

Monthly Flash Estimates of Electric Power Data

Data for:
October 2009

Section 1. Commentary

The contiguous United States as a whole experienced temperatures that were significantly below normal in October 2009. The month ranked as the third coolest October on record with only Florida experiencing temperatures that were above normal. Accordingly, total population-weighted heating degree days for the contiguous United States were 17.4 percent above the average for the month of October.

Despite the cooler weather, retail sales of electricity decreased by 1.9 percent compared to October 2008. This decrease in retail sales was caused in part by a significant decline in industrial activity as observed by the 6.7-percent decrease in industrial retail sales over the same period. The average U.S. retail price of electricity decreased 2.3 percent in October 2009 compared to the previous year. This decrease in price can in part be attributed to lower fuel costs for natural gas used for electricity generation.

In October 2009, total electric power generation in the United States decreased 4.2 percent from October 2008. Over the same period, coal generation decreased 7.9 percent as a result of the increased cost of coal as a fuel used in electricity generation and the decrease in demand for electric power due to the economic downturn in the United States. Natural gas generation in October 2009 decreased by 1.8 percent compared to October 2008, while nuclear generation decreased 8.8 percent over the same period. The contiguous United States experienced its wettest October on record in October 2009. Accordingly, conventional hydroelectric generation was 29.8 percent higher than October 2008.

Following the year-over-year decrease in coal generation, the consumption of coal to produce electricity decreased 6.9 percent when compared to October 2008. Over the same time period, petroleum liquids consumption increased 1.7 percent, while natural gas consumption decreased 0.6 percent.

Total coal stocks in the Electric Power Sector remained at a historically high level in October 2009, increasing by 1.0 percent from the previous month. The September 2009 to October 2009 change in coal stocks consisted of a 2.2-percent increase in bituminous coal and a 0.2-percent increase in subbituminous coal. Petroleum liquid stocks decreased 1.9 percent from September 2009.

References for weather data:

<http://www.ncdc.noaa.gov/oa/climate/research/2009/oct/national.html>

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
October 2009

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
September 2009	-6.8%	-13.1%	12.0%
October 2008	-4.2%	-8.8%	29.8%
Year to Date	-4.7%	-0.4%	6.5%
Latest 12 Month Period*	-4.1%	-0.4%	6.4%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
September 2009	-21.2%	1.4%	1.0%
October 2008	-0.6%	-6.9%	28.3%
Year to Date	3.4%	-11.1%	--
Latest 12 Month Period*	2.5%	-9.5%	--

* Change in total consumption or generation for the latest 12 month period (November 2008 to October 2009) compared to the prior 12 month period (November 2007 to October 2008).

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

Data for:
October 2009

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Oct-09	Oct-08	% Change	Sep-09	% Change
Coal	140,981	153,143	-7.9%	138,325	1.9%
Petroleum Liquids	1,878	1,856	1.2%	1,689	11.2%
Natural Gas	71,473	72,767	-1.8%	90,968	-21.4%
Nuclear	57,290	62,793	-8.8%	65,941	-13.1%
Hydroelectric Conventional	19,633	15,120	29.8%	17,525	12.0%
All Other	13,636	12,552	8.6%	12,622	8.0%
Total (All Energy Sources)	304,890	318,232	-4.2%	327,070	-6.8%

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-09	Oct-08	% Change	Sep-09	% Change
Coal (Thousand Short Tons)	75,058	80,624	-6.9%	74,041	1.4%
Petroleum Liquids (Thousand Barrels)	3,163	3,109	1.7%	2,803	12.8%
Natural Gas (Million Cubic Feet)	557,936	561,175	-0.6%	707,624	-21.2%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Oct-09	Oct-08	% Change	Sep-09	% Change
Coal (Thousand Short Tons)	201,784	157,334	28.3%	199,864	1.0%
Petroleum Liquids (Thousand Barrels)	41,647	42,935	-3.0%	42,462	-1.9%

