

Monthly Flash Estimates of Electric Power Data

Data for:
July 2011

Section 1. Commentary

The contiguous United States experienced temperatures that were significantly above normal in July 2011. In particular, Texas, Oklahoma, and Delaware experienced their warmest July on record, while almost all States east of the Pacific time zone observed near record temperatures in July 2011. Accordingly, the total population-weighted cooling degree days for the United States were 28.0 percent above the July normal.

In July 2011, retail sales of electricity remained relatively unchanged from July 2010. Over the same period, the average U.S. retail price of electricity increased 0.7 percent. The average U.S. retail price of electricity for the 12-month period ending July 2011 increased 1.4 percent over the previous 12-month period ending July 2010.

The total electric power generation in the United States increased 1.7 percent compared to July 2010 (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). Over the same period, coal generation decreased 1.3 percent, while natural gas generation increased 2.2 percent. Petroleum liquids generation showed the largest percentage change, decreasing 46.3 percent due in part to the increased cost of petroleum liquids as a fuel used in electricity generation. Conventional hydroelectric generation increased 30.0 percent from the previous year, as riverflows in the Northwest showed signs of returning to normal following an abnormally long hydroelectric season.

Total coals stocks in the electric power sector decreased 11.0 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 similar decrease from the previous month.

References for weather data:

<http://www.ncdc.noaa.gov/oa/climate/research/2011/jul/national.html>

Table of Contents

1. Commentary	Page 1
2. Key Indicators of Generation, Consumption & Stocks	Page 2
3. Month-to-Month Comparisons: Generation, Consumption and Stocks (Total)	Page 3
4. Net Generation Trends	Page 4
5. Fossil Fuel Consumption Trends	Page 5
6. Fossil Fuel Stock Trends	Page 6
7. Average Number of Days of Burn Non-Lignite Coal	Page 7
8. Month-to-Month Comparisons: Electric Power Retail Sales and Average Prices	Page 8
9. Retail Sales Trends	Page 9
10. Average Retail Price Trends	Page 10
11. Heating and Cooling Degree Days	Page 11
12. Documentation	Page 12

This report was prepared by the U.S. Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the U.S. Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization. For additional information, contact Chris Cassar at Christopher.Cassar@eia.gov.



Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
June 2011	13.4%	10.8%	-2.3%
July 2010	1.7%	0.6%	30.0%
Year to Date	0.5%	-3.1%	30.3%
Latest 12 Month Period*	1.9%	0.0%	16.3%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
June 2011	29.7%	12.6%	-11.0%
July 2010	2.3%	-0.4%	-12.7%
Year to Date	2.9%	-3.1%	--
Latest 12 Month Period*	4.6%	-0.8%	--

* Change in total consumption or generation for the latest 12 month period (August 2010 to July 2011) compared to the prior 12 month period (August 2009 to July 2010).

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Jul-11	Jul-10	% Change	Jun-11	% Change
Coal	177,575	179,933	-1.3%	158,221	12.2%
Petroleum Liquids	1,613	3,002	-46.3%	1,514	6.5%
Natural Gas	117,454	114,883	2.2%	91,035	29.0%
Nuclear	72,345	71,913	0.6%	65,270	10.8%
Hydroelectric Conventional	31,380	24,136	30.0%	32,114	-2.3%
All Other	16,556	16,105	2.8%	19,576	-15.4%
Total (All Energy Sources)	416,923	409,972	1.7%	367,731	13.4%

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	Jul-11	Jul-10	% Change	Jun-11	% Change
Coal (Thousand Short Tons)	94,614	94,992	-0.4%	84,039	12.6%
Petroleum Liquids (Thousand Barrels)	2,765	5,252	-47.4%	2,581	7.1%
Natural Gas (Million Cubic Feet)	943,536	921,966	2.3%	727,616	29.7%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jul-11	Jul-10	% Change	Jun-11	% Change
Coal (Thousand Short Tons)	147,761	169,215	-12.7%	165,974	-11.0%
Petroleum Liquids (Thousand Barrels)	35,633	35,925	-0.8%	36,257	-1.7%

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:
July 2011

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 2011	July 2011	1,042,418	10,049	559,290	452,373	209,055	131,106	2,404,291
Prior Period	January 2010	July 2010	1,087,982	14,345	546,400	466,934	160,470	116,434	2,392,565
Percent Difference			-4.2%	-29.9%	2.4%	-3.1%	30.3%	12.6%	0.5%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	August 2010	July 2011	1,805,186	19,100	994,705	792,407	305,636	214,719	4,131,753
Prior Period	August 2009	July 2010	1,831,587	23,070	955,160	792,730	262,838	189,724	4,055,109
Percent Difference			-1.4%	-17.2%	4.1%	0.0%	16.3%	13.2%	1.9%

