Monthly Flash Estimates of

Electric Power Data

Data for: December 2010

Section 1. Commentary

In December 2010, the contiguous United States as a whole experienced temperatures that were near normal. However, there was a significant contrast in temperatures across the country as the western United States experienced above average temperatures, while the more densely populated eastern part of the nation experienced temperatures that were significantly below average. Accordingly, the total population-weighted heating degree days for the United States were 9.9 percent above the December normal.

Retail sales of electricity increased 2.9 percent from December 2009. Over the same period, the average U.S. retail price of electricity increased 1.3 percent. For the 12-month period ending December 2010, the average U.S. retail price of electricity increased 0.6 percent over the previous 12-month period ending December 2009.

Total electric power generation in the United States increased 3.1 percent compared to December 2009. Over the same period, coal generation increased 0.6 percent, while natural gas generation increased 6.9 percent. Petroleum liquids generation had the largest percentage change, increasing 67.0 percent, mainly due to the increased need for peaking generation due to the significantly below average temperatures experienced in the Northeast, Southeast, and Midwest. Nuclear generation increased 4.2 percent compared to December 2009.

Consistent with the year-over-year increase in coal generation, the consumption of coal to produce electricity increased 0.3 percent. Over the same period, natural gas consumption increased 7.8 percent, while petroleum liquids consumption increased 71.6 percent when compared to December 2009.

Total coal stocks decreased 4.1 percent from the previous month. Accordingly, the average number of days of burn for coal plants consuming bituminous or subbituminous coal as their primary fuel exhibited a slight decrease from the previous month.

References for weather data:
http://www.ncdc.noaa.gov/oa/climate/research/2010/dec/national.html

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U.S. Energy Information Administration

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
November 2010	**18.3%**	**17.6%**	**19.0%**
December 2009	**3.1%**	**4.2%**	**-6.5%**
Year to Date	**4.3%**	**1.0%**	**-6.0%**
Latest 12 Month Period*	**4.3%**	**1.0%**	**-6.0%**

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
November 2010	**14.2%**	**21.9%**	**-4.1%**
December 2009	**7.8%**	**0.3%**	**-7.5%**
Year to Date	**7.2%**	**4.8%**	**--**
Latest 12 Month Period*	**7.2%**	**4.8%**	**--**

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

Section 3. Month-to-Month Comparisons: Generation, Consumption and Stocks (Total)	Data for: December 2010

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Dec-10	Dec-09	% Change	Nov-10	% Change
Coal	167,406	166,434	0.6%	135,496	23.6%
Petroleum Liquids	2,452	1,468	67.0%	1,208	103.0%
Natural Gas	76,477	71,574	6.9%	68,332	11.9%
Nuclear	73,683	70,710	4.2%	62,655	17.6%
Hydroelectric Conventional	23,111	24,730	-6.5%	19,425	19.0%
All Other	18,081	15,545	16.3%	18,223	-0.8%
Total (All Energy Sources)	361,210	350,461	3.1%	305,340	18.3%

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	Dec-10	Dec-09	% Change	Nov-10	% Change
Coal (Thousand Short Tons)	88,566	88,320	0.3%	72,643	21.9%
Petroleum Liquids (Thousand Barrels)	4,234	2,467	71.6%	1,999	111.8%
Natural Gas (Million Cubic Feet)	586,055	543,885	7.8%	513,285	14.2%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Dec-10	Dec-09	% Change	Nov-10	% Change
Coal (Thousand Short Tons)	175,315	189,467	-7.5%	182,848	-4.1%
Petroleum Liquids (Thousand Barrels)	36,083	39,210	-8.0%	37,197	-3.0%

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: December 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	December 2010	1,850,608	23,430	981,470	806,968	257,052	200,466	4,119,994
Prior Period	January 2009	December 2009	1,755,904	25,974	920,797	798,855	273,445	174,719	3,949,694
Percent Difference			5.4%	-9.8%	6.6%	1.0%	-6.0%	14.7%	4.3%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	January 2010	December 2010	1,850,608	23,430	981,470	806,968	257,052	200,466	4,119,994
Prior Period	January 2009	December 2009	1,755,904	25,974	920,797	798,855	273,445	174,719	3,949,694
Percent Difference			5.4%	-9.8%	6.6%	1.0%	-6.0%	14.7%	4.3%

