

Monthly Flash Estimates of Electric Power Data

Data for:
July 2007

Section 1. Commentary

According to the National Oceanic and Atmospheric Administration (NOAA), July 2007 brought record warmth to many of the states in the western U.S. However, cooler than average temperatures observed in the heavily populated eastern half of the country kept residential energy demand in the contiguous United States close to normal, with cooling degree days 1.2 percent below the average for the month of July.

Due to the below normal temperatures observed in the heavily populated eastern United States, July 2007 electricity generation and retail sales of electricity were down when compared to July 2006. Retail sales of electricity was 1.6 percent lower when compared to July 2006, with residential retail sales decreasing the most at 4.9 percent. Furthermore, generation for electric power was 4.1 percent lower than what was recorded in July 2006. The average U.S. retail price of electricity for July 2007 remained relatively unchanged and was only 0.5 percent higher than July 2006 and 0.7 percent higher than June 2007, indicating that the sharp year-to-year price increases observed recently are moderating.

The NOAA reported that 25 percent of the contiguous U.S. had fallen under severe to extreme drought conditions by the end of July 2007. Conventional hydroelectric generation was 10.0 percent lower than July 2006 and 2.2 percent lower compared to June 2007. Petroleum liquids and natural gas generation showed a turnaround and were 18.7 percent and 10.7 percent lower, respectively, compared to July 2006 as cooler than average temperatures in the eastern U.S. decreased the need for peaking generation. Nuclear generation showed a modest 1.3 percent increase compared to July 2006; however, it was the only major electricity source to increase over the same period.

Total coal stocks in the electric power sector for July 2007 decreased 6.0 percent from June 2007, as the normal drawdown of coal stocks continued through the summer months. While bituminous coal stocks decreased 7.2 percent and subbituminous coal stocks decreased 4.8 percent from June 2007, both were still higher by 16.9 percent and 15.3 percent, respectively, when compared to July 2006. Petroleum liquids stocks were 12.6 percent lower than July 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/jul/jul07.html>

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
July 2007

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
June 2007	8.5%	6.8%	-2.2%
July 2006	-4.1%	1.3%	-10.0%
Year to Date	1.4%	1.6%	-13.8%
Latest 12 Month Period*	0.2%	0.2%	-9.2%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
June 2007	19.1%	7.7%	-6.0%
July 2006	-12.9%	-0.6%	15.4%
Year to Date	4.1%	1.7%	n/a
Latest 12 Month Period*	5.3%	0.5%	n/a

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

**Section 3. Month-to-Month Comparisons:
Generation, Consumption and Stocks (Total)**

**Data for:
July 2007**

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Jul-07	Jul-06	% Change	Jun-07	% Change
Coal	185,249	187,401	-1.1%	173,601	6.7%
Petroleum Liquids	4,108	5,053	-18.7%	4,114	-0.1%
Natural Gas	96,387	107,941	-10.7%	80,994	19.0%
Nuclear	73,096	72,186	1.3%	68,443	6.8%
Hydroelectric Conventional	22,352	24,838	-10.0%	22,860	-2.2%
All Other	11,319	11,927	-5.1%	11,739	-3.6%
Total (All Energy Sources)	392,511	409,346	-4.1%	361,753	8.5%

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	Jul-07	Jul-06	% Change	Jun-07	% Change
Coal (Thousand Short Tons)	97,186	97,793	-0.6%	90,269	7.7%
Petroleum Liquids (Thousand Barrels)	7,153	8,828	-19.0%	7,177	-0.3%
Natural Gas (Million Cubic Feet)	814,747	935,836	-12.9%	683,845	19.1%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jul-07	Jul-06	% Change	Jun-07	% Change
Coal (Thousand Short Tons)	146,975	127,361	15.4%	156,363	-6.0%
Petroleum Liquids (Thousand Barrels)	43,786	50,078	-12.6%	44,345	-1.3%

