

Monthly Flash Estimates of Electric Power Data

Data for:
August 2010

Section 1. Commentary

The contiguous United States, as a whole, experienced temperatures that were significantly above average in August 2010. Accordingly, the total population-weighted cooling degree days for the United States were 22.8 percent above the August normal.

Retail sales of electricity increased 8.1 percent compared to August 2009. Over the same period, the average U.S. retail price of electricity increased 1.0 percent. For the 12-month period ending August 2010, the U.S. average retail price of electricity decreased 0.9 percent over the previous 12-month period ending August 2009.

In August 2010, total electric power generation in the United States increased 7.3 percent compared to August 2009. Over the same period, coal generation increased 8.7 percent, and natural gas generation increased 11.5 percent. Petroleum liquids generation decreased 3.0 percent as a result of the increased cost of petroleum liquids as a fuel used in electricity generation. For example, the price for West Texas Intermediate crude oil increased 7.8 percent from August 2009 to August 2010. Nuclear generation decreased 0.9 percent compared to August 2009 mainly because of outages and de-rates that occurred in August 2010 at several nuclear plants, in particular the Browns Ferry, Crystal River, Braidwood, Arkansas Nuclear One, and Saint Lucie plants.

Consistent with the year-over-year increase in coal generation, the consumption of coal to produce electricity increased 9.1 percent when compared to August 2009. Over the same time period, petroleum liquids consumption decreased 1.3 percent, while natural gas consumption increased 13.0 percent.

Total coal stocks decreased 6.5 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 resembles what was observed in 2008 and prior years.

References for weather data:

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

References for petroleum prices:

http://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm

Table of Contents

1. Commentary	Page 1
2. Key Indicators of Generation, Consumption & Stocks	Page 2
3. Month-to-Month Comparisons: Generation, Consumption and Stocks (Total)	Page 3
4. Net Generation Trends	Page 4
5. Fossil Fuel Consumption Trends	Page 5
6. Fossil Fuel Stock Trends	Page 6
7. Month-to-Month Comparisons: Electric Power Retail Sales and Average Prices	Page 7
8. Retail Sales Trends	Page 8
9. Average Retail Price Trends	Page 9
10. Heating and Cooling Degree Days	Page 10
11. Documentation	Page 11

This report was prepared by the U.S. Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the U.S. Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization. For additional information, contact Chris Cassar at 202-586-5448, or at Christopher.Cassar@eia.gov.



Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
August 2010

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
July 2010	-0.3%	-0.5%	-17.9%
August 2009	7.3%	-0.9%	2.6%
Year to Date	4.9%	-1.2%	-5.3%
Latest 12 Month Period*	2.6%	-2.4%	1.7%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
July 2010	5.2%	-0.3%	-6.5%
August 2009	13.0%	9.1%	-17.9%
Year to Date	8.7%	6.8%	--
Latest 12 Month Period*	8.0%	1.8%	--

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

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

Data for:
August 2010

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Aug-10	Aug-09	% Change	Jul-10	% Change
Coal	178,368	164,078	8.7%	180,402	-1.1%
Petroleum Liquids	2,391	2,464	-3.0%	3,000	-20.3%
Natural Gas	121,246	108,724	11.5%	114,896	5.5%
Nuclear	71,574	72,245	-0.9%	71,913	-0.5%
Hydroelectric Conventional	19,718	19,215	2.6%	24,023	-17.9%
All Other	15,582	14,163	10.0%	15,818	-1.5%
Total (All Energy Sources)	408,880	380,890	7.3%	410,053	-0.3%

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	Aug-10	Aug-09	% Change	Jul-10	% Change
Coal (Thousand Short Tons)	94,917	87,039	9.1%	95,221	-0.3%
Petroleum Liquids (Thousand Barrels)	4,176	4,230	-1.3%	5,252	-20.5%
Natural Gas (Million Cubic Feet)	971,934	860,143	13.0%	923,688	5.2%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Aug-10	Aug-09	% Change	Jul-10	% Change
Coal (Thousand Short Tons)	157,228	191,611	-17.9%	168,208	-6.5%
Petroleum Liquids (Thousand Barrels)	35,102	39,762	-11.7%	35,397	-0.8%

