

Monthly Flash Estimates of Electric Power Data

Data for:
January 2009

Section 1. Commentary

Near normal temperatures prevailed across the contiguous United States in January 2009, marking the fifth straight month that temperatures have been close to average. However, regional differences in temperature occurred as the western United States experienced warmer than normal temperatures while the Northeast and the central United States experienced below average temperatures. Accordingly, heating degree days for the contiguous United States as a whole were 3.9 percent above the average for the month of January 2009 and 6.8 percent above a warmer January 2008.

Even with the colder weather, retail sales of electricity decreased 1.8 percent compared to January 2008. This decrease in January 2008-to-January 2009 retail sales is being caused by the significant decline in industrial consumption as observed by the 11.4 percent decrease in industrial retail sales over the same period. The average U.S. retail price of electricity continued to show an upward trend in January 2009 from the previous year, increasing 8.5 percent from January 2008. This increase in average U.S. retail price from January 2008 can be attributed to the higher cost of coal used in electricity generation and the expiration of price caps observed in several deregulated States.

In January 2009, total electric power generation in the United States decreased 3.7 percent from January 2008 (the change in electric power generation does not necessarily coincide with the change in retail sales of electricity because utility billing cycles tend to lag electricity production in many areas). Coal generation in the contiguous United States decreased 5.1 percent when compared to January 2008, while consumption of coal to generate electricity decreased 3.2 percent over the same time period. Similarly, natural gas generation decreased 10.4 percent compared to January 2008, while consumption of natural gas to generate electricity decreased 9.9 percent over the same time period. Petroleum liquids generation continued to show an upward trend, increasing 62.8 percent when compared to January 2008. Conventional hydroelectric generation was 2.5 percent higher than January 2008 and 14.0 percent higher than December 2008.

Total coal stocks in the contiguous United States decreased 4.5 percent from the previous month as the country experienced its first full month of winter. The December 2008-to-January 2009 change in coal stocks consisted of a 3.6-percent decrease for bituminous coal and a 5.8-percent decrease for subbituminous coal. However, due to the decrease in total electricity generation in the United States observed in the year 2008, total coal stocks increased 5.9 percent from January 2008 to January 2009. Petroleum liquids stocks were 0.5 percent lower than December 2008.

References for weather data:

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

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
January 2009

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
December 2008	3.1%	0.8%	14.0%
January 2008	-3.7%	0.1%	2.5%
Year to Date	-3.7%	0.1%	2.5%
Latest 12 Month Period*	-1.7%	0.4%	2.5%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
December 2008	1.0%	1.6%	-4.5%
January 2008	-9.9%	-3.2%	5.9%
Year to Date	-9.9%	-3.2%	n/a
Latest 12 Month Period*	-5.3%	-0.8%	n/a

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

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

Data for:
January 2009

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Jan-09	Jan-08	% Change	Dec-08	% Change
Coal	173,608	182,899	-5.1%	168,632	3.0%
Petroleum Liquids	4,984	3,062	62.8%	3,126	59.4%
Natural Gas	64,881	72,415	-10.4%	63,901	1.5%
Nuclear	73,479	73,415	0.1%	72,931	0.8%
Hydroelectric Conventional	23,443	22,880	2.5%	20,567	14.0%
All Other	13,417	12,668	5.9%	13,904	-3.5%
Total (All Energy Sources)	353,813	367,339	-3.7%	343,061	3.1%

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	Jan-09	Jan-08	% Change	Dec-08	% Change
Coal (Thousand Short Tons)	91,161	94,173	-3.2%	89,721	1.6%
Petroleum Liquids (Thousand Barrels)	8,259	5,228	58.0%	5,222	58.2%
Natural Gas (Million Cubic Feet)	494,108	548,392	-9.9%	489,143	1.0%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jan-09	Jan-08	% Change	Dec-08	% Change
Coal (Thousand Short Tons)	155,694	146,966	5.9%	163,056	-4.5%
Petroleum Liquids (Thousand Barrels)	42,513	44,867	-5.2%	42,737	-0.5%

