

Monthly Flash Estimates of Electric Power Data

Data for:
November 2009

Section 1. Commentary

In November 2009, the contiguous United States as a whole experienced temperatures that were significantly above average. Based on preliminary temperature data, the month ranked as the third warmest November on record. All regions of the United States experienced above average temperatures during the month, with the exception of the Southeast and Western States, which experienced near average temperatures. Accordingly, total population-weighted heating degree days for the contiguous United States were 18.0 percent below the average for the month of November.

Retail sales of electricity decreased 4.1 percent compared to November 2008. This decrease in retail sales was caused in part by a significant decline in industrial activity as observed by the 5.8-percent decrease in industrial retail sales over the same period. The average U.S. retail price of electricity decreased 4.1 percent in November 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.

Total electric power generation in the United States decreased 5.6 percent from November 2008. Over the same period, coal generation decreased 12.2 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 November 2009 remained relatively unchanged from November 2008, while nuclear generation decreased 6.8 percent over the same period. Following record setting precipitation totals observed during the previous month, conventional hydroelectric generation increased 34.0 percent when compared to November 2008.

Total coal stocks in the Electric Power Sector remained at a historically high level in November 2009, increasing by 2.3 percent from the previous month. The October 2009 to November 2009 change in coal stocks consisted of a 0.5-percent increase in bituminous coal and a 3.9-percent increase in subbituminous coal. Petroleum liquid stocks decreased 1.4 percent from October 2009.

References for weather data:

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

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
November 2009

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
October 2009	-4.5%	2.4%	5.6%
November 2008	-5.6%	-6.8%	34.0%
Year to Date	-4.7%	-0.9%	8.4%
Latest 12 Month Period*	-4.4%	-0.7%	8.6%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
October 2009	-15.8%	-3.2%	2.3%
November 2008	-1.4%	-10.2%	24.7%
Year to Date	3.0%	-11.0%	--
Latest 12 Month Period*	2.3%	-10.2%	--

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

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Nov-09	Nov-08	% Change	Oct-09	% Change
Coal	136,170	155,146	-12.2%	141,551	-3.8%
Petroleum Liquids	1,343	2,089	-35.7%	1,855	-27.6%
Natural Gas	61,375	61,386	0.0%	71,837	-14.6%
Nuclear	59,069	63,408	-6.8%	57,688	2.4%
Hydroelectric Conventional	20,739	15,479	34.0%	19,633	5.6%
All Other	13,921	12,422	12.1%	13,682	1.7%
Total (All Energy Sources)	292,619	309,930	-5.6%	306,245	-4.5%

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	Nov-09	Nov-08	% Change	Oct-09	% Change
Coal (Thousand Short Tons)	72,935	81,245	-10.2%	75,317	-3.2%
Petroleum Liquids (Thousand Barrels)	2,223	3,446	-35.5%	3,130	-29.0%
Natural Gas (Million Cubic Feet)	465,934	472,433	-1.4%	553,363	-15.8%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Nov-09	Nov-08	% Change	Oct-09	% Change
Coal (Thousand Short Tons)	206,629	165,654	24.7%	201,980	2.3%
Petroleum Liquids (Thousand Barrels)	41,095	42,891	-4.2%	41,684	-1.4%

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:
November 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	November 2009	1,600,062	24,345	842,305	726,310	246,520	150,334	3,589,876
Prior Period	January 2008	November 2008	1,825,754	28,036	813,047	733,251	227,518	139,592	3,767,198
Percent Difference			-12.4%	-13.2%	3.6%	-0.9%	8.4%	7.7%	-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	December 2008	November 2009	1,768,694	27,471	906,206	799,241	267,087	164,239	3,932,938
Prior Period	December 2007	November 2008	1,999,583	30,839	879,854	805,233	245,859	152,120	4,113,488
Percent Difference			-11.5%	-10.9%	3.0%	-0.7%	8.6%	8.0%	-4.4%