Figure 4.1 Trends in Total Net Generation (All Sectors): 2009, 2010, and 2011

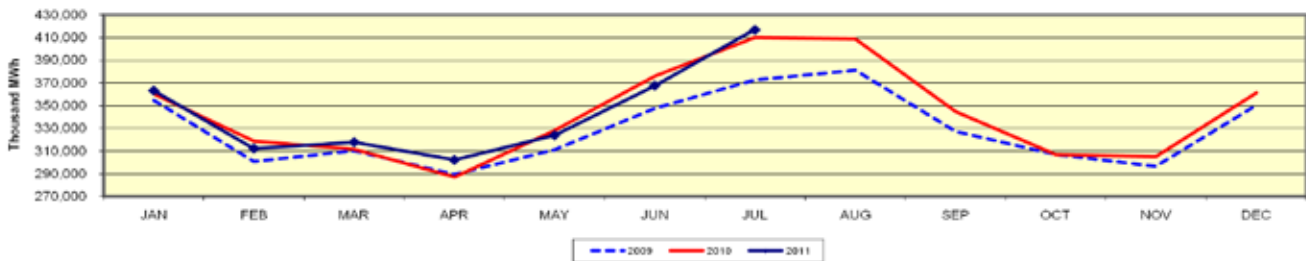


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

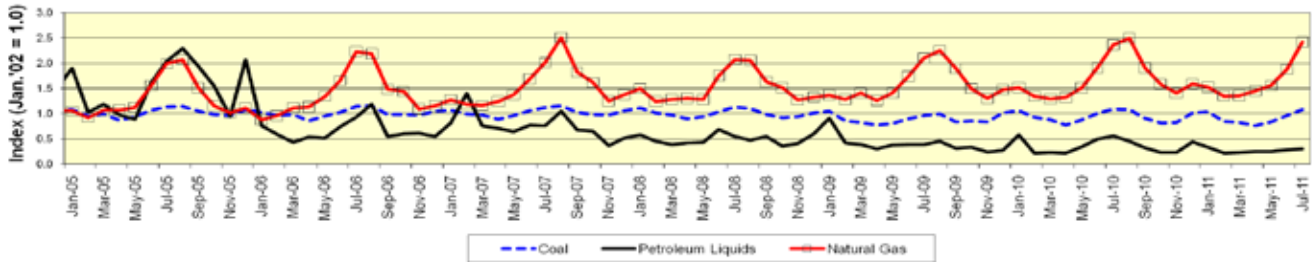


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)

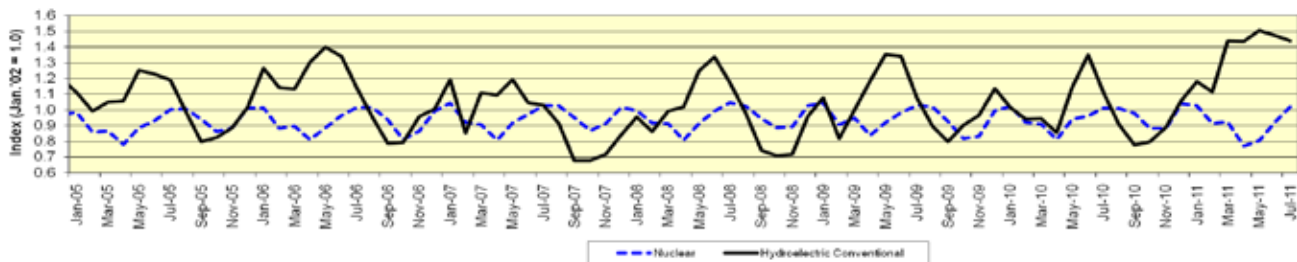


Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2011	July 2011	555,294	17,133	4,380,795
Prior Period	January 2010	July 2010	572,973	24,616	4,257,243
Percent Difference			-3.1%	-30.4%	2.9%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	August 2010	July 2011	961,877	32,558	7,757,020
Prior Period	August 2009	July 2010	969,623	39,206	7,416,616
Percent Difference			-0.8%	-17.0%	4.6%

