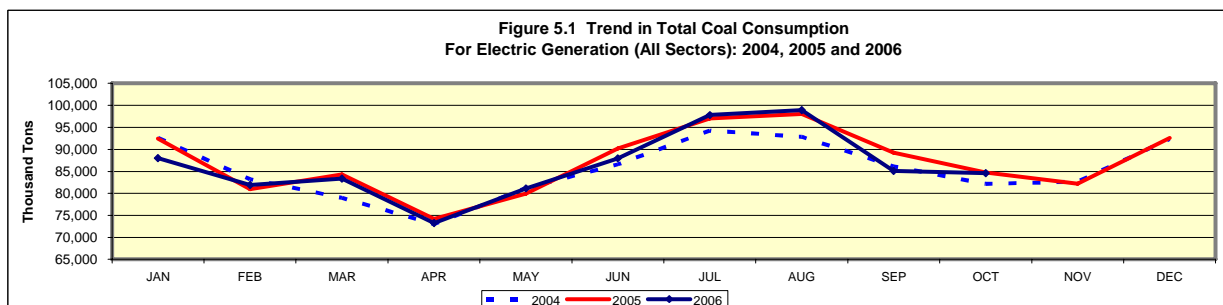
**Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)**

### Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
<b>Current Period</b>	January 2006	October 2006	862,018	64,628	5,963,478
<b>Prior Period</b>	January 2005	October 2005	871,081	140,999	5,620,100
<b>Percent Difference</b>			-1.0%	-54.2%	6.1%

### Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
<b>Current Period</b>	November 2005	October 2006	1,036,815	92,330	6,830,138
<b>Prior Period</b>	November 2004	October 2005	1,046,081	163,605	6,490,968
<b>Percent Difference</b>			-0.9%	-43.6%	5.2%

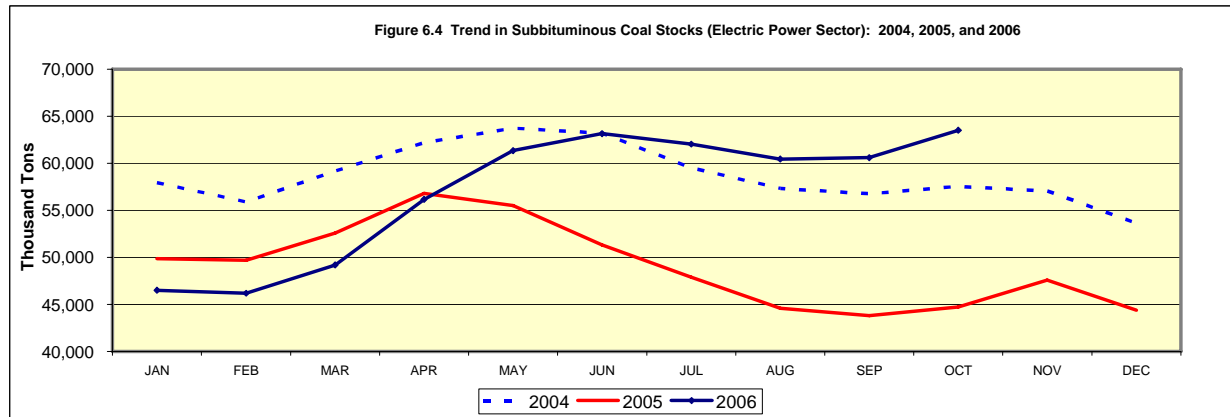
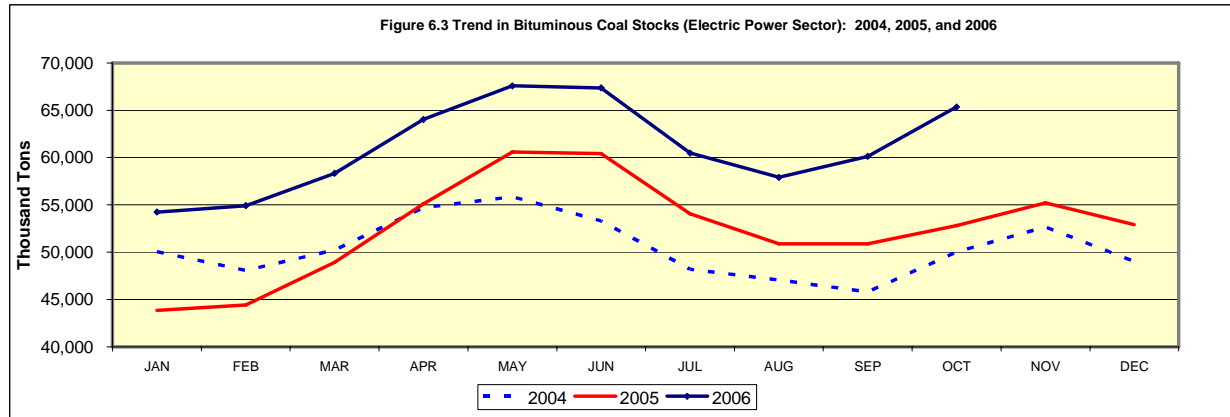
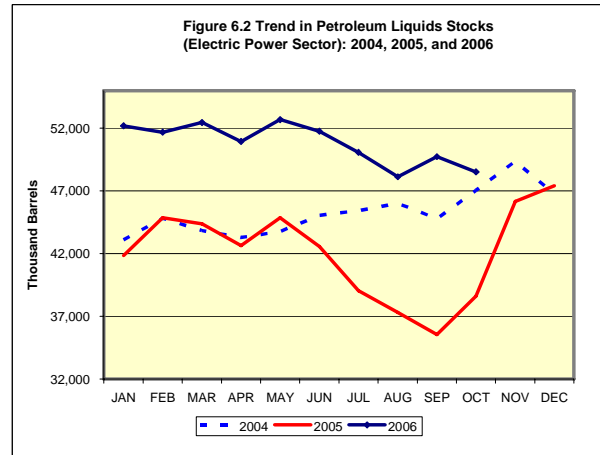
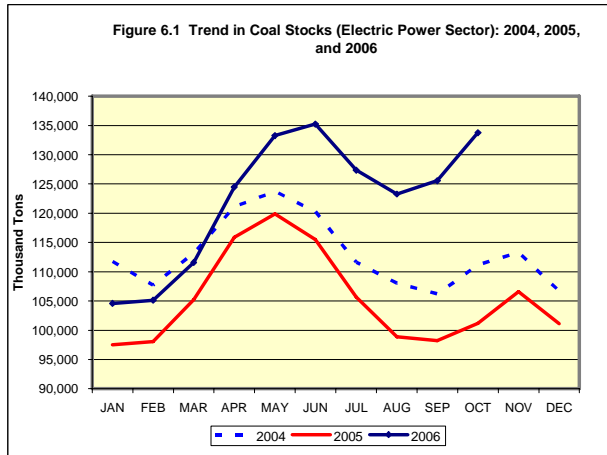