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

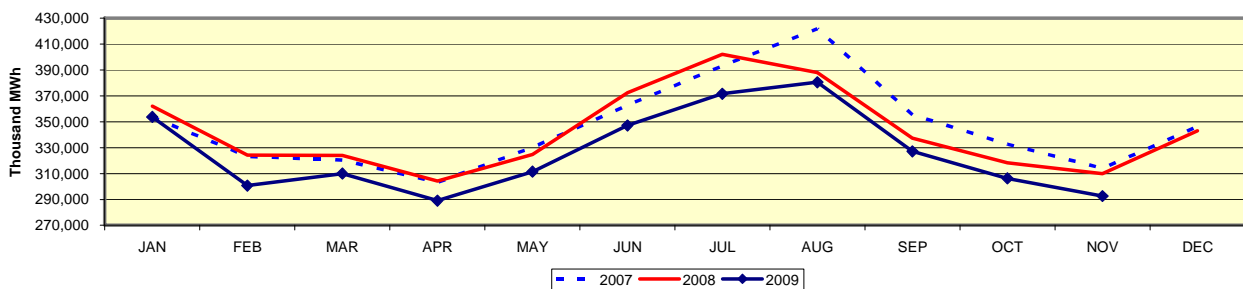


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

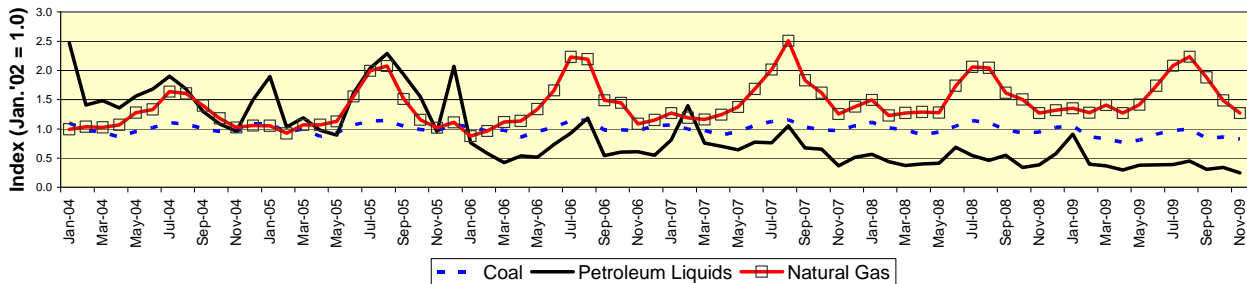
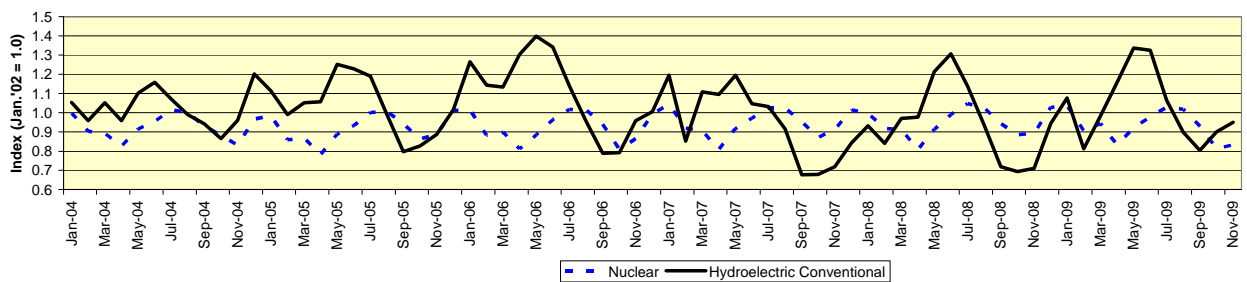


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
November 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	November 2009	849,215	40,972	6,532,651
Prior Period	January 2008	November 2008	953,868	47,046	6,344,255
Percent Difference			-11.0%	-12.9%	3.0%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	December 2008	November 2009	938,936	46,195	7,021,794
Prior Period	December 2007	November 2008	1,045,232	51,770	6,861,633
Percent Difference			-10.2%	-10.8%	2.3%

