

Monthly Flash Estimates of Electric Power Data

Data for:
October 2010

Section 1. Commentary

In October 2010, the contiguous United States experienced temperatures that were above average. Accordingly, the total population-weighted heating degree days for the United States were 15.6 percent below the October normal.

Retail sales of electricity remained relatively unchanged from October 2009. Over the same period, the average U.S. retail price of electricity increased 1.8 percent. For the 12-month period ending October 2010, the average U.S. retail price of electricity decreased 0.2 percent over the previous 12-month period ending October 2009.

Total electric power generation in the United States remained relatively unchanged compared to October 2009. Over the same period, coal generation decreased 4.2 percent, while natural gas generation increased 5.6 percent. Petroleum liquids generation had the largest percentage change when compared to October 2009, decreasing 36.8 percent.

Consistent with the year-over-year decrease in coal generation, the consumption of coal to produce electricity decreased 3.9 percent when compared to October 2009. Over the same time period, natural gas consumption increased 5.0 percent, while petroleum liquids consumption decreased 35.1 percent.

Total coal stocks increased 7.3 percent from the previous month. This increase observed over the past two months is a result of the seasonal build up of coal stocks as the United States prepares for the winter months. Accordingly, the average number of days of burn for coal plants consuming bituminous or subbituminous coal as their primary fuel has shown an upward trend since mid-summer.

References for weather data:

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

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Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
September 2010	-10.9%	-9.5%	-1.9%
October 2009	0.1%	8.2%	-15.7%
Year to Date	4.6%	0.2%	-6.1%
Latest 12 Month Period*	3.6%	-0.6%	-1.8%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
September 2010	-18.5%	-9.6%	7.3%
October 2009	5.0%	-3.9%	-12.4%
Year to Date	7.2%	5.9%	--
Latest 12 Month Period*	7.0%	3.9%	--

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

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Oct-10	Oct-09	% Change	Sep-10	% Change
Coal	134,084	139,956	-4.2%	148,667	-9.8%
Petroleum Liquids	1,147	1,814	-36.8%	1,746	-34.3%
Natural Gas	76,634	72,587	5.6%	92,503	-17.2%
Nuclear	62,751	58,021	8.2%	69,371	-9.5%
Hydroelectric Conventional	16,601	19,691	-15.7%	16,915	-1.9%
All Other	16,139	14,923	8.1%	15,863	1.7%
Total (All Energy Sources)	307,356	306,991	0.1%	345,064	-10.9%

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-10	Oct-09	% Change	Sep-10	% Change
Coal (Thousand Short Tons)	71,770	74,686	-3.9%	79,350	-9.6%
Petroleum Liquids (Thousand Barrels)	1,979	3,047	-35.1%	2,894	-31.6%
Natural Gas (Million Cubic Feet)	586,551	558,858	5.0%	719,755	-18.5%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Oct-10	Oct-09	% Change	Sep-10	% Change
Coal (Thousand Short Tons)	174,654	199,477	-12.4%	162,798	7.3%
Petroleum Liquids (Thousand Barrels)	37,025	39,248	-5.7%	36,773	0.7%

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:
October 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	October 2010	1,548,834	19,683	836,663	670,630	213,734	164,202	3,453,746
Prior Period	January 2009	October 2009	1,452,661	23,190	785,951	669,075	227,708	144,062	3,302,647
Percent Difference			6.6%	-15.1%	6.5%	0.2%	-6.1%	14.0%	4.6%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	November 2009	October 2010	1,852,077	22,467	971,509	800,409	259,472	194,858	4,100,792
Prior Period	November 2008	October 2009	1,774,728	28,638	911,769	805,415	264,237	171,805	3,956,592
Percent Difference			4.4%	-21.5%	6.6%	-0.6%	-1.8%	13.4%	3.6%