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:
January 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	January 2009	173,608	4,984	64,881	73,479	23,443	13,418	353,813
Prior Period	January 2008	January 2008	182,899	3,062	72,415	73,415	22,880	12,668	367,339
Percent Difference			-5.1%	62.8%	-10.4%	0.1%	2.5%	5.9%	-3.7%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	February 2008	January 2009	1,985,094	33,083	869,414	809,037	250,354	154,371	4,101,353
Prior Period	February 2007	January 2008	2,023,615	48,146	907,530	805,833	244,346	141,083	4,170,553
Percent Difference			-1.9%	-31.3%	-4.2%	0.4%	2.5%	9.4%	-1.7%

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

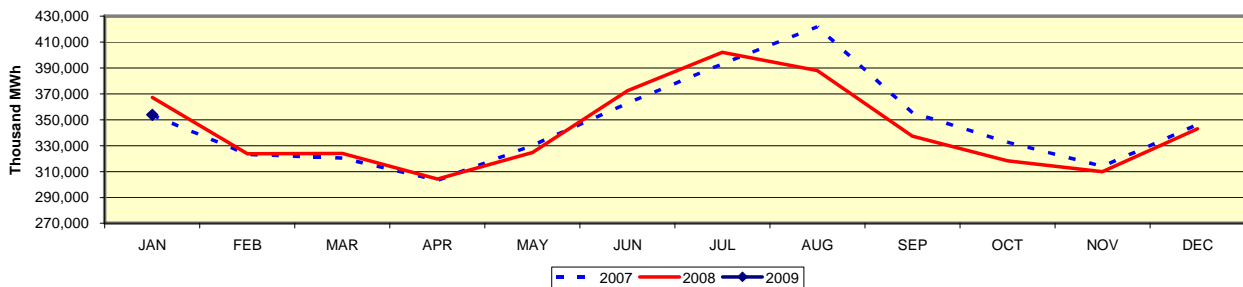


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

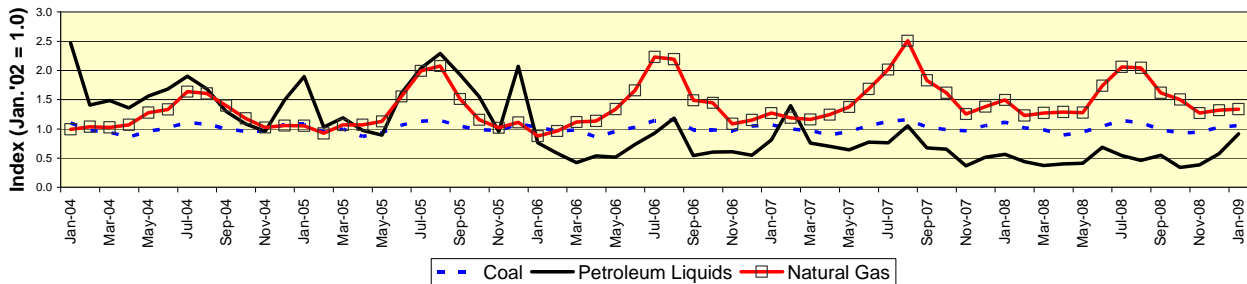
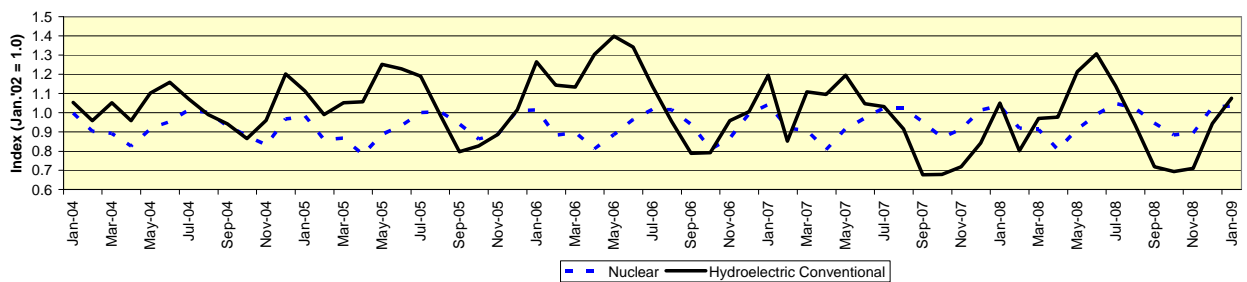