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

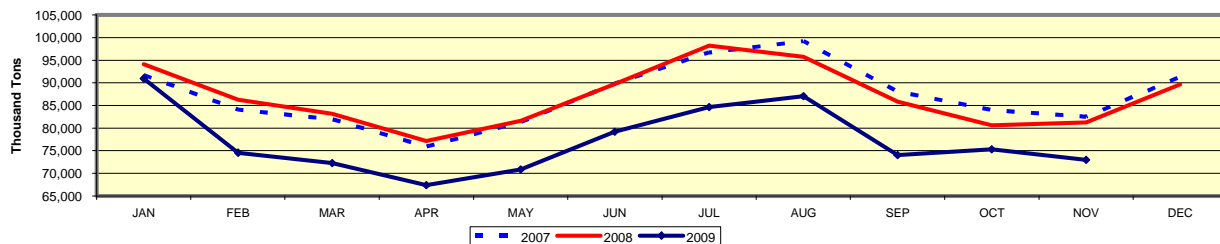


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

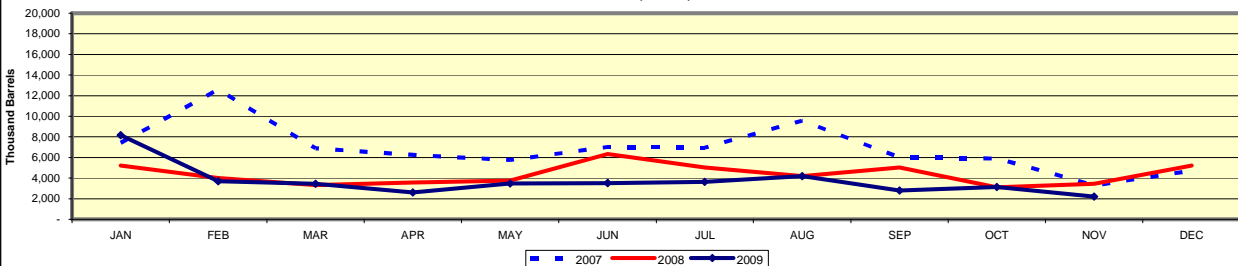
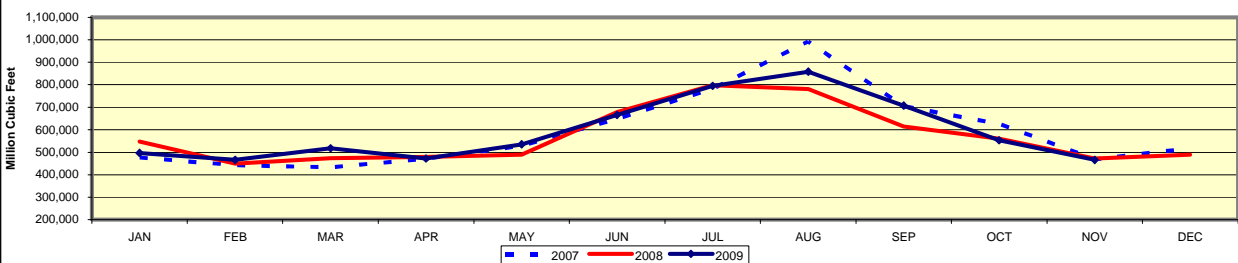


