

Monthly Flash Estimates of Electric Power Data

Data for:
June 2011

Section 1. Commentary

The contiguous United States experienced temperatures that were above normal in June 2011. In particular, southern states experienced significantly above average temperatures which exacerbated drought conditions present in the region. Accordingly, the total population-weighted cooling degree days for the United States were 20.2 percent above the June normal (though still less than in June 2010; see Table 11.1).

In June 2011, retail sales of electricity remained relatively unchanged from June 2010. Over the same period, the average U.S. retail price of electricity increased 0.9 percent. The average U.S. retail price of electricity for the 12-month period ending June 2011 increased 1.6 percent over the previous 12-month period ending June 2010.

The total electric power generation in the United States decreased 3.0 percent compared to June 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 4.6 percent, while natural gas generation decreased 4.4 percent. Petroleum liquids generation showed the largest percentage change, decreasing 50.3 percent due in part to the increased cost of petroleum liquids as a fuel used in electricity generation. Conventional hydroelectric generation increased 13.3 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 5.3 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/jun/national.html>

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Section 2. Key Indicators of Generation, Consumption & Stocks

Data for:
June 2011

Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
May 2011	12.6%	14.5%	-2.2%
June 2010	-3.0%	-4.4%	8.7%
Year to Date	0.1%	-3.8%	30.3%
Latest 12 Month Period*	2.6%	-0.2%	13.8%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
May 2011	18.3%	14.0%	-5.3%
June 2010	-2.7%	-3.9%	-8.4%
Year to Date	2.5%	-3.6%	--
Latest 12 Month Period*	5.8%	0.3%	--

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

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

Data for:
June 2011

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Jun-11	Jun-10	% Change	May-11	% Change
Coal	158,250	165,918	-4.6%	137,684	14.9%
Petroleum Liquids	1,347	2,710	-50.3%	1,338	0.7%
Natural Gas	88,292	92,398	-4.4%	75,459	17.0%
Nuclear	65,270	68,301	-4.4%	57,017	14.5%
Hydroelectric Conventional	32,062	29,489	8.7%	32,791	-2.2%
All Other	19,587	17,284	13.3%	19,647	-0.3%
Total (All Energy Sources)	364,809	376,100	-3.0%	323,935	12.6%

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	Jun-11	Jun-10	% Change	May-11	% Change
Coal (Thousand Short Tons)	83,998	87,451	-3.9%	73,675	14.0%
Petroleum Liquids (Thousand Barrels)	2,344	4,540	-48.4%	2,258	3.8%
Natural Gas (Million Cubic Feet)	709,381	729,312	-2.7%	599,791	18.3%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Jun-11	Jun-10	% Change	May-11	% Change
Coal (Thousand Short Tons)	165,783	181,062	-8.4%	175,018	-5.3%
Petroleum Liquids (Thousand Barrels)	35,724	36,891	-3.2%	34,341	4.0%

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:
June 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	June 2011	864,873	8,269	439,093	380,028	177,622	114,561	1,984,446
Prior Period	January 2010	June 2010	908,049	11,343	431,516	395,020	136,334	100,331	1,982,593
Percent Difference			-4.8%	-27.1%	1.8%	-3.8%	30.3%	14.2%	0.1%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	July 2010	June 2011	1,807,573	20,323	989,391	791,976	298,340	214,278	4,121,881
Prior Period	July 2009	June 2010	1,809,887	22,193	942,148	793,766	262,087	187,539	4,017,620
Percent Difference			-0.1%	-8.4%	5.0%	-0.2%	13.8%	14.3%	2.6%