Figure 5.1 Trend in Total Coal Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

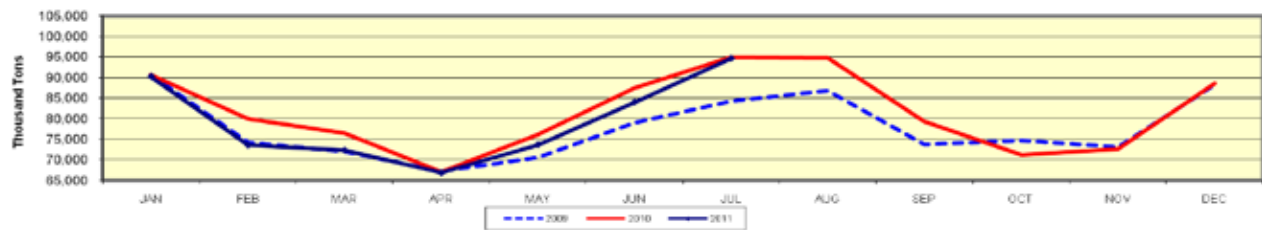


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

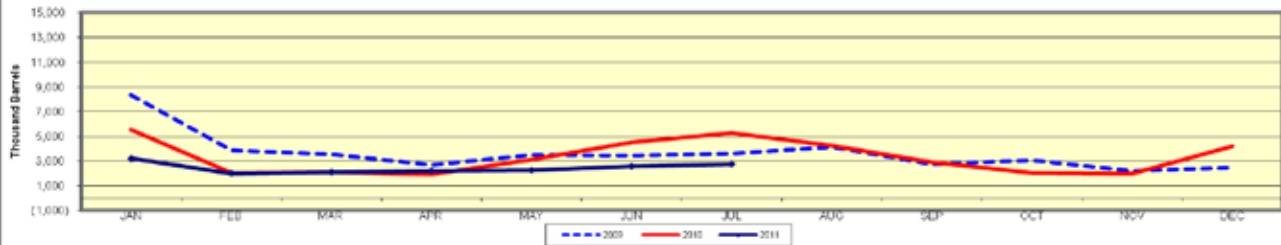


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

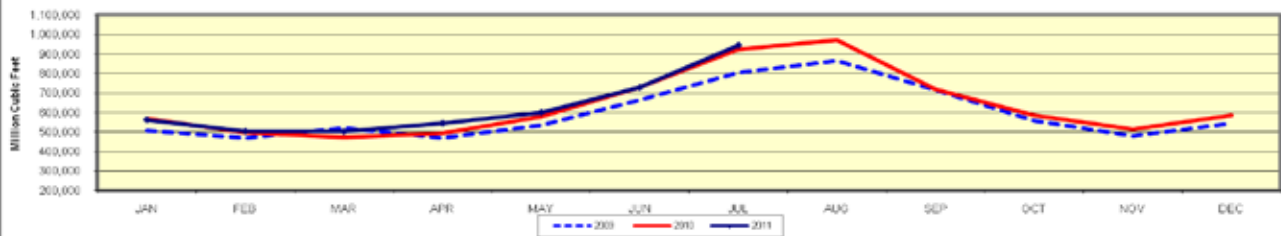
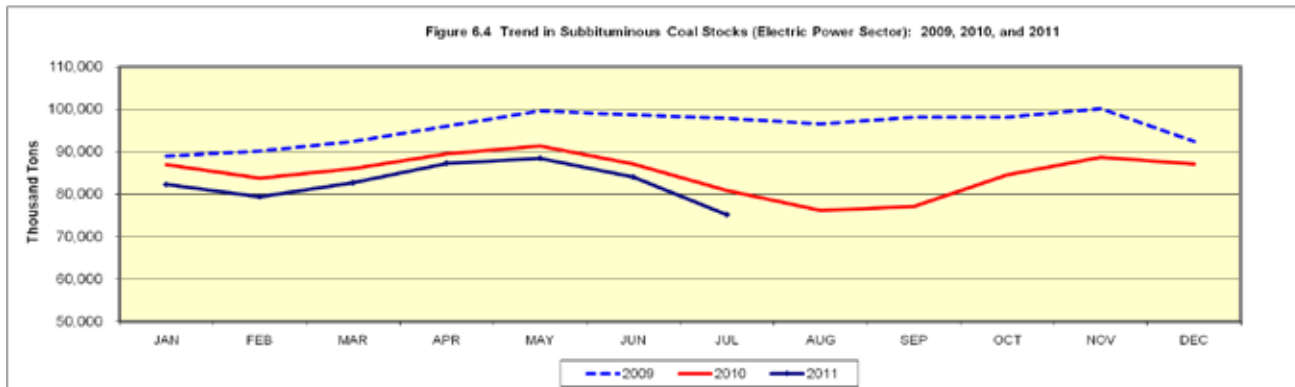
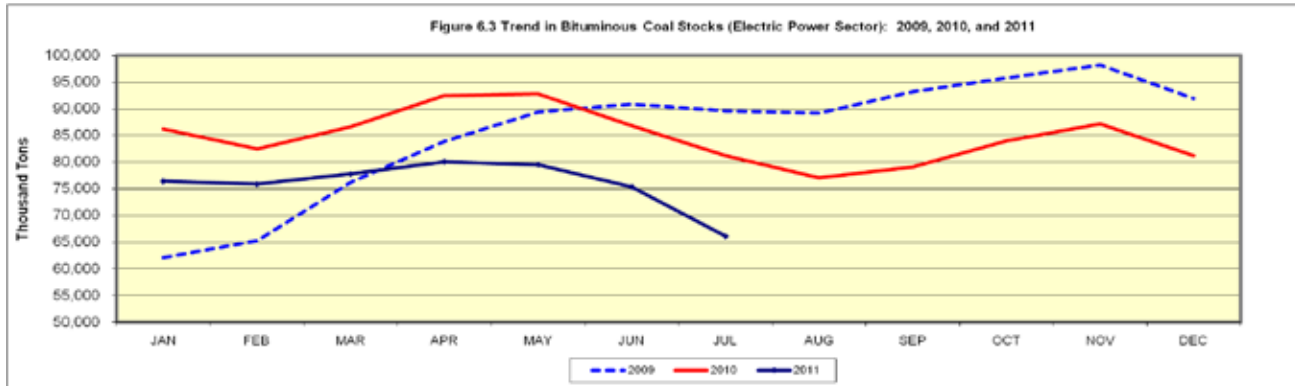
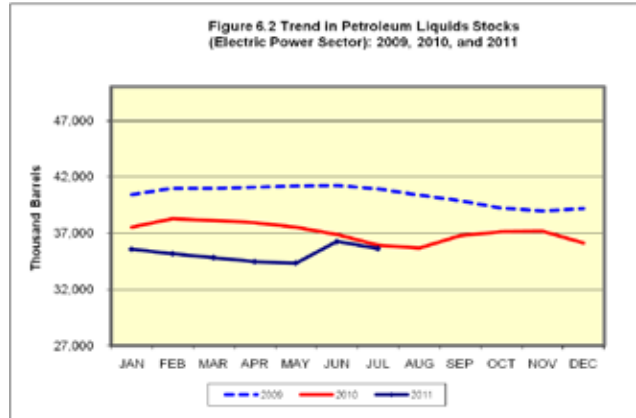