# Section 6. Fossil Fuel Stock Trends

Data for:  
October 2006

**Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)**

Fossil Fuel Stocks	Oct-06	Oct-05	% Change	Sep-06	% Change
<b>Coal, Total (Thousand Short Tons)</b>	133,772	101,218	32.2%	125,572	6.5%
Bituminous (includes anthracite and coal synfuel)	65,339	52,809	23.7%	60,121	8.7%
Subbituminous	63,503	44,722	42.0%	60,595	4.8%
Lignite	4,931	3,687	33.7%	4,857	1.5%
<b>Petroleum Liquids (Thousand Barrels)</b>	48,525	38,615	25.7%	49,739	-2.4%



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

Data for:  
October 2006

### Retail Sales

**Table 7.1 Retail Sales (Million kWh)**

Ultimate Customer	Oct-06	Oct-05	% Change	Sep-06	% Change
Residential	96,505	102,686	-6.0%	116,103	-16.9%
Commercial	109,195	108,474	0.7%	114,931	-5.0%
Industrial	84,214	85,856	-1.9%	85,424	-1.4%
Transportation	659	610	8.1%	677	-2.7%
All Sectors	290,574	297,626	-2.4%	317,135	-8.4%

### Average Retail Price

**Table 7.2 Average Retail Price (Cents/kWh) -- U.S. Total**

Ultimate Customer	Oct-06	Oct-05	% Change	Sep-06	% Change
Residential	10.55	9.76	8.1%	10.94	-3.6%
Commercial	9.41	8.91	5.6%	9.78	-3.8%
Industrial	6.12	6.03	1.5%	6.27	-2.4%
Transportation	9.71	9.57	1.5%	9.31	4.3%
All Sectors	8.83	8.37	5.5%	9.26	-4.6%

