

Monthly Flash Estimates of Electric Power Data

Data for:
July 2010

Section 1. Commentary

The contiguous United States, as a whole, experienced temperatures that were significantly above average in July 2010. Accordingly, the total population-weighted cooling degree days for the United States were 19.9 percent above the July normal.

Retail sales of electricity increased 9.5 percent compared to July 2009. Over the same period, the average U.S. retail price of electricity increased 1.3 percent. For the 12-month period ending July 2010, the U.S. average retail price of electricity decreased 1.4 percent over the previous 12-month period ending July 2009.

In July 2010, total electric power generation in the United States increased 9.2 percent compared to July 2009. Over the same period, coal generation increased 12.4 percent, and natural gas generation increased 11.4 percent. Petroleum liquids generation had the largest percentage change, increasing 39.3 percent. This large increase in petroleum liquids generation was the result of an increased need for peaking generation due to the significantly above average temperatures experienced throughout the contiguous United States in July 2010. Nuclear generation decreased 1.4 percent compared to July 2009 mainly because of refueling and maintenance outages that occurred in July 2010 at the Crystal River, H B Robinson, and PPL Susquehanna nuclear plants.

Consistent with the year-over-year increase in coal generation, the consumption of coal to produce electricity increased 11.5 percent when compared to July 2009. Over the same time period, petroleum liquids consumption increased 41.7 percent, while natural gas consumption increased 14.5 percent.

Total coal stocks decreased 7.9 percent from the previous month. The month-to-month change in total coal stocks observed over the first half of 2010 is an indication that Electric Power sector coal stocks are assuming a seasonal pattern that more closely resembles what was observed prior to 2009.

References for weather data:

<http://www.ncdc.noaa.gov/oa/climate/research/2010/jul/national.html>

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
July 2010

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
June 2010	8.1%	5.3%	-18.0%
July 2009	9.2%	-1.4%	4.7%
Year to Date	4.4%	-1.3%	-6.2%
Latest 12 Month Period*	1.6%	-2.4%	0.7%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
June 2010	24.8%	7.8%	-7.9%
July 2009	14.5%	11.5%	-14.3%
Year to Date	7.6%	6.3%	--
Latest 12 Month Period*	7.4%	0.0%	--

* Change in total consumption or generation for the latest 12 month period (August 2009 to July 2010) compared to the prior 12 month period (August 2008 to July 2009).

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

**Data for:
July 2010**

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Jul-10	Jul-09	% Change	Jun-10	% Change
Coal	178,796	159,099	12.4%	166,162	7.6%
Petroleum Liquids	2,962	2,126	39.3%	2,697	9.8%
Natural Gas	113,107	101,570	11.4%	92,824	21.9%
Nuclear	71,913	72,949	-1.4%	68,301	5.3%
Hydroelectric Conventional	24,014	22,930	4.7%	29,294	-18.0%
All Other	15,796	13,575	16.4%	16,938	-6.7%
Total (All Energy Sources)	406,589	372,249	9.2%	376,216	8.1%

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-10	Jul-09	% Change	Jun-10	% Change
Coal (Thousand Short Tons)	94,401	84,658	11.5%	87,543	7.8%
Petroleum Liquids (Thousand Barrels)	5,196	3,667	41.7%	4,527	14.8%
Natural Gas (Million Cubic Feet)	915,830	799,742	14.5%	733,670	24.8%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jul-10	Jul-09	% Change	Jun-10	% Change
Coal (Thousand Short Tons)	165,953	193,702	-14.3%	180,172	-7.9%
Petroleum Liquids (Thousand Barrels)	35,314	40,371	-12.5%	36,365	-2.9%

Notes:

- Coal consumption and generation includes subbituminous coal, bituminous coal, anthracite, lignite, and waste coal.
- Coal stocks include the coal categories listed immediately above, except for waste coal. The bituminous category includes anthracite.
- 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, only waste oil is excluded.
- 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 2010

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 2010	July 2010	1,089,349	14,348	546,269	466,905	159,738	113,539	2,390,148
Prior Period	January 2009	July 2009	1,016,680	16,989	513,142	473,038	170,304	100,355	2,290,508
Percent Difference			7.1%	-15.5%	6.5%	-1.3%	-6.2%	13.1%	4.4%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	August 2009	July 2010	1,837,155	23,151	953,504	792,612	261,565	184,764	4,052,751
Prior Period	August 2008	July 2009	1,832,521	29,917	891,053	811,869	259,711	164,972	3,990,043
Percent Difference			0.3%	-22.6%	7.0%	-2.4%	0.7%	12.0%	1.6%