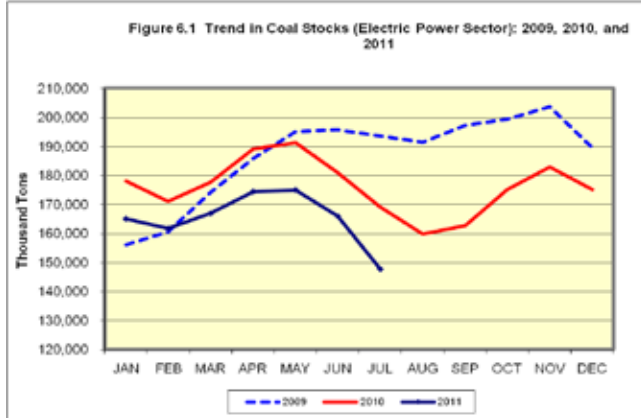


Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jul-11	Jul-10	% Change	Jun-11	% Change
Coal, Total (Thousand Short Tons)	147,761	169,215	-12.7%	165,974	-11.0%
Bituminous (includes anthracite and coal synfuel)	66,144	81,229	-18.6%	75,379	-12.3%
Subbituminous	75,203	80,932	-7.1%	84,059	-10.5%
Lignite	6,413	7,054	-9.1%	6,536	-1.9%
Petroleum Liquids (Thousand Barrels)	35,633	35,925	-0.8%	36,257	-1.7%