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:
July 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	July 2007	1,160,011	31,415	478,504	466,577	163,949	81,630	2,382,086
Prior Period	January 2006	July 2006	1,142,820	24,377	451,256	459,169	190,221	81,971	2,349,814
Percent Difference			1.5%	28.9%	6.0%	1.6%	-13.8%	-0.4%	1.4%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	August 2006	July 2007	2,004,415	50,381	834,845	794,626	262,034	138,938	4,085,239
Prior Period	August 2005	July 2006	2,001,363	72,158	783,698	793,173	288,651	136,544	4,075,587
Percent Difference			0.2%	-30.2%	6.5%	0.2%	-9.2%	1.8%	0.2%

Figure 4.1 Trends in Total Net Generation (All Sectors): 2005, 2006, and 2007

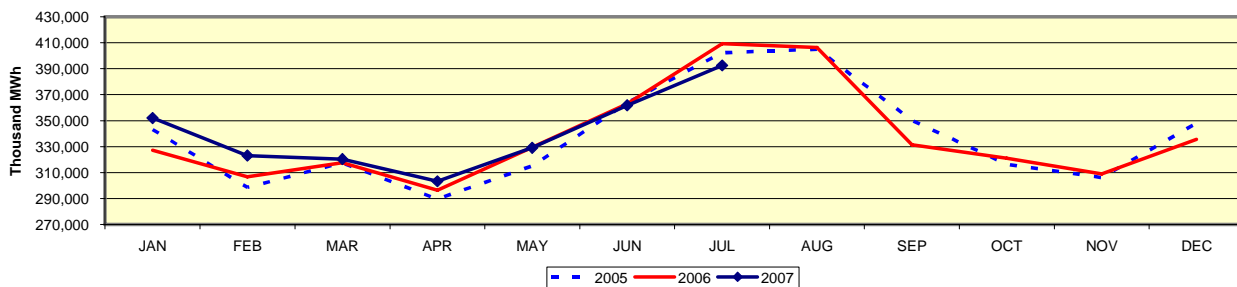


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

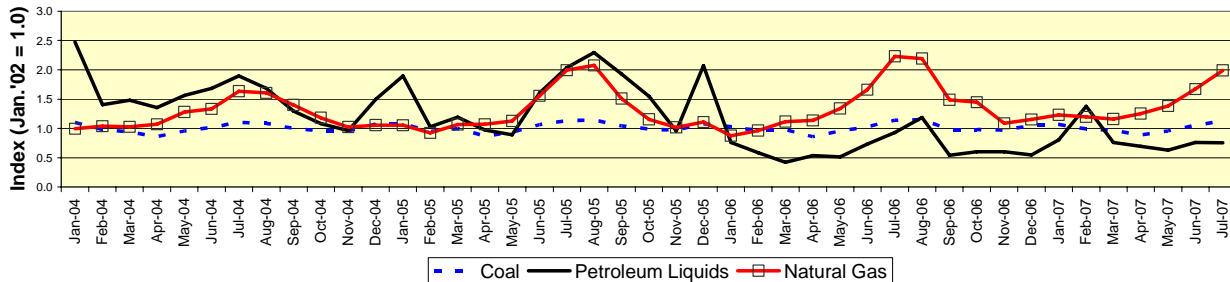
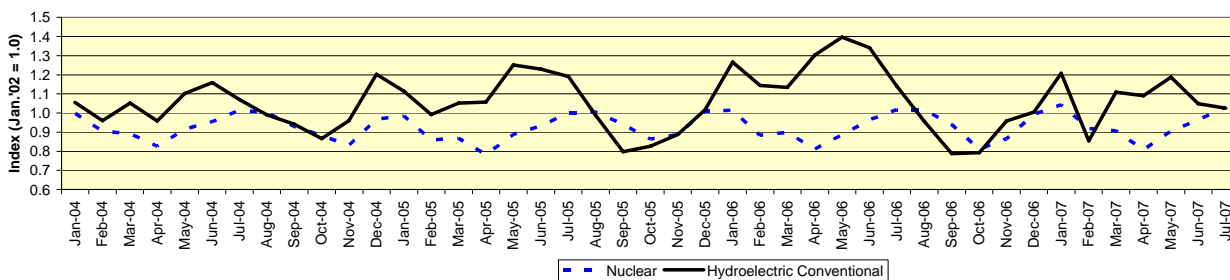