Figure 4.1 Trends in Total Net Generation (All Sectors): 2008, 2009, and 2010

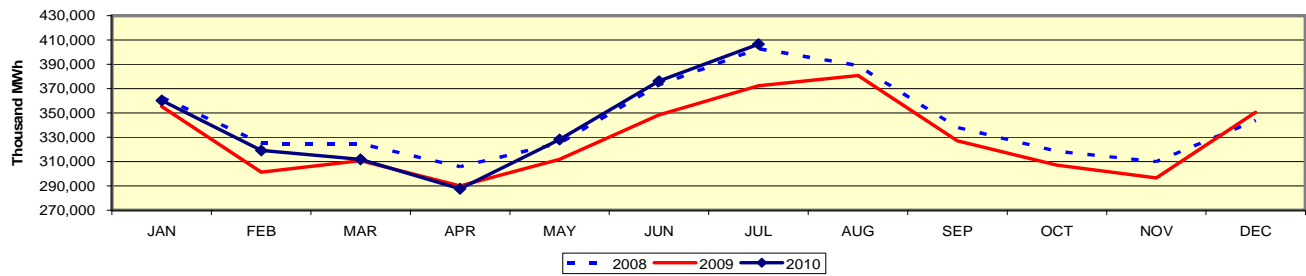


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

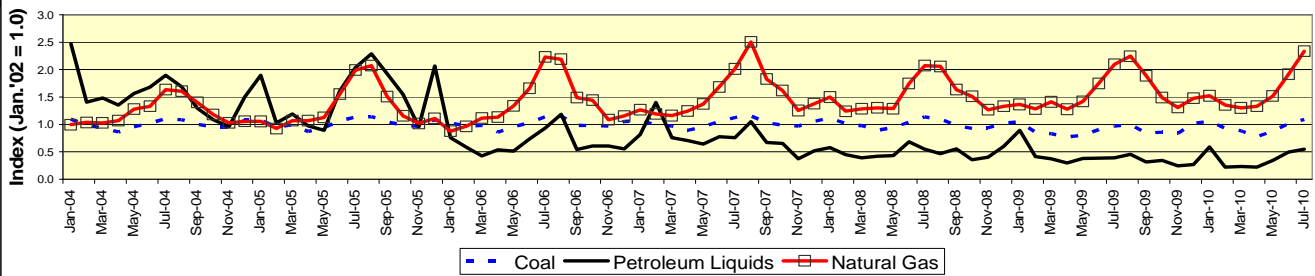
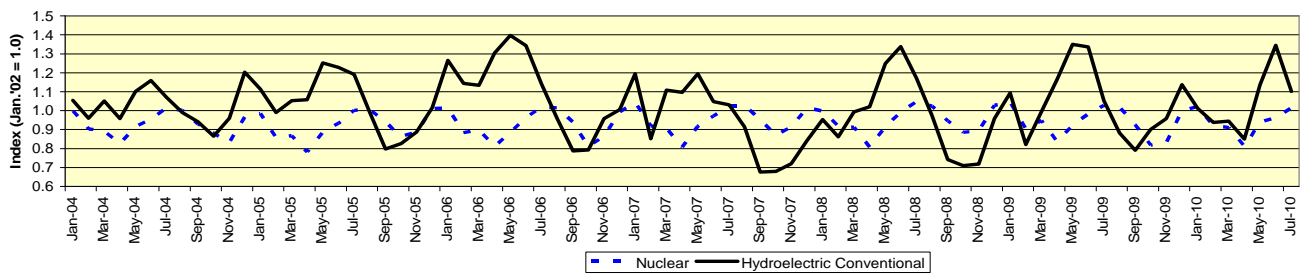


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
July 2010

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 2010	July 2010	573,522	24,661	4,259,723
Prior Period	January 2009	July 2009	539,775	28,806	3,960,166
Percent Difference			6.3%	-14.4%	7.6%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	August 2009	July 2010	971,807	39,527	7,404,157
Prior Period	August 2008	July 2009	971,604	50,567	6,893,864
Percent Difference			0.0%	-21.8%	7.4%