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
January 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	January 2009	91,161	8,259	494,108
Prior Period	January 2008	January 2008	94,173	5,228	548,392
Percent Difference			-3.2%	58.0%	-9.9%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	February 2008	January 2009	1,040,577	55,299	6,779,113
Prior Period	February 2007	January 2008	1,049,193	80,239	7,161,541
Percent Difference			-0.8%	-31.1%	-5.3%

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

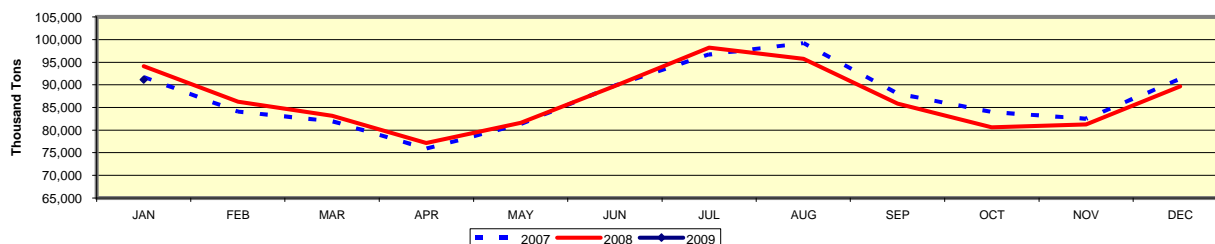


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

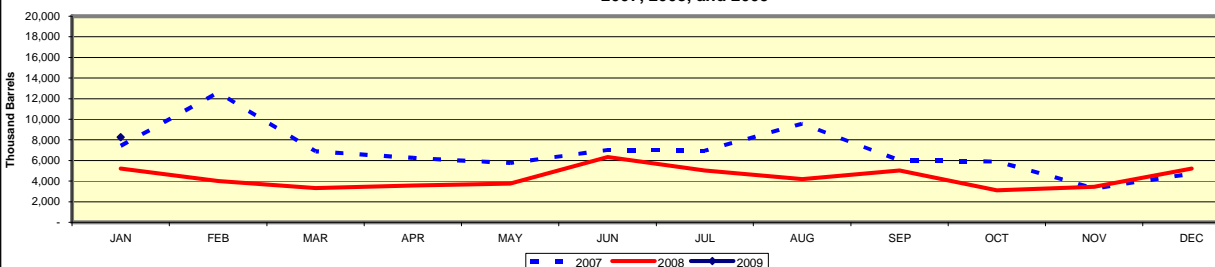
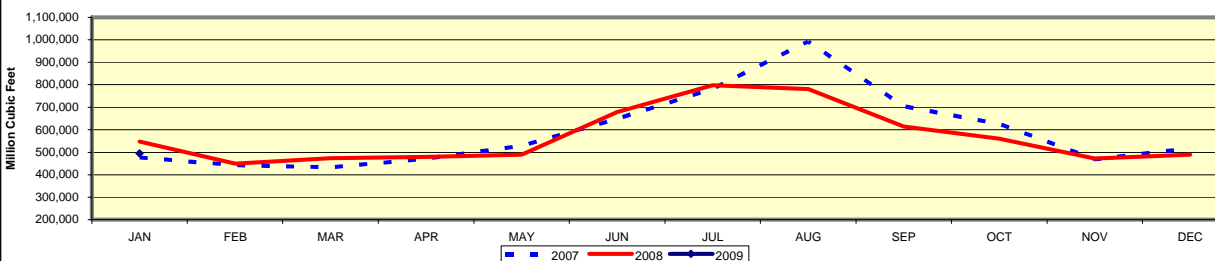