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:
August 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	August 2010	1,269,323	16,777	669,304	538,479	179,465	129,144	2,802,492
Prior Period	January 2009	August 2009	1,180,759	19,452	621,867	545,282	189,519	114,519	2,671,398
Percent Difference			7.5%	-13.8%	7.6%	-1.2%	-5.3%	12.8%	4.9%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	September 2009	August 2010	1,853,050	23,117	967,816	791,941	262,077	186,204	4,084,205
Prior Period	September 2008	August 2009	1,816,023	29,834	900,104	811,496	257,696	166,793	3,981,946
Percent Difference			2.0%	-22.5%	7.5%	-2.4%	1.7%	11.6%	2.6%

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

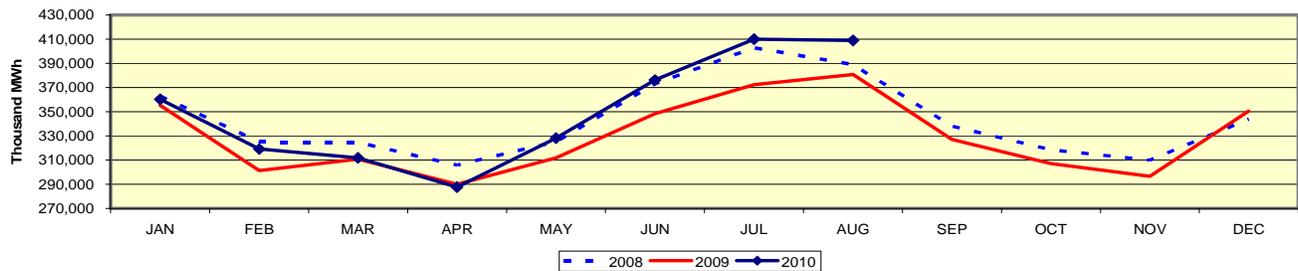


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

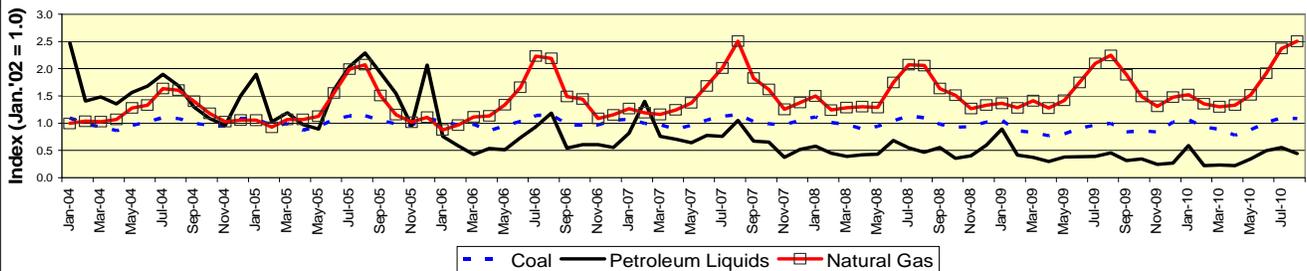
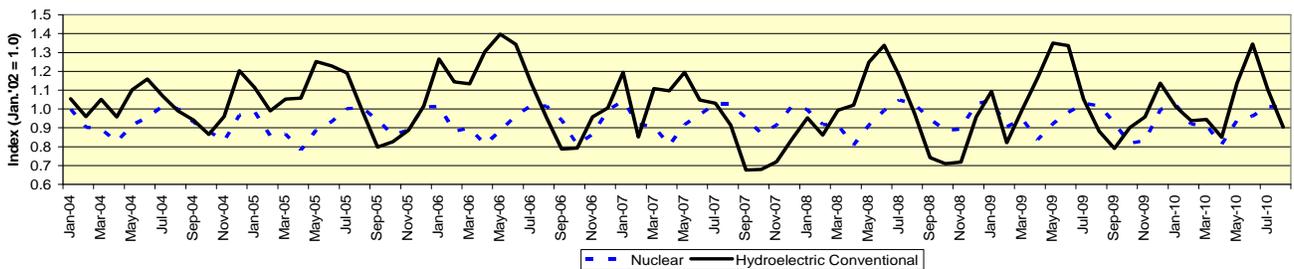