**Table 7.3 Average Retail Price (Cents/kWh) by Census Division**

Census Division	Residential			All Sectors		
	Oct-06	Oct-05	% Change	Oct-06	Oct-05	% Change
New England	16.08	13.55	18.7%	14.12	11.92	18.5%
Middle Atlantic	13.51	13.28	1.7%	11.43	11.59	-1.4%
East North Central	9.42	8.62	9.3%	7.50	6.98	7.4%
West North Central	8.10	7.84	3.3%	6.39	6.14	4.1%
South Atlantic	10.21	9.10	12.2%	8.58	7.72	11.1%
East South Central	8.16	7.83	4.2%	6.54	6.31	3.6%
West South Central	11.69	10.82	8.0%	9.41	9.46	-0.5%
Mountain	9.23	8.95	3.1%	7.61	7.47	1.9%
Pacific Contiguous	10.48	9.74	7.6%	10.45	9.64	8.4%
Pacific Noncontiguous	20.22	19.47	3.9%	17.78	17.34	2.5%
U.S. Total	10.55	9.76	8.1%	8.83	8.37	5.5%

# Section 8. Retail Sales Trends

Data for:  
October 2006

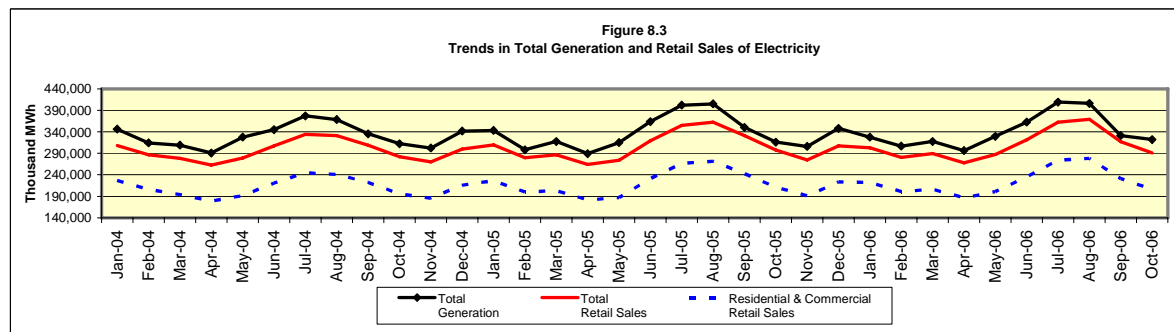
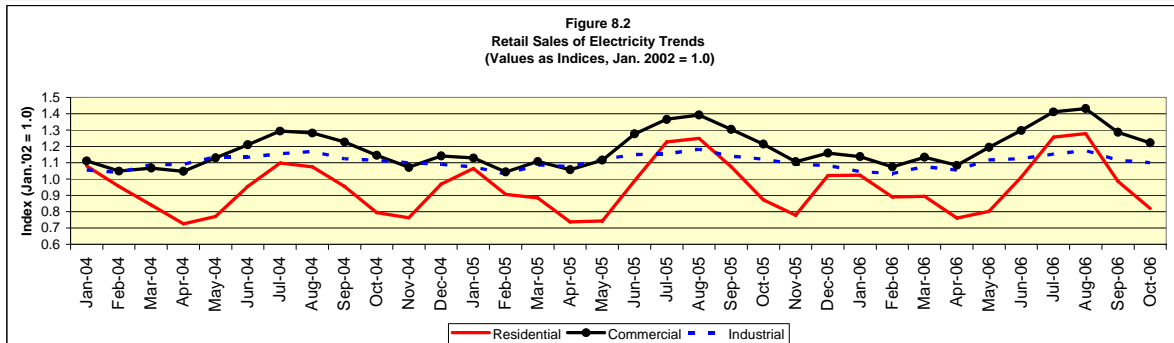
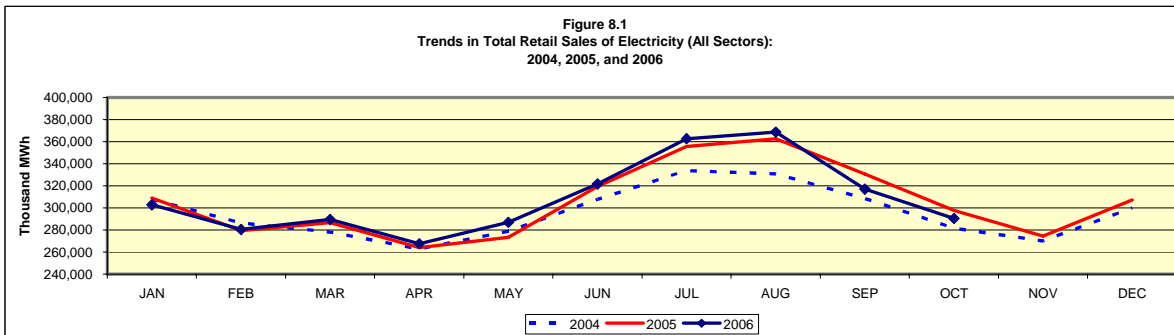
**Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)**  
Millions of Kilowatthours