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
July 2007

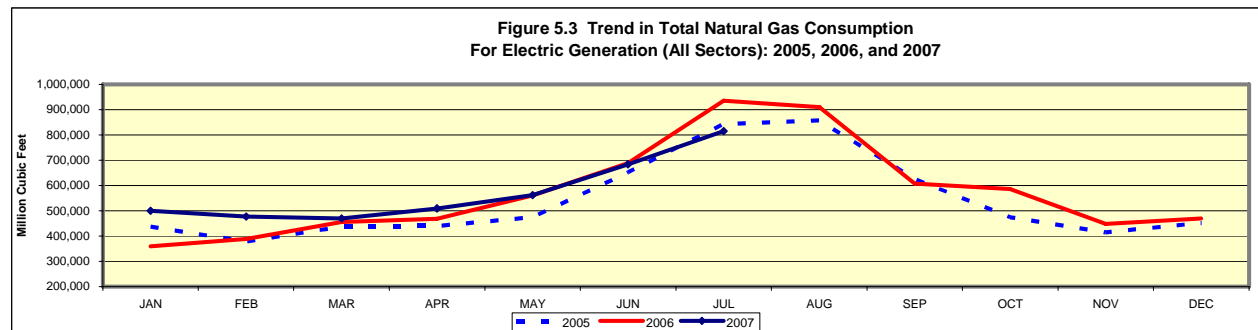
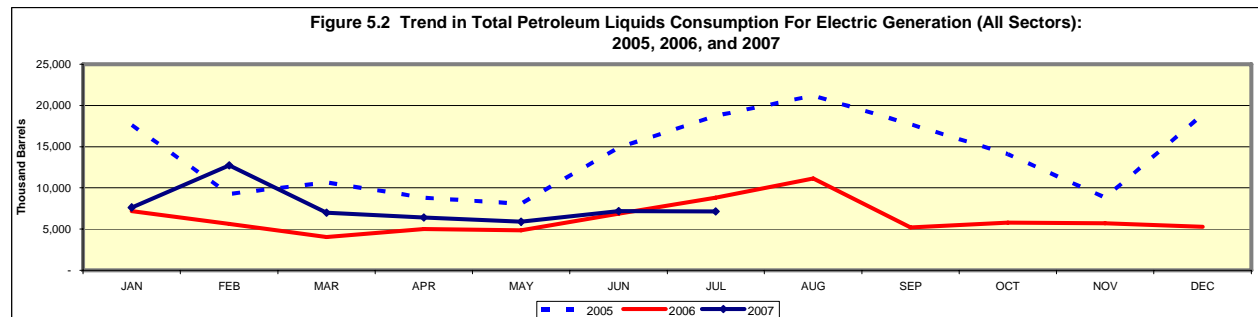
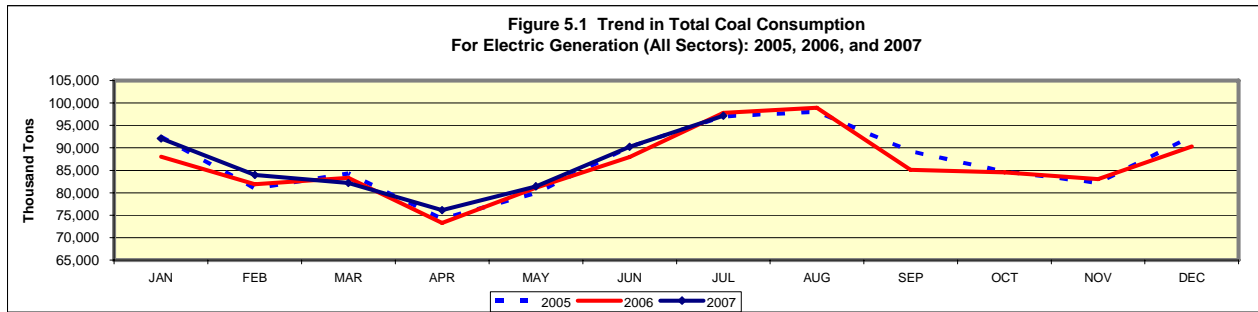
Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2007	July 2007	603,229	53,991	4,017,848
Prior Period	January 2006	July 2006	593,432	42,465	3,859,038
Percent Difference			1.7%	27.1%	4.1%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	August 2006	July 2007	1,045,266	87,160	7,036,895
Prior Period	August 2005	July 2006	1,040,206	123,105	6,682,925
Percent Difference			0.5%	-29.2%	5.3%