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

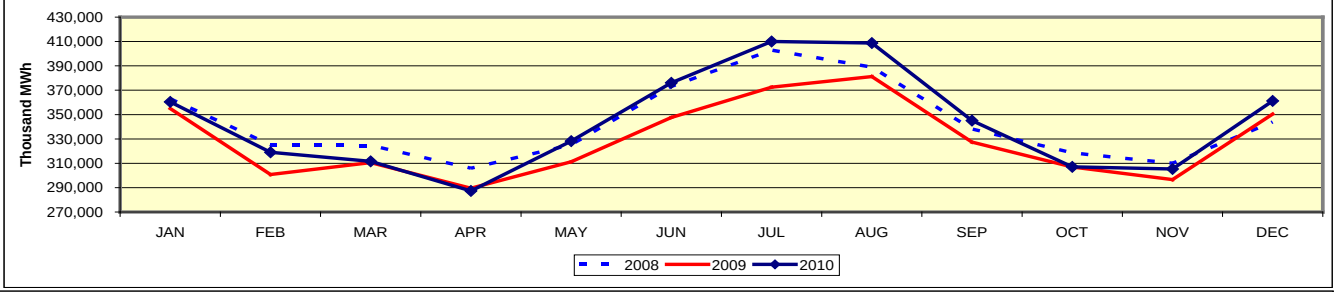


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

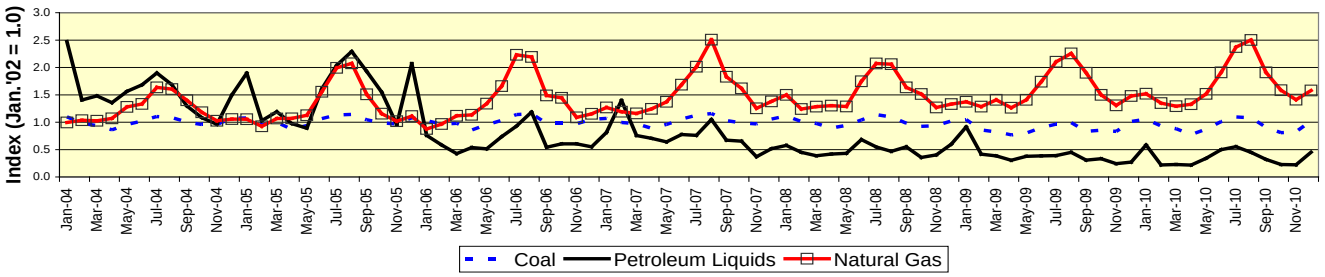


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)

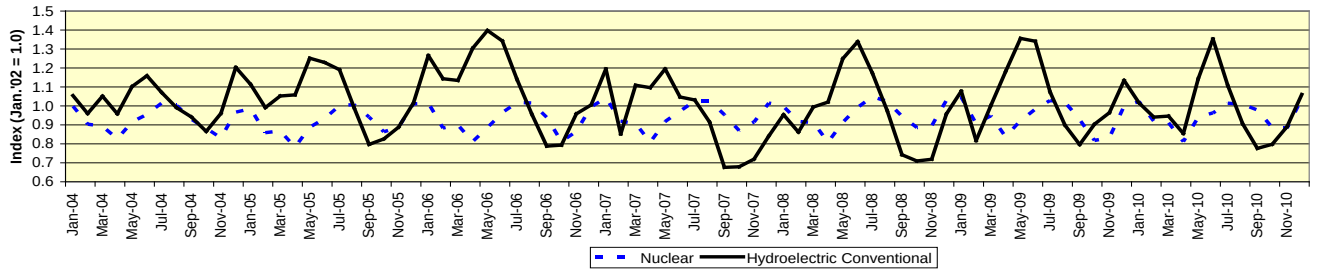


Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2010	December 2010	979,459	40,073	7,633,937
Prior Period	January 2009	December 2009	934,683	43,559	7,120,585
Percent Difference			4.8%	-8.0%	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	January 2010	December 2010	979,459	40,073	7,633,937
Prior Period	January 2009	December 2009	934,683	43,559	7,120,585
Percent Difference			4.8%	-8.0%	7.2%