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

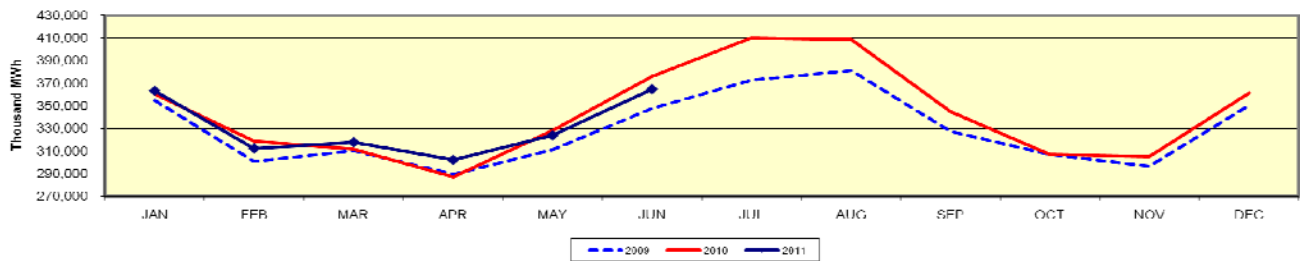


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

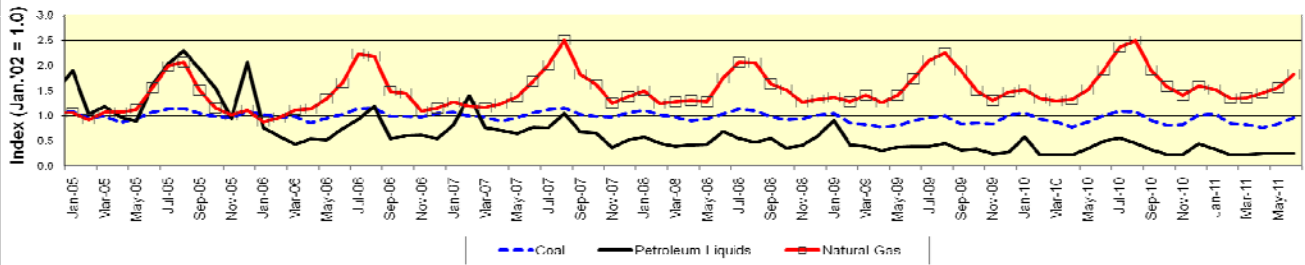
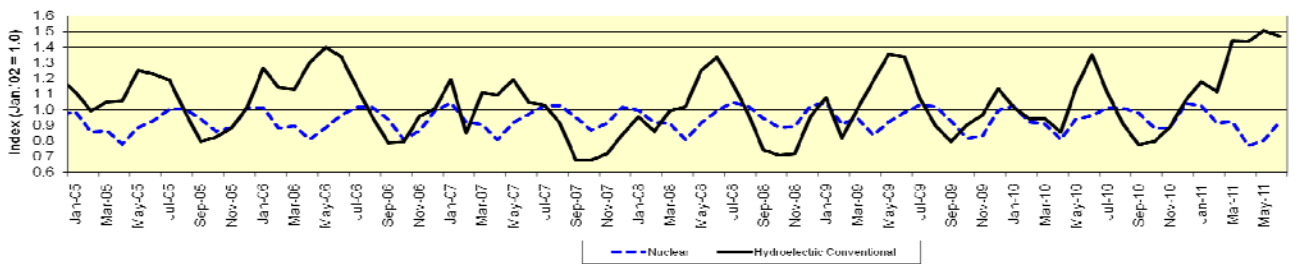


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)



Section 5. Fossil Fuel Consumption Trends

Data for:
June 2011

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	June 2011	460,639	14,131	3,419,023
Prior Period	January 2010	June 2010	477,981	19,364	3,335,278
Percent Difference			-3.6%	-27.0%	2.5%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	July 2010	June 2011	962,213	34,808	7,717,214
Prior Period	July 2009	June 2010	958,991	37,540	7,296,600
Percent Difference			0.3%	-7.3%	5.8%