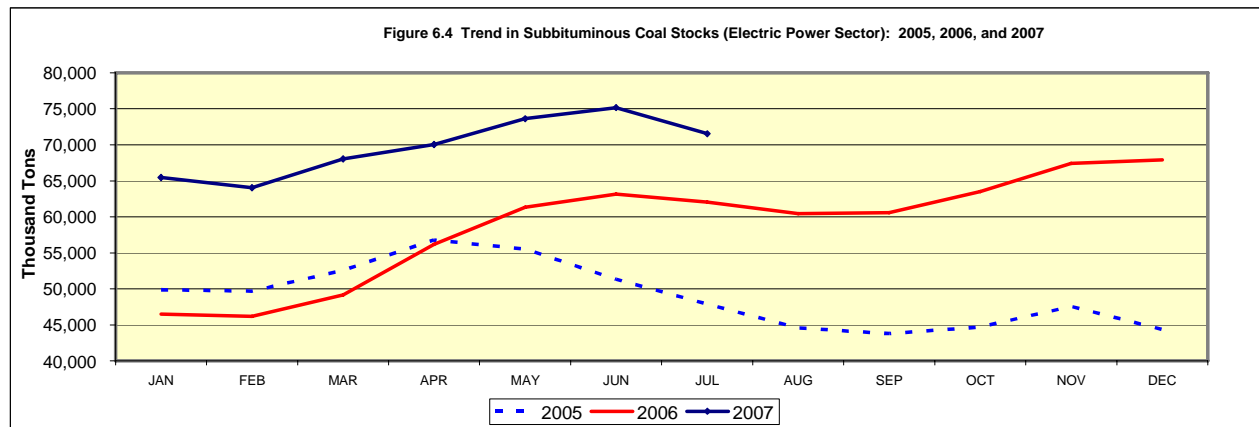
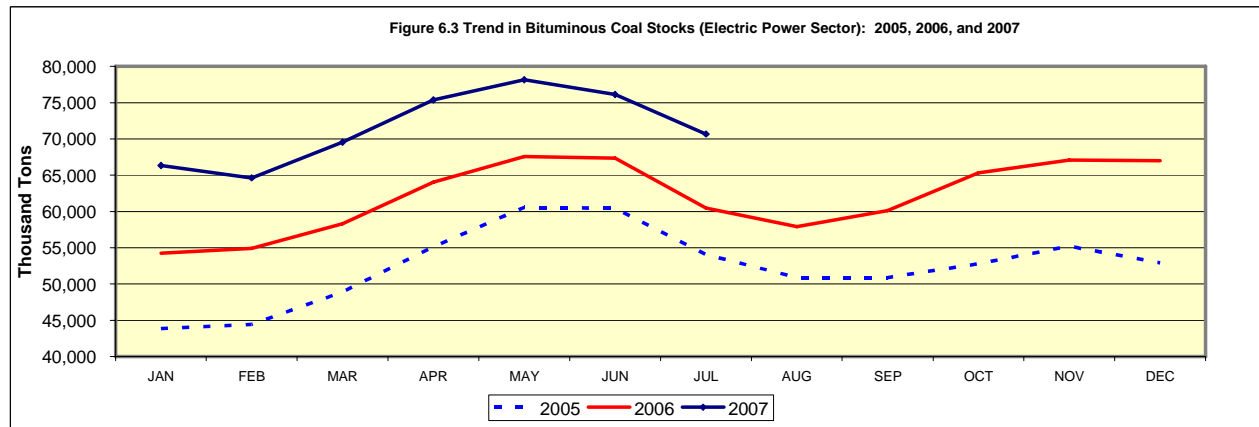
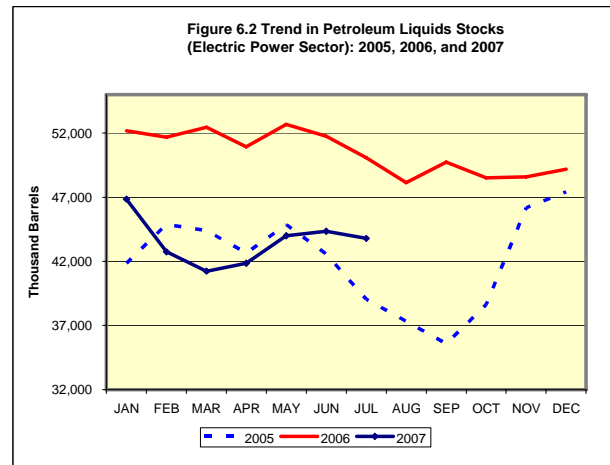
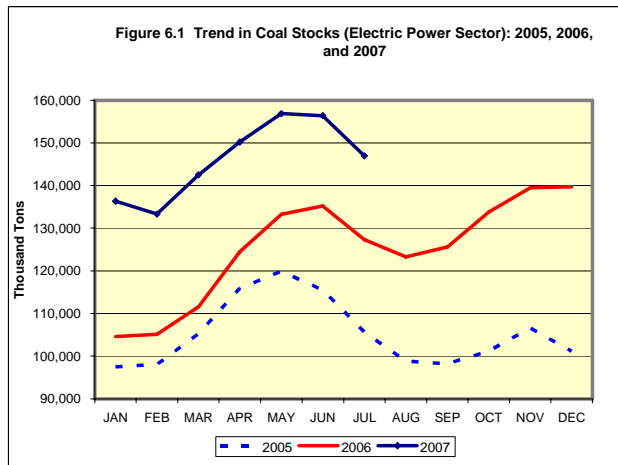