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

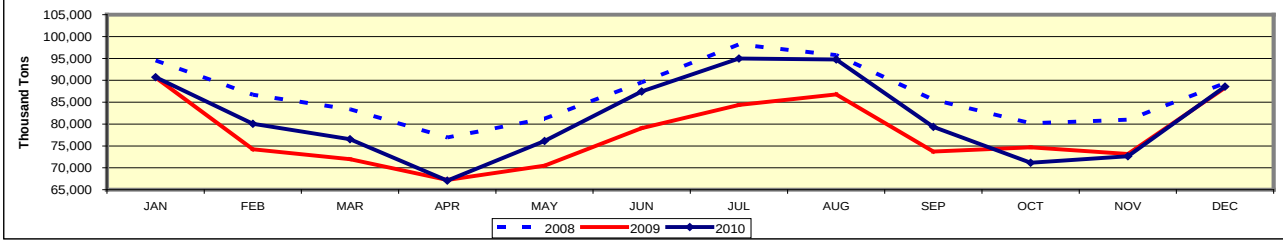


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010

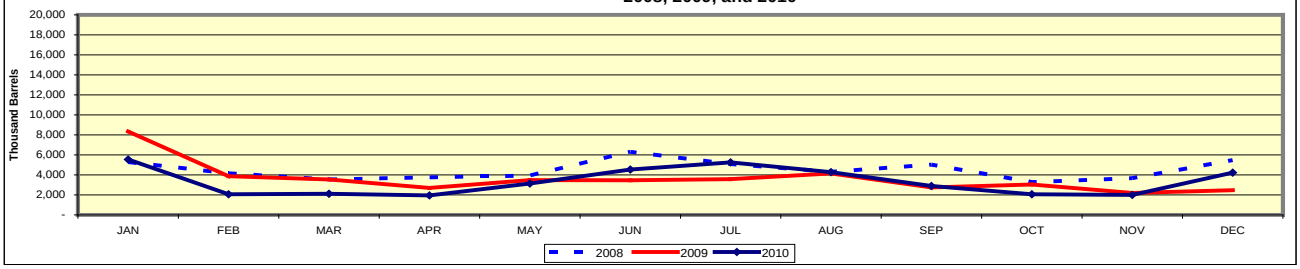
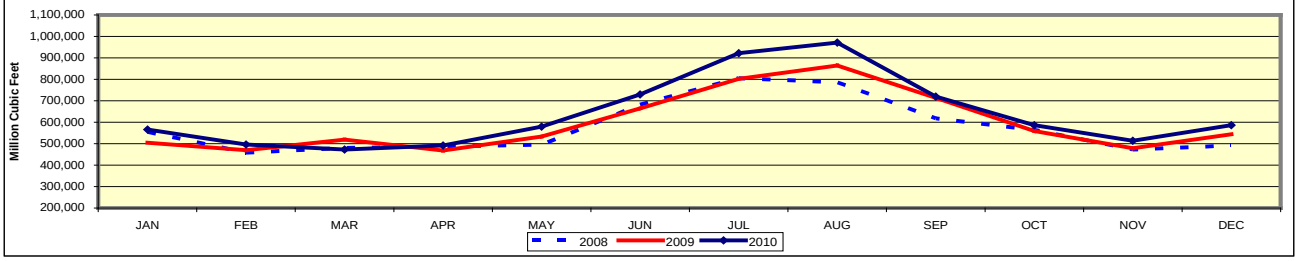


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2008, 2009, and 2010



Section 6. Fossil Fuel Stock Trends

Data for:
December 2010

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

Fossil Fuel Stocks	Dec-10	Dec-09	% Change	Nov-10	% Change
Coal, Total (Thousand Short Tons)	175,315	189,467	-7.5%	182,848	-4.1%
Bituminous (includes anthracite and coal synfuel)	81,264	91,922	-11.6%	87,179	-6.8%
Subbituminous	86,795	92,448	-6.1%	88,762	-2.2%
Lignite	7,257	5,097	42.4%	6,907	5.1%
Petroleum Liquids (Thousand Barrels)	36,083	39,210	-8.0%	37,197	-3.0%

Figure 6.1 Trend in Coal Stocks (Electric Power Sector): 2008, 2009, and 2010

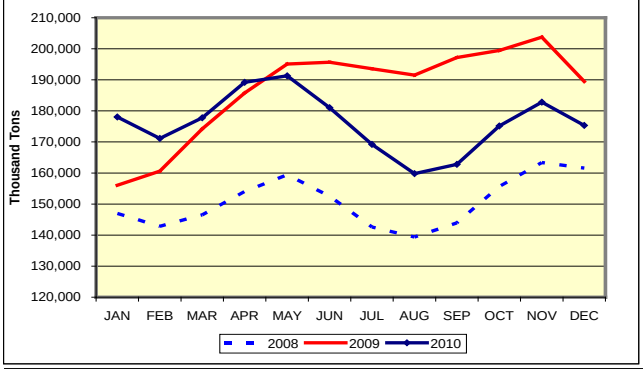


Figure 6.2 Trend in Petroleum Liquids Stocks (Electric Power Sector): 2008, 2009, and 2010

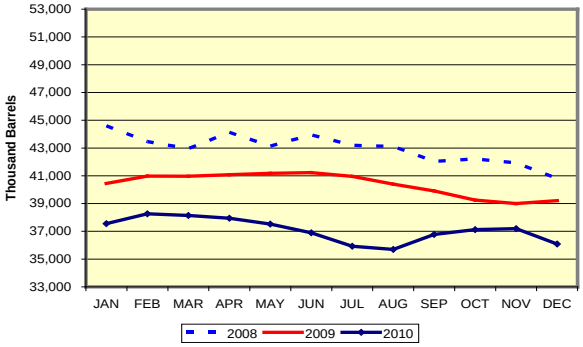


Figure 6.3 Trend in Bituminous Coal Stocks (Electric Power Sector): 2008, 2009, and 2010