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

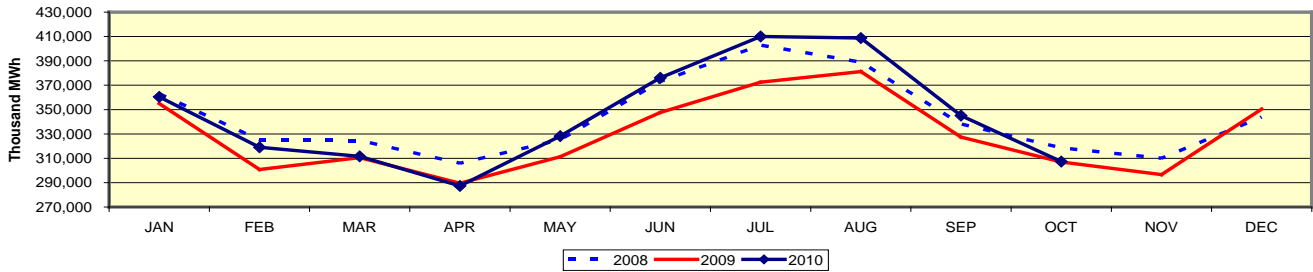


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

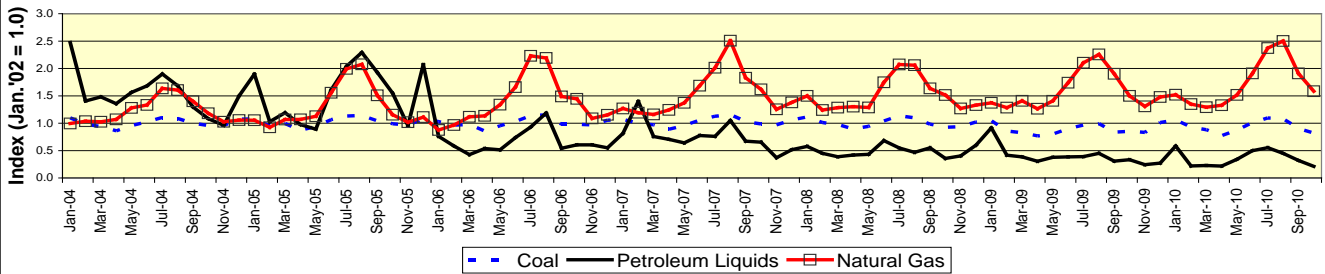
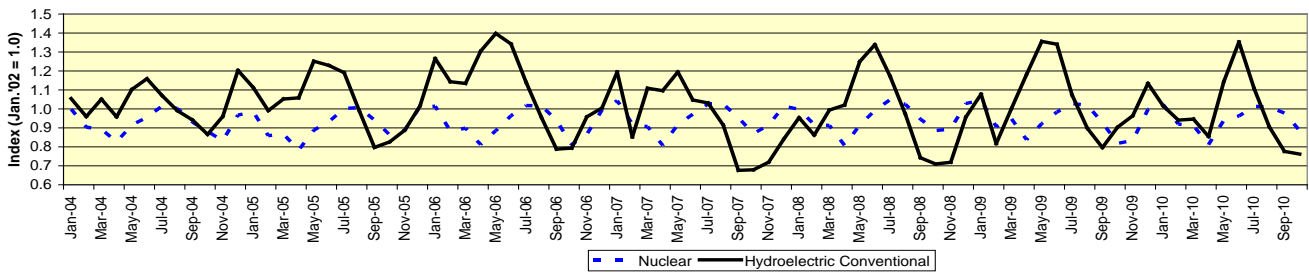


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
October 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	October 2010	818,859	33,761	6,534,577
Prior Period	January 2009	October 2009	773,213	38,905	6,097,841
Percent Difference			5.9%	-13.2%	7.2%

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 2009	October 2010	980,330	38,416	7,557,320
Prior Period	November 2008	October 2009	943,559	48,057	7,062,252
Percent Difference			3.9%	-20.1%	7.0%