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 2009

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 2009	October 2009	1,463,322	23,025	780,565	666,843	225,781	136,366	3,295,902
Prior Period	January 2008	October 2008	1,670,607	25,947	751,661	669,842	212,039	127,172	3,457,268
Percent Difference			-12.4%	-11.3%	3.8%	-0.4%	6.5%	7.2%	-4.7%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	November 2008	October 2009	1,787,099	28,240	905,853	803,182	261,827	162,692	3,948,893
Prior Period	November 2007	October 2008	2,003,820	30,751	879,106	806,724	246,063	151,197	4,117,661
Percent Difference			-10.8%	-8.2%	3.0%	-0.4%	6.4%	7.6%	-4.1%

Figure 4.1 Trends in Total Net Generation (All Sectors): 2007, 2008, and 2009

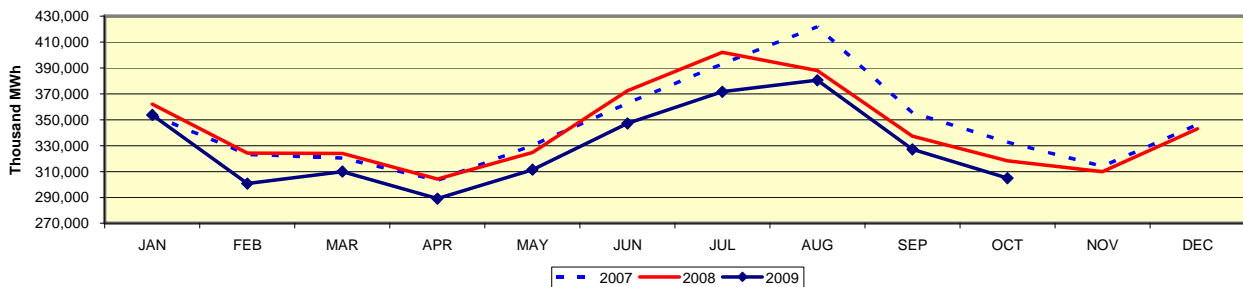


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

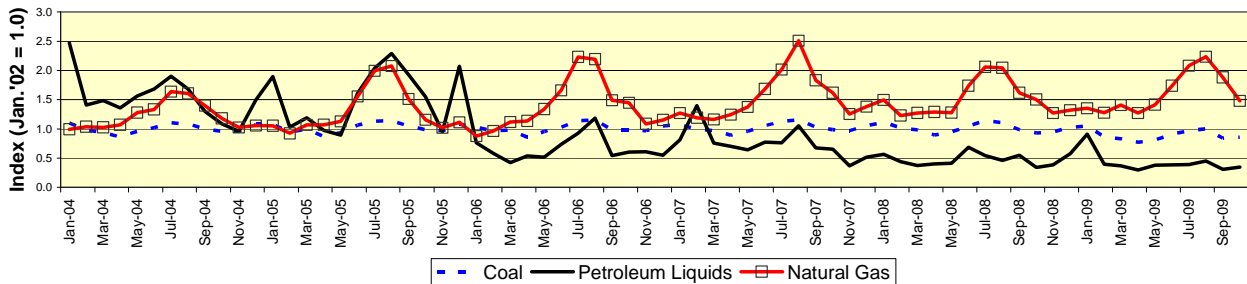
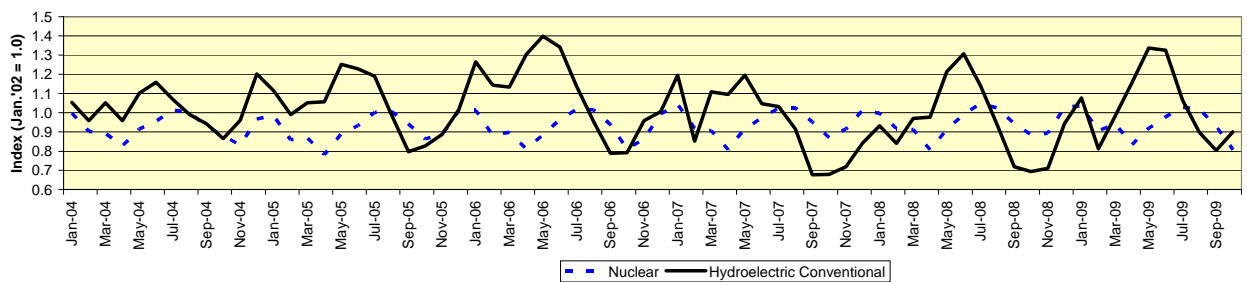