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

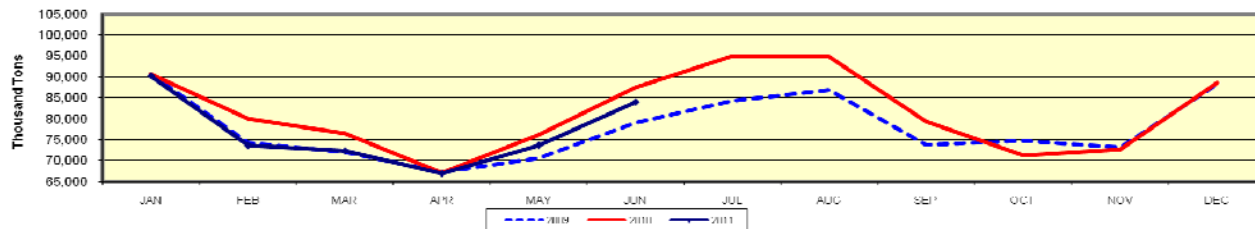


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

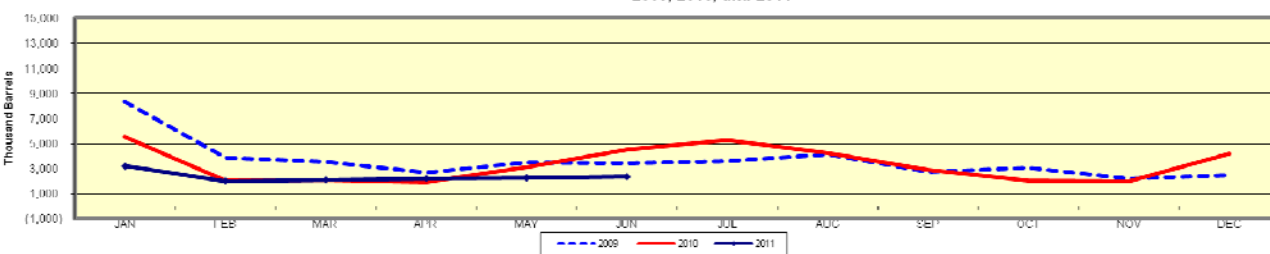
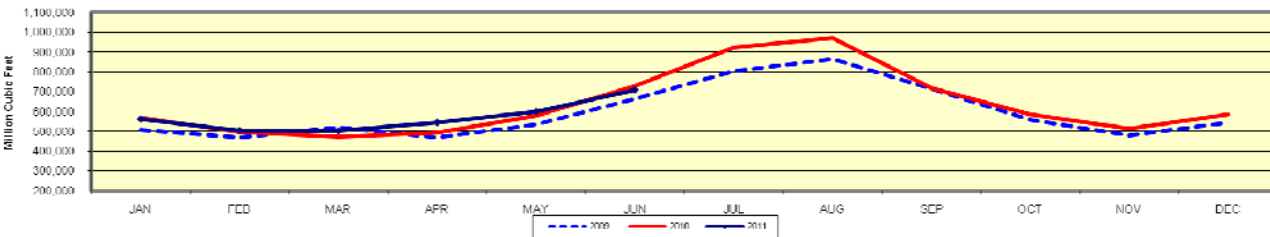