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2007, 2008, and 2009

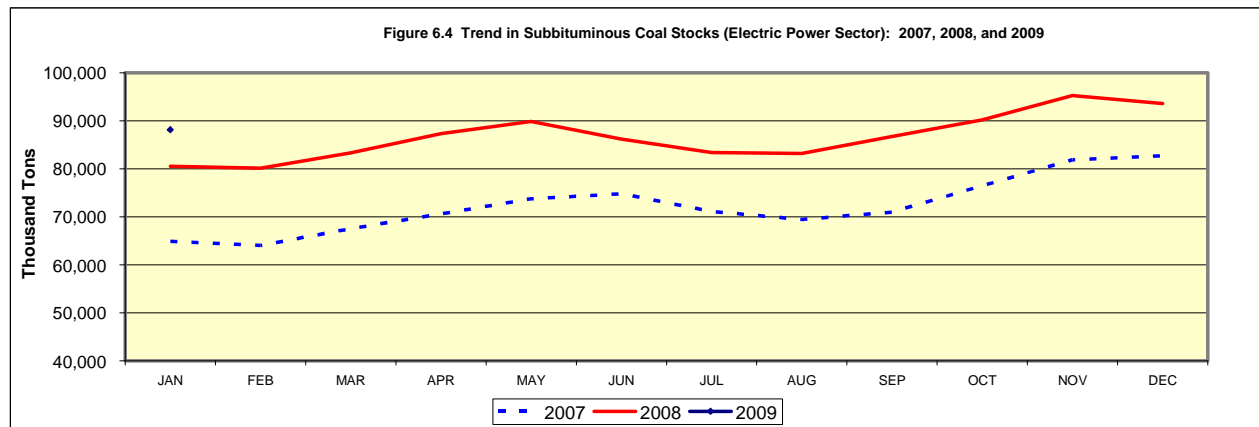
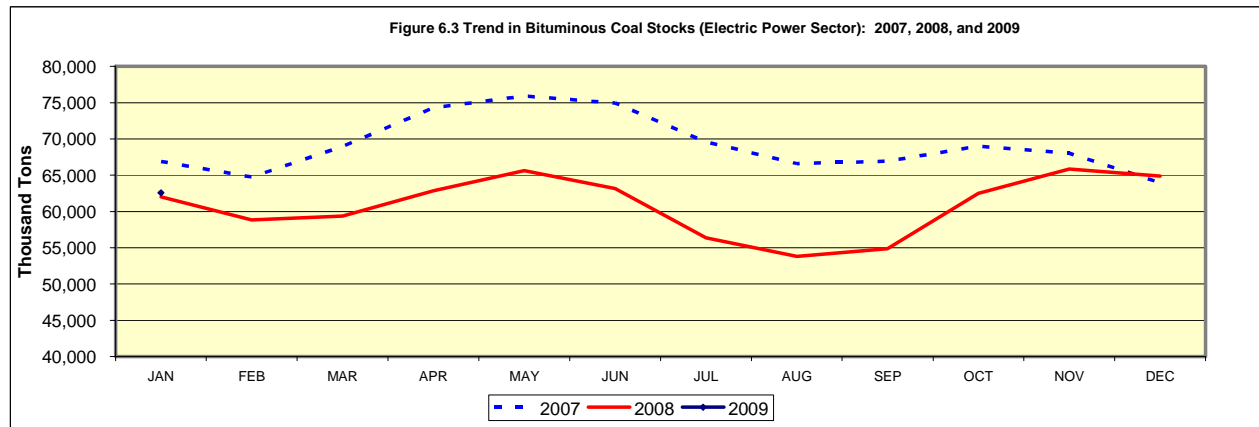
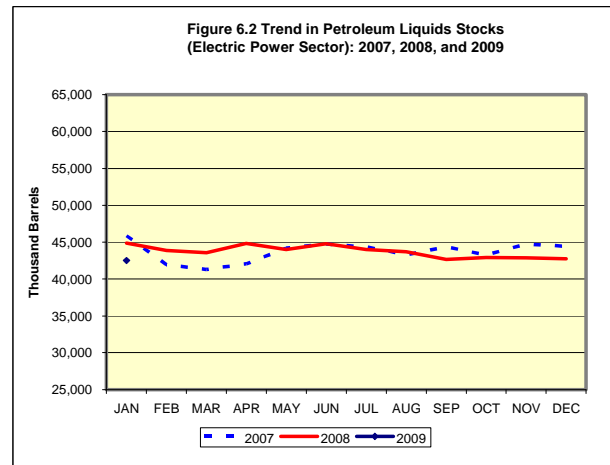
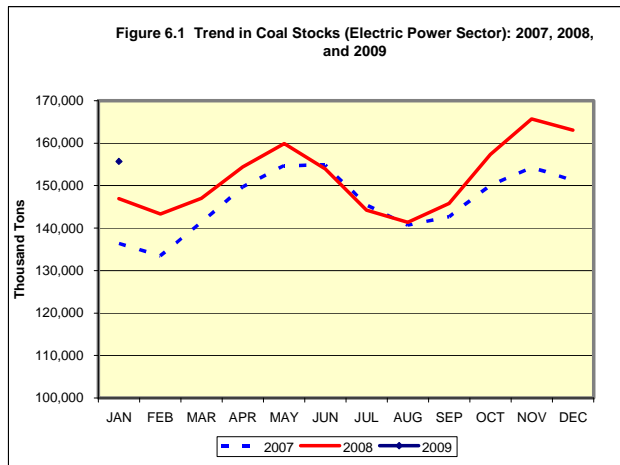