Figure 5.1 Trend in Total Coal Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

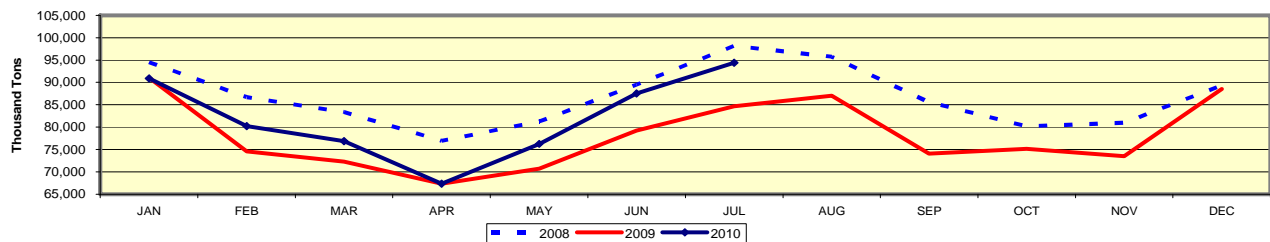


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

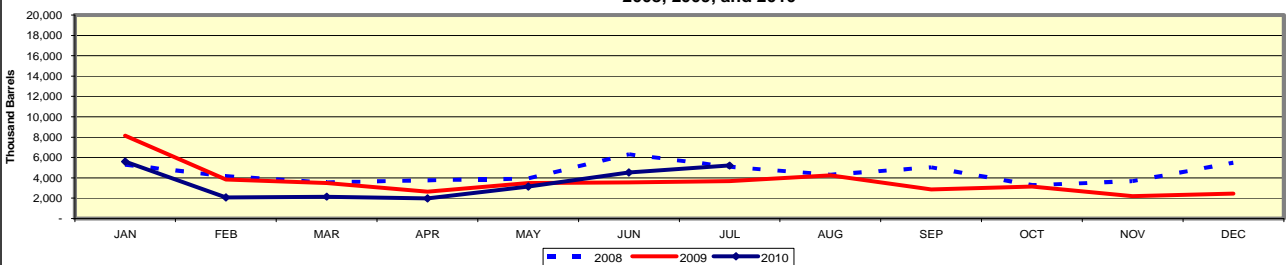
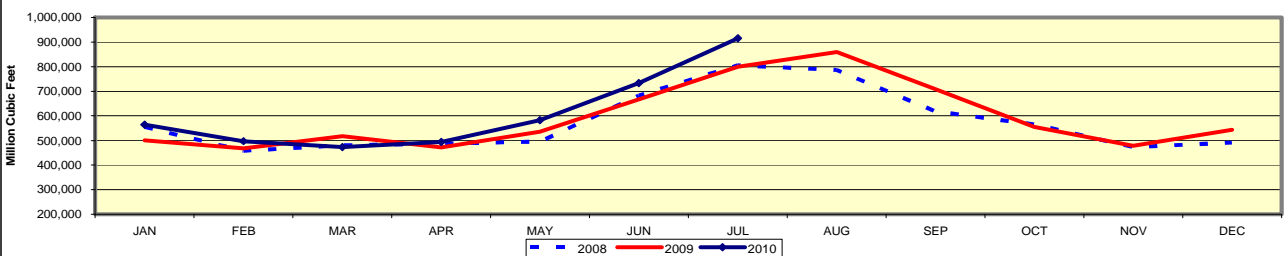