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
October 2009

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 2009	October 2009	776,021	38,783	6,071,290
Prior Period	January 2008	October 2008	872,623	43,600	5,871,822
Percent Difference			-11.1%	-11.0%	3.4%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	November 2008	October 2009	946,988	47,451	7,032,866
Prior Period	November 2007	October 2008	1,046,481	51,627	6,858,068
Percent Difference			-9.5%	-8.1%	2.5%

Figure 5.1 Trend in Total Coal Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

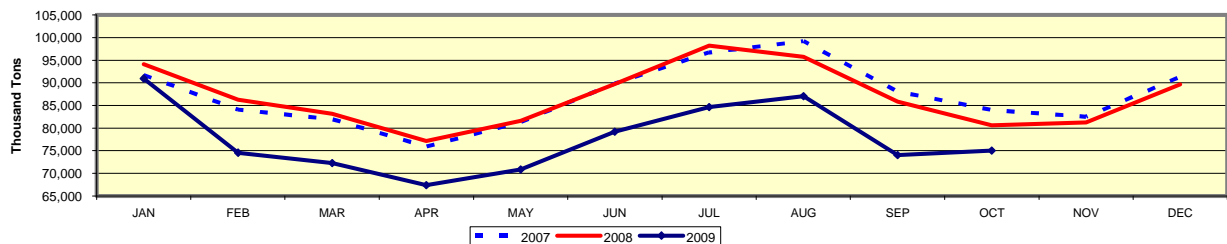


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

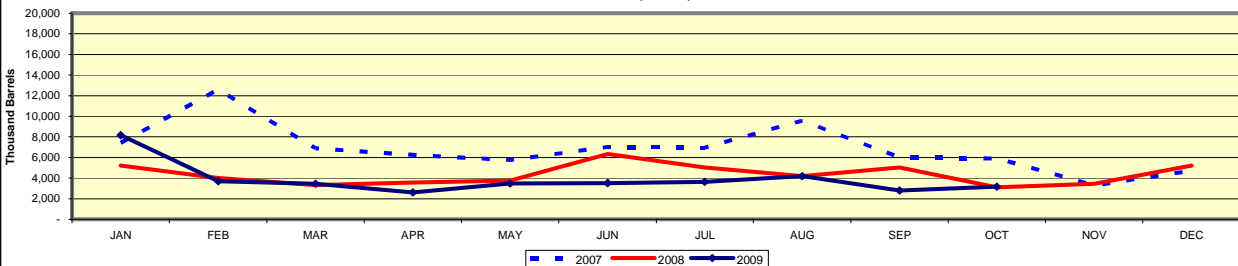
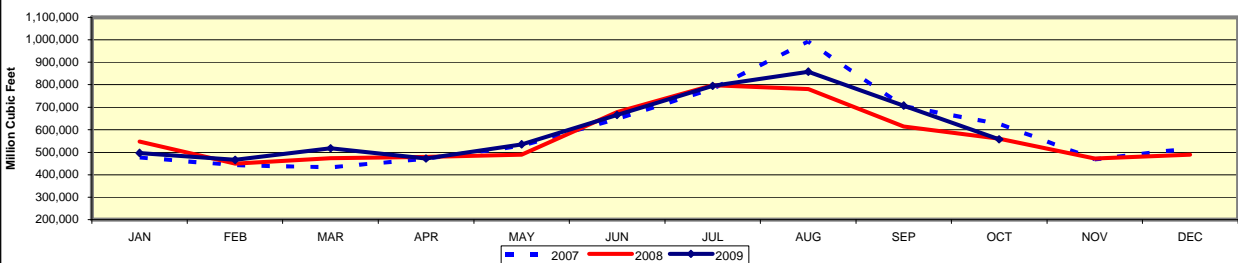