Section 6. Fossil Fuel Stock Trends

Data for:
January 2009

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

Fossil Fuel Stocks	Jan-09	Jan-08	% Change	Dec-08	% Change
Coal, Total (Thousand Short Tons)	155,694	146,966	5.9%	163,056	-4.5%
Bituminous (includes anthracite and coal synfuel)	62,570	62,008	0.9%	64,890	-3.6%
Subbituminous	88,167	80,500	9.5%	93,559	-5.8%
Lignite	4,956	4,457	11.2%	4,607	7.6%
Petroleum Liquids (Thousand Barrels)	42,513	44,867	-5.2%	42,737	-0.5%



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

Data for:
January 2009

Retail Sales

Table 7.1 Retail Sales (Million kWh)

Ultimate Customer	Jan-09	Jan-08	% Change	Dec-08	% Change
Residential	136,741	133,806	2.2%	125,638	8.8%
Commercial	111,658	111,091	0.5%	109,119	2.3%
Industrial	73,133	82,524	-11.4%	74,545	-1.9%
Transportation	729	710	2.7%	669	9.0%
All Sectors	322,261	328,130	-1.8%	309,972	4.0%

Average Retail Price

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

Ultimate Customer	Jan-09	Jan-08	% Change	Dec-08	% Change
Residential	11.03	10.23	7.8%	10.99	0.4%
Commercial	10.01	9.39	6.6%	9.95	0.6%
Industrial	6.92	6.39	8.3%	6.89	0.4%
Transportation	11.71	9.69	20.8%	11.21	4.5%
All Sectors	9.74	8.98	8.5%	9.64	1.0%

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

Census Division	Residential			All Sectors		
	Jan-09	Jan-08	% Change	Jan-09	Jan-08	% Change
New England	17.88	16.56	8.0%	16.09	15.19	5.9%
Middle Atlantic	14.16	13.67	3.6%	12.78	12.33	3.6%
East North Central	10.18	9.35	8.9%	8.83	7.94	11.2%
West North Central	7.92	7.52	5.3%	6.87	6.41	7.2%
South Atlantic	10.79	9.73	10.9%	9.77	8.69	12.4%
East South Central	9.35	8.15	14.7%	8.20	6.94	18.2%
West South Central	11.17	10.27	8.8%	9.59	9.00	6.6%
Mountain	9.19	8.77	4.8%	7.65	7.41	3.2%
Pacific Contiguous	11.76	11.51	2.2%	10.46	10.10	3.6%
Pacific Noncontiguous	21.25	22.23	-4.4%	19.28	20.40	-5.5%
U.S. Total	11.03	10.23	7.8%	9.74	8.98	8.5%

