Monthly Flash Estimates of

Electric Power Data

Data for:
May 2011

Section 1. Commentary

The contiguous United States experienced temperatures that were slightly below normal in May 2011. However, significant differences in temperature occurred across the country as western states experienced below average temperatures, while many eastern states experienced above average temperatures.

In May 2011, retail sales of electricity increased 1.6 percent from May 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 May 2011 increased 1.7 percent over the previous 12-month period ending May 2010.

The total electric power generation in the United States decreased 1.2 percent compared to May 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 4.1 percent, while natural gas generation increased 4.0 percent. Conventional hydroelectric generation had the largest percentage change, increasing 31.8 percent from the previous year. This was mainly due to record amounts of precipitation that fell in the Northwest in May 2011. Furthermore, conventional hydroelectric generation for the year-to-date period ending May 2011 increased 36.3 percent over the previous year-to-date period ending May 2010. This occurred because the Northwest experienced its wettest spring on record. Nuclear generation decreased 15.8 percent. The Browns Ferry nuclear plant had the largest decrease in generation compared to May 2011 as the facility was taken offline due to a tornado damaging the transmission lines that connect the facility to the power grid.

In May 2011, coal plants reached the end of the spring build-up of coal for consumption in the summer months. Accordingly, coal stocks for plants in the electric power sector remained relatively flat from the previous month, only increasing 0.2 percent from April 2011. Furthermore, this year's spring build-up of coal stocks has been less severe than last year's spring build-up of coal stocks as total coal stocks in May 2011 decreased 8.6 percent when compared to May 2010.

References for weather data:
http://www.ncdc.noaa.gov/oa/climate/research/2011/may/national.html

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Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
April 2011	**7.3%**	**2.9%**	**4.9%**
May 2010	**-1.2%**	**-15.8%**	**31.8%**
Year to Date	**0.8%**	**-3.9%**	**36.3%**
Latest 12 Month Period*	**3.6%**	**-0.1%**	**13.0%**

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
April 2011	**11.3%**	**10.4%**	**0.2%**
May 2010	**4.4%**	**-3.1%**	**-8.6%**
Year to Date	**4.2%**	**-3.5%**	**--**
Latest 12 Month Period*	**7.1%**	**1.6%**	**--**

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

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	May-11	May-10	% Change	Apr-11	% Change
Coal	137,806	143,686	-4.1%	124,389	10.8%
Petroleum Liquids	1,308	1,851	-29.3%	1,331	-1.7%
Natural Gas	76,355	73,427	4.0%	70,218	8.7%
Nuclear	56,124	66,658	-15.8%	54,547	2.9%
Hydroelectric Conventional	32,837	24,920	31.8%	31,293	4.9%
All Other	19,870	17,665	12.5%	20,377	-2.5%
Total (All Energy Sources)	324,302	328,208	-1.2%	302,156	7.3%

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	May-11	May-10	% Change	Apr-11	% Change
Coal (Thousand Short Tons)	73,781	76,123	-3.1%	66,844	10.4%
Petroleum Liquids (Thousand Barrels)	2,297	3,140	-26.8%	2,211	3.9%
Natural Gas (Million Cubic Feet)	605,314	579,531	4.4%	543,954	11.3%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	May-11	May-10	% Change	Apr-11	% Change
Coal (Thousand Short Tons)	174,777	191,295	-8.6%	174,463	0.2%
Petroleum Liquids (Thousand Barrels)	34,508	37,526	-8.0%	34,457	0.1%

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: May 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	May 2011	706,746	6,891	351,697	313,865	145,606	95,199	1,620,004
Prior Period	January 2010	May 2010	742,131	8,634	339,118	326,719	106,846	83,045	1,606,493
Percent Difference			-4.8%	-20.2%	3.7%	-3.9%	36.3%	14.6%	0.8%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	June 2010	May 2011	1,815,364	21,654	994,394	794,114	295,813	212,200	4,133,539
Prior Period	June 2009	May 2010	1,792,056	21,573	933,943	795,199	261,831	184,516	3,989,118
Percent Difference			1.3%	0.4%	6.5%	-0.1%	13.0%	15.0%	3.6%