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

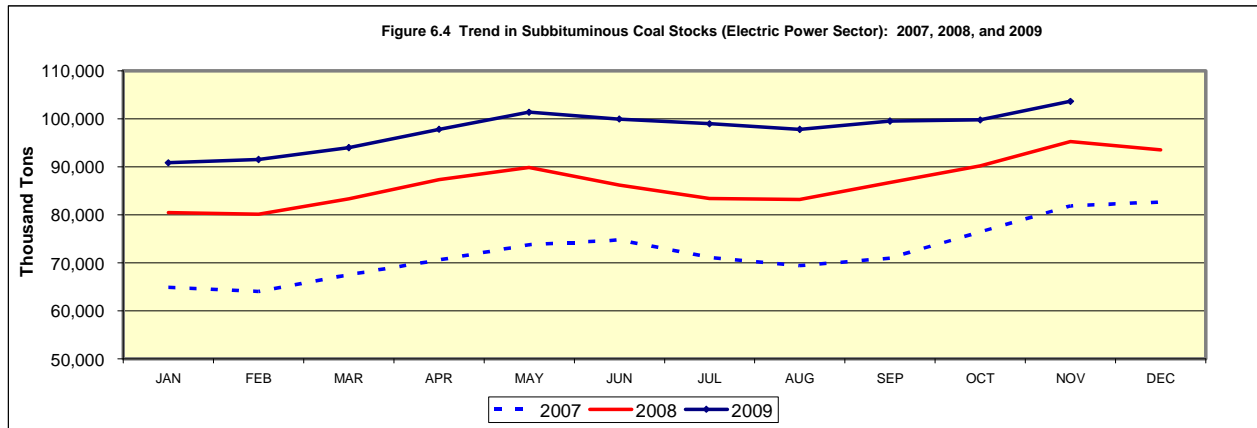
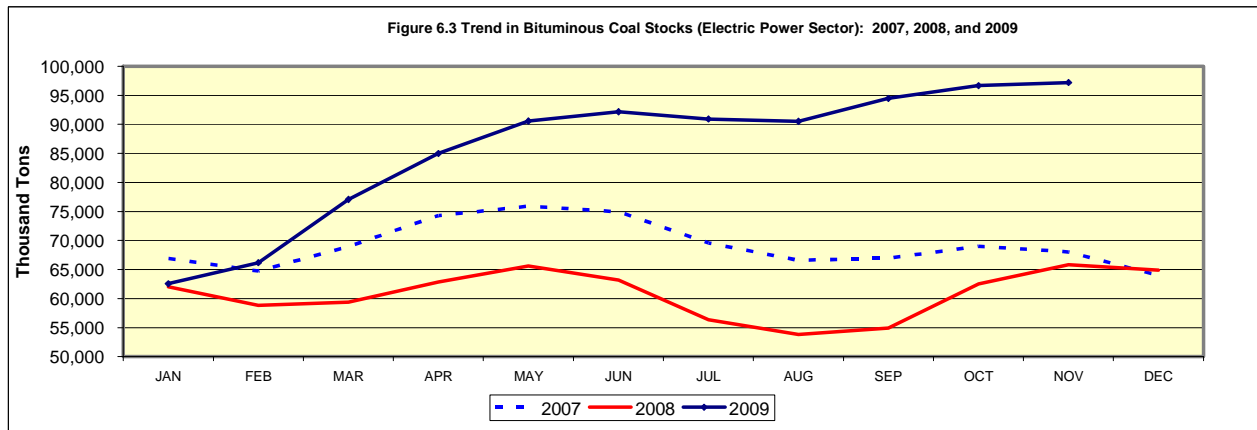
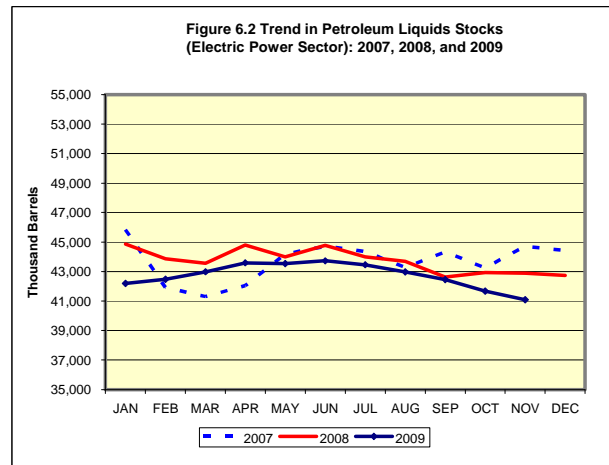
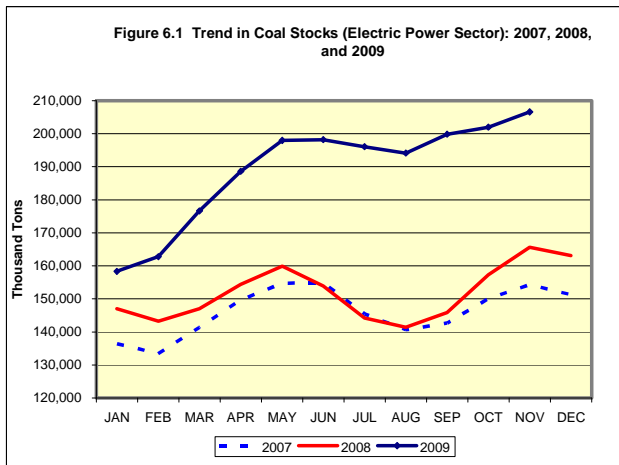