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

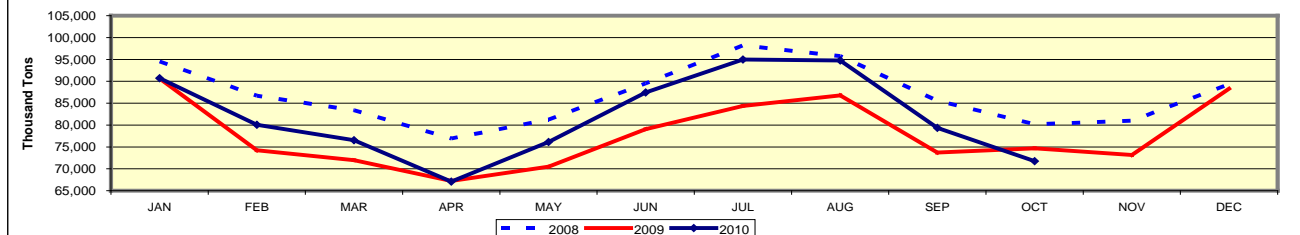


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

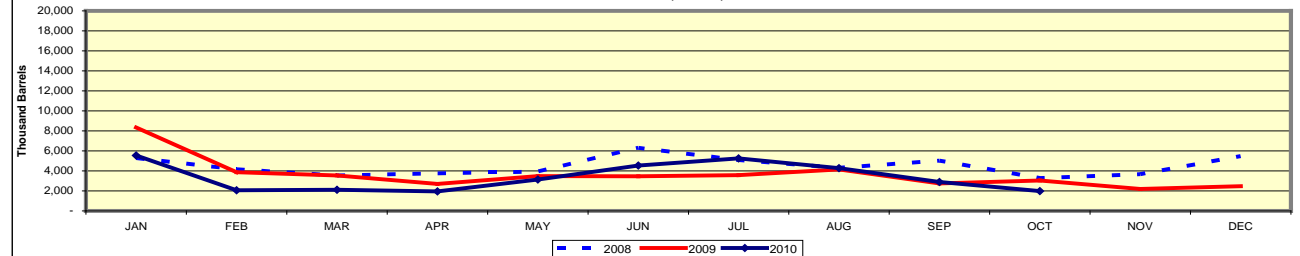
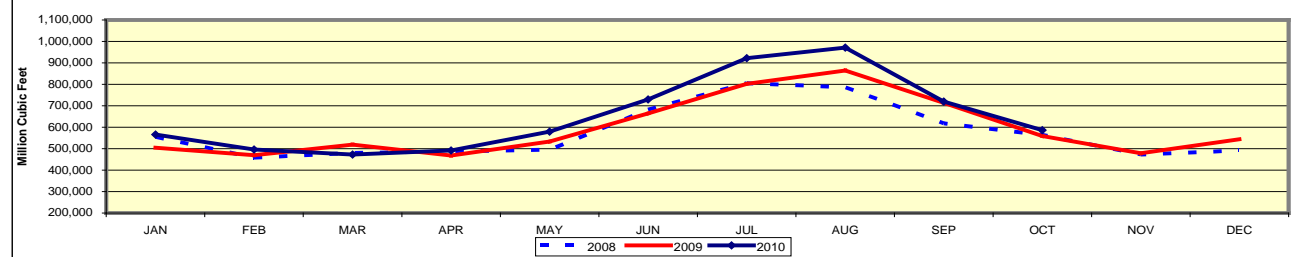


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

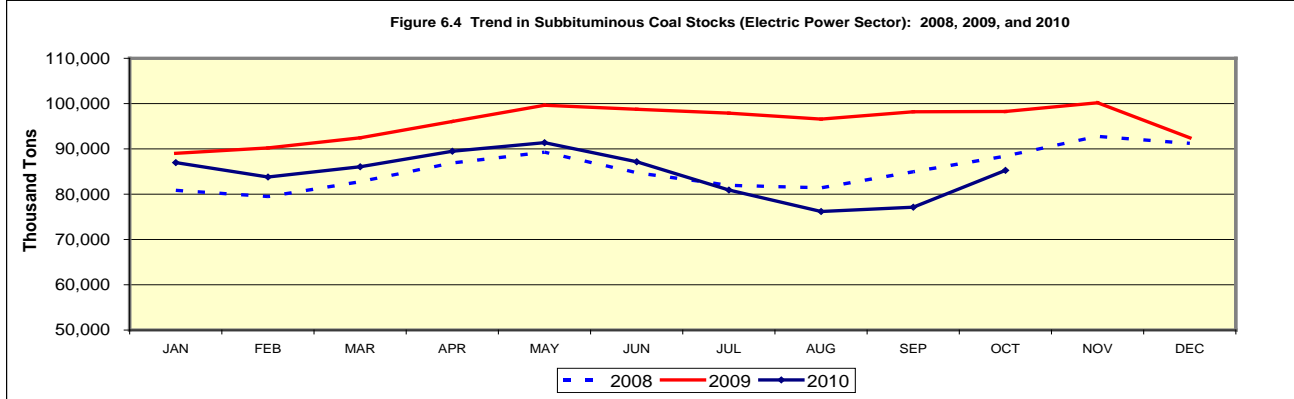
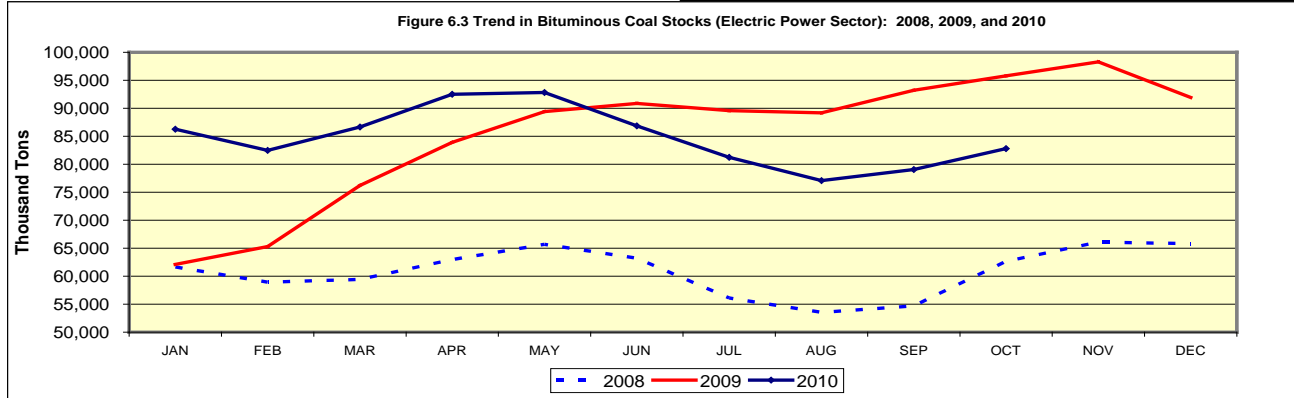
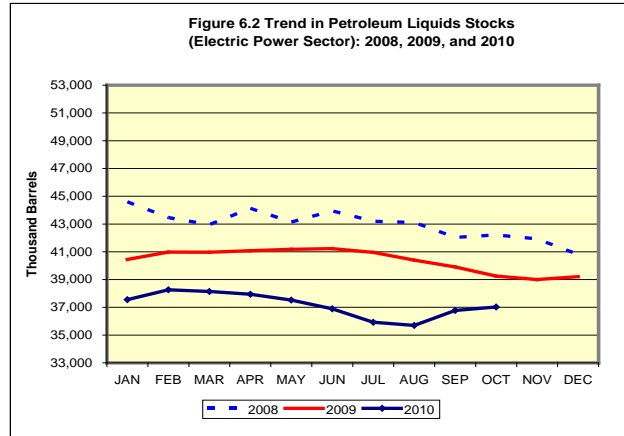
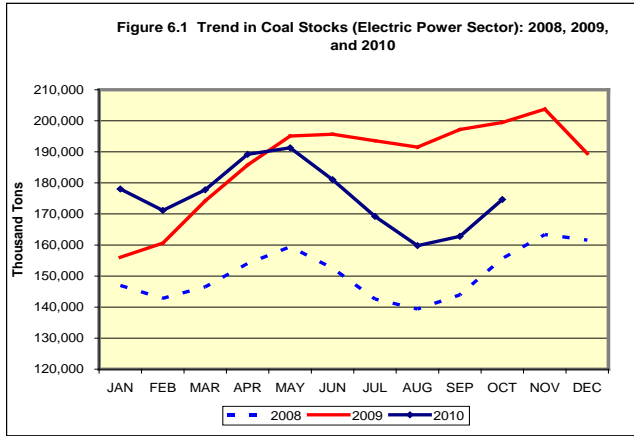