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

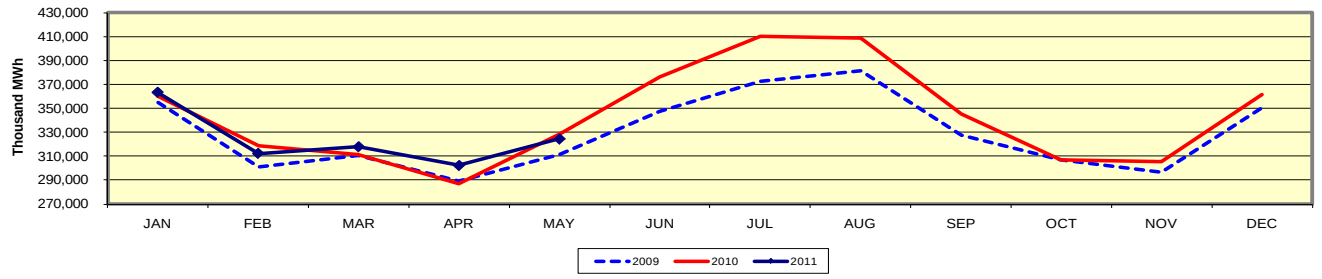


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

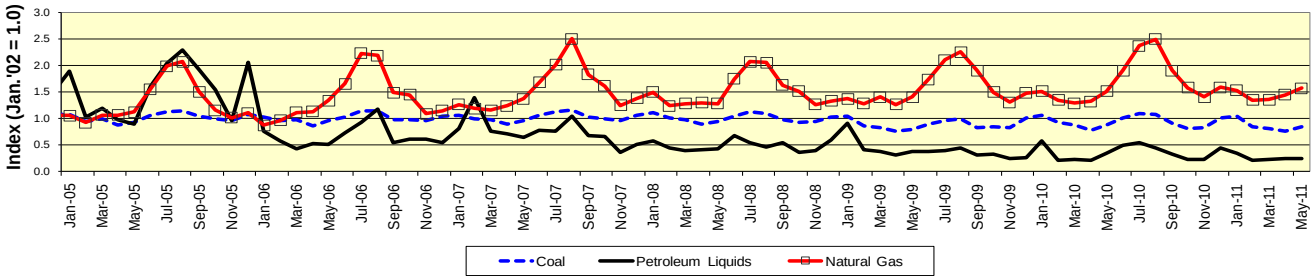


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)

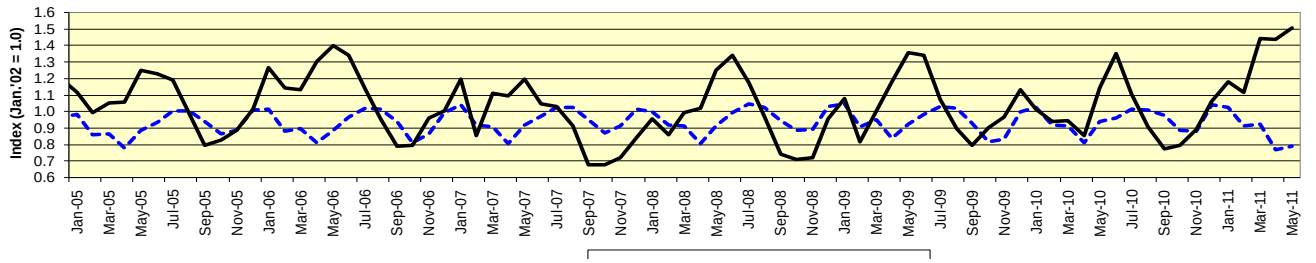


Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2011	May 2011	376,747	11,826	2,715,165
Prior Period	January 2010	May 2010	390,530	14,825	2,605,965
Percent Difference			-3.5%	-20.2%	4.2%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	June 2010	May 2011	965,772	37,042	7,742,668
Prior Period	June 2009	May 2010	950,612	36,464	7,231,907
Percent Difference			1.6%	1.6%	7.1%