Section 8. Retail Sales Trends

Data for:
January 2009

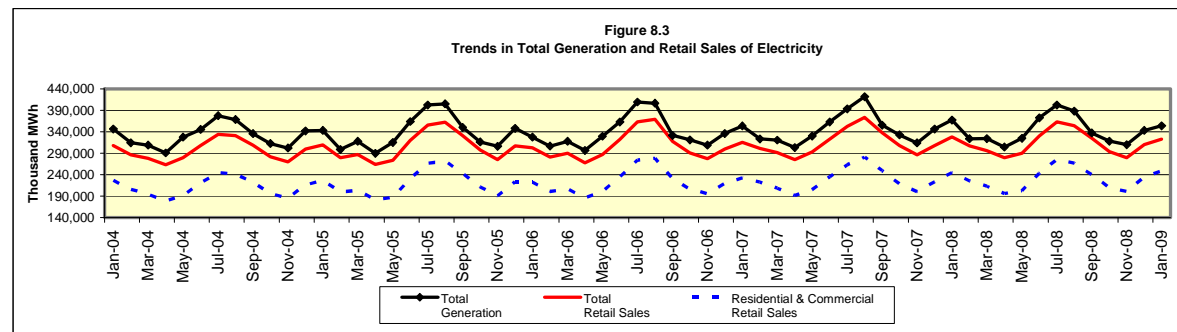
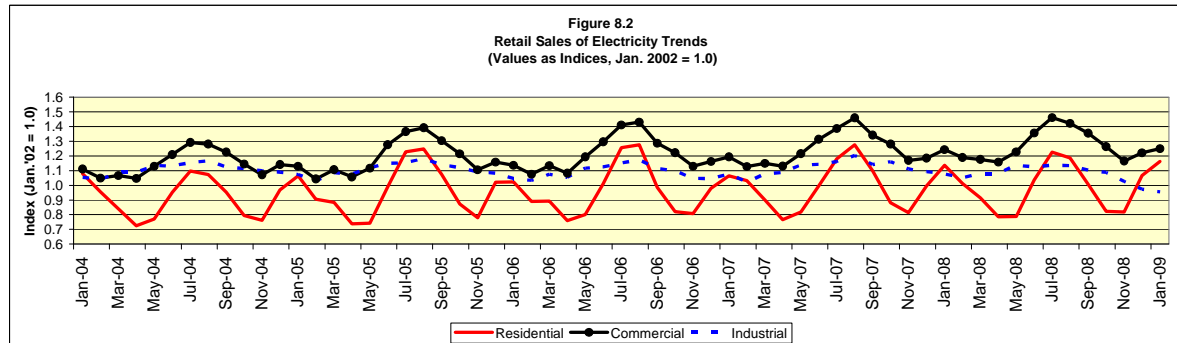
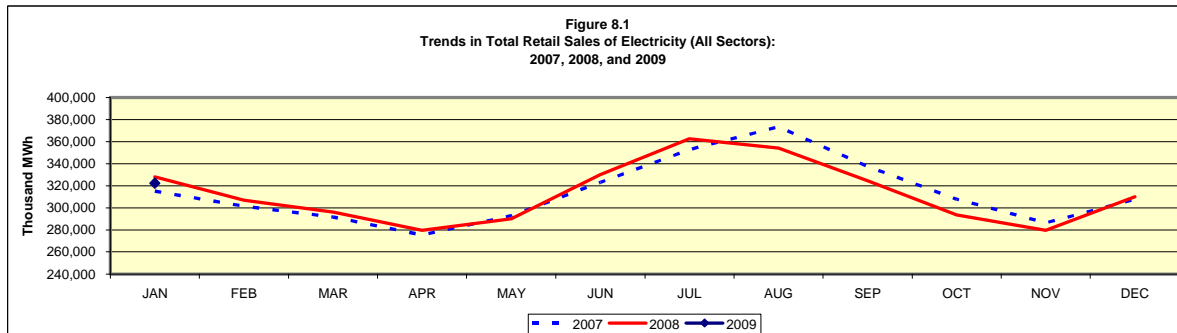
Table 8.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	January 2009	136,741	111,658	73,133	729	322,261
Prior Period	January 2008	January 2008	133,806	111,091	82,524	710	328,130
Percent Difference			2.2%	0.5%	-11.4%	2.7%	-1.8%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	February 2008	January 2009	1,392,356	1,362,453	987,545	7,671	3,750,025
Prior Period	February 2007	January 2008	1,400,760	1,340,738	1,027,971	8,117	3,777,587
Percent Difference			-0.6%	1.6%	-3.9%	-5.5%	-0.7%