Section 6. Fossil Fuel Stock Trends

Data for:
October 2010

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

Fossil Fuel Stocks	Oct-10	Oct-09	% Change	Sep-10	% Change
Coal, Total (Thousand Short Tons)	174,654	199,477	-12.4%	162,798	7.3%
Bituminous (includes anthracite and coal symfuel)	82,809	95,788	-13.5%	79,050	4.8%
Subbituminous	85,253	98,254	-13.2%	77,140	10.5%
Lignite	6,592	5,434	21.3%	6,608	-0.2%
Petroleum Liquids (Thousand Barrels)	37,025	39,248	-5.7%	36,773	0.7%



Section 7. Average Number of Days Burn Non-Lignite Coal

Data for:
October 2010

Table 7.1 Average Number of Days Burn Non-Lignite Coal by Region (Electric Power Sector)

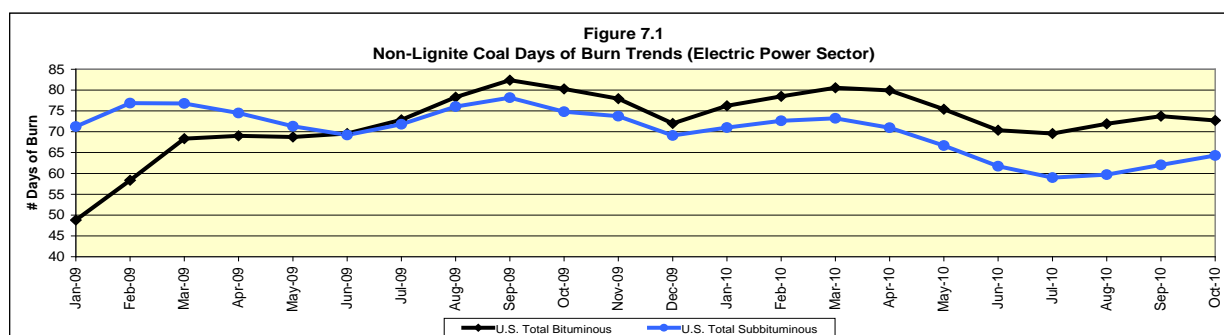
Zone	Oct-10	Oct-09	% Change	Sep-10	% Change
Northeast	57	55	4.6%	57	0.4%
South	71	83	-14.5%	70	2.1%
Midwest	67	73	-8.6%	66	0.7%
West	71	84	-15.9%	70	1.3%