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

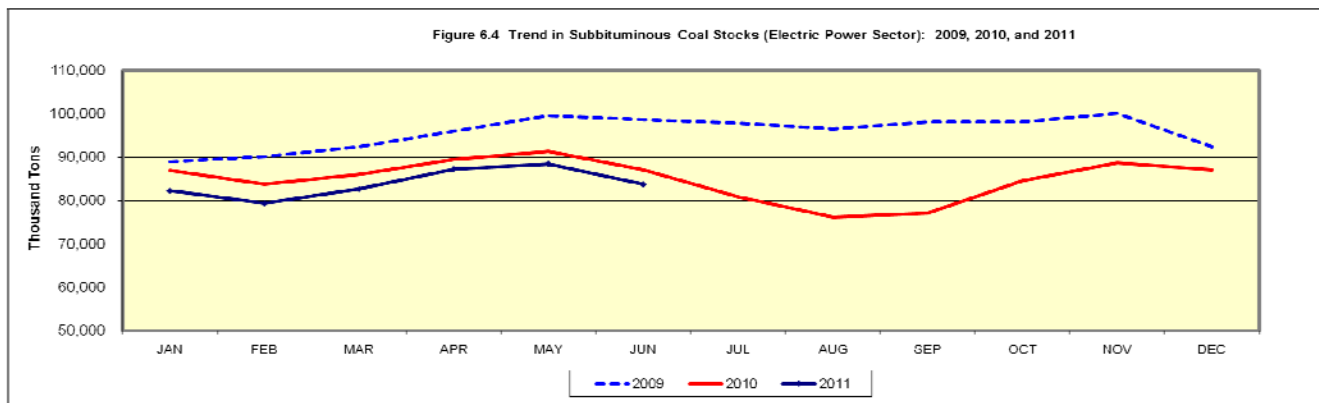
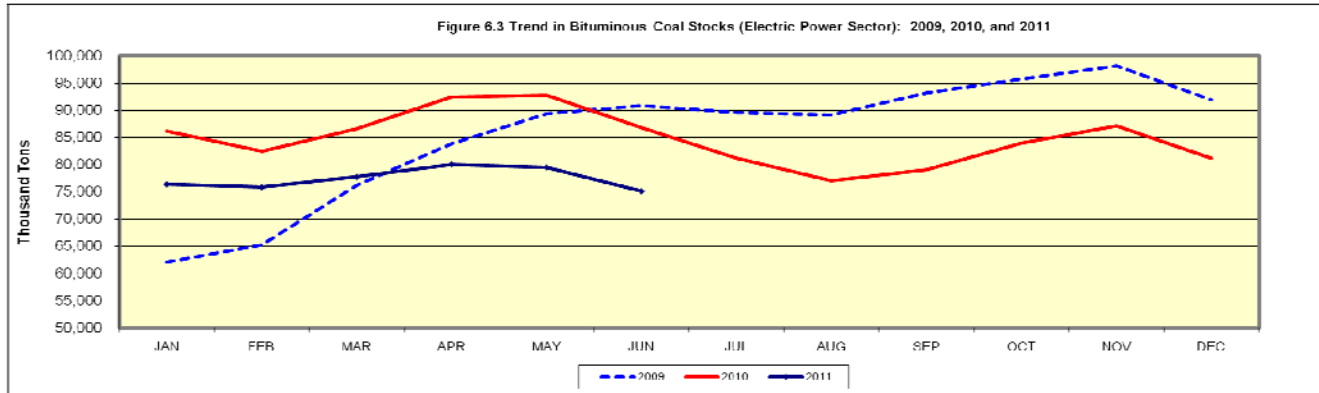
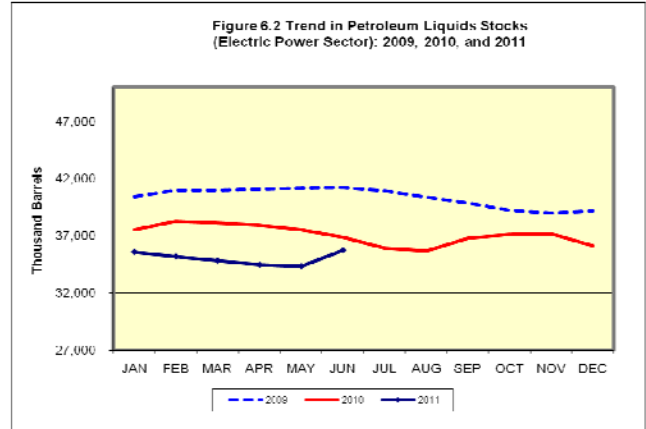
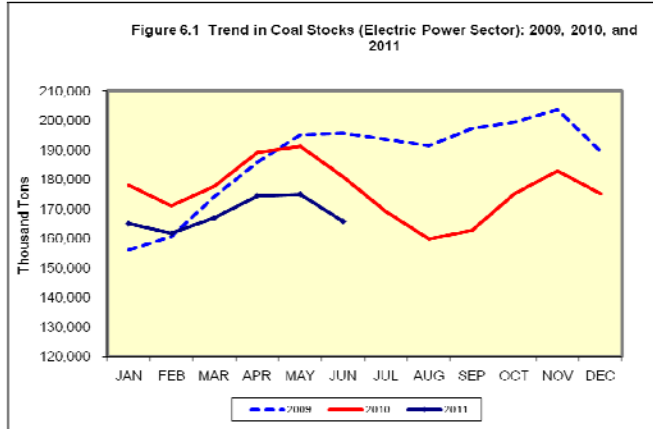


Section 6. Fossil Fuel Stock Trends

Data for:
June 2011

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

Fossil Fuel Stocks	Jun-11	Jun-10	% Change	May-11	% Change
Coal, Total (Thousand Short Tons)	165,783	181,062	-8.4%	175,018	-5.3%
Bituminous (includes anthracite and coal synfuel)	75,160	86,860	-13.5%	79,542	-5.5%
Subbituminous	83,776	87,157	-3.9%	88,483	-5.3%
Lignite	6,847	7,045	-2.8%	6,992	-2.1%
Petroleum Liquids (Thousand Barrels)	35,724	36,891	-3.2%	34,341	4.0%