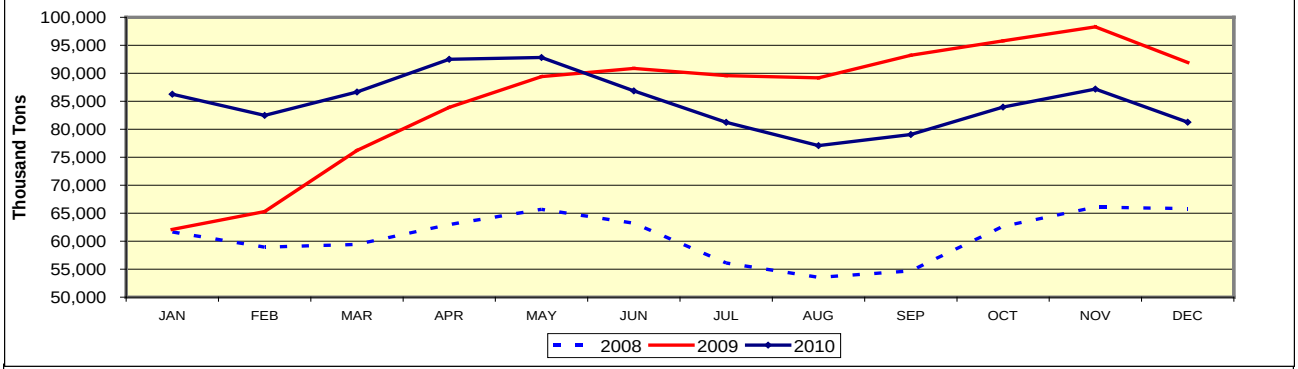
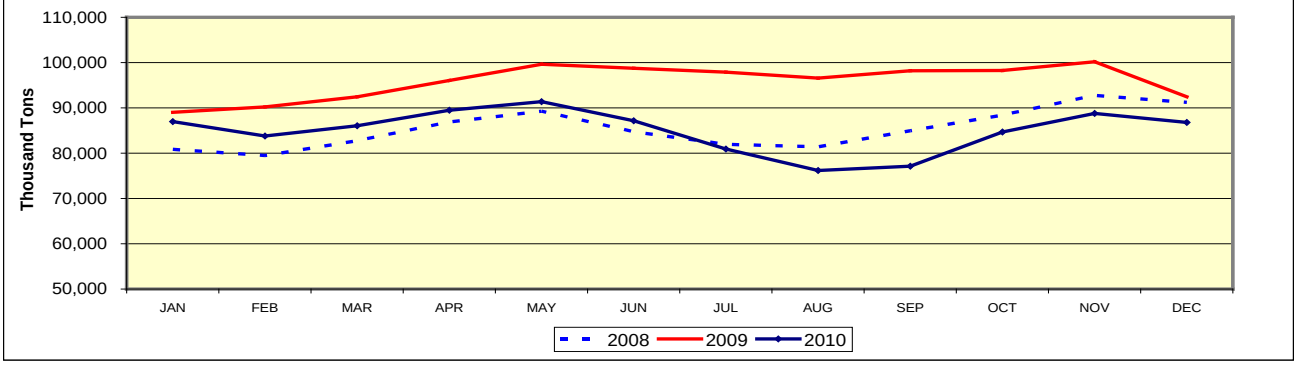


Figure 6.4 Trend in Subbituminous Coal Stocks (Electric Power Sector): 2008, 2009, and 2010



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

Data for:
December 2010

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

Zone	Dec-10	Dec-09	% Change	Nov-10	% Change
Northeast	44	46	-4.0%	55	-19.2%
South	65	75	-13.5%	72	-8.8%
Midwest	66	65	1.3%	66	-0.8%
West	72	83	-13.4%	69	4.4%

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

	December 2010		
Zone	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	21.4%	57.7%	20.9%
South	12.6%	38.7%	48.6%
Midwest	10.0%	38.7%	51.2%
West	7.6%	36.5%	55.9%
U.S. Total	11.6%	40.0%	48.5%