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

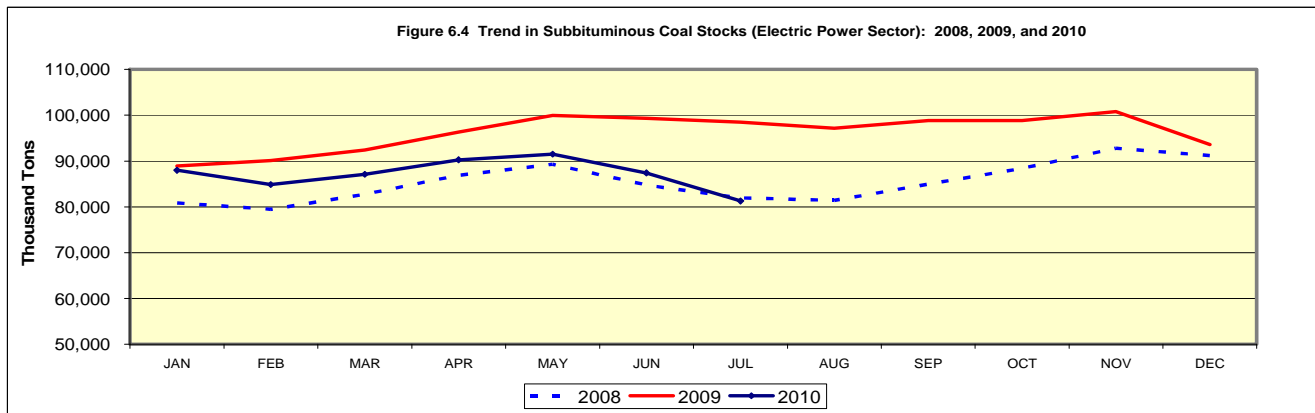
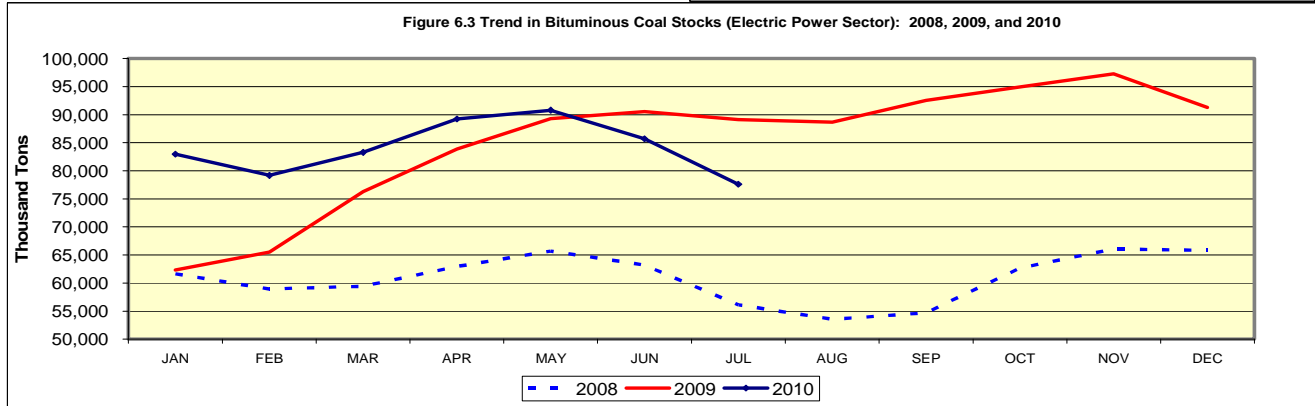
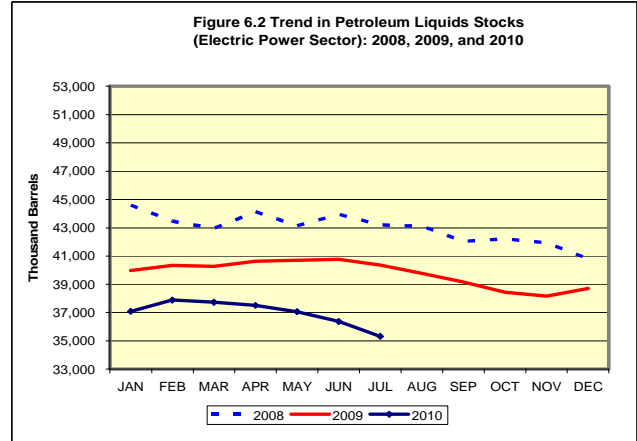
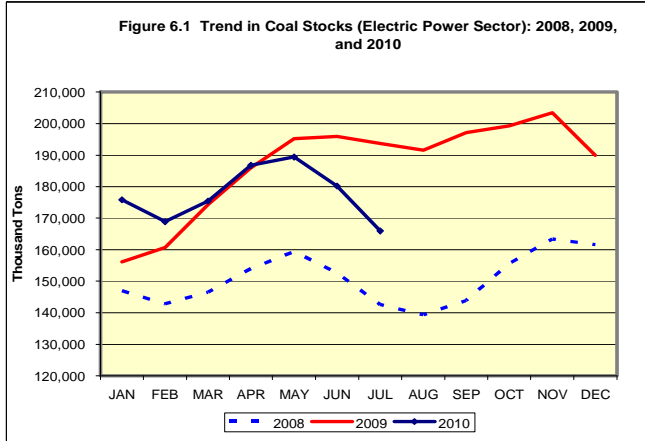