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

Data for:
July 2011

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

Zone	Jul-11	Jul-10	% Change	Jun-11	% Change
Northeast	42	52	-18.2%	49	-13.7%
South	54	63	-15.3%	57	-6.3%
Midwest	53	62	-14.4%	56	-5.9%
West	69	71	-3.5%	73	-5.5%

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

Zone	July 2011		
	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	36.6%	33.4%	30.0%
South	18.4%	43.3%	38.3%
Midwest	23.0%	34.0%	43.0%
West	7.1%	39.6%	53.3%
U.S. Total	19.7%	38.4%	41.9%

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

Zone	Coal	Jul-11		Jul-10		% Change of Stocks	Jun-11		% Change of Stocks
		Stocks (000 tons)	Days of Burn	Stocks (000 tons)	Days of Burn		Stocks (000 tons)	Days of Burn	
Northeast	Bituminous	6,200	45	7,203	55	-13.9%	7,600	51	-18.4%
	Subbituminous	517	24	636	29	-18.7%	651	35	-20.6%
South	Bituminous	35,930	57	43,149	66	-16.7%	40,415	59	-11.1%
	Subbituminous	4,115	36	5,585	52	-26.3%	5,207	45	-21.0%
Midwest	Bituminous	13,065	50	19,665	75	-33.6%	15,182	55	-13.9%
	Subbituminous	38,060	54	40,277	57	-5.5%	41,953	57	-9.3%
West	Bituminous	7,502	122	7,199	108	4.2%	7,629	119	-1.7%
	Subbituminous	27,079	61	28,438	65	-4.8%	30,431	67	-11.0%
U.S. Total	Bituminous	62,698	58	77,216	70	-18.8%	70,826	61	-11.5%
	Subbituminous	69,770	54	74,936	59	-6.9%	78,241	59	-10.8%

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

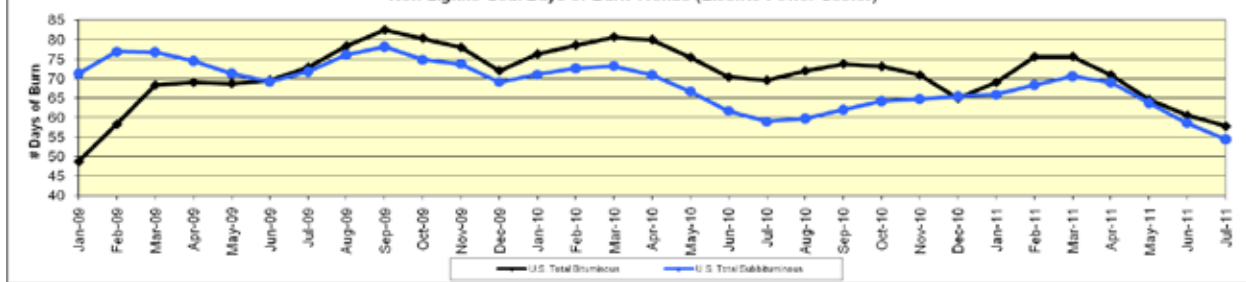
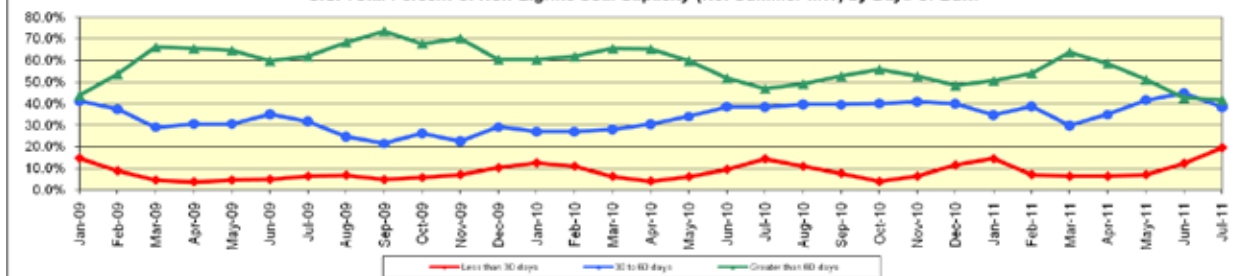


Figure 7.2 U.S. Total Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn



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

Data for:
July 2011

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	Jul-11	Jul-10	% Change	Jun-11	% Change
Residential	154,528	155,554	-0.7%	126,369	22.3%
Commercial	127,380	128,192	-0.6%	117,547	8.4%
Industrial	86,223	84,809	1.7%	83,152	3.7%
Transportation	624	658	-5.2%	638	-2.2%
All Sectors	368,755	369,214	-0.1%	327,706	12.5%