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

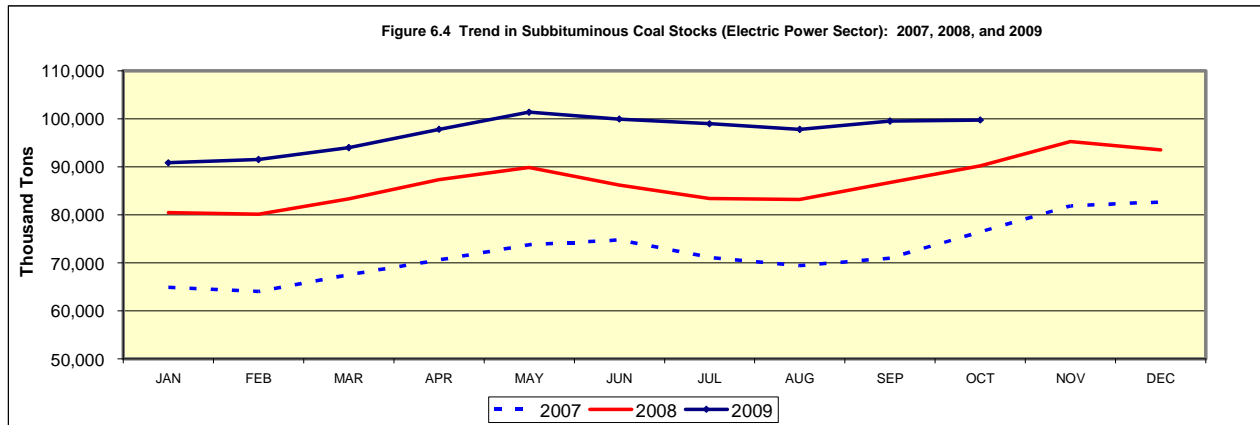
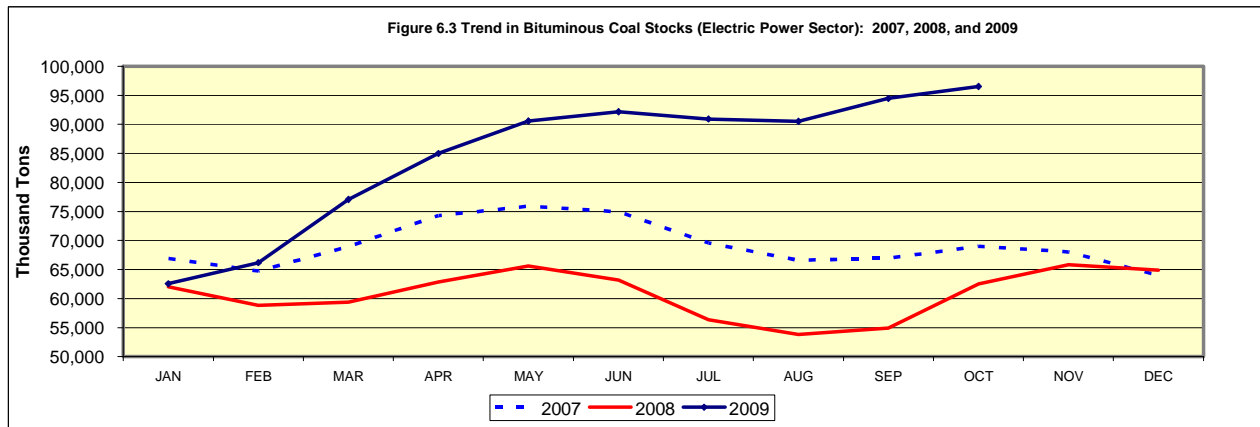
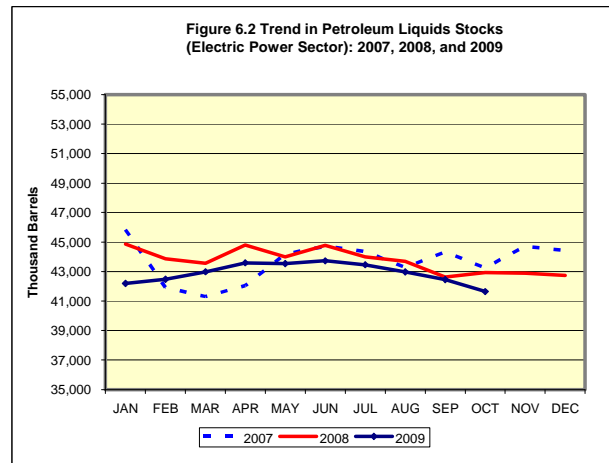
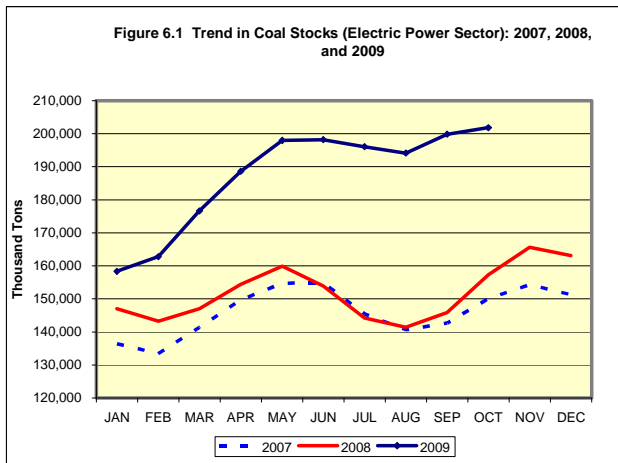