Section 6. Fossil Fuel Stock Trends

Data for:
November 2009

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

Fossil Fuel Stocks	Nov-09	Nov-08	% Change	Oct-09	% Change
Coal, Total (Thousand Short Tons)	206,629	165,654	24.7%	201,980	2.3%
Bituminous (includes anthracite and coal synfuel)	97,214	65,838	47.7%	96,690	0.5%
Subbituminous	103,638	95,259	8.8%	99,764	3.9%
Lignite	5,777	4,558	26.7%	5,525	4.6%
Petroleum Liquids (Thousand Barrels)	41,095	42,891	-4.2%	41,684	-1.4%



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

Data for:
November 2009

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Nov-09	Nov-08	% Change	Oct-09	% Change
Residential	92,581	95,574	-3.1%	98,373	-5.9%
Commercial	99,682	103,461	-3.7%	109,924	-9.3%
Industrial	72,977	77,472	-5.8%	76,632	-4.8%
Transportation	573	616	-7.0%	580	-1.2%
All Sectors	265,813	277,123	-4.1%	285,509	-6.9%

Average Retail Price

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

Ultimate Customer	Nov-09	Nov-08	% Change	Oct-09	% Change
Residential	11.24	11.52	-2.4%	11.76	-4.4%
Commercial	9.73	10.13	-3.9%	10.22	-4.8%
Industrial	6.42	7.04	-8.8%	6.68	-3.9%
Transportation	10.81	10.60	2.0%	11.28	-4.2%
All Sectors	9.35	9.75	-4.1%	9.81	-4.7%

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

Census Division	Residential			All Sectors		
	Nov-09	Nov-08	% Change	Nov-09	Nov-08	% Change
New England	16.93	18.00	-5.9%	15.03	15.97	-5.9%
Middle Atlantic	14.73	14.48	1.7%	12.49	12.46	0.2%
East North Central	10.83	10.94	-1.0%	8.62	8.84	-2.5%
West North Central	8.61	8.66	-0.6%	7.01	6.93	1.2%
South Atlantic	11.39	10.89	4.6%	9.77	9.47	3.2%
East South Central	9.16	9.99	-8.3%	7.45	8.37	-11.0%
West South Central	10.85	12.01	-9.7%	8.46	9.85	-14.1%
Mountain	9.79	9.46	3.5%	7.93	7.66	3.5%
Pacific Contiguous	10.68	11.97	-10.8%	9.60	10.84	-11.4%
Pacific Noncontiguous	22.15	25.90	-14.5%	20.08	23.81	-15.7%
U.S. Total	11.24	11.52	-2.4%	9.35	9.75	-4.1%