Section 6. Fossil Fuel Stock Trends

Data for:
July 2010

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

Fossil Fuel Stocks	Jul-10	Jul-09	% Change	Jun-10	% Change
Coal, Total (Thousand Short Tons)	165,953	193,702	-14.3%	180,172	-7.9%
Bituminous (includes anthracite and coal synfuel)	77,630	89,129	-12.9%	85,716	-9.4%
Subbituminous	81,290	98,472	-17.4%	87,398	-7.0%
Lignite	7,034	6,101	15.3%	7,058	-0.3%
Petroleum Liquids (Thousand Barrels)	35,314	40,371	-12.5%	36,365	-2.9%



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

Data for:
July 2010

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Jul-10	Jul-09	% Change	Jun-10	% Change
Residential	155,183	137,467	12.9%	126,975	22.2%
Commercial	129,778	123,010	5.5%	120,372	7.8%
Industrial	82,380	75,032	9.8%	79,841	3.2%
Transportation	656	656	0.0%	652	0.6%
All Sectors	367,997	336,166	9.5%	327,840	12.2%

Average Retail Price

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

Ultimate Customer	Jul-10	Jul-09	% Change	Jun-10	% Change
Residential	12.02	11.90	1.0%	11.92	0.8%
Commercial	10.71	10.63	0.8%	10.46	2.4%
Industrial	7.31	7.13	2.5%	7.01	4.3%
Transportation	11.34	11.41	-0.6%	11.35	-0.1%
All Sectors	10.50	10.37	1.3%	10.19	3.0%

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

Census Division	Residential			All Sectors		
	Jul-10	Jul-09	% Change	Jul-10	Jul-09	% Change
New England	16.12	17.32	-6.9%	15.00	15.56	-3.6%
Middle Atlantic	16.72	16.29	2.6%	14.78	13.98	5.7%
East North Central	11.67	11.15	4.7%	9.50	9.21	3.1%
West North Central	10.66	10.03	6.3%	9.00	8.48	6.1%
South Atlantic	11.34	11.52	-1.6%	10.03	10.09	-0.6%
East South Central	9.79	9.64	1.6%	8.57	8.42	1.8%
West South Central	11.02	11.35	-2.9%	9.13	9.42	-3.1%
Mountain	11.30	10.87	4.0%	9.48	9.23	2.7%
Pacific Contiguous	13.31	13.58	-2.0%	12.65	12.71	-0.5%
Pacific Noncontiguous	24.26	21.22	14.3%	21.69	18.56	16.9%
U.S. Total	12.02	11.90	1.0%	10.50	10.37	1.3%