Section 6. Fossil Fuel Stock Trends

Data for:
October 2009

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

Fossil Fuel Stocks	Oct-09	Oct-08	% Change	Sep-09	% Change
Coal, Total (Thousand Short Tons)	201,784	157,334	28.3%	199,864	1.0%
Bituminous (includes anthracite and coal synfuel)	96,523	62,515	54.4%	94,484	2.2%
Subbituminous	99,740	90,202	10.6%	99,523	0.2%
Lignite	5,522	4,617	19.6%	5,857	-5.7%
Petroleum Liquids (Thousand Barrels)	41,647	42,935	-3.0%	42,462	-1.9%



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

Data for:
October 2009

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Oct-09	Oct-08	% Change	Sep-09	% Change
Residential	98,373	96,051	2.4%	115,186	-14.6%
Commercial	109,897	112,147	-2.0%	116,397	-5.6%
Industrial	76,627	82,117	-6.7%	76,876	-0.3%
Transportation	580	629	-7.8%	614	-5.5%
All Sectors	285,478	290,943	-1.9%	309,073	-7.6%

Average Retail Price

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

Ultimate Customer	Oct-09	Oct-08	% Change	Sep-09	% Change
Residential	11.76	11.91	-1.3%	12.06	-2.5%
Commercial	10.23	10.50	-2.6%	10.51	-2.7%
Industrial	6.70	7.23	-7.3%	6.99	-4.1%
Transportation	11.03	10.90	1.2%	10.90	1.2%
All Sectors	9.81	10.04	-2.3%	10.21	-3.9%

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

Census Division	Residential			All Sectors		
	Oct-09	Oct-08	% Change	Oct-09	Oct-08	% Change
New England	17.27	18.76	-7.9%	15.43	16.35	-5.6%
Middle Atlantic	15.58	15.15	2.8%	13.08	13.13	-0.4%
East North Central	11.23	11.22	0.1%	8.73	8.84	-1.2%
West North Central	9.20	9.18	0.2%	7.32	7.01	4.4%
South Atlantic	11.62	11.38	2.1%	9.92	9.78	1.4%
East South Central	9.47	10.33	-8.3%	7.57	8.46	-10.5%
West South Central	11.16	12.39	-9.9%	8.86	10.34	-14.3%
Mountain	10.51	10.07	4.4%	8.57	8.20	4.5%
Pacific Contiguous	12.15	11.84	2.6%	11.49	11.11	3.4%
Pacific Noncontiguous	22.79	28.11	-18.9%	20.42	25.72	-20.6%
U.S. Total	11.76	11.91	-1.3%	9.81	10.04	-2.3%