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

Data for:
June 2011

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

Zone	Jun-11	Jun-10	% Change	May-11	% Change
Northeast	49	57	-14.7%	53	-7.1%
South	57	68	-15.4%	62	-7.7%
Midwest	56	61	-8.2%	60	-6.8%
West	73	74	-1.2%	78	-6.6%

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

Zone	June 2011		
	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	19.2%	53.8%	27.0%
South	10.3%	48.9%	40.8%
Midwest	18.5%	40.1%	41.5%
West	0.7%	40.4%	58.9%
U.S. Total	12.5%	44.8%	42.7%

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

Zone	Coal	Jun-11		Jun-10		% Change of Stocks	May-11		% Change of Stocks
		Stocks (000 tons)	Days of Burn	Stocks (000 tons)	Days of Burn		Stocks (000 tons)	Days of Burn	
Northeast	Bituminous	7,584	51	8,515	60	-10.9%	8,016	54	-5.4%
	Subbituminous	651	35	774	42	-16.0%	668	38	-2.5%
South	Bituminous	40,212	59	48,311	70	-16.8%	43,753	64	-8.1%
	Subbituminous	5,207	45	5,983	54	-13.0%	5,482	47	-5.0%
Midwest	Bituminous	15,182	55	18,230	66	-16.7%	15,818	59	-4.0%
	Subbituminous	41,953	57	43,639	60	-3.9%	44,035	61	-4.7%
West	Bituminous	7,629	119	7,628	111	0.0%	7,356	114	3.7%
	Subbituminous	30,431	67	30,636	68	-0.7%	32,165	73	-5.4%
U.S. Total	Bituminous	70,607	60	82,684	70	-14.6%	74,943	65	-5.8%
	Subbituminous	78,241	59	81,032	62	-3.4%	82,349	64	-5.0%

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

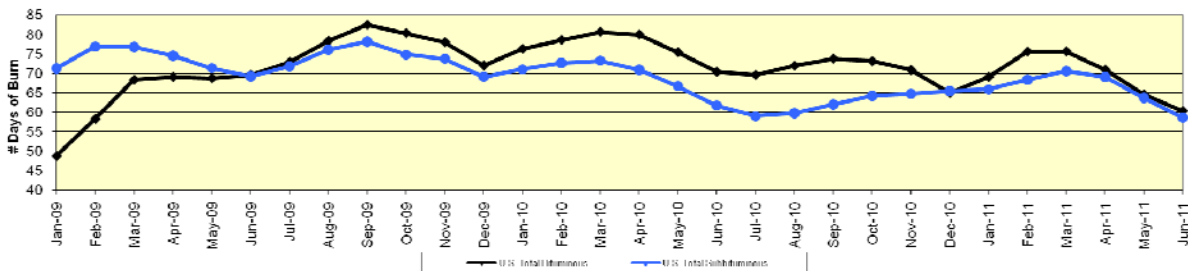
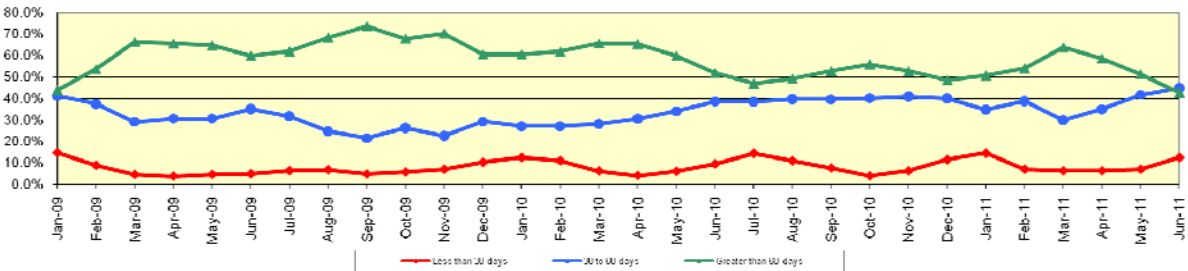


Figure 7.2 U.S. Total Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn



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

Data for:
June 2011

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	Jun-11	Jun-10	% Change	May-11	% Change
Residential	127,066	127,692	-0.5%	98,307	29.3%
Commercial	117,692	119,394	-1.4%	107,069	9.9%
Industrial	85,186	82,166	3.7%	81,575	4.4%
Transportation	615	654	-6.0%	620	-0.8%
All Sectors	330,559	329,906	0.2%	287,570	14.9%