Average Retail Price

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

Ultimate Customer	Jul-11	Jul-10	% Change	Jun-11	% Change
Residential	12.18	12.03	1.2%	12.06	1.0%
Commercial	10.77	10.76	0.1%	10.77	0.0%
Industrial	7.39	7.28	1.5%	7.21	2.5%
Transportation	10.88	11.49	-5.3%	11.16	-2.5%
All Sectors	10.57	10.50	0.7%	10.37	1.9%

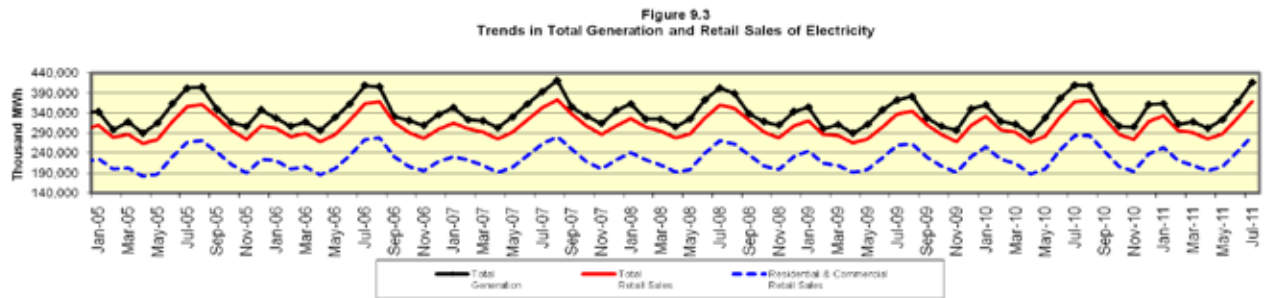
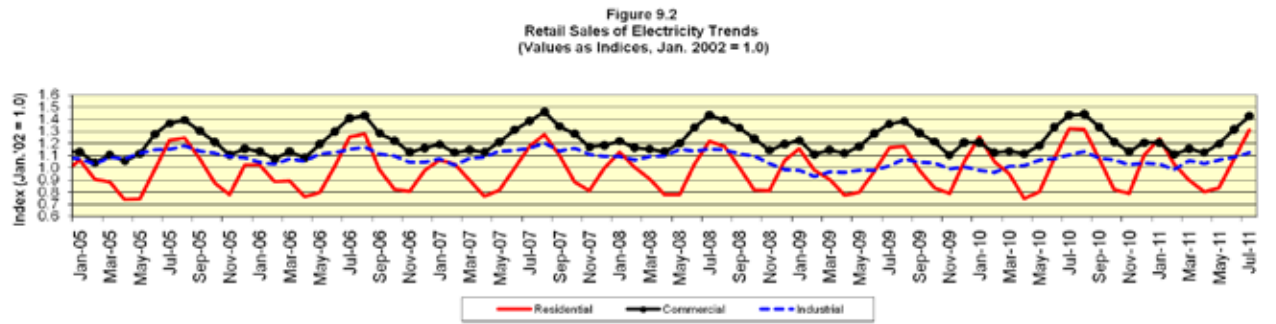
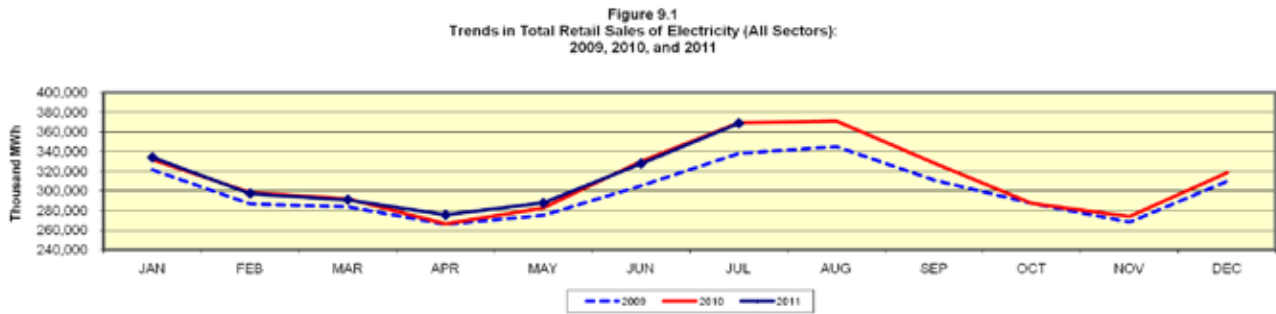
Table 8.3 Average Retail Price (Cents/kWh) by Census Division