**Year-to-Date Comparison**

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
<b>Current Period</b>	January 2006	October 2006	1,143,940	1,096,215	841,766	6,786	3,088,707
<b>Prior Period</b>	January 2005	October 2005	1,147,363	1,072,749	852,670	6,259	3,079,040
<b>Percent Difference</b>			-0.3%	2.2%	-1.3%	8.4%	0.3%

**Comparison to Prior Twelve-Month Period**

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
<b>Current Period</b>	November 2005	October 2006	1,355,803	1,298,546	1,008,253	8,033	3,670,635
<b>Prior Period</b>	November 2004	October 2005	1,350,969	1,270,482	1,020,327	7,475	3,649,253
<b>Percent Difference</b>			0.4%	2.2%	-1.2%	7.5%	0.6%





# Section 9. Average Retail Price Trends

Data for:  
October 2006

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

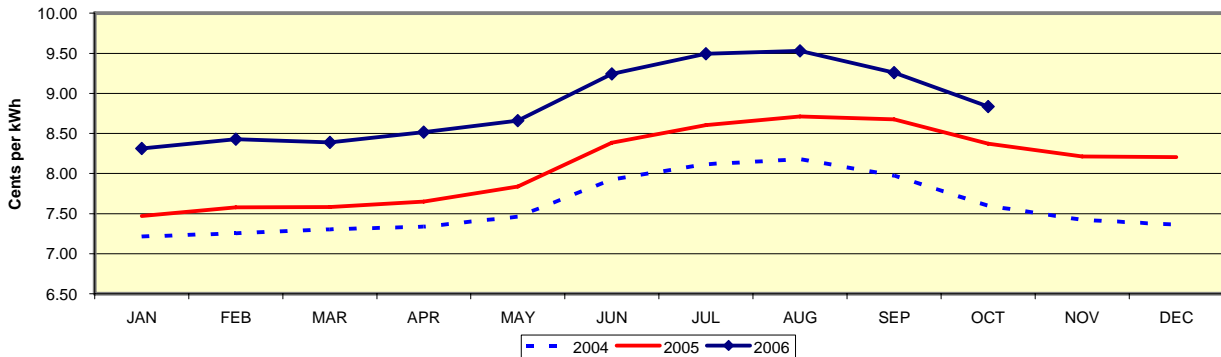
### Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
<b>Current Period</b>	January 2006	October 2006	10.47	9.42	6.11	9.05	8.91
<b>Prior Period</b>	January 2005	October 2005	9.44	8.65	5.71	8.64	8.13
<b>Percent Difference</b>			10.9%	8.9%	7.0%	4.7%	9.6%

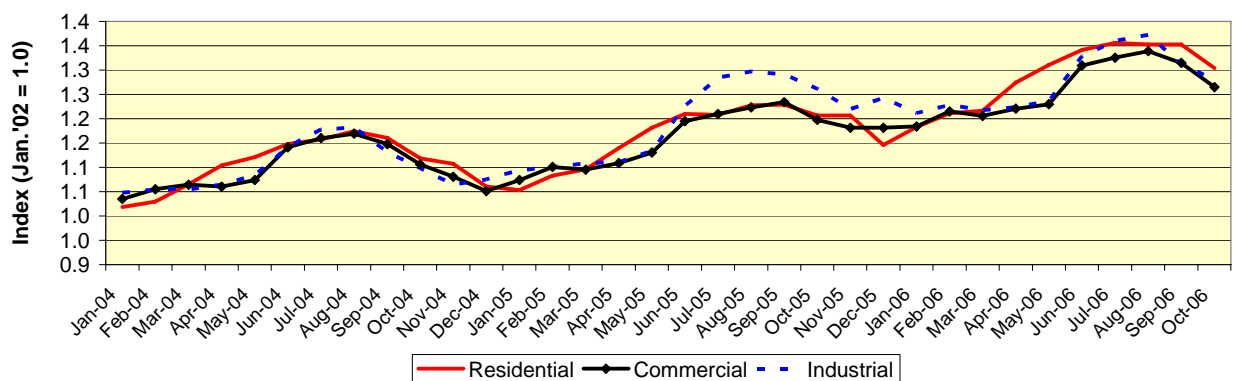
### Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
<b>Current Period</b>	November 2005	October 2006	10.32	9.32	6.08	8.91	8.80
<b>Prior Period</b>	November 2004	October 2005	9.34	8.53	5.61	8.40	8.01
<b>Percent Difference</b>			10.5%	9.3%	8.4%	6.1%	9.9%