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
August 2010

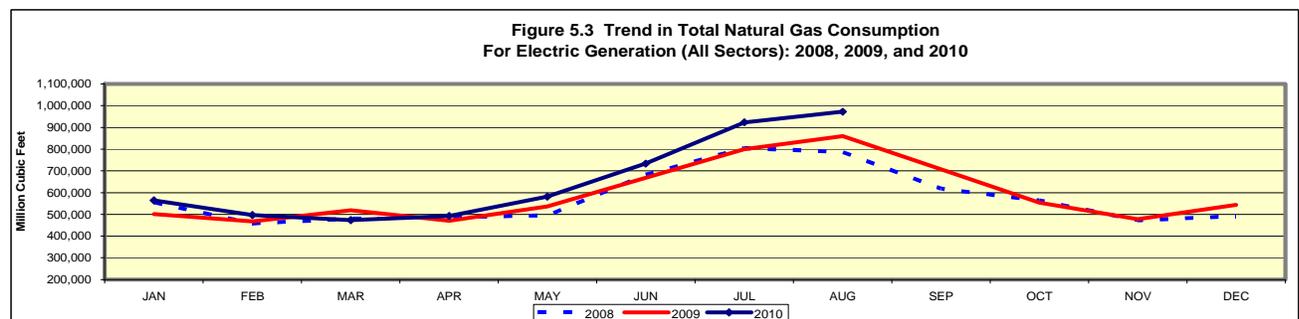
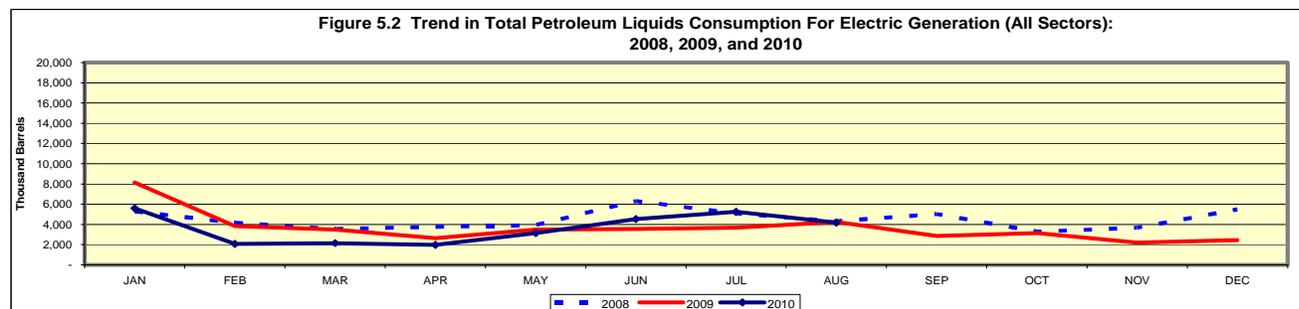
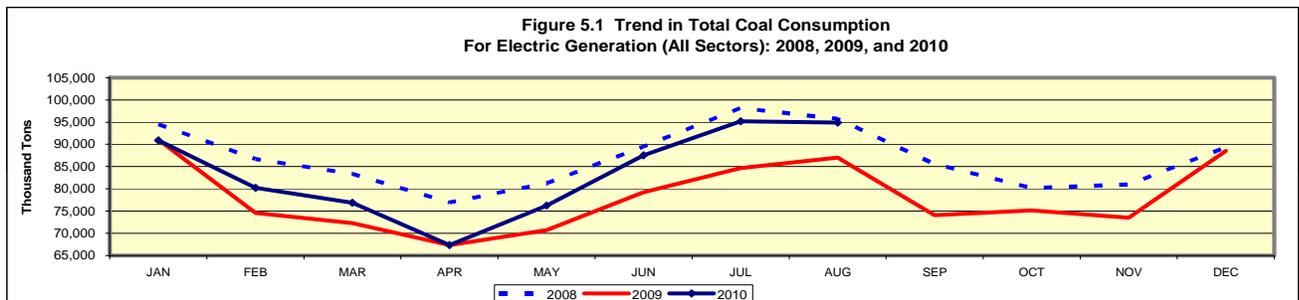
Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2010	August 2010	669,259	28,892	5,239,515
Prior Period	January 2009	August 2009	626,814	33,036	4,820,310
Percent Difference			6.8%	-12.5%	8.7%