Table 7.2 Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn (Electric Power Sector)

Zone	October 2010		
	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	5.6%	54.9%	39.5%
South	4.5%	37.3%	58.3%
Midwest	4.2%	38.6%	57.2%
West	1.8%	45.8%	52.4%

Table 7.3 Coal Stocks and Average Number of Days Burn for Non-Lignite Coal by Region (Electric Power Sector)

Zone	Coal	Oct-10		Oct-09		% Change of Stocks	Sep-10		% Change of Stocks
		Stocks (000 tons)	Days of Burn	Stocks (000 tons)	Days of Burn		Stocks (000 tons)	Days of Burn	
Northeast	Bituminous	7,718	59	7,306	55	5.6%	7,015	59	10.0%
	Subbituminous	737	45	827	48	-10.8%	686	41	7.4%
South	Bituminous	45,198	73	55,196	84	-18.1%	41,313	72	9.4%
	Subbituminous	5,683	60	7,606	77	-25.3%	5,178	57	9.7%
Midwest	Bituminous	19,535	73	20,224	73	-3.4%	19,674	78	-0.7%
	Subbituminous	43,887	64	49,519	73	-11.4%	39,735	62	10.4%
West	Bituminous	6,877	98	8,629	117	-20.3%	7,020	104	-2.0%
	Subbituminous	28,081	66	33,365	78	-15.8%	25,458	64	10.3%
U.S. Total	Bituminous	79,328	73	91,356	80	-13.2%	75,023	74	5.7%
	Subbituminous	78,387	64	91,317	75	-14.2%	71,057	62	10.3%



Section 8. Month-to-Month Comparisons: Electric Power Retail Sales and Average Prices

Data for:
October 2010

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	Oct-10	Oct-09	% Change	Sep-10	% Change
Residential	96,755	98,522	-1.8%	125,770	-23.1%
Commercial	110,082	108,635	1.3%	121,097	-9.1%
Industrial	79,621	79,584	0.0%	81,050	-1.8%
Transportation	607	607	0.1%	628	-3.3%
All Sectors	287,065	287,348	-0.1%	328,545	-12.6%

Average Retail Price

Table 8.2 Average Retail Price (Cents/kWh) -- U.S. Total

Ultimate Customer	Oct-10	Oct-09	% Change	Sep-10	% Change
Residential	11.93	11.66	2.3%	11.97	-0.3%
Commercial	10.23	10.26	-0.3%	10.55	-3.0%
Industrial	6.85	6.53	4.9%	7.07	-3.1%
Transportation	10.86	10.84	0.2%	11.39	-4.7%
All Sectors	9.87	9.70	1.8%	10.24	-3.6%

Table 8.3 Average Retail Price (Cents/kWh) by Census Division

Census Division	Residential			All Sectors		
	Oct-10	Oct-09	% Change	Oct-10	Oct-09	% Change
New England	16.68	17.25	-3.3%	14.69	15.38	-4.5%
Middle Atlantic	15.87	15.13	4.9%	13.27	12.86	3.2%
East North Central	11.93	11.20	6.5%	9.05	8.68	4.3%
West North Central	10.03	9.23	8.7%	7.73	7.32	5.6%
South Atlantic	11.31	11.61	-2.6%	9.60	9.88	-2.8%
East South Central	10.58	9.59	10.3%	8.53	7.65	11.5%
West South Central	10.87	10.90	-0.3%	8.62	8.59	0.3%
Mountain	10.44	10.47	-0.3%	8.48	8.57	-1.1%
Pacific Contiguous	12.59	11.93	5.5%	11.63	11.23	3.6%
Pacific Noncontiguous	23.67	22.81	3.8%	21.44	20.43	4.9%
U.S. Total	11.93	11.66	2.3%	9.87	9.70	1.8%