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

		Dec-10		Dec-09			Nov-10		
Zone	Coal	Stocks (000 tons)	Days of Burn	Stocks (000 tons)	Days of Burn	% Change of Stocks	Stocks (000 tons)	Days of Burn	% Change of Stocks
Northeast	Bituminous	6,980	47	7,042	48	-0.9%	8,191	57	-14.8%
	Subbituminous	523	26	675	33	-22.5%	794	40	-34.2%
South	Bituminous	45,499	68	52,755	76	-13.8%	49,462	74	-8.0%
	Subbituminous	5,074	49	7,437	74	-31.8%	5,486	54	-7.5%
Midwest	Bituminous	17,679	59	19,856	66	-11.0%	18,427	64	-4.1%
	Subbituminous	47,025	68	44,992	64	4.5%	47,660	67	-1.3%
West	Bituminous	6,771	101	8,330	119	-18.7%	6,884	97	-1.6%
	Subbituminous	28,607	67	32,448	78	-11.8%	28,654	65	-0.2%
U.S. Total	Bituminous	76,929	65	87,984	72	-12.6%	82,964	71	-7.3%
	Subbituminous	81,229	65	85,551	69	-5.1%	82,595	65	-1.7%

Figure 7.1
Non-Lignite Coal Days of Burn Trends (Electric Power Sector)

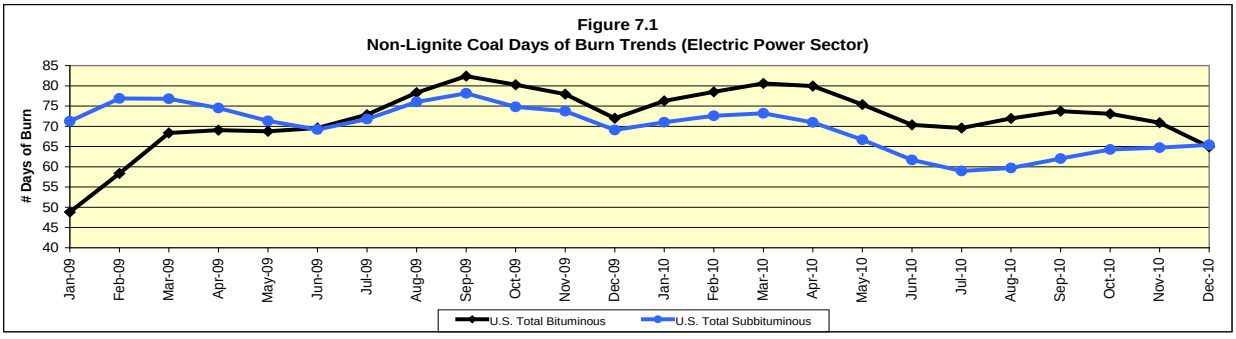
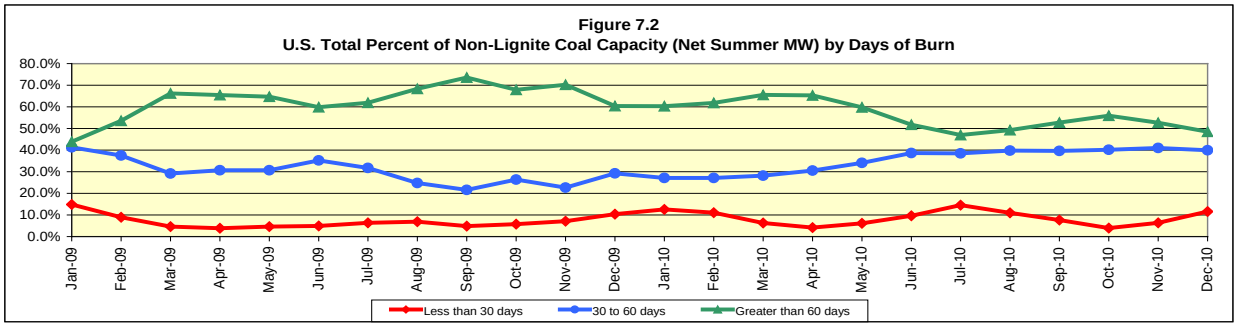


Figure 7.2
U.S. Total Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn



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

Data for: December 2010

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	Dec-10	Dec-09	% Change	Nov-10	% Change
Residential	130,379	123,570	5.5%	93,170	39.9%
Commercial	107,845	108,076	-0.2%	101,399	6.4%
Industrial	79,734	77,251	3.2%	78,805	1.2%
Transportation	672	688	-2.3%	595	12.9%
All Sectors	318,630	309,585	2.9%	273,969	16.3%

Average Retail Price

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

Ultimate Customer	Dec-10	Dec-09	% Change	Nov-10	% Change
Residential	11.03	10.89	1.3%	11.70	-5.7%
Commercial	9.81	9.69	1.2%	10.07	-2.6%
Industrial	6.59	6.49	1.5%	6.59	0.0%
Transportation	10.16	10.47	-3.0%	10.42	-2.5%
All Sectors	9.50	9.38	1.3%	9.62	-1.2%