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 2009	August 2010	980,504	39,528	7,523,805
Prior Period	September 2008	August 2009	962,891	50,493	6,967,560
Percent Difference			1.8%	-21.7%	8.0%

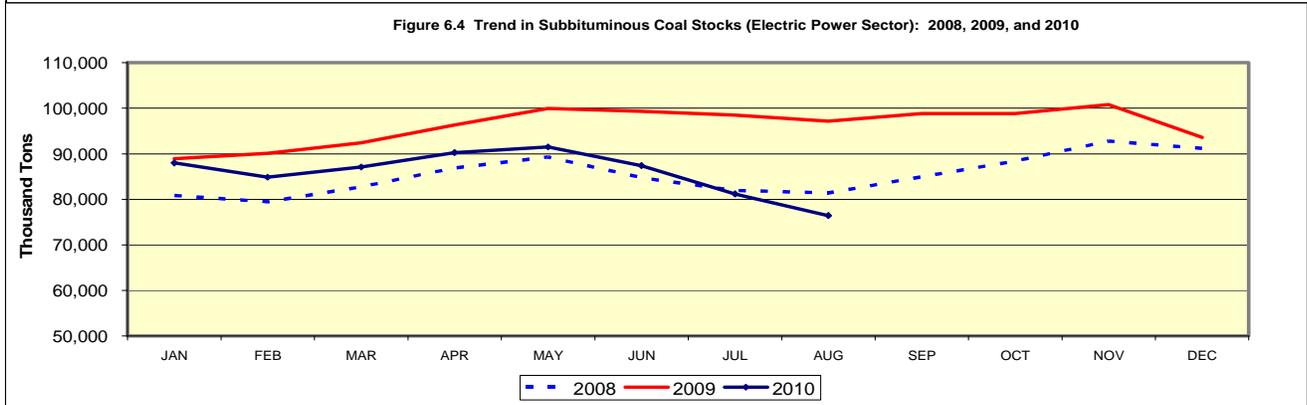
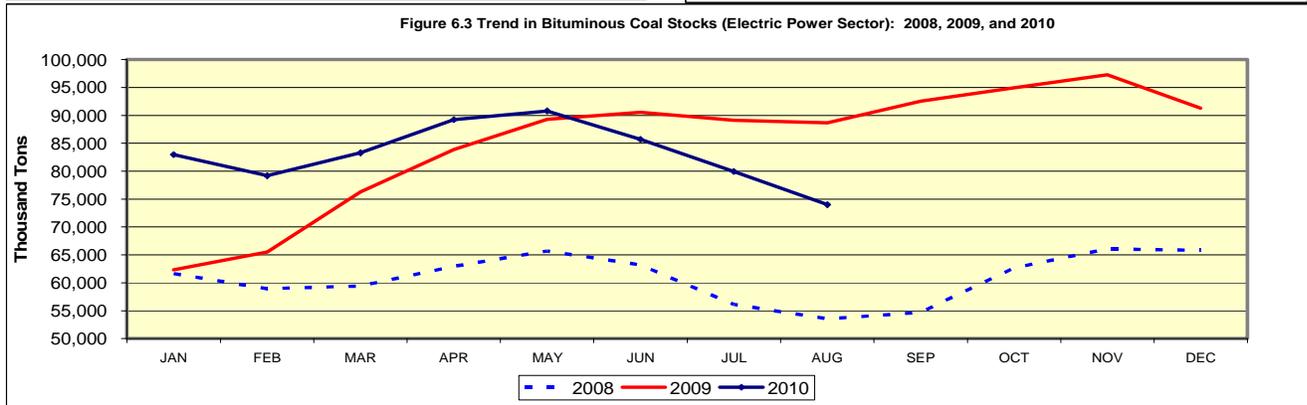
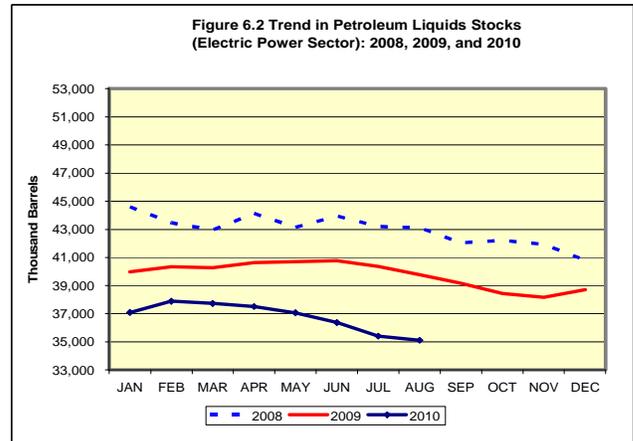
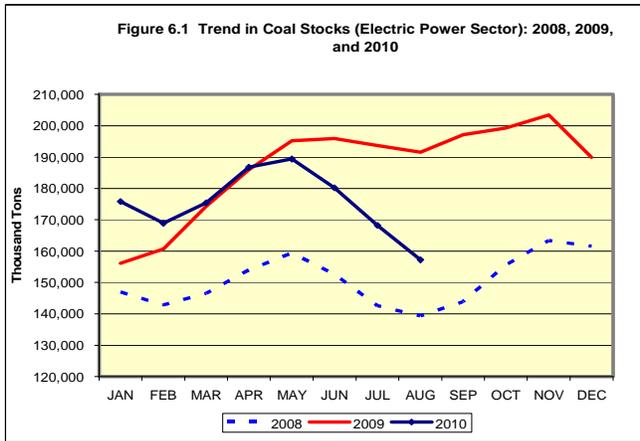