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

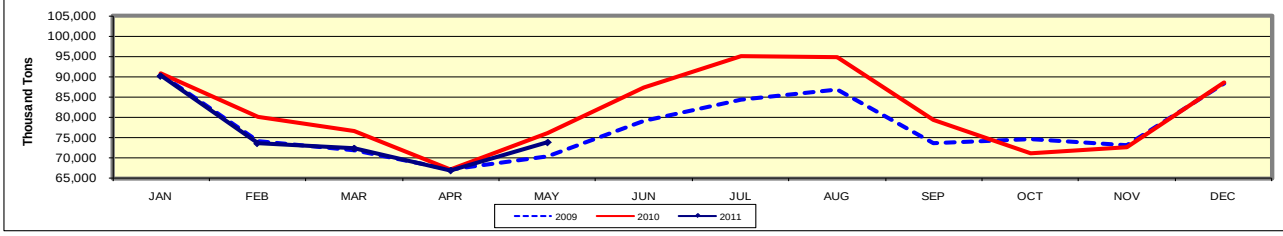


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

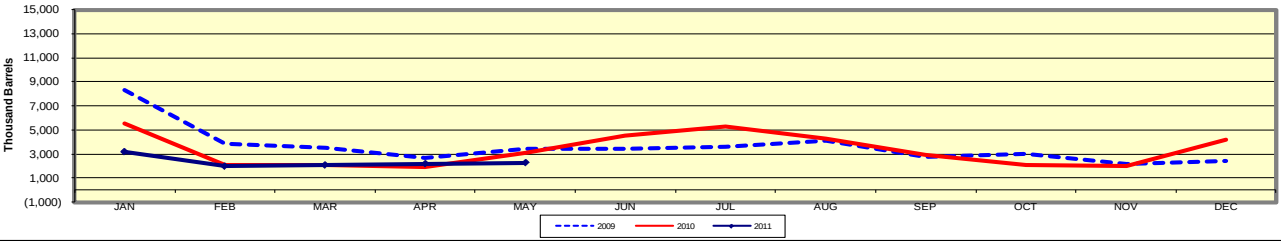
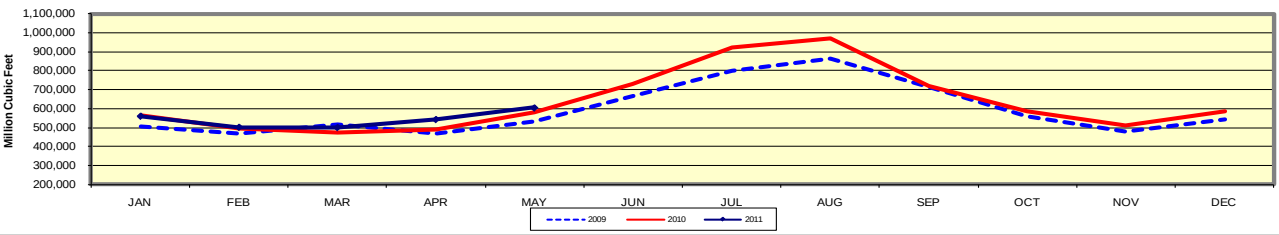


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011



Section 6. Fossil Fuel Stock Trends

Data for:
May 2011

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

Fossil Fuel Stocks	May-11	May-10	% Change	Apr-11	% Change
Coal, Total (Thousand Short Tons)	174,777	191,295	-8.6%	174,463	0.2%
Bituminous (includes anthracite and coal synfuel)	79,372	92,825	-14.5%	80,086	-0.9%
Subbituminous	87,457	91,387	-4.3%	87,332	0.1%
Lignite	7,947	7,083	12.2%	7,045	12.8%
Petroleum Liquids (Thousand Barrels)	34,508	37,526	-8.0%	34,457	0.1%

Figure 6.1 Trend in Coal Stocks (Electric Power Sector): 2009, 2010, and 2011

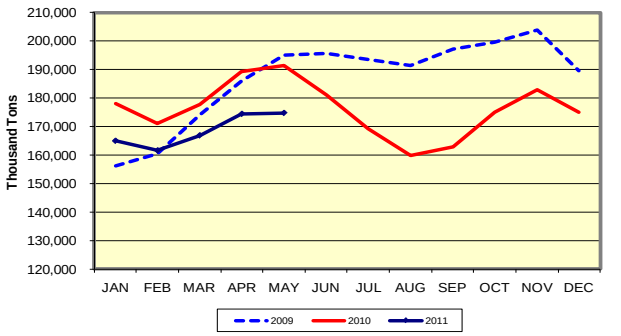


Figure 6.2 Trend in Petroleum Liquids Stocks (Electric Power Sector): 2009, 2010, and 2011