Section 8. Retail Sales Trends

Data for:
July 2010

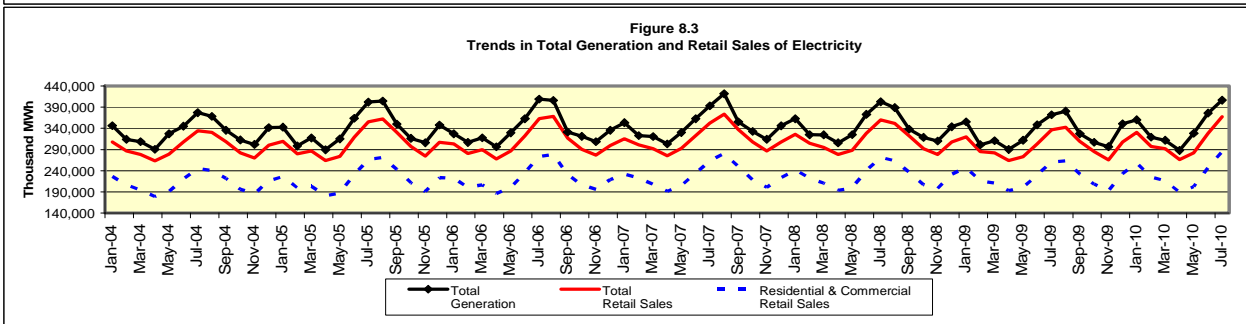
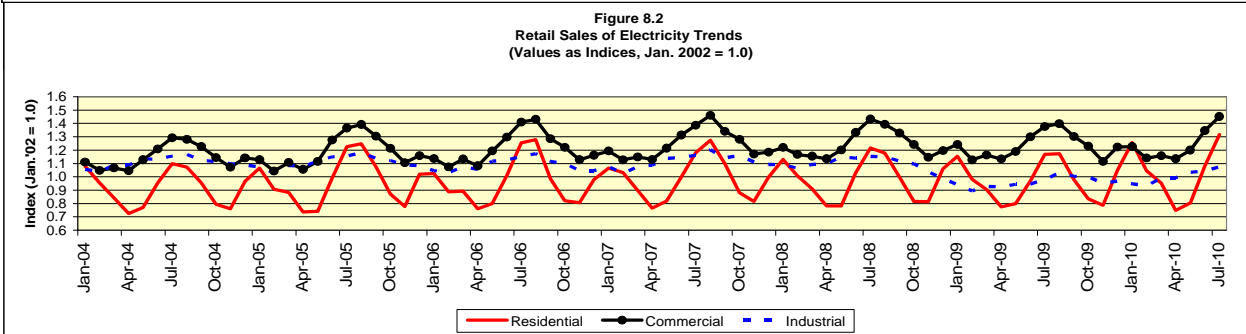
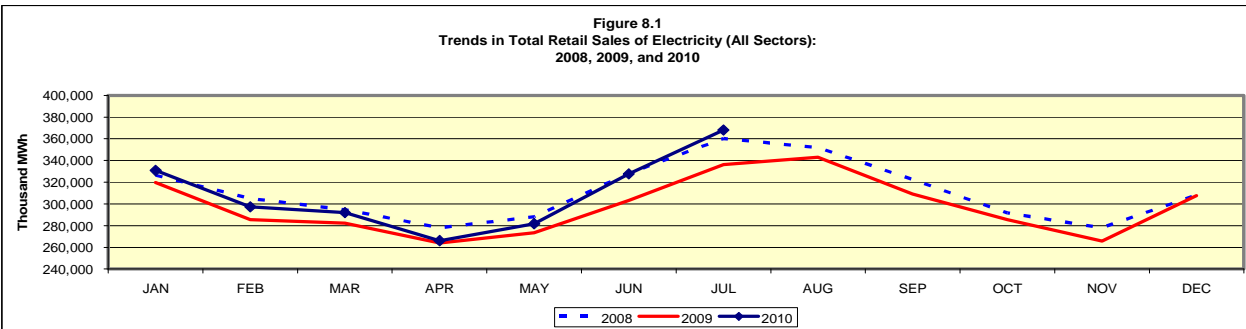
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	July 2010	848,282	773,842	537,441	4,589	2,164,153
Prior Period	January 2009	July 2009	794,928	762,766	502,250	4,518	2,064,462
Percent Difference			6.7%	1.5%	7.0%	1.6%	4.8%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2009	July 2010	1,416,223	1,334,065	917,094	7,759	3,675,141
Prior Period	August 2008	July 2009	1,368,042	1,326,220	914,830	7,713	3,616,805
Percent Difference			3.5%	0.6%	0.2%	0.6%	1.6%