Section 6. Fossil Fuel Stock Trends

Data for:
July 2007

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

Fossil Fuel Stocks	Jul-07	Jul-06	% Change	Jun-07	% Change
Coal, Total (Thousand Short Tons)	146,975	127,361	15.4%	156,363	-6.0%
Bituminous (includes anthracite and coal synfuel)	70,674	60,472	16.9%	76,130	-7.2%
Subbituminous	71,538	62,040	15.3%	75,159	-4.8%
Lignite	4,763	4,849	-1.8%	5,074	-6.1%
Petroleum Liquids (Thousand Barrels)	43,786	50,078	-12.6%	44,345	-1.3%



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

Data for:
July 2007

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Jul-07	Jul-06	% Change	Jun-07	% Change
Residential	140,503	147,807	-4.9%	117,556	19.5%
Commercial	128,321	126,074	1.8%	119,824	7.1%
Industrial	87,338	88,256	-1.0%	84,423	3.5%
Transportation	716	693	3.3%	685	4.5%
All Sectors	356,877	362,830	-1.6%	322,488	10.7%

Average Retail Price

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

Ultimate Customer	Jul-07	Jul-06	% Change	Jun-07	% Change
Residential	11.02	10.97	0.5%	11.07	-0.5%
Commercial	9.86	9.86	0.0%	9.92	-0.6%
Industrial	6.70	6.50	3.1%	6.61	1.4%
Transportation	10.46	9.74	7.4%	10.06	4.0%
All Sectors	9.54	9.49	0.5%	9.47	0.7%

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

Census Division	Residential			All Sectors		
	Jul-07	Jul-06	% Change	Jul-07	Jul-06	% Change
New England	16.19	15.89	1.9%	14.85	14.38	3.3%
Middle Atlantic	14.90	14.23	4.7%	12.75	12.47	2.2%
East North Central	10.11	9.66	4.7%	8.36	8.00	4.5%
West North Central	9.18	8.99	2.1%	7.74	7.57	2.2%
South Atlantic	10.26	10.11	1.5%	8.79	8.80	-0.1%
East South Central	8.34	8.34	0.0%	7.26	7.26	0.0%
West South Central	11.37	11.72	-3.0%	9.62	9.83	-2.1%
Mountain	9.94	9.40	5.7%	8.29	7.90	4.9%
Pacific Contiguous	12.88	14.04	-8.3%	11.86	12.51	-5.2%
Pacific Noncontiguous	21.57	21.61	-0.2%	18.79	19.01	-1.2%
U.S. Total	11.02	10.97	0.5%	9.54	9.49	0.5%