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

Census Division	Residential			All Sectors		
	Dec-10	Dec-09	% Change	Dec-10	Dec-09	% Change
New England	16.29	16.31	-0.1%	14.87	14.91	-0.3%
Middle Atlantic	14.99	14.39	4.2%	13.02	12.68	2.7%
East North Central	10.83	10.35	4.6%	8.85	8.61	2.8%
West North Central	8.91	8.35	6.7%	7.57	7.04	7.5%
South Atlantic	10.55	10.75	-1.9%	9.50	9.54	-0.4%
East South Central	9.56	8.92	7.2%	8.25	7.66	7.7%
West South Central	10.03	10.17	-1.4%	8.25	8.42	-2.0%
Mountain	9.66	9.69	-0.3%	7.87	7.98	-1.4%
Pacific Contiguous	11.72	11.76	-0.3%	10.15	10.18	-0.3%
Pacific Noncontiguous	23.03	21.61	6.6%	21.56	19.76	9.1%
U.S. Total	11.03	10.89	1.3%	9.50	9.38	1.3%

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	December 2010	1,450,757	1,329,303	962,211	7,740	3,750,010
Prior Period	January 2009	December 2009	1,364,474	1,307,168	917,442	7,781	3,596,865
Percent Difference			6.3%	1.7%	4.9%	-0.5%	4.3%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	December 2010	1,450,757	1,329,303	962,211	7,740	3,750,010
Prior Period	January 2009	December 2009	1,364,474	1,307,168	917,442	7,781	3,596,865
Percent Difference			6.3%	1.7%	4.9%	-0.5%	4.3%

Figure 9.1
Trends in Total Retail Sales of Electricity (All Sectors):
2008, 2009, and 2010

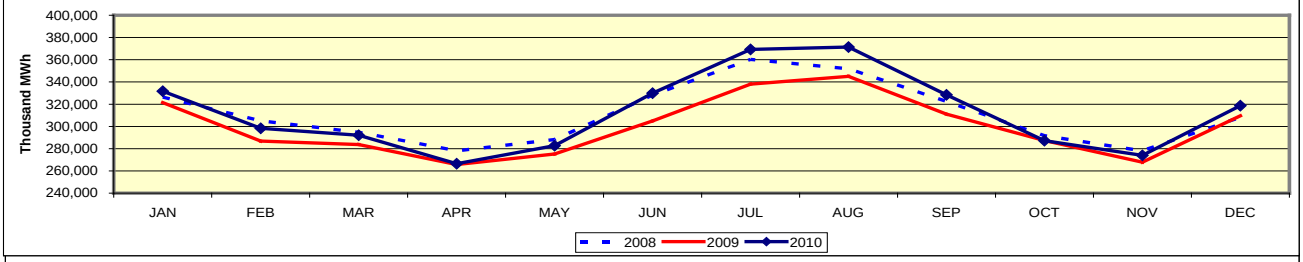


Figure 9.2
Retail Sales of Electricity Trends
(Values as Indices, Jan. 2002 = 1.0)

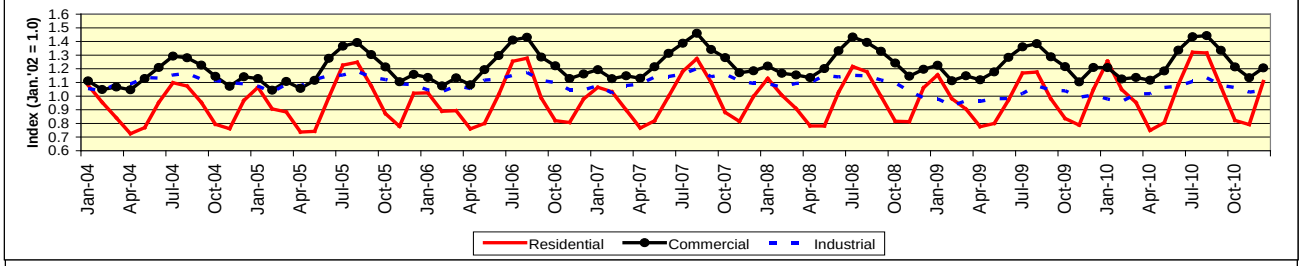
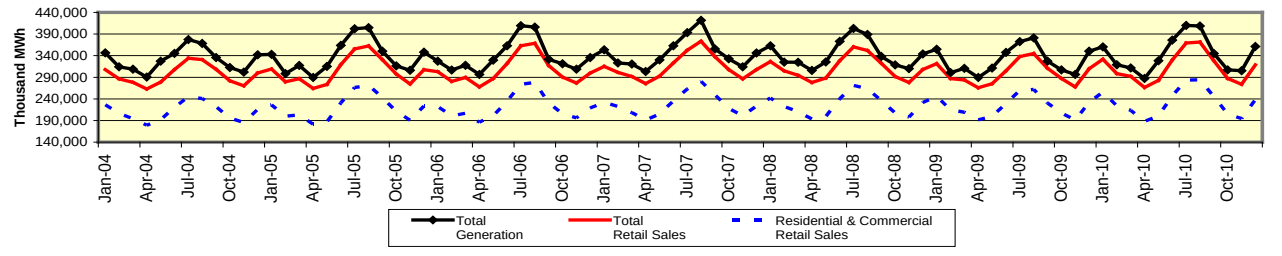