Average Retail Price

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

Ultimate Customer	Jun-11	Jun-10	% Change	May-11	% Change
Residential	12.06	11.95	0.9%	12.03	0.2%
Commercial	10.74	10.61	1.2%	10.26	4.7%
Industrial	7.14	7.00	2.0%	6.76	5.6%
Transportation	11.22	11.36	-1.2%	10.80	3.9%
All Sectors	10.32	10.23	0.9%	9.87	4.6%

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

Census Division	Residential			All Sectors		
	Jun-11	Jun-10	% Change	Jun-11	Jun-10	% Change
New England	16.25	16.34	-0.6%	14.90	14.99	-0.6%
Middle Atlantic	16.20	16.30	-0.6%	13.80	14.17	-2.6%
East North Central	12.16	12.01	1.2%	9.50	9.39	1.2%
West North Central	10.86	10.40	4.4%	8.89	8.54	4.1%
South Atlantic	11.65	11.38	2.4%	10.14	9.87	2.7%
East South Central	10.29	9.83	4.7%	8.73	8.46	3.2%
West South Central	10.78	10.90	-1.1%	9.01	8.90	1.2%
Mountain	11.22	11.25	-0.3%	9.17	9.23	-0.7%
Pacific Contiguous	13.03	13.07	-0.3%	12.18	12.24	-0.5%
Pacific Noncontiguous	29.32	24.13	21.5%	26.82	21.69	23.7%
U.S. Total	12.06	11.95	0.9%	10.32	10.23	0.9%

Section 9. Retail Sales Trends

Data for:
June 2011

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	June 2011	693,808	636,301	481,882	3,859	1,815,849
Prior Period	January 2010	June 2010	694,176	635,138	467,924	3,970	1,801,208
Percent Difference			-0.1%	0.2%	3.0%	-2.8%	0.8%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	July 2010	June 2011	1,450,390	1,330,486	976,122	7,628	3,764,626
Prior Period	July 2009	June 2010	1,400,491	1,310,792	941,041	7,812	3,660,137
Percent Difference			3.6%	1.5%	3.7%	-2.4%	2.9%

Figure 9.1
Trends in Total Retail Sales of Electricity (All Sectors):
2009, 2010, and 2011

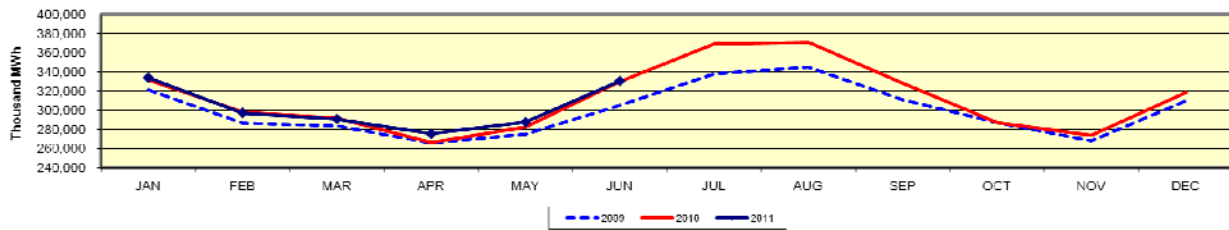


Figure 9.2
Retail Sales of Electricity Trends
(Values as Indices, Jan. 2002 = 1.0)