Section 9. Retail Sales Trends

Data for:
October 2010

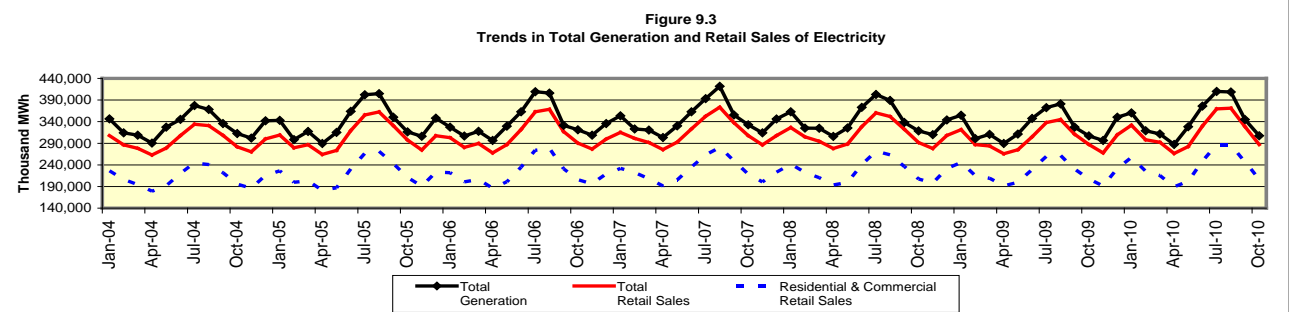
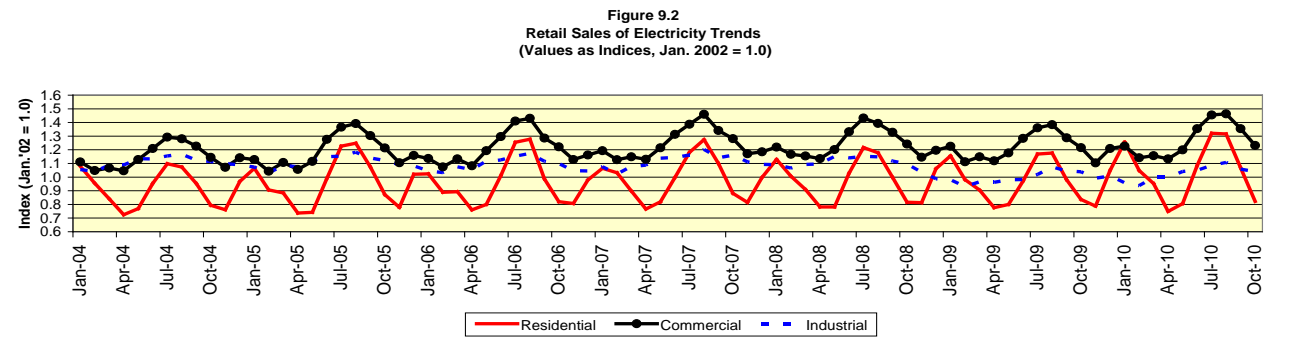
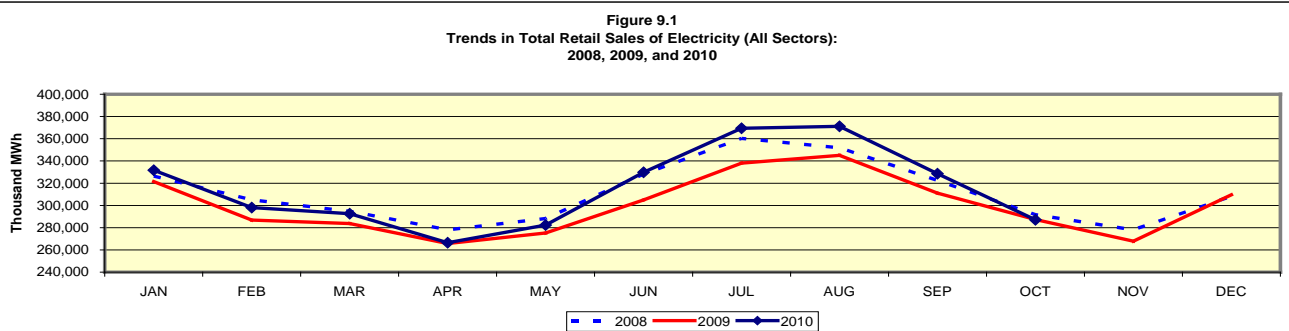
Table 9.1 Trends in Total Retail Sales of Electricity (All Sectors)
Millions of Kilowatthours

Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	October 2010	1,227,206	1,136,603	786,851	6,472	3,157,132
Prior Period	January 2009	October 2009	1,148,182	1,100,446	764,274	6,501	3,019,403
Percent Difference			6.9%	3.3%	3.0%	-0.4%	4.6%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	November 2009	October 2010	1,443,498	1,343,325	940,019	7,752	3,734,594
Prior Period	November 2008	October 2009	1,368,850	1,309,739	919,266	7,788	3,605,643
Percent Difference			5.5%	2.6%	2.3%	-0.5%	3.6%