Section 8. Retail Sales Trends

Data for:
October 2009

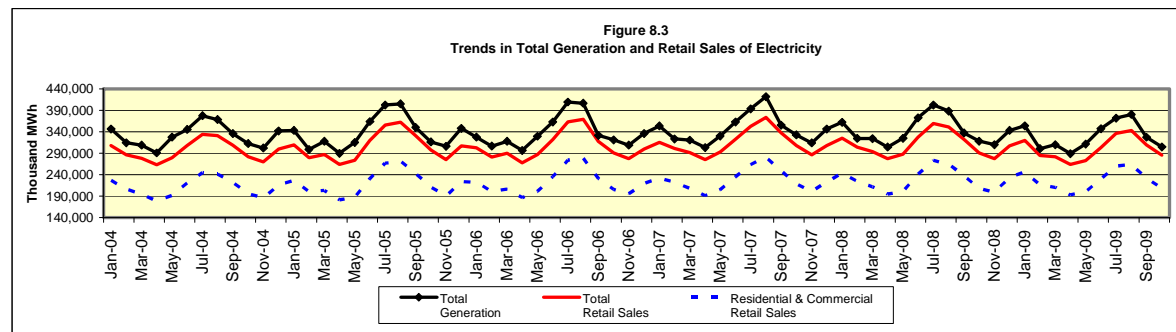
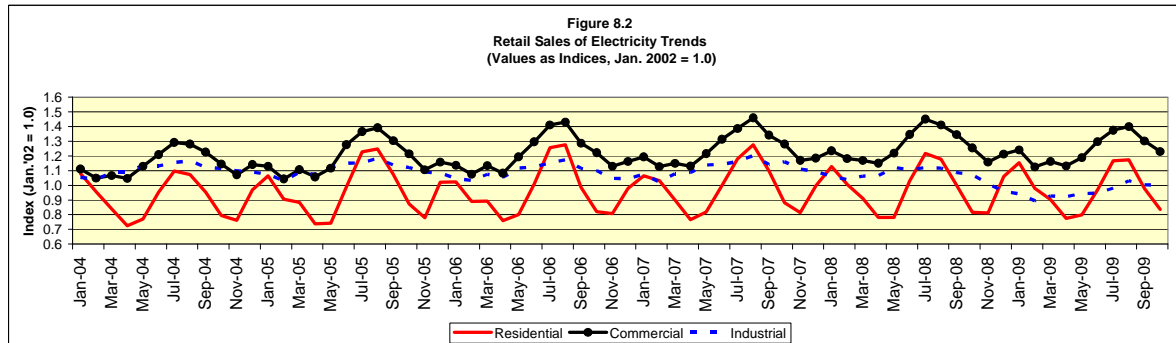
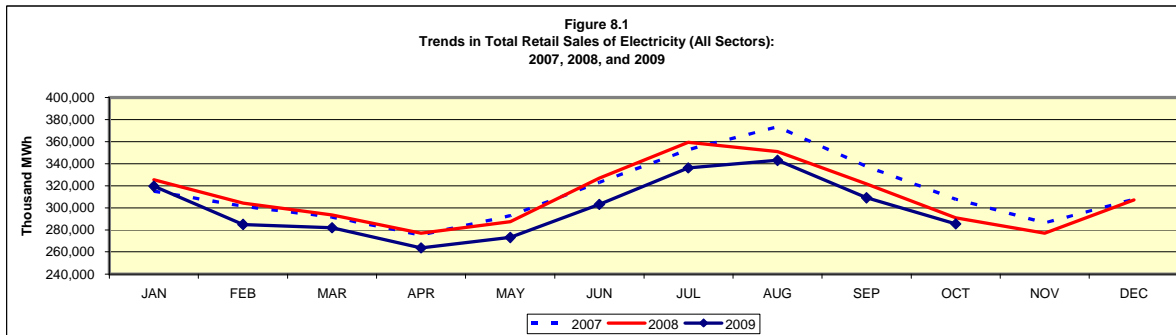
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	October 2009	1,146,177	1,112,782	734,600	6,257	2,999,816
Prior Period	January 2008	October 2008	1,158,969	1,140,613	831,213	6,366	3,137,163
Percent Difference			-1.1%	-2.4%	-11.6%	-1.7%	-4.4%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	November 2008	October 2009	1,366,515	1,324,622	885,536	7,543	3,584,215
Prior Period	November 2007	October 2008	1,372,282	1,351,125	1,000,056	7,703	3,731,166
Percent Difference			-0.4%	-2.0%	-11.5%	-2.1%	-3.9%