Section 8. Retail Sales Trends

Data for:
July 2007

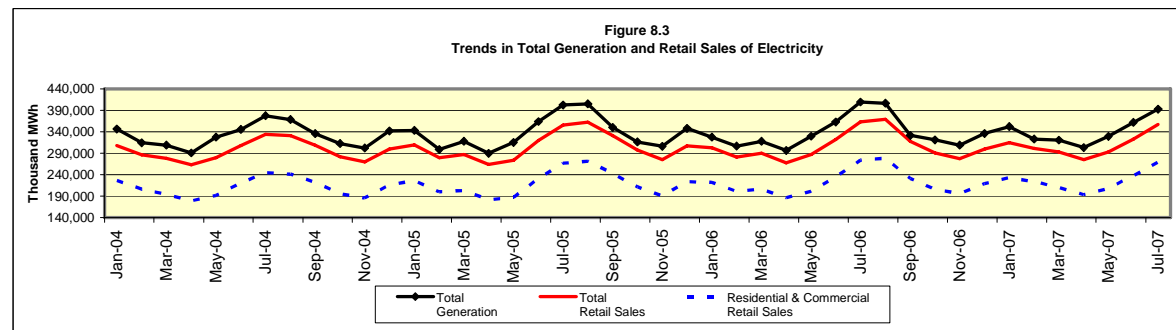
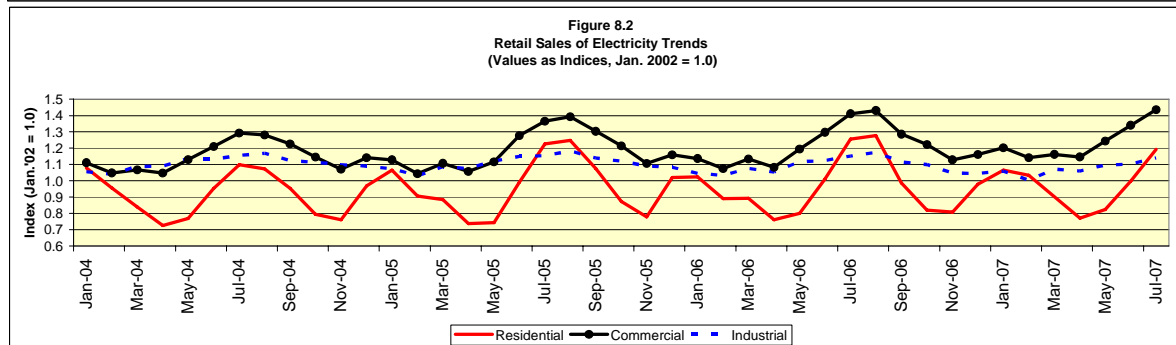
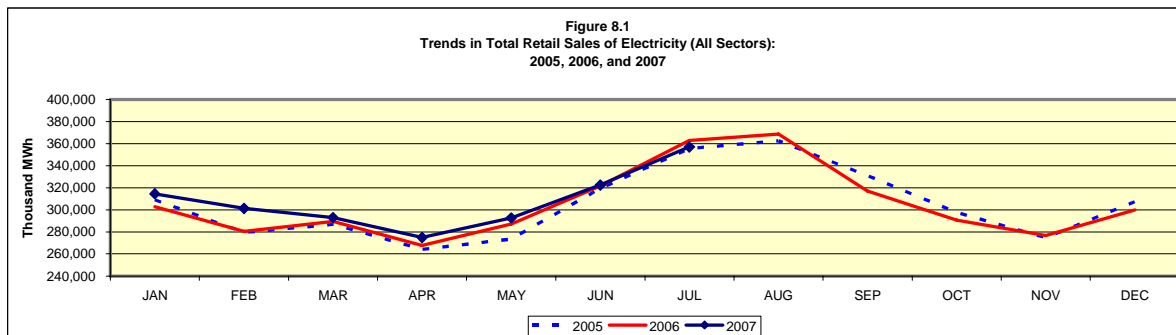
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2007	July 2007	798,662	774,918	576,974	4,920	2,155,473
Prior Period	January 2006	July 2006	780,948	744,250	582,305	4,751	2,112,254
Percent Difference			2.3%	4.1%	-0.9%	3.6%	2.0%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2006	July 2007	1,371,946	1,331,519	996,598	8,255	3,708,318
Prior Period	August 2005	July 2006	1,368,918	1,296,008	1,012,439	7,910	3,685,275
Percent Difference			0.2%	2.7%	-1.6%	4.4%	0.6%