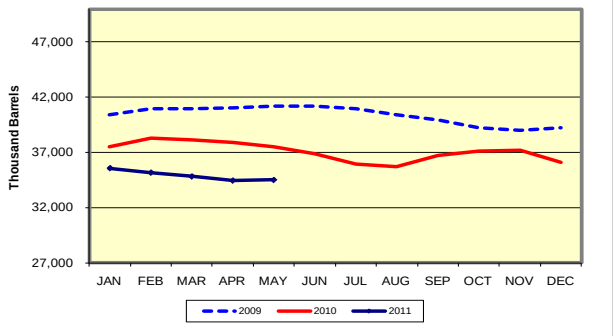


Figure 6.3 Trend in Bituminous Coal Stocks (Electric Power Sector): 2009, 2010, and 2011

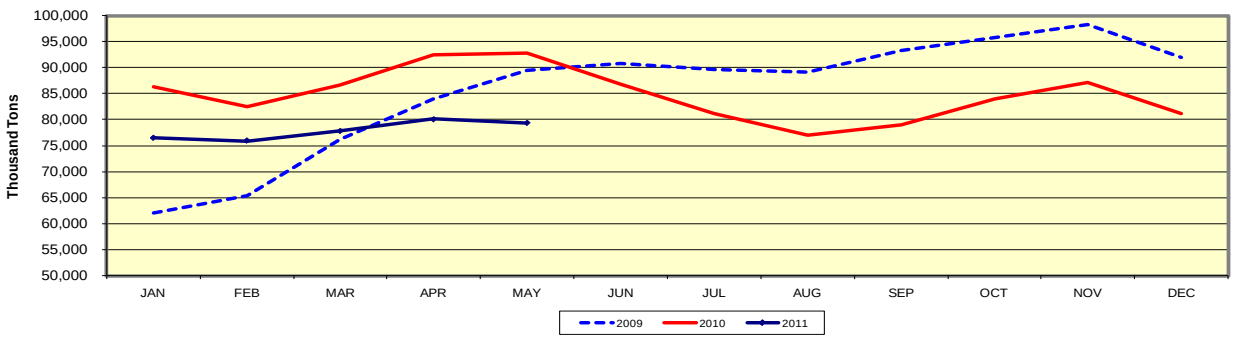
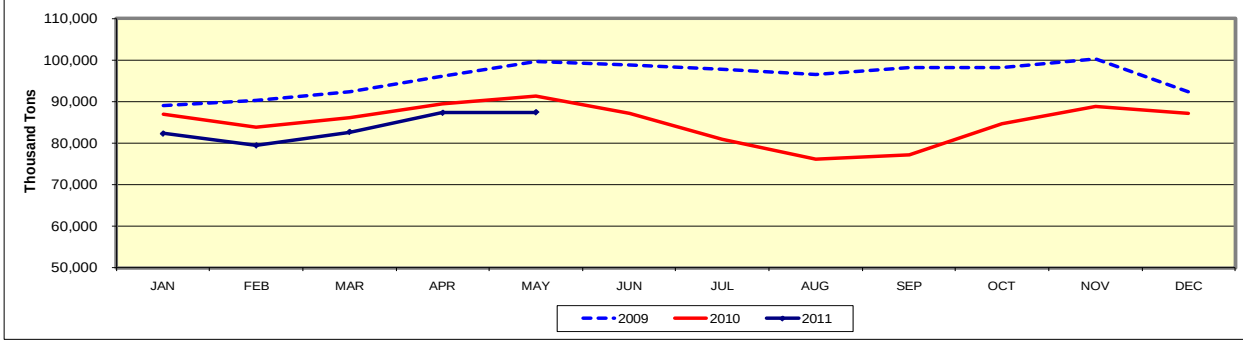


Figure 6.4 Trend in Subbituminous Coal Stocks (Electric Power Sector): 2009, 2010, and 2011



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

Data for:
May 2011

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

Zone	May-11	May-10	% Change	Apr-11	% Change
Northeast	53	65	-19.3%	59	-10.9%
South	62	73	-15.8%	69	-10.5%
Midwest	60	66	-8.3%	66	-8.7%
West	78	78	0.4%	82	-4.2%

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

	May 2011		
Zone	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	17.7%	45.3%	37.0%
South	5.3%	44.8%	49.9%
Midwest	9.2%	45.6%	45.1%
West	0.7%	23.6%	75.6%
U.S. Total	7.1%	41.6%	51.3%