Section 9. Average Retail Price Trends

Data for:
October 2009

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

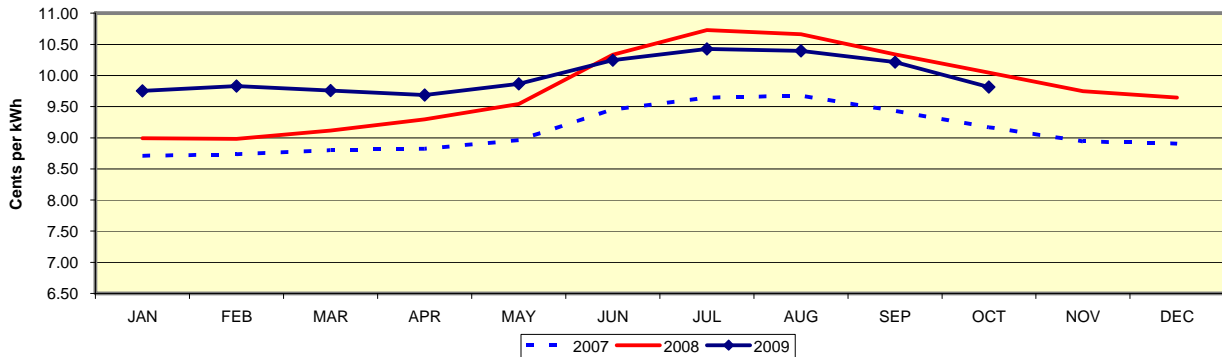
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	October 2009	11.68	10.31	6.96	11.38	10.02
Prior Period	January 2008	October 2008	11.38	10.32	7.02	11.36	9.84
Percent Difference			2.6%	-0.1%	-0.9%	0.2%	1.8%

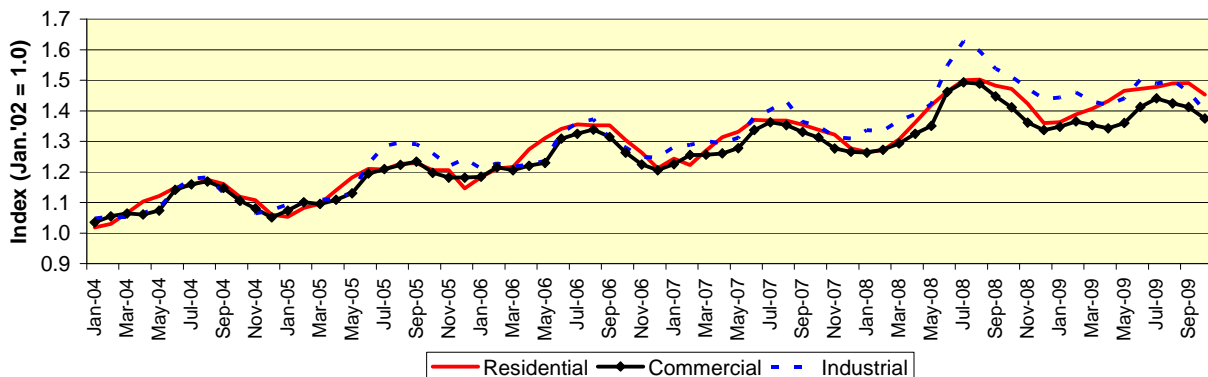
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	November 2008	October 2009	11.61	10.27	6.96	11.30	9.96
Prior Period	November 2007	October 2008	11.24	10.19	6.90	10.94	9.70
Percent Difference			3.3%	0.8%	0.9%	3.3%	2.7%

**Figure 9.1 Trends in Average Retail Price of Electricity (All Sectors):
2007, 2008, and 2009**



**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 2009

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	October 2009	331	282	49	17.4%	47	53	-6	-11.3%
Prior Period	October 2008	281	282	-1	-0.4%	48	53	-5	-9.4%
Percent Difference		17.8%				-2.1%			