Section 6. Fossil Fuel Stock Trends

Data for:
August 2010

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

Fossil Fuel Stocks	Aug-10	Aug-09	% Change	Jul-10	% Change
Coal, Total (Thousand Short Tons)	157,228	191,611	-17.9%	168,208	-6.5%
Bituminous (includes anthracite and coal synfuel)	73,987	88,689	-16.6%	79,937	-7.4%
Subbituminous	76,438	97,142	-21.3%	81,201	-5.9%
Lignite	6,804	5,780	17.7%	7,070	-3.8%
Petroleum Liquids (Thousand Barrels)	35,102	39,762	-11.7%	35,397	-0.8%



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

Data for:
August 2010

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Aug-10	Aug-09	% Change	Jul-10	% Change
Residential	154,783	138,290	11.9%	155,325	-0.3%
Commercial	130,792	124,975	4.7%	129,895	0.7%
Industrial	84,359	79,016	6.8%	82,498	2.3%
Transportation	610	633	-3.7%	658	-7.3%
All Sectors	370,544	342,915	8.1%	368,375	0.6%

Average Retail Price

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

Ultimate Customer	Aug-10	Aug-09	% Change	Jul-10	% Change
Residential	12.02	12.00	0.2%	12.01	0.1%
Commercial	10.69	10.60	0.8%	10.70	-0.1%
Industrial	7.22	7.12	1.4%	7.31	-1.2%
Transportation	11.45	11.13	2.9%	11.59	-1.2%
All Sectors	10.46	10.36	1.0%	10.50	-0.4%

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

Census Division	Residential			All Sectors		
	Aug-10	Aug-09	% Change	Aug-10	Aug-09	% Change
New England	16.66	16.89	-1.4%	15.32	15.48	-1.0%
Middle Atlantic	16.53	16.00	3.3%	14.43	13.93	3.6%
East North Central	11.76	11.32	3.9%	9.51	9.24	2.9%
West North Central	10.55	10.15	3.9%	8.88	8.43	5.3%
South Atlantic	11.39	11.49	-0.9%	9.99	9.99	0.0%
East South Central	10.00	9.69	3.2%	8.80	8.42	4.5%
West South Central	11.02	11.17	-1.3%	9.24	9.26	-0.2%
Mountain	11.26	10.96	2.7%	9.40	9.21	2.1%
Pacific Contiguous	13.52	13.89	-2.7%	12.65	12.68	-0.2%
Pacific Noncontiguous	24.40	22.38	9.0%	21.79	19.68	10.7%
U.S. Total	12.02	12.00	0.2%	10.46	10.36	1.0%