Figure 9.3
Trends in Total Generation and Retail Sales of Electricity



Section 10. Average Retail Price Trends

Data for: December 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	December 2010	11.58	10.26	6.79	10.95	9.88
Prior Period	January 2009	December 2009	11.51	10.17	6.81	10.65	9.82
Percent Difference			0.6%	0.9%	-0.3%	2.8%	0.6%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2010	December 2010	11.58	10.26	6.79	10.95	9.88
Prior Period	January 2009	December 2009	11.51	10.17	6.81	10.65	9.82
Percent Difference			0.6%	0.9%	-0.3%	2.8%	0.6%

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

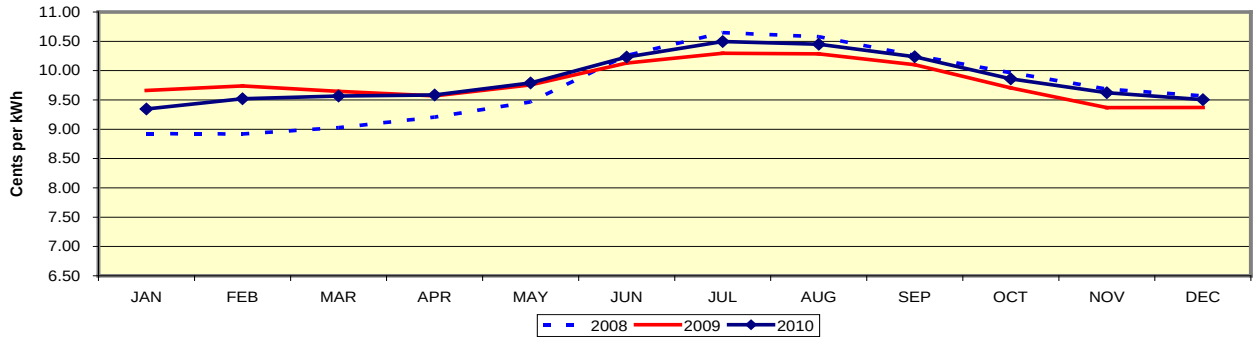
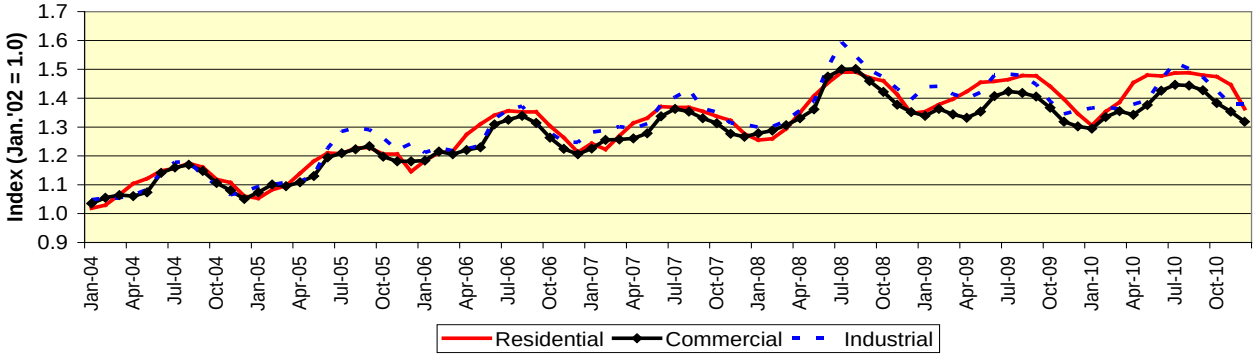


Figure 10.2 Average Retail Price of Electricity: Trends by Sector (Values as Indices, Jan. 2002 = 1.0)



Section 11. Heating and Cooling Degree Days

Data for: December 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	December 2010	898	817	81	9.9%	2	8	-6	-75.0%
Prior Period	December 2009	877	817	60	7.3%	7	8	-1	-12.5%
Percent Difference		2.4%				-71.4%			