Census Division	Residential			All Sectors		
	Jul-11	Jul-10	% Change	Jul-11	Jul-10	% Change
New England	16.50	16.17	2.0%	14.99	15.05	-0.4%
Middle Atlantic	16.39	16.72	-2.0%	14.26	14.79	-3.6%
East North Central	12.11	11.79	2.7%	9.72	9.58	1.5%
West North Central	11.19	10.79	3.7%	9.28	9.06	2.4%
South Atlantic	11.61	11.43	1.6%	10.20	10.10	1.0%
East South Central	10.22	9.89	3.3%	9.04	8.64	4.6%
West South Central	10.69	10.78	-0.8%	9.06	8.94	1.3%
Mountain	11.34	11.29	0.4%	9.50	9.47	0.3%
Pacific Contiguous	13.98	13.28	5.3%	12.80	12.61	1.5%
Pacific Noncontiguous	29.89	24.20	23.5%	27.25	21.61	26.1%
U.S. Total	12.18	12.03	1.2%	10.57	10.50	0.7%

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 2011	July 2011	847,640	763,536	566,071	4,505	2,181,752
Prior Period	January 2010	July 2010	849,729	763,330	552,734	4,628	2,170,421
Percent Difference			-0.2%	0.0%	2.4%	-2.7%	0.5%

Comparison to Prior Twelve-Month Period							
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2010	July 2011	1,448,668	1,329,528	975,502	7,617	3,761,315
Prior Period	August 2009	July 2010	1,418,364	1,317,376	947,805	7,796	3,691,341
Percent Difference			2.1%	0.9%	2.9%	-2.3%	1.9%



Section 10. Average Retail Price Trends

Data for:
July 2011

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

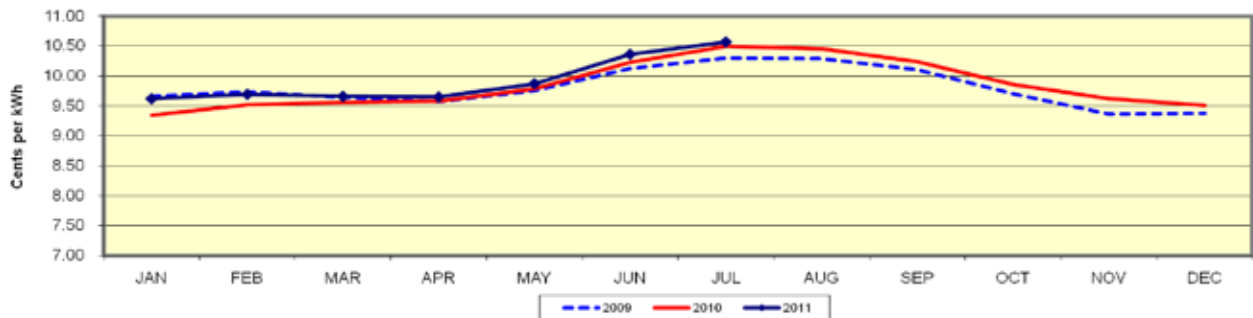
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2011	July 2011	11.69	10.30	6.86	10.77	9.95
Prior Period	January 2010	July 2010	11.46	10.20	6.74	11.01	9.82
Percent Difference			2.0%	1.0%	1.8%	-2.2%	1.3%