Section 8. Retail Sales Trends

Data for:
August 2010

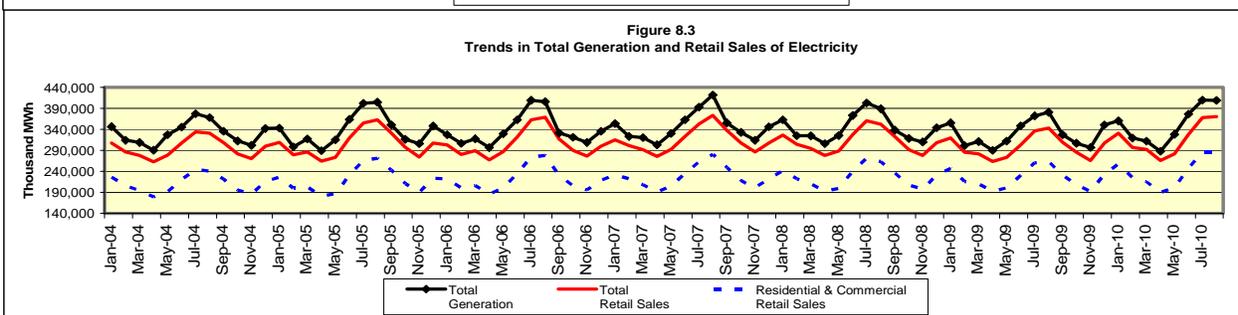
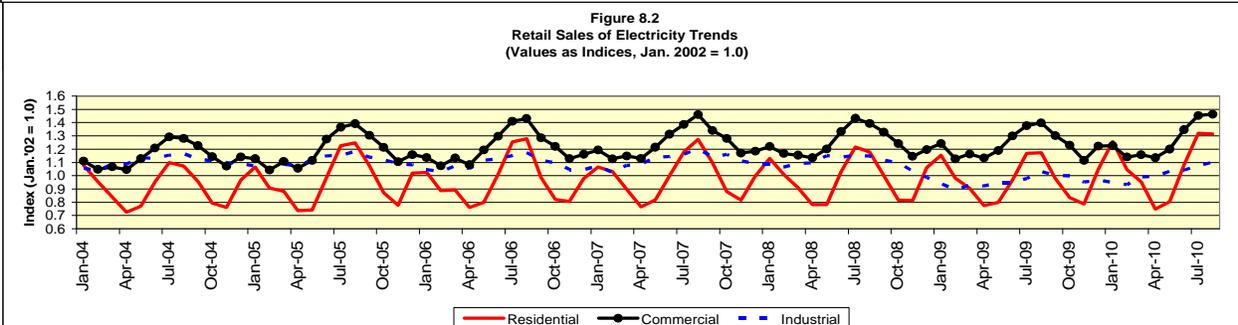
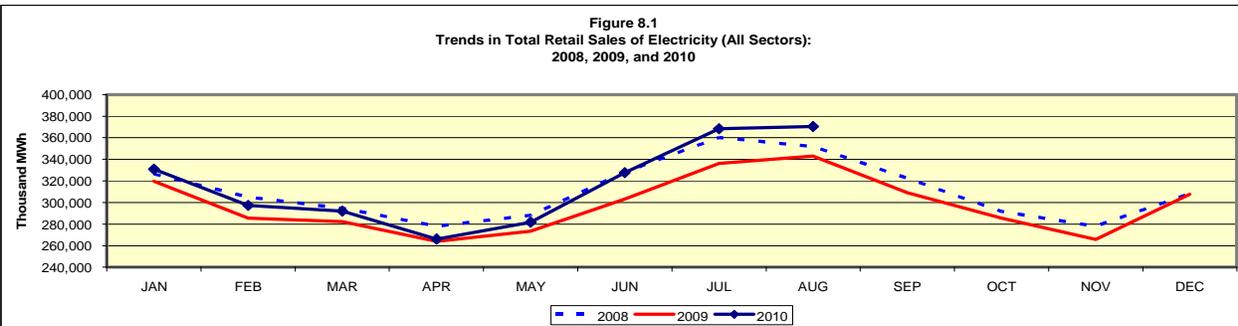
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	August 2010	1,003,207	904,750	621,918	5,200	2,535,075
Prior Period	January 2009	August 2009	933,218	887,741	581,267	5,151	2,407,377
Percent Difference			7.5%	1.9%	7.0%	1.0%	5.3%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	September 2009	August 2010	1,432,859	1,339,997	922,554	7,737	3,703,148
Prior Period	September 2008	August 2009	1,367,567	1,326,700	905,856	7,699	3,607,823
Percent Difference			4.8%	1.0%	1.8%	0.5%	2.6%