Section 10. Average Retail Price Trends

Data for:
October 2010

**Table 10.1 Trends in Average Retail Price of Electricity (All Sectors)
Cents per Kilowatthour**

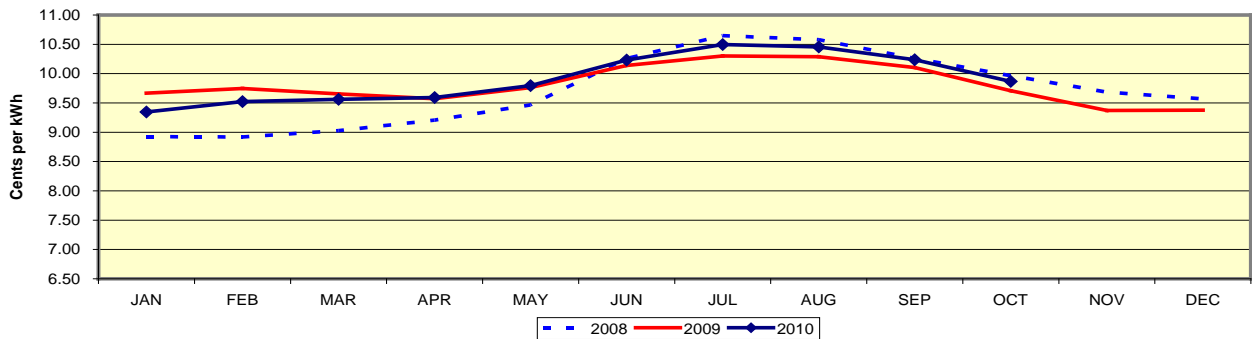
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	October 2010	11.62	10.26	6.85	11.08	9.94
Prior Period	January 2009	October 2009	11.59	10.34	6.77	10.68	9.91
Percent Difference			0.3%	-0.8%	1.2%	3.7%	0.3%

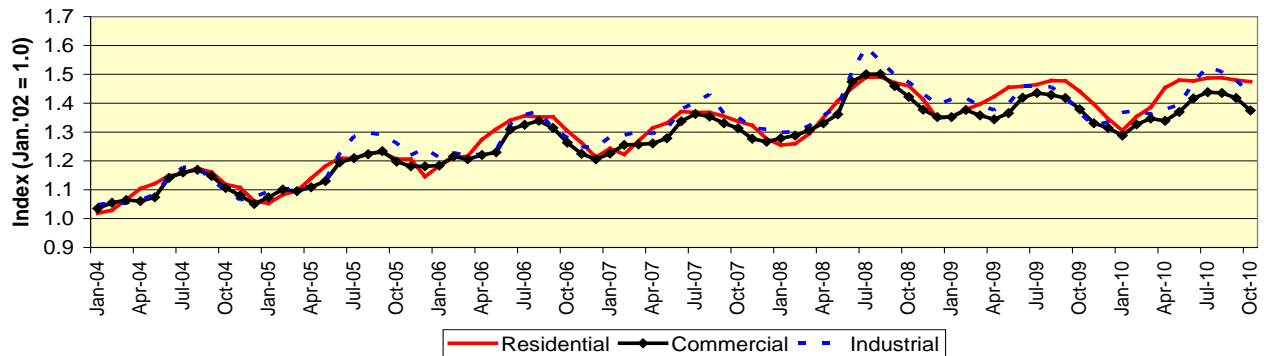
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	November 2009	October 2010	11.54	10.20	6.77	10.98	9.85
Prior Period	November 2008	October 2009	11.52	10.31	6.77	10.65	9.87
Percent Difference			0.2%	-1.1%	0.0%	3.1%	-0.2%

**Figure 10.1 Trends in Average Retail Price of Electricity (All Sectors):
2008, 2009, and 2010**



**Figure 10.2 Average Retail Price of Electricity: Trends by Sector
(Values as Indices, Jan. 2002 = 1.0)**



Section 11. Heating and Cooling Degree Days

Data for:
October 2010

Table 11.1 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 2010	238	282	-44	-15.6%	51	53	-2	-3.8%
Prior Period	October 2009	330	282	48	17.0%	47	53	-6	-11.3%
Percent Difference		-27.9%				8.5%			

Table 11.2 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	October 2010	3,040	1,440	Current Period	November 2009	October 2010	4,358	1,463
Prior Period	January 2009	October 2009	3,175	1,206	Prior Period	November 2008	October 2009	4,540	1,226
Percent Difference			-4.3%	19.4%	Percent Difference			-4.0%	19.3%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2010