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

		May-11		May-10			Apr-11		
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	8,016	54	9,249	66	-13.3%	7,698	60	4.1%
	Subbituminous	668	38	1,081	62	-38.2%	646	48	3.3%
South	Bituminous	43,753	64	52,534	76	-16.7%	45,127	72	-3.0%
	Subbituminous	5,482	47	6,667	60	-17.8%	5,878	53	-6.7%
Midwest	Bituminous	15,818	59	19,088	71	-17.1%	15,628	64	1.2%
	Subbituminous	44,035	61	45,575	64	-3.4%	44,090	67	-0.1%
West	Bituminous	7,356	114	7,616	112	-3.4%	7,204	113	2.1%
	Subbituminous	32,165	73	31,814	73	1.1%	30,915	77	4.0%
U.S. Total	Bituminous	74,943	65	88,487	75	-15.3%	75,657	71	-0.9%
	Subbituminous	82,349	64	85,137	67	-3.3%	81,528	69	1.0%

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

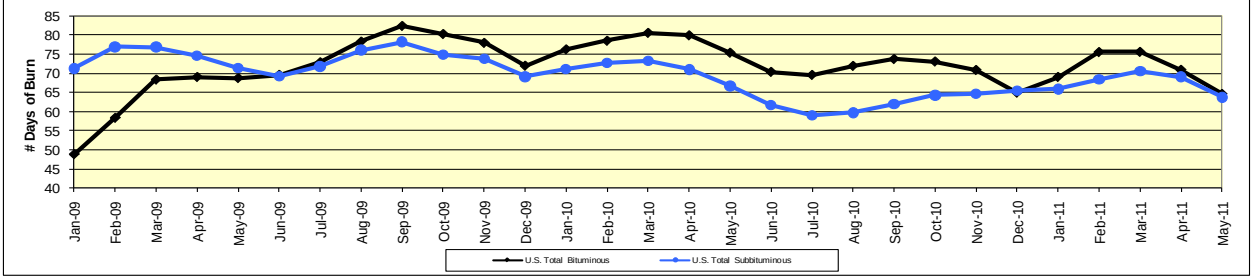
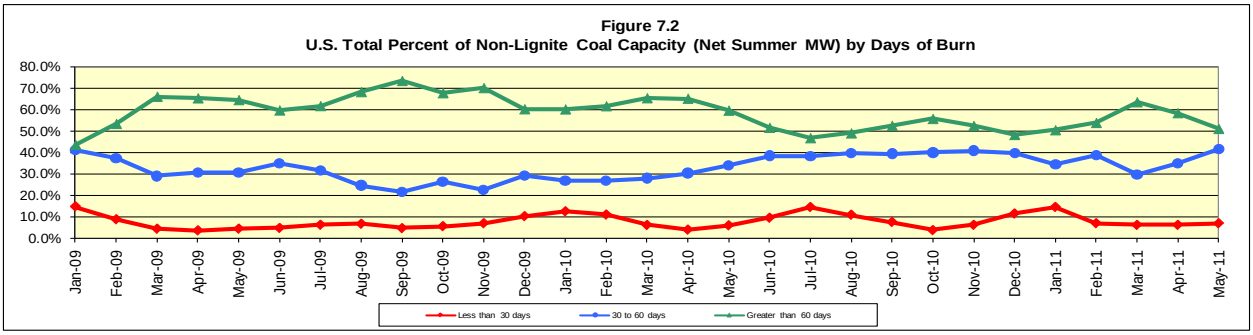


Figure 7.2
U.S. Total Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn



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

Data for: May 2011

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	May-11	May-10	% Change	Apr-11	% Change
Residential	98,128	94,838	3.5%	94,799	3.5%
Commercial	107,284	105,813	1.4%	100,725	6.5%
Industrial	81,231	81,482	-0.3%	79,359	2.4%
Transportation	611	595	2.7%	619	-1.3%
All Sectors	287,254	282,728	1.6%	275,502	4.3%

Average Retail Price

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

Ultimate Customer	May-11	May-10	% Change	Apr-11	% Change
Residential	12.02	11.97	0.4%	11.79	2.0%
Commercial	10.27	10.24	0.3%	10.06	2.1%
Industrial	6.71	6.66	0.8%	6.58	2.0%
Transportation	10.89	10.99	-0.9%	10.33	5.4%
All Sectors	9.86	9.79	0.7%	9.65	2.2%