Section 9. Average Retail Price Trends

Data for:
August 2010

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

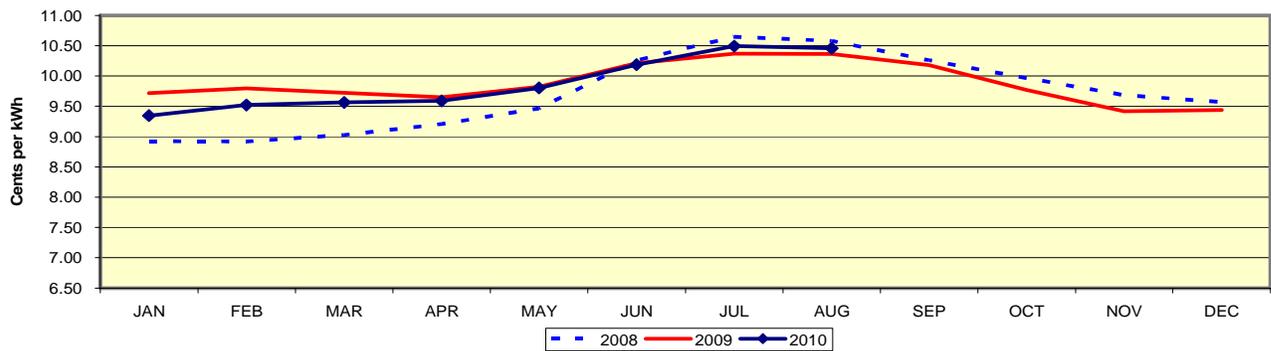
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	August 2010	11.53	10.22	6.81	11.15	9.91
Prior Period	January 2009	August 2009	11.58	10.28	6.94	11.34	9.98
Percent Difference			-0.4%	-0.6%	-1.9%	-1.7%	-0.7%

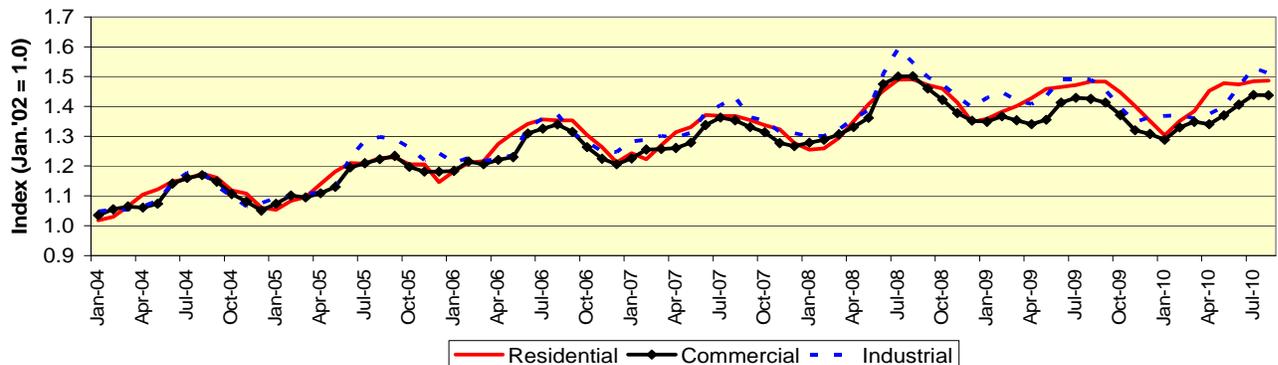
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	September 2009	August 2010	11.52	10.17	6.76	11.05	9.85
Prior Period	September 2008	August 2009	11.55	10.33	6.94	11.13	9.94
Percent Difference			-0.3%	-1.5%	-2.6%	-0.7%	-0.9%

**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:
August 2010

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	August 2010	7	15	-8	-53.3%	356	290	66	22.8%
Prior Period	August 2009	12	15	-3	-20.0%	307	290	17	5.9%
Percent Difference				-41.7%		16.0%			