Section 9. Average Retail Price Trends

Data for:
January 2009

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

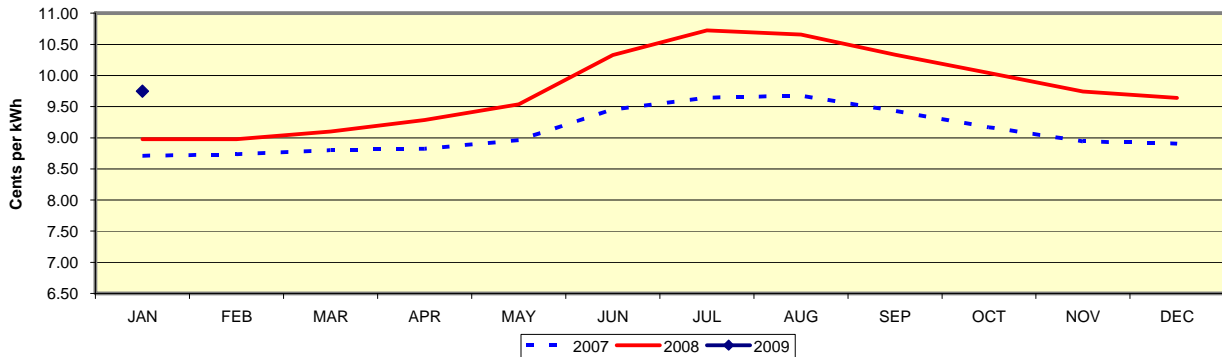
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2009	January 2009	11.03	10.01	6.92	11.71	9.74
Prior Period	January 2008	January 2008	10.23	9.39	6.39	9.69	8.98
Percent Difference			7.8%	6.6%	8.3%	20.8%	8.5%

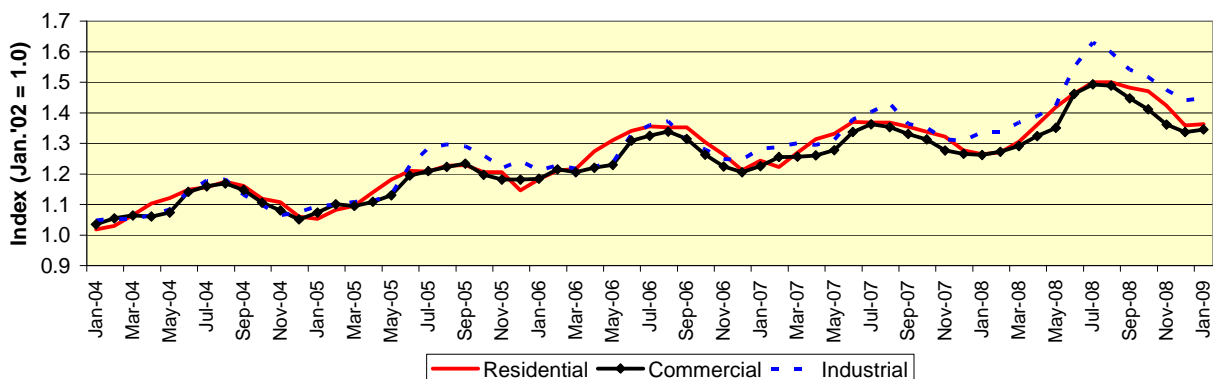
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	February 2008	January 2009	11.43	10.32	7.07	11.47	9.88
Prior Period	February 2007	January 2008	10.66	9.67	6.41	9.77	9.15
Percent Difference			7.2%	6.7%	10.3%	17.4%	8.0%