Section 8. Retail Sales Trends

Data for:
November 2009

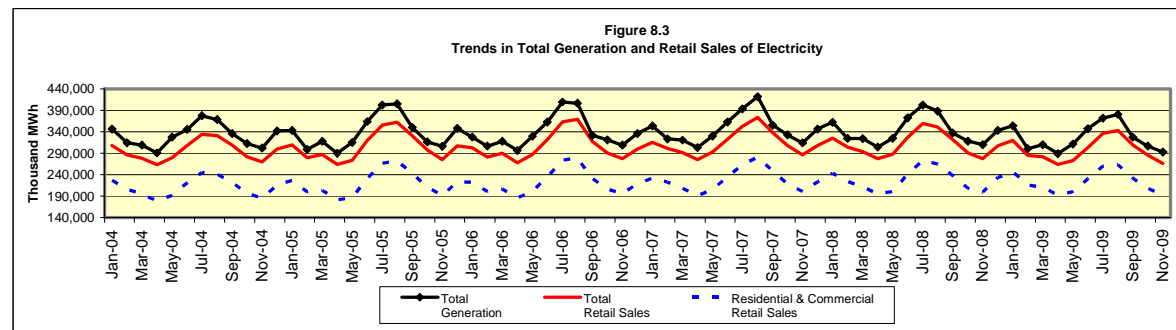
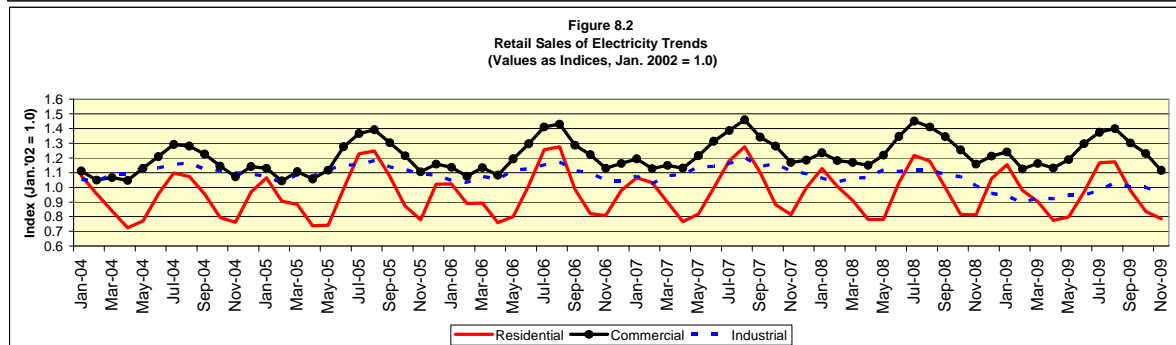
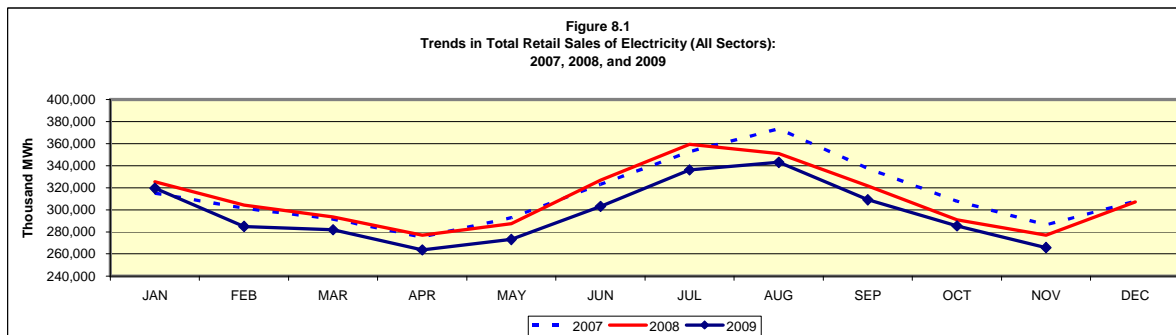
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	November 2009	1,238,758	1,212,490	807,582	6,830	3,265,660
Prior Period	January 2008	November 2008	1,254,544	1,244,074	908,686	6,982	3,414,286
Percent Difference			-1.3%	-2.5%	-11.1%	-2.2%	-4.4%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	December 2008	November 2009	1,363,521	1,320,869	881,047	7,499	3,572,936
Prior Period	December 2007	November 2008	1,371,952	1,349,983	992,410	7,645	3,721,990
Percent Difference			-0.6%	-2.2%	-11.2%	-1.9%	-4.0%