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

Census Division	Residential			All Sectors		
	May-11	May-10	% Change	May-11	May-10	% Change
New England	16.45	16.58	-0.8%	14.59	14.71	-0.8%
Middle Atlantic	16.16	16.16	0.0%	13.26	13.53	-2.0%
East North Central	12.10	11.92	1.5%	9.14	9.05	1.0%
West North Central	10.54	10.18	3.5%	8.30	7.84	5.9%
South Atlantic	11.54	11.29	2.2%	9.76	9.53	2.4%
East South Central	10.46	10.03	4.3%	8.54	8.09	5.6%
West South Central	10.80	11.10	-2.7%	8.54	8.65	-1.3%
Mountain	10.78	10.91	-1.2%	8.57	8.72	-1.7%
Pacific Contiguous	12.19	12.56	-2.9%	10.84	11.08	-2.2%
Pacific Noncontiguous	28.22	23.89	18.1%	25.76	21.64	19.0%
U.S. Total	12.02	11.97	0.4%	9.86	9.79	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	May 2011	566,563	518,824	396,352	3,235	1,484,974
Prior Period	January 2010	May 2010	566,484	515,744	385,758	3,316	1,471,302
Percent Difference			0.0%	0.6%	2.7%	-2.4%	0.9%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	June 2010	May 2011	1,450,838	1,332,402	972,759	7,658	3,763,657
Prior Period	June 2009	May 2010	1,387,146	1,306,151	934,120	7,769	3,635,186
Percent Difference			4.6%	2.0%	4.1%	-1.4%	3.5%

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

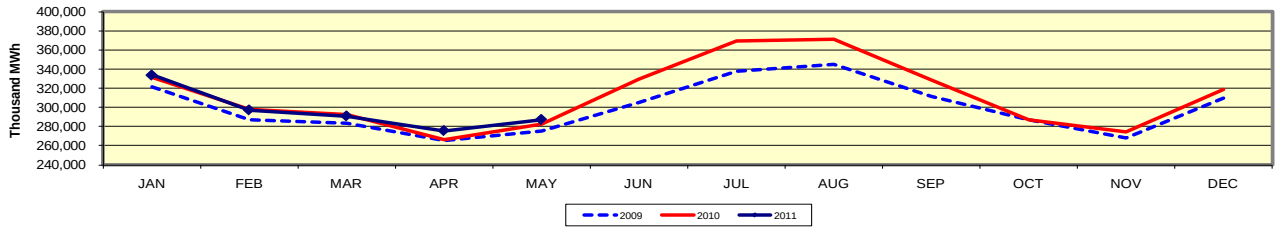


Figure 9.2
Retail Sales of Electricity Trends
(Values as Indices, Jan. 2002 = 1.0)

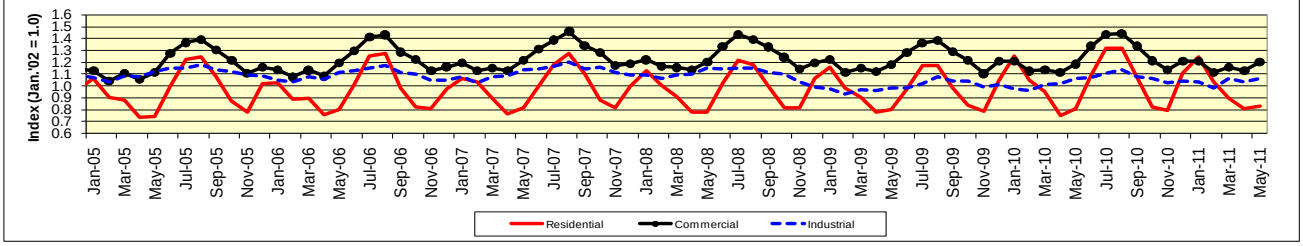
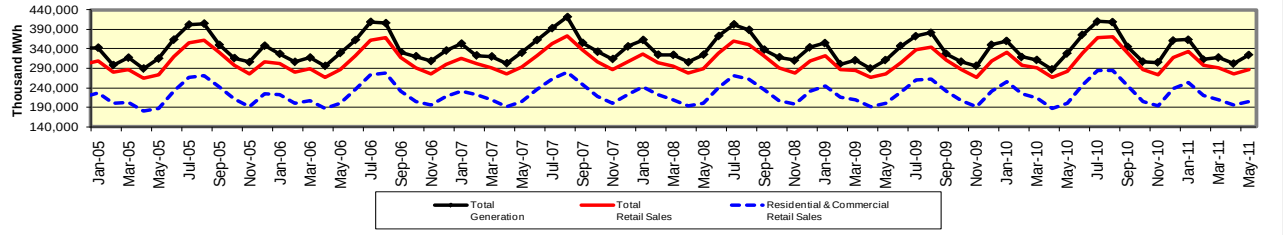