Section 9. Average Retail Price Trends

Data for:
July 2010

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

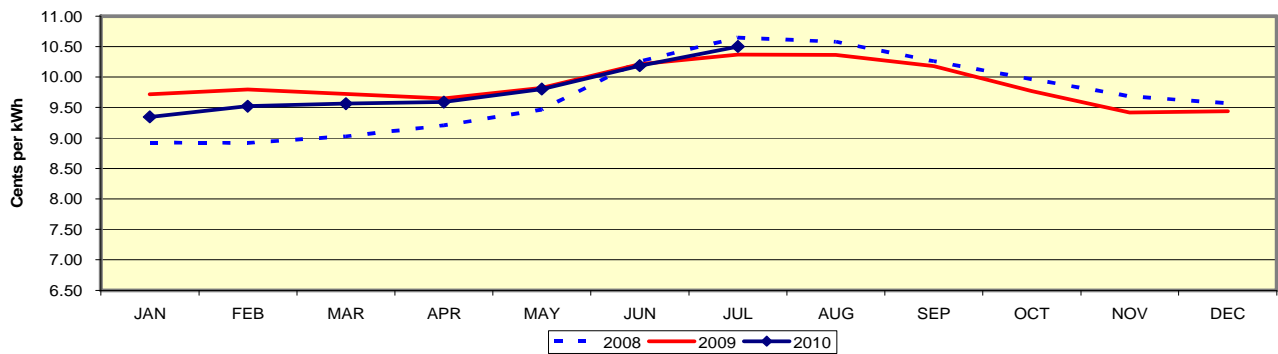
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	July 2010	11.45	10.14	6.75	11.07	9.81
Prior Period	January 2009	July 2009	11.50	10.22	6.92	11.36	9.91
Percent Difference			-0.4%	-0.8%	-2.5%	-2.6%	-1.0%

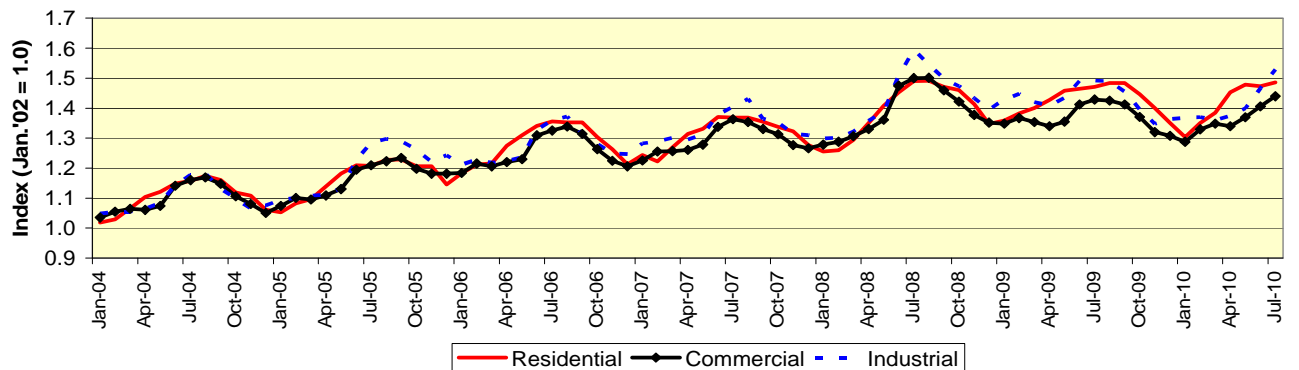
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2009	July 2010	11.51	10.16	6.75	11.00	9.83
Prior Period	August 2008	July 2009	11.55	10.39	6.97	11.22	9.97
Percent Difference			-0.3%	-2.2%	-3.2%	-2.0%	-1.4%

**Figure 9.1 Trends in Average Retail Price of Electricity (All Sectors):
2008, 2009, and 2010**



**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 2010

Table 10.1 Degree Days

	Month	Heating Degree Days				Cooling Degree Days			
		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 2010	5	9	-4	-44.4%	385	321	64	19.9%
Prior Period	July 2009	14	9	5	55.6%	284	321	-37	-11.5%
Percent Difference									

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 2010	July 2010	2,745	841	Current Period	August 2009	July 2010	4,465	1,387
Prior Period	January 2009	July 2009	2,773	683	Prior Period	August 2008	July 2009	4,484	1,205
Percent Difference					Percent Difference				