Section 9. Average Retail Price Trends

Data for:
November 2009

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

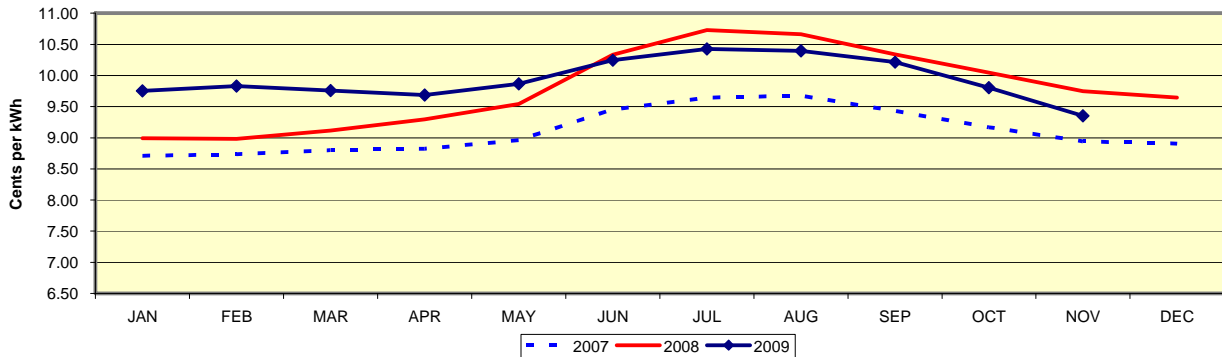
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	November 2009	11.65	10.26	6.91	11.35	9.96
Prior Period	January 2008	November 2008	11.39	10.30	7.03	11.29	9.83
Percent Difference			2.3%	-0.4%	-1.7%	0.5%	1.3%

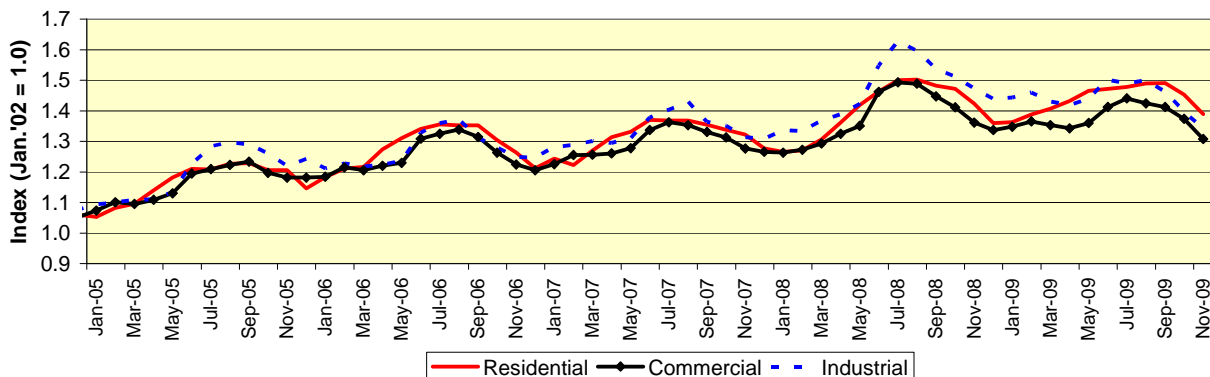
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	December 2008	November 2009	11.59	10.24	6.90	11.34	9.93
Prior Period	December 2007	November 2008	11.30	10.23	6.96	11.11	9.76
Percent Difference			2.6%	0.1%	-0.9%	2.1%	1.7%

**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:
November 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	November 2009	442	539	-97	-18.0%	14	15	-1	-6.7%
Prior Period	November 2008	534	539	-5	-0.9%	12	15	-3	-20.0%
Percent Difference		-17.2%				16.7%			