Section 9. Average Retail Price Trends

Data for:
July 2007

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

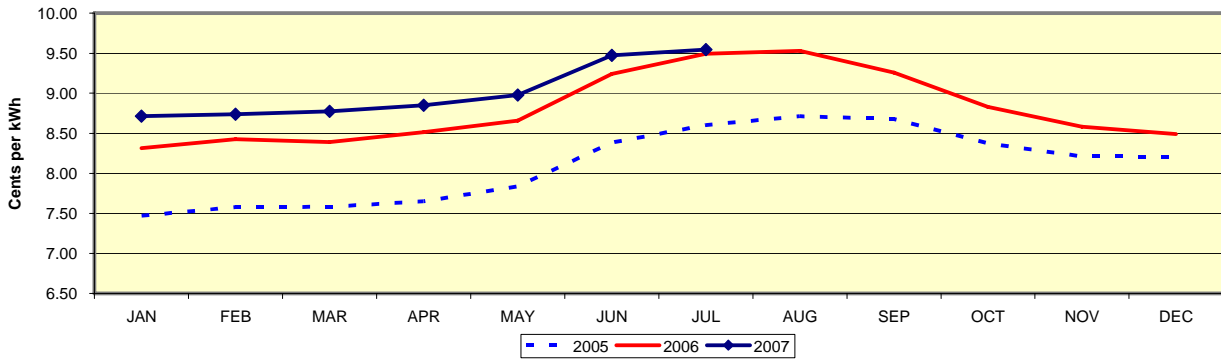
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2007	July 2007	10.52	9.50	6.32	9.82	9.03
Prior Period	January 2006	July 2006	10.31	9.27	6.02	8.84	8.76
Percent Difference			2.0%	2.5%	5.0%	11.1%	3.1%

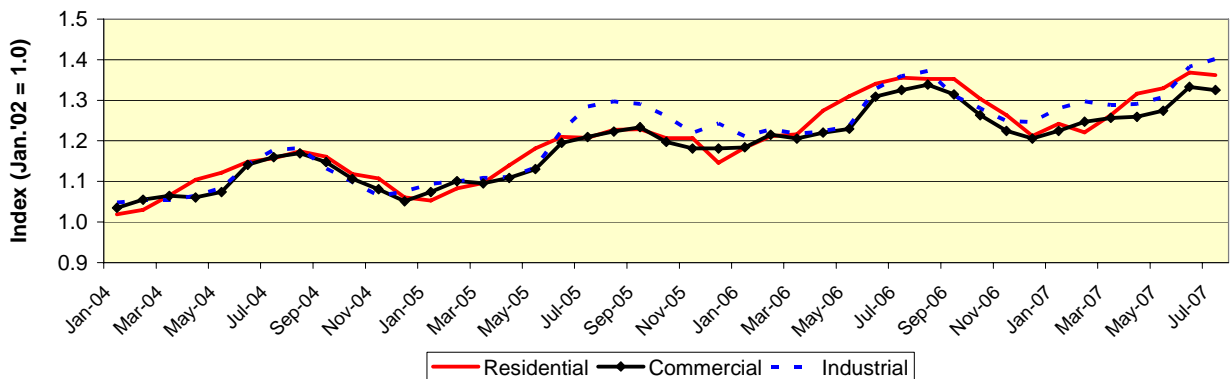
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2006	July 2007	10.52	9.49	6.26	9.64	9.01
Prior Period	August 2005	July 2006	10.06	9.14	6.03	8.85	8.63
Percent Difference			4.6%	3.8%	3.8%	8.9%	4.4%

**Figure 9.1 Trends in Average Retail Price of Electricity (All Sectors):
2005, 2006, and 2007**



**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:
July 2007

Table 10.1 Degree Days

		Heating Degree Days				Cooling Degree Days			
	Month	Heating Degree Days	Normal Heating Degree Days	Deviation From Normal	Percent Difference From Normal	Cooling Degree Days	Normal Cooling Degree Days	Deviation From Normal	Percent Difference From Normal
Current Period	July 2007	7	9	-2	-22.2%	319	323	-4	-1.2%
Prior Period	July 2006	2	9	-7	-77.8%	388	323	65	20.1%
Percent Difference		250.0%				-17.8%			