Figure 10.1 Deviation From Normal: Heating Degree Days, 2010

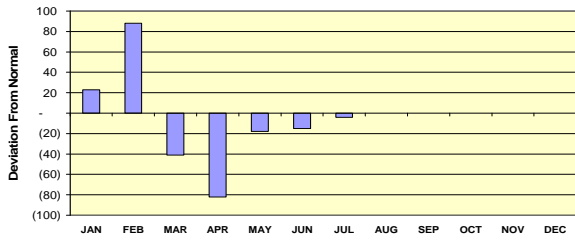


Figure 10.2 Deviation From Normal: Cooling Degree Days, 2010

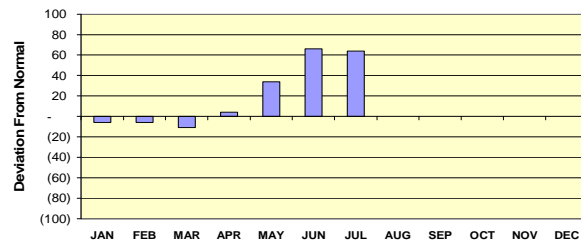


Figure 10.3 Trend in Heating Degree Days: 2009, 2010, and Normal

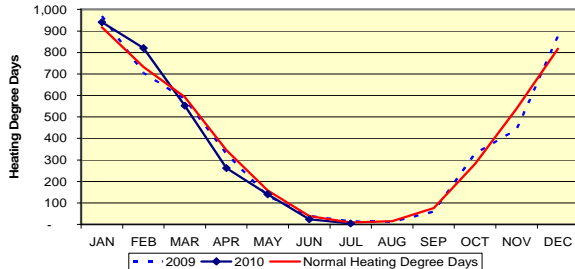


Figure 10.4 Trend in Cooling Degree Days: 2009, 2010, and Normal

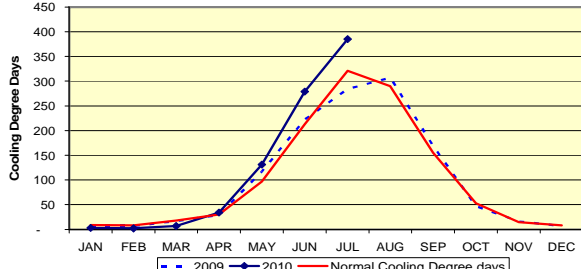


Figure 10.5 Trend in Cumulative Heating Degree Days: 2009, 2010, and Normal

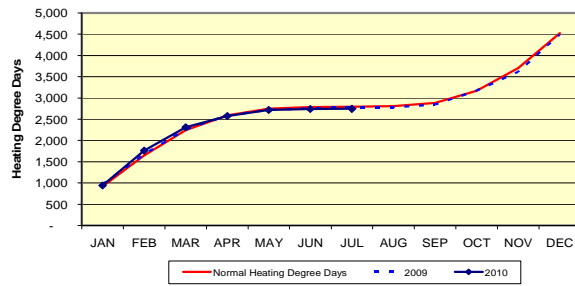
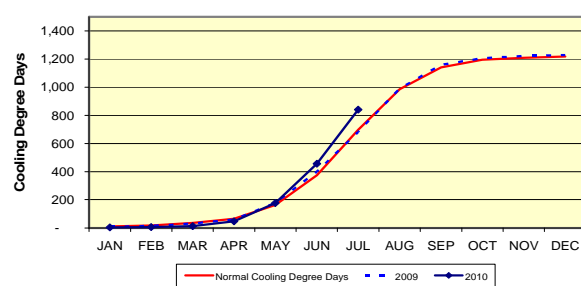


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2009, 2010, and Normal



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, U.S. Energy Information Administration (EIA), U.S. Department of Energy. Data published in the Flash Estimates are compiled from the following sources: U.S. Energy Information Administration, Form EIA-826, "Monthly Electric Utility Sales and Revenues with State Distributions Report," and U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

The survey data are collected monthly using multiple-attribute cutoff sampling of power plants and electric retailers for the purpose of estimation for various data elements (generation, stocks, revenue, etc.), for various categories, such as geographic regions. (The data elements and categories are "attributes.") The nominal sample sizes are: for the Form EIA-826, approximately 450 electric utilities and other energy service providers; for the Form EIA-923, approximately 1590 plants. Regression-based (i.e., "prediction") methodologies are used to estimate totals from the sample. Essentially complete samples are collected for the *Electric Power Monthly* (EPM), which includes State-level values. The Flash Estimates is based on an incomplete sample and includes only national-level estimates. Using 'prediction,' it is generally possible to make estimates based on the incomplete EPM sample, and still estimate variances.

For complete documentation on EIA monthly electric data collection and estimation, see the Technical Notes to the *Electric Power Monthly*, at: <http://www.eia.gov/cneaf/electricity/epm/epm.pdf>. Values displayed in the Flash Estimates may differ from values published in the *Electric Power Monthly* due to the additional data collection and data revisions that may occur between the releases of these two publications. 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).