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	August 2010	2,746	1,199	Current Period	September 2009	August 2010	4,454	1,438
Prior Period	January 2009	August 2009	2,785	990	Prior Period	September 2008	August 2009	4,483	1,229
Percent Difference			-1.4%	21.1%	Percent Difference			-0.6%	17.0%

Figure 10.1 Deviation From Normal: Heating Degree Days, 2010

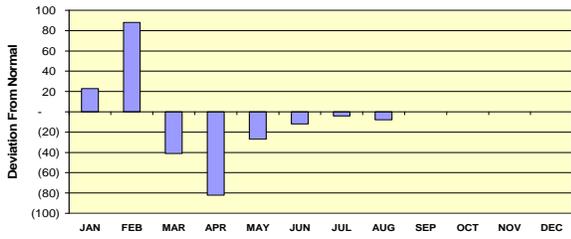


Figure 10.2 Deviation From Normal: Cooling Degree Days, 2010

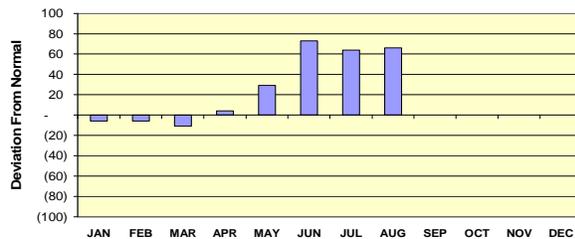


Figure 10.3 Trend in Heating Degree Days: 2009, 2010, and Normal

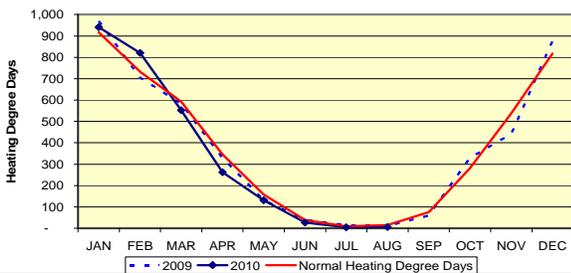


Figure 10.4 Trend in Cooling Degree Days: 2009, 2010, and Normal

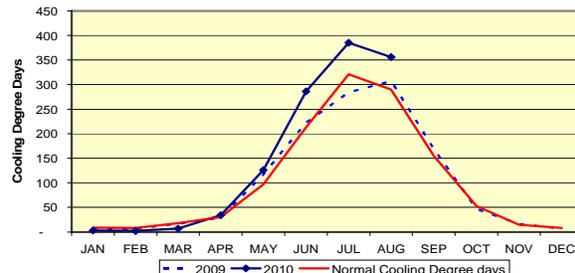


Figure 10.5 Trend in Cumulative Heating Degree Days: 2009, 2010, and Normal

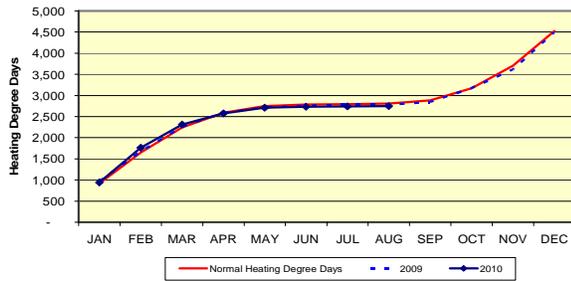
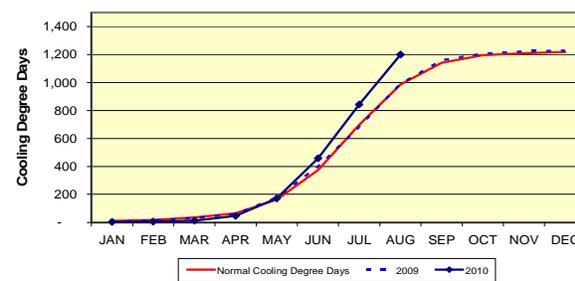


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2009, 2010, and Normal



General: The Monthly Flash Estimates of Electric Power Data ("Flash Estimates") is prepared by the Electric Power Operations Team, Office of Electricity, Renewables and Uranium Statistics, 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).