Figure 9.3
Trends in Total Generation and Retail Sales of Electricity



Section 10. Average Retail Price Trends

Data for: May 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	May 2011	11.47	10.07	6.66	10.69	9.70
Prior Period	January 2010	May 2010	11.20	9.97	6.57	10.85	9.55
Percent Difference			2.4%	1.0%	1.4%	-1.5%	1.6%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	June 2010	May 2011	11.68	10.30	6.82	10.89	9.94
Prior Period	June 2009	May 2010	11.46	10.15	6.71	10.75	9.77
Percent Difference			1.9%	1.5%	1.6%	1.3%	1.7%

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

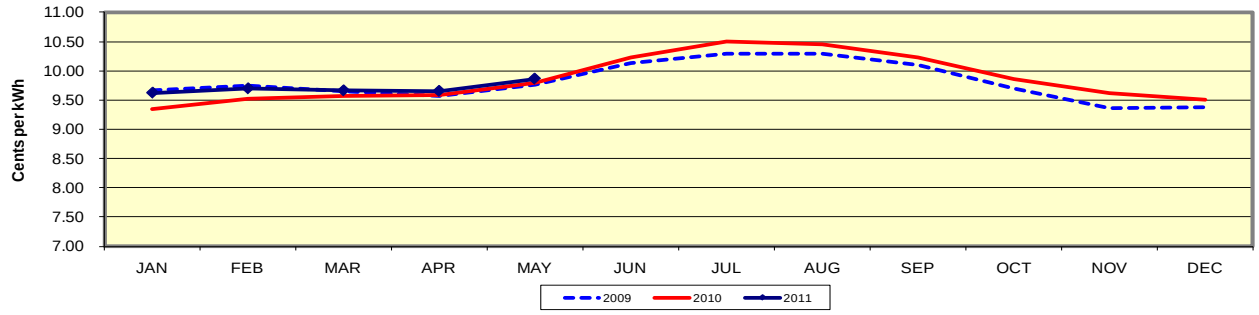
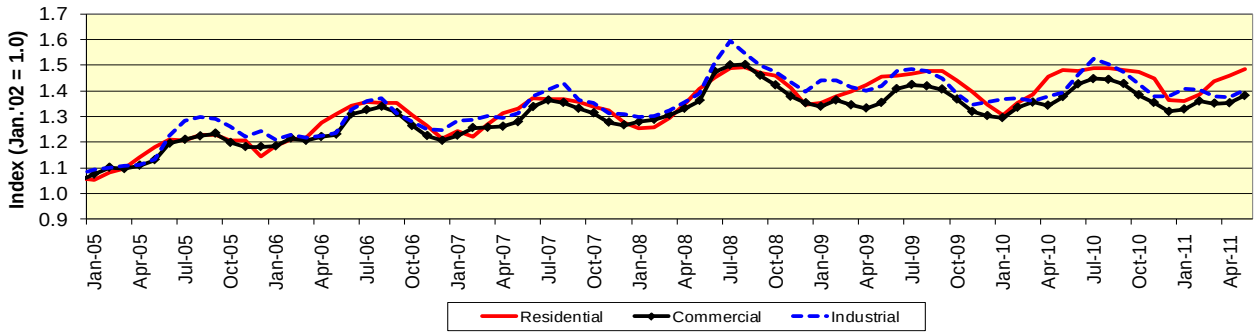


Figure 10.2 Average Retail Price of Electricity: Trends by Sector (Values as Indices, Jan. 2002 = 1.0)



Section 11. Heating and Cooling Degree Days

Data for: May 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	May 2011	166	159	7	4.4%	120	97	23	23.7%
Prior Period	May 2010	132	159	-27	-17.0%	126	97	29	29.9%
Percent Difference		25.8%				-4.8%			