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	December 2010	4,451	1,461	**Current Period**	January 2010	December 2010	4,451	1,461
Prior Period	January 2009	December 2009	4,493	1,229	**Prior Period**	January 2009	December 2009	4,493	1,229
Percent Difference			-0.9%	18.9%	**Percent Difference**			-0.9%	18.9%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2010

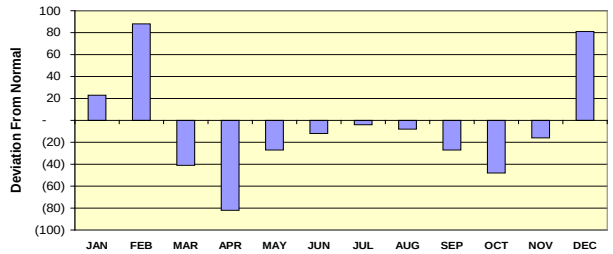


Figure 11.2 Deviation From Normal Cooling Degree Days, 2010

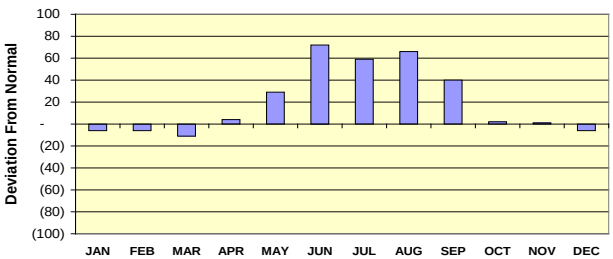


Figure 11.3 Trend in Heating Degree Days: 2009, 2010, and Normal

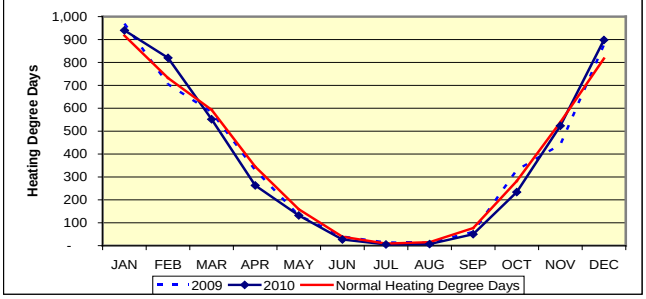


Figure 11.4 Trend in Cooling Degree Days: 2009, 2010, and Normal

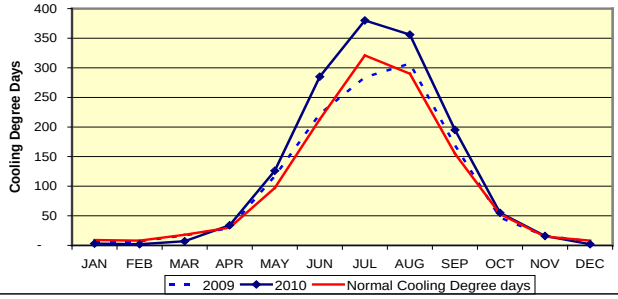


Figure 11.5 Trend in Cumulative Heating Degree Days: 2009, 2010, and Normal

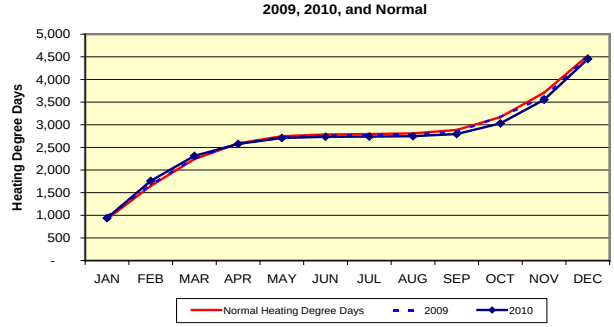
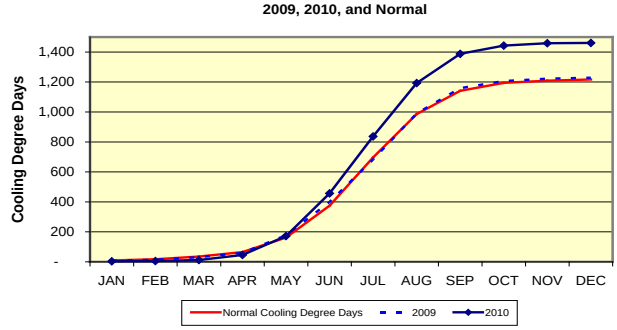


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2009, 2010, and Normal



Section 12. Documentation

Data for: December 2010

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.