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	November 2009	3,618	1,220	Current Period	December 2008	November 2009	4,449	1,228
Prior Period	January 2008	November 2008	3,663	1,269	Prior Period	December 2007	November 2008	4,463	1,281
Percent Difference			-1.2%	-3.9%	Percent Difference			-0.3%	-4.1%

Figure 10.1 Deviation From Normal: Heating Degree Days, 2009

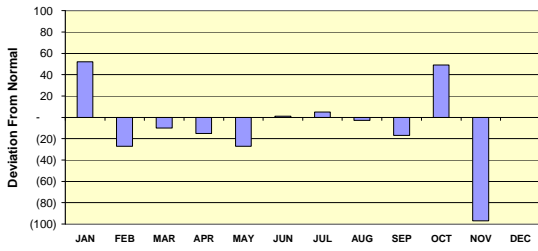


Figure 10.2 Deviation From Normal Cooling Degree Days, 2009

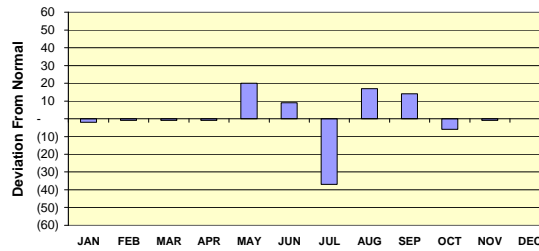


Figure 10.3 Trend in Heating Degree Days: 2008, 2009, and Normal

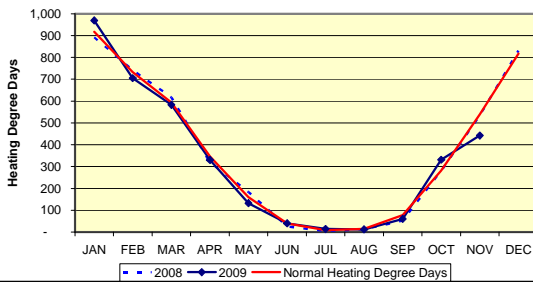


Figure 10.4 Trend in Cooling Degree Days: 2008, 2009, and Normal

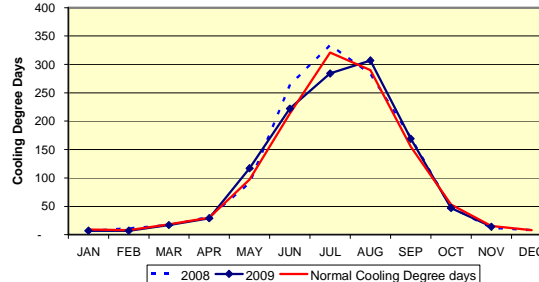


Figure 10.5 Trend in Cumulative Heating Degree Days: 2008, 2009, and Normal

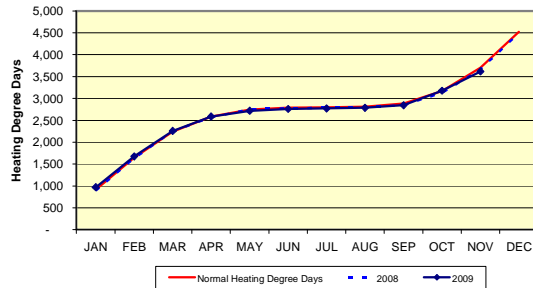
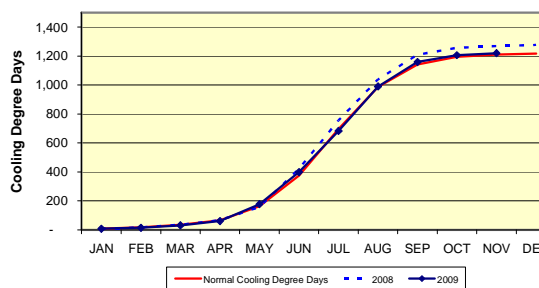


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2008, 2009, and Normal



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, U.S. 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).