**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:
January 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	January 2009	953	917	36	3.9%	4	9	-5	-55.6%
Prior Period	January 2008	892	917	-25	-2.7%	7	9	-2	-22.2%
Percent Difference		6.8%				-42.9%			

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	January 2009	953	4	Current Period	February 2008	January 2009	4,547	1,274
Prior Period	January 2008	January 2008	892	7	Prior Period	February 2007	January 2008	4,306	1,392
Percent Difference			6.8%	-42.9%	Percent Difference			5.6%	-8.5%

Figure 10.1 Deviation From Normal: Heating Degree Days, 2009

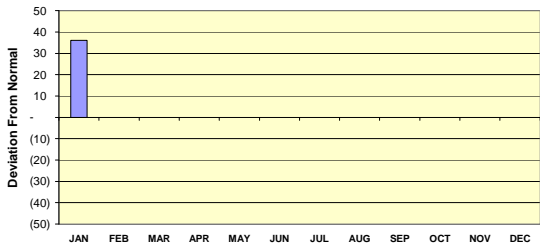


Figure 10.2 Deviation From Normal Cooling Degree Days, 2009

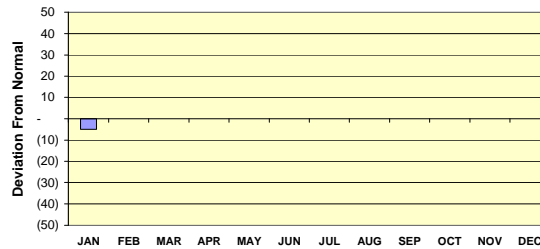


Figure 10.3 Trend in Heating Degree Days: 2008, 2009, and Normal

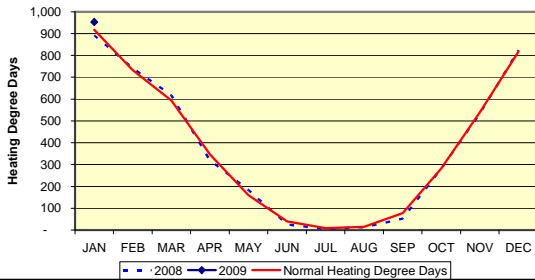


Figure 10.4 Trend in Cooling Degree Days: 2008, 2009, and Normal

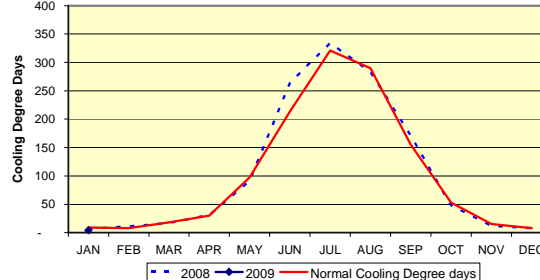


Figure 10.5 Trend in Cumulative Heating Degree Days: 2008, 2009, and Normal

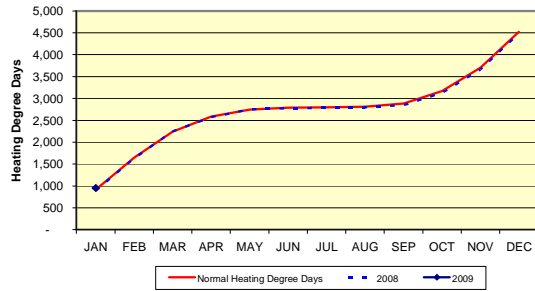
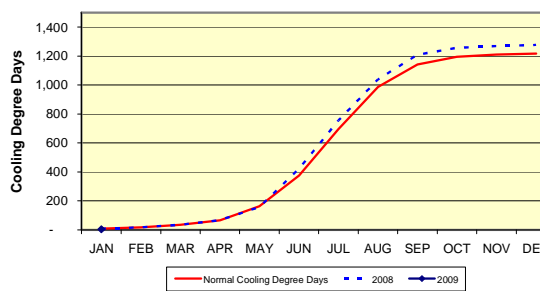


Figure 10.6 Trend in Cumulative Cooling Degree Days: 2008, 2009, and Normal



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 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-923, approximately 1590 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).