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	May 2011	2,767	209	**Current Period**	June 2010	May 2011	4,521	1,494
Prior Period	January 2010	May 2010	2,707	172	**Prior Period**	June 2009	May 2010	4,481	1,224
Percent Difference			2.2%	21.5%	**Percent Difference**			0.9%	22.1%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2011

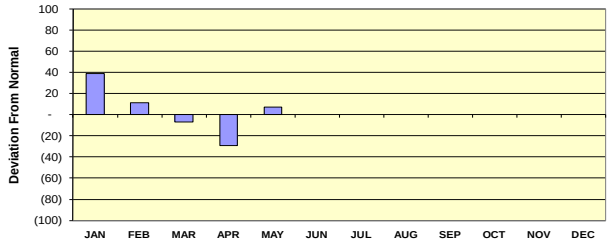


Figure 11.2 Deviation From Normal Cooling Degree Days, 2011

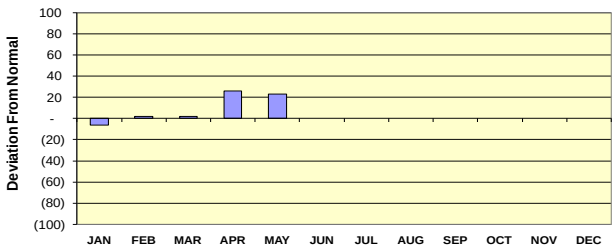


Figure 11.3 Trend in Heating Degree Days: 2010, 2011, and Normal

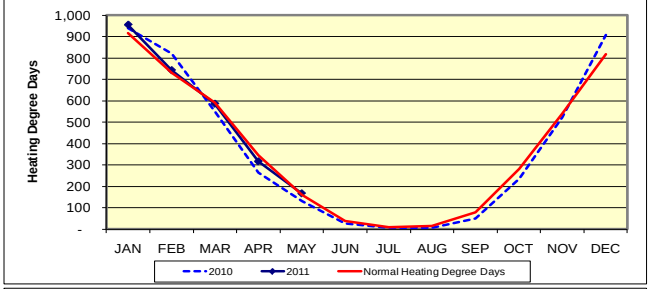


Figure 11.4 Trend in Cooling Degree Days: 2010, 2011, and Normal

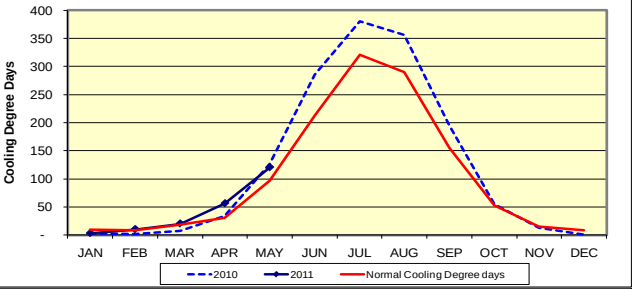


Figure 11.5 Trend in Cumulative Heating Degree Days: 2010, 2011, and Normal

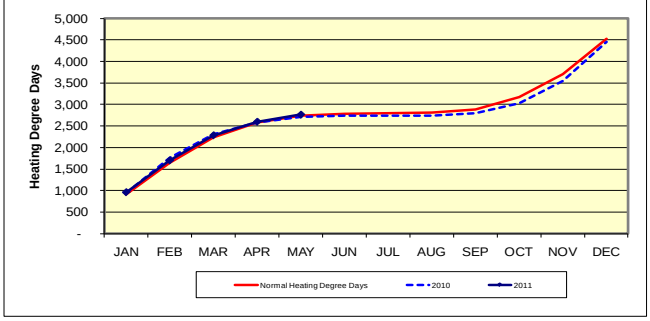
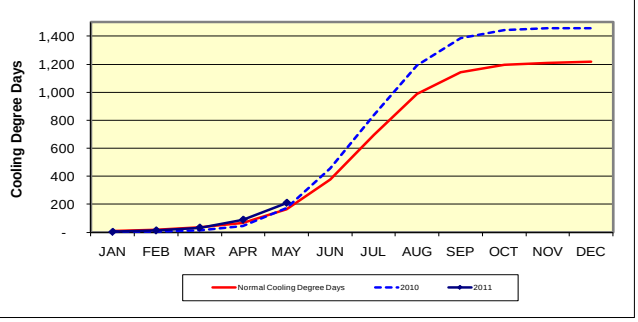


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2010, 2011, and Normal



Section 12. Documentation

Data for: May 2011

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.