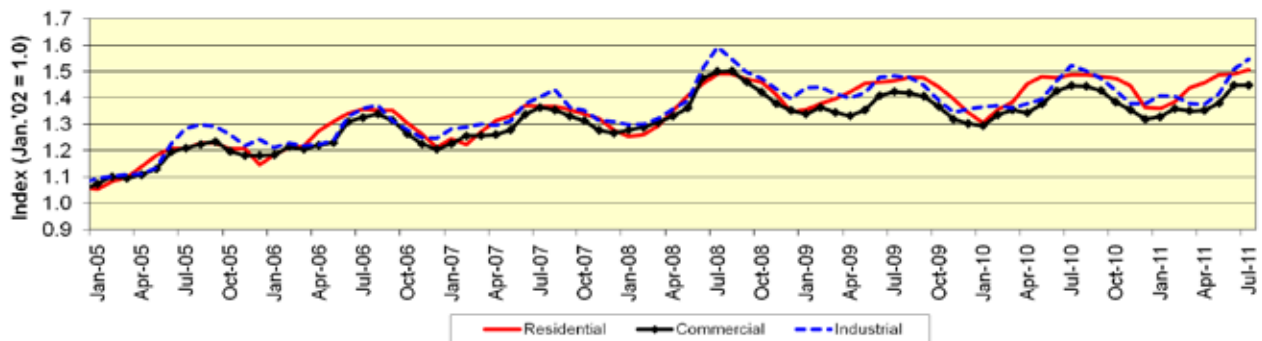
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	August 2010	July 2011	11.71	10.31	6.86	10.82	9.95
Prior Period	August 2009	July 2010	11.50	10.18	6.73	10.84	9.81
Percent Difference			1.8%	1.3%	1.9%	-0.2%	1.4%

**Figure 10.1 Trends in Average Retail Price of Electricity (All Sectors):
2009, 2010, and 2011**



**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:
July 2011

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	July 2011	4	9	-5	-55.6%	411	321	90	28.0%
Prior Period	July 2010	5	9	-4	-44.4%	380	321	59	18.4%
Percent Difference		-20.0%				8.2%			

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 2011	July 2011	2,806	876	Current Period	August 2010	July 2011	4,528	1,496
Prior Period	January 2010	July 2010	2,739	837	Prior Period	August 2009	July 2010	4,459	1,383
Percent Difference			2.4%	4.7%	Percent Difference			1.5%	8.2%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2011



Figure 11.2 Deviation From Normal Cooling Degree Days, 2011



Figure 11.3 Trend in Heating Degree Days: 2010, 2011, and Normal

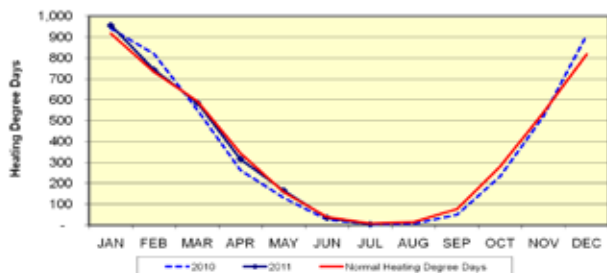


Figure 11.4 Trend in Cooling Degree Days: 2010, 2011, and Normal

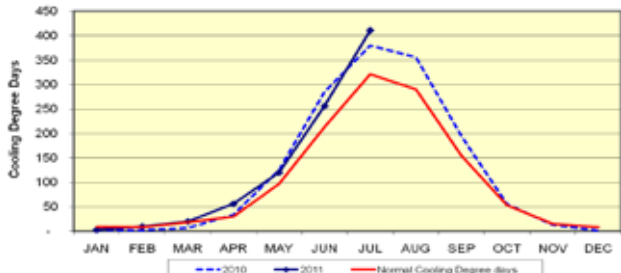


Figure 11.5 Trend in Cumulative Heating Degree Days: 2010, 2011, and Normal

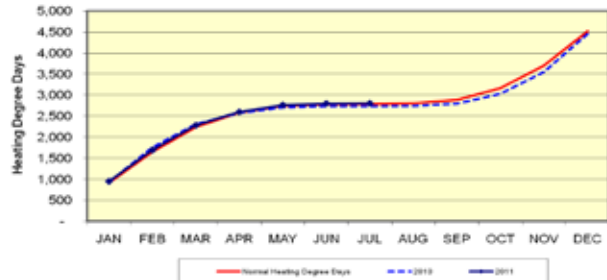
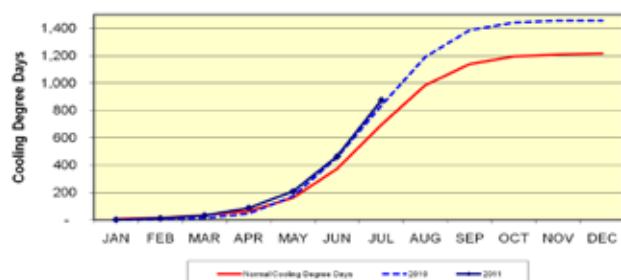


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2010, 2011, and Normal



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 combined heat and power ("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.