**Figure 9.1 Trends in Average Retail Price of Electricity (All Sectors):  
2004, 2005, and 2006**



**Figure 9.2 Average Retail Price of Electricity: Trends by Sector  
(Values as Indices, Jan. 2002 = 1.0)**



# Section 10. Heating and Cooling Degree Days

Data for:  
October 2006

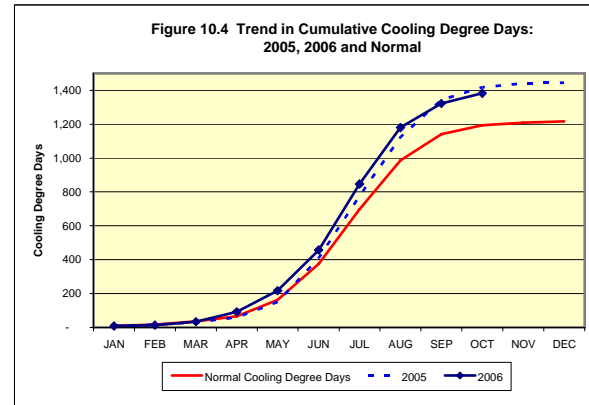
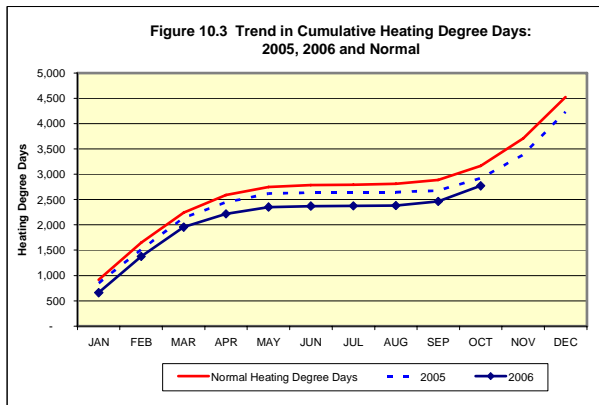
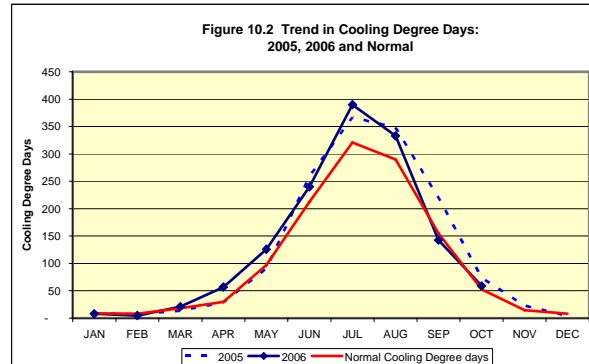
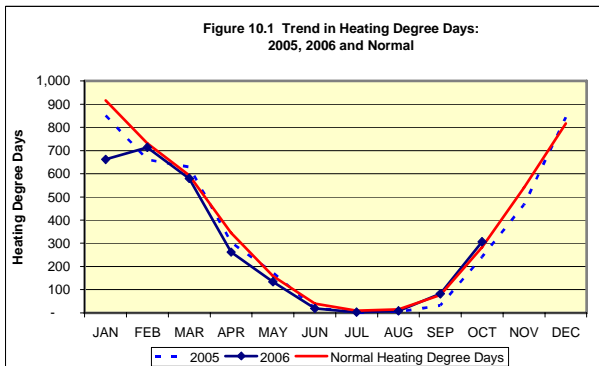
## Table 10.1 Degree Days

	Month	Heating Degree Days			Cooling Degree Days		
		Heating Degree Days	Normal Heating Degree Days	Deviation From the Normal	Cooling Degree Days	Normal Cooling Degree Days	Deviation From the Normal
Current Period	October 2006	307	282	25	59	53	6
Previous Period	October 2005	241	282	-41	74	53	21
Percent Difference		27.4%			-20.3%		

## 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	October 2006	2,771	1,382
Prior Period	January 2005	October 2005	2,919	1,418
Percent Difference			-5.1%	-2.5%

Comparison to Prior 12 Month Period				
	Starting Month	Ending Month	Heating Degree Days	Cooling Degree Days
Current Period	November 2005	October 2006	4,081	1,409
Prior Period	November 2004	October 2005	4,191	1,441
Percent Difference			-2.6%	-2.2%



**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).