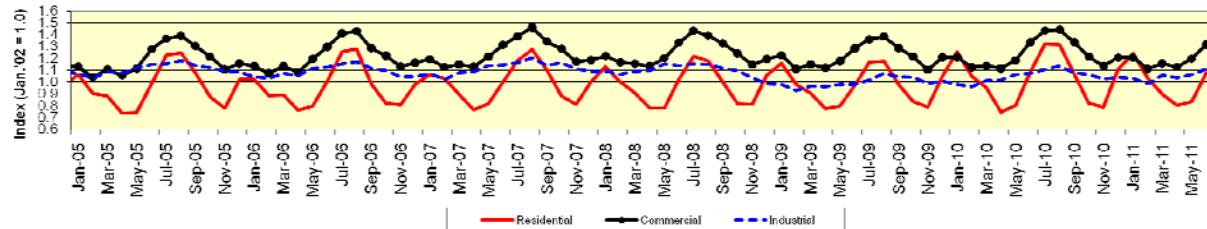
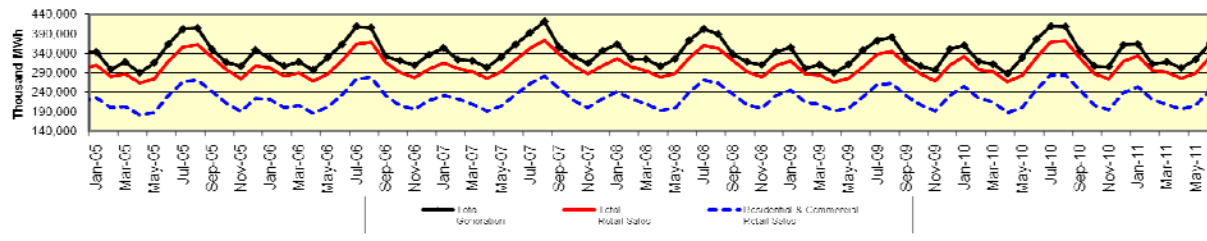


Figure 9.3
Trends in Total Generation and Retail Sales of Electricity



Section 10. Average Retail Price Trends

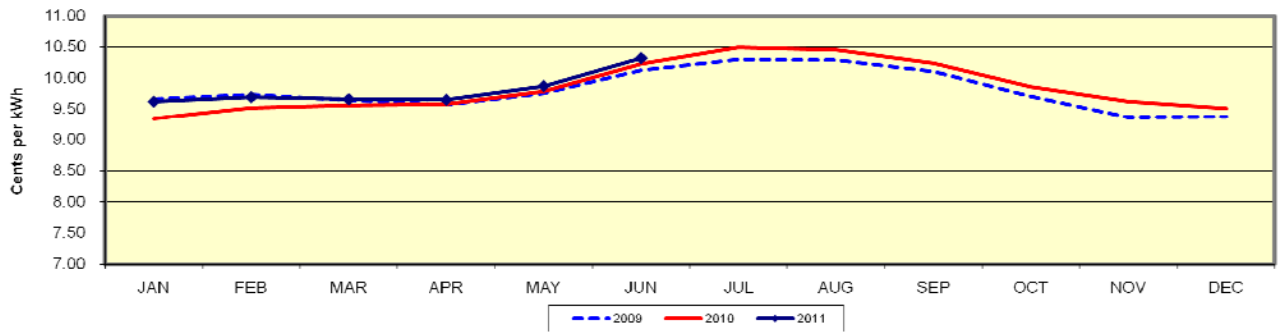
Data for:
June 2011

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

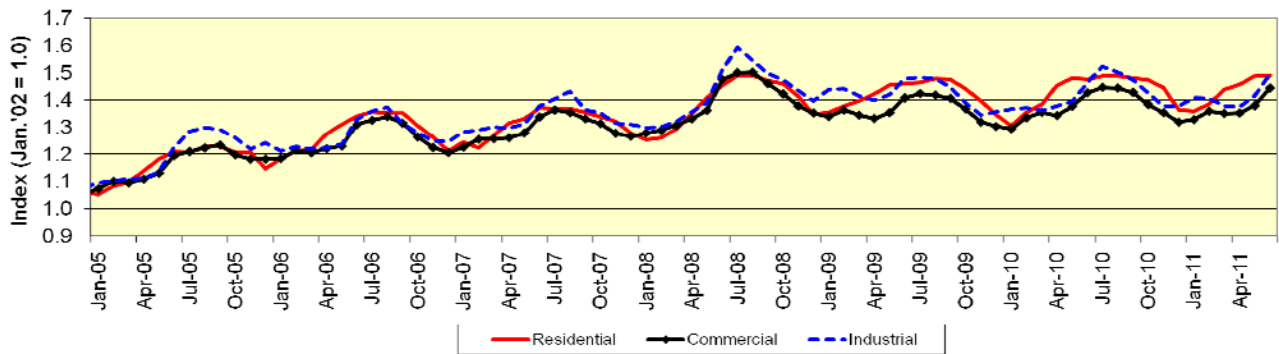
Year-to-Date Comparison							
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2011	June 2011	11.58	10.20	6.76	10.76	9.81
Prior Period	January 2010	June 2010	11.34	10.09	6.64	10.93	9.68
Percent Difference			2.1%	1.1%	1.8%	-1.6%	1.3%