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 2009	October 2009	3,180	1,205	Current Period	November 2008	October 2009	4,545	1,225
Prior Period	January 2008	October 2008	3,129	1,257	Prior Period	November 2007	October 2008	4,450	1,285
Percent Difference			1.6%	-4.1%	Percent Difference			2.1%	-4.7%

Figure 10.1 Deviation From Normal: Heating Degree Days, 2009

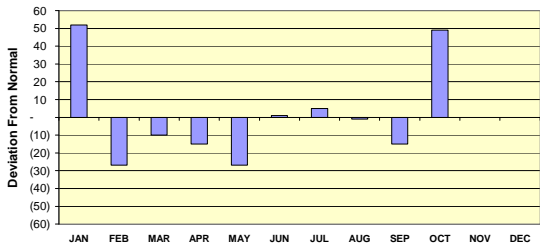


Figure 10.2 Deviation From Normal: Cooling Degree Days, 2009

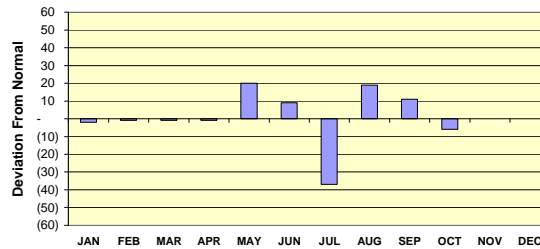


Figure 10.3 Trend in Heating Degree Days: 2008, 2009, and Normal

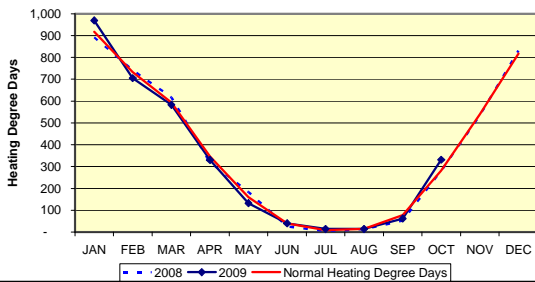


Figure 10.4 Trend in Cooling Degree Days: 2008, 2009, and Normal

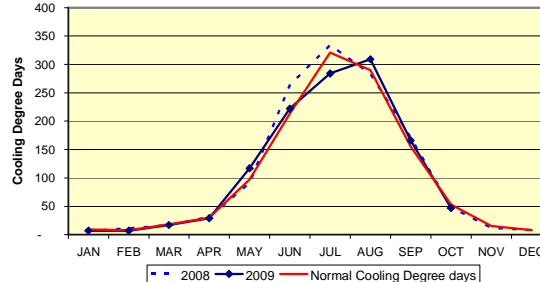


Figure 10.5 Trend in Cumulative Heating Degree Days: 2008, 2009, and Normal

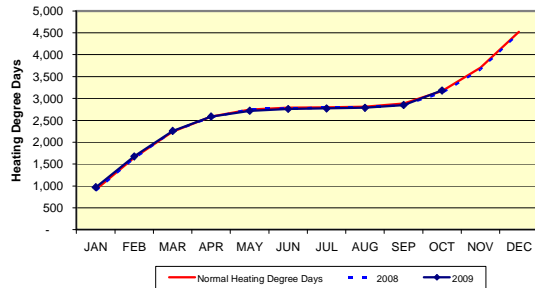
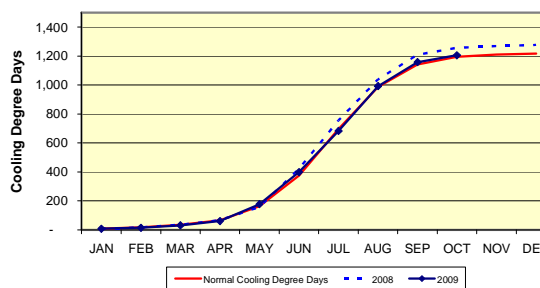


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2008, 2009, and Normal



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," and 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.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 the additional data collection and data revisions that may occur between the release 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).