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	July 2007	2,713	737	Current Period	August 2006	July 2007	4,265	1,283
Prior Period	January 2006	July 2006	2,444	822	Prior Period	August 2005	July 2006	4,057	1,467
Percent Difference			11.0%	-10.3%	Percent Difference			5.1%	-12.5%

Figure 10.1 Deviation From Normal: Heating Degree Days, 2007

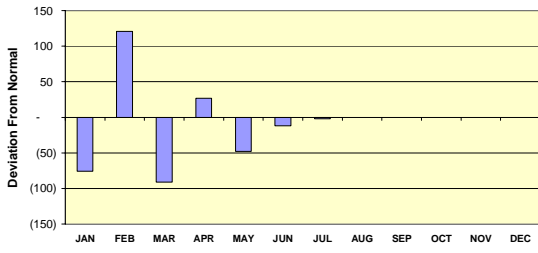


Figure 10.2 Deviation From Normal: Cooling Degree Days, 2007

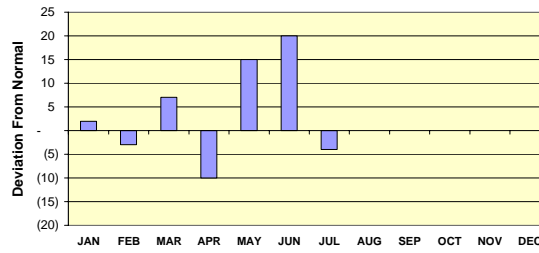


Figure 10.3 Trend in Heating Degree Days: 2006, 2007, and Normal

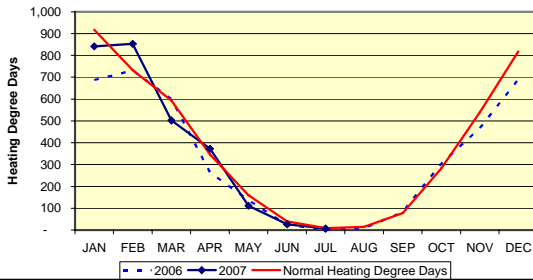


Figure 10.4 Trend in Cooling Degree Days: 2006, 2007, and Normal

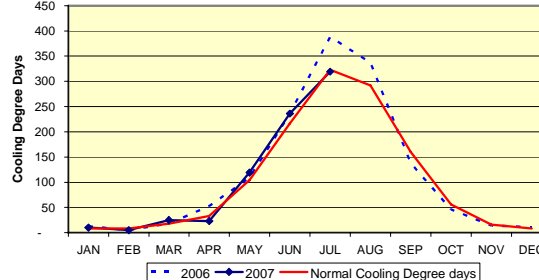


Figure 10.5 Trend in Cumulative Heating Degree Days: 2006, 2007, and Normal

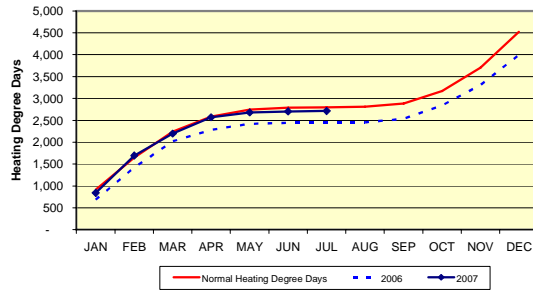
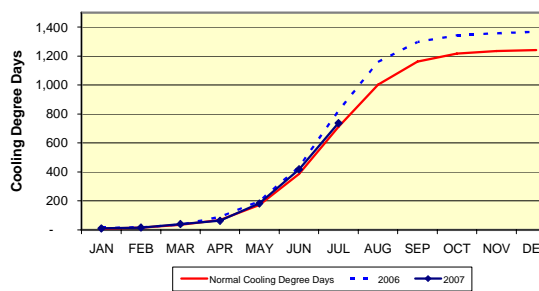


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2006, 2007, and Normal



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).