Comparison to Prior 12 Month Period							
	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	July 2010	June 2011	11.69	10.31	6.84	10.87	9.94
Prior Period	July 2009	June 2010	11.48	10.17	6.71	10.80	9.78
Percent Difference			1.8%	1.4%	1.9%	0.6%	1.6%

**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:
June 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	June 2011	35	39	-4	-10.3%	256	213	43	20.2%
Prior Period	June 2010	27	39	-12	-30.8%	285	213	72	33.8%
Percent Difference		29.6%				-10.2%			

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	June 2011	2,802	465	Current Period	July 2010	June 2011	4,529	1,465
Prior Period	January 2010	June 2010	2,734	457	Prior Period	July 2009	June 2010	4,468	1,287
Percent Difference			2.5%	1.8%	Percent Difference			1.4%	13.8%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2011

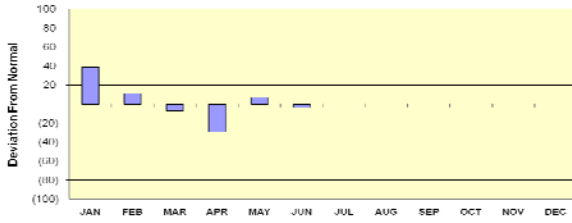


Figure 11.2 Deviation From Normal: Cooling Degree Days, 2011

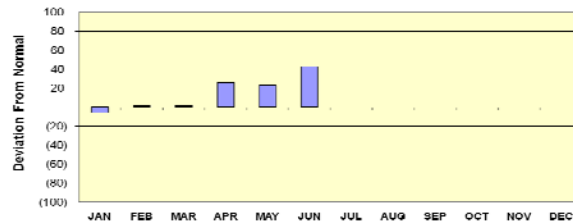


Figure 11.3 Trend in Heating Degree Days: 2010, 2011, and Normal

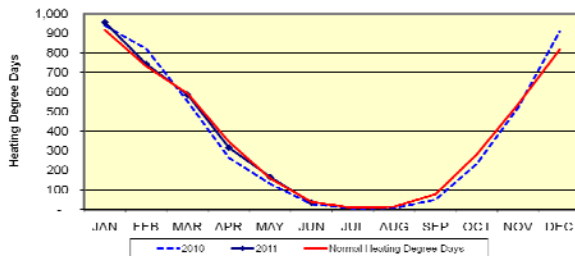


Figure 11.4 Trend in Cooling Degree Days: 2010, 2011, and Normal

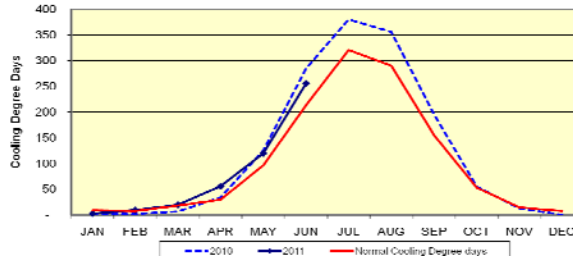


Figure 11.5 Trend in Cumulative Heating Degree Days: 2010, 2011, and Normal

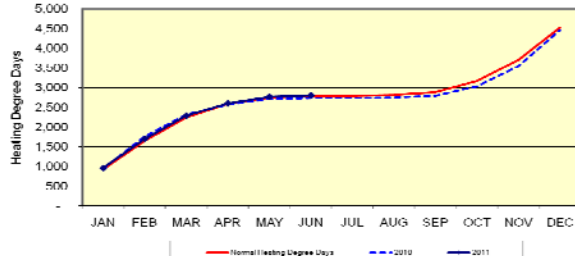
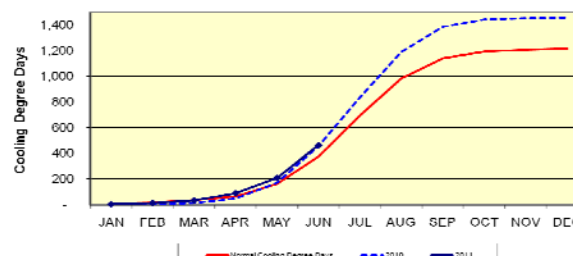


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2010, 2011, and Normal



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.