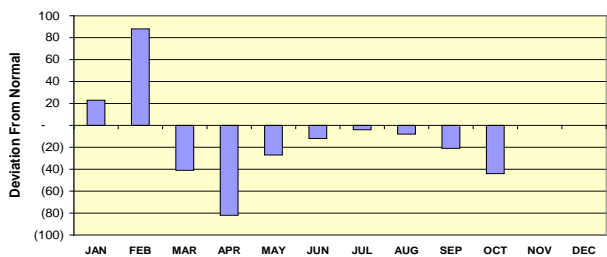


Figure 11.2 Deviation From Normal: Cooling Degree Days, 2010

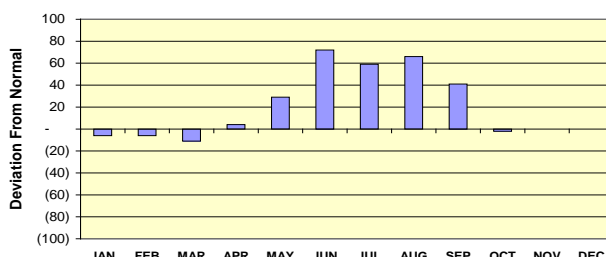


Figure 11.3 Trend in Heating Degree Days: 2009, 2010, and Normal

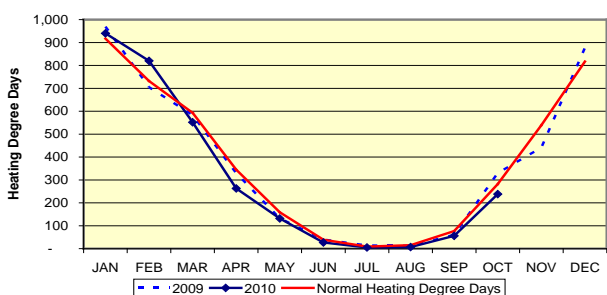


Figure 11.4 Trend in Cooling Degree Days: 2009, 2010, and Normal

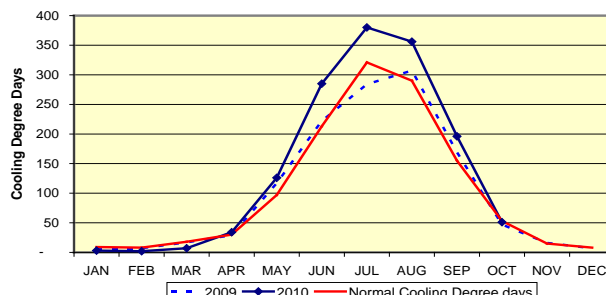


Figure 11.5 Trend in Cumulative Heating Degree Days: 2009, 2010, and Normal

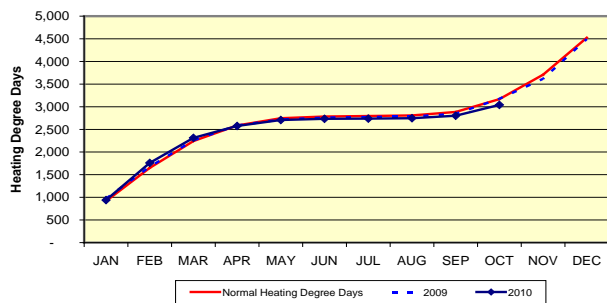
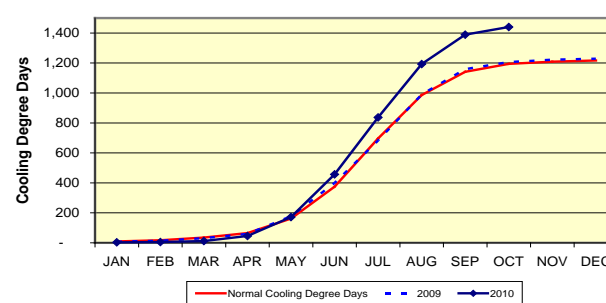


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2009, 2010, and Normal



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).

Average Days of Burn: Average Days of Burn is defined as the average number of days remaining until coal stocks reach zero if no further deliveries of coal are made. These data have been calculated using only the population of coal plants present in the monthly Form EIA-923. This includes 1) coal plants that have generators with a primary fuel of bituminous coal (including anthracite) or subbituminous, and 2) are in the Electric Power Sector (as defined in the above "Sector definitions"). Excluded are plants with primary fuel of lignite and waste coal, mine mouth plants, and out of service plants. Coal storage terminals and the related plants that they serve are aggregated into one entity for the calculation of Average Days of Burn, as are plants that share stockpiles.

Average days of burn is computed as follows: End of month stocks for the current (data) month, divided by the average burn per day. Average burn per day is the average of the three previous years' consumption as reported on the Form EIA-923.

For lists of the plants included in the calculations, the plants that are excluded, and the plants that are aggregated with terminals, contact EIA at EIA923@eia.gov.

These data are displayed by coal rank and by zone. Each zone has been formed by combining the following Census Divisions:

"Northeast" -- New England, Middle Atlantic
 "South" -- South Atlantic, East South Central
 "Midwest" -- West North Central, East North Central
 "West" -- Mountain, West South Central, Pacific Contiguous

Coal Stocks: Section 6 vs. Section 7

The coal stocks data presented in Section 6 will differ from the coal stocks presented in Section 7. This occurs because coal stocks in Section 6 include the entire population of coal plants that report on both the annual and monthly Form EIA-923. The coal stocks reported in Section 7 only include coal plants that report on the monthly Form EIA-923 and have a primary fuel of bituminous (including anthracite) or subbituminous as reported on the Form EIA-860.