

Monthly Flash Estimates of Electric Power Data

Data for:
April 2011

Section 1. Commentary

The contiguous United States experienced temperatures that were above normal in April 2011. Accordingly, the total population-weighted heating degree days for the United States were 8.4 percent below the April normal.

In April 2011, retail sales of electricity increased 3.1 percent from April 2010. Over the same period, the average U.S. retail price of electricity increased 1.0 percent. The average U.S. retail price of electricity for the 12-month period ending April 2011 increased 1.6 percent over the previous 12-month period ending April 2010.

The total electric power generation in the United States increased 4.1 percent compared to April 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 2.2 percent, while natural gas generation increased 4.2 percent and petroleum liquids generation increased 21.9 percent. Conventional hydroelectric generation had the largest percentage change, increasing 67.3 percent from the previous year. This was mainly due to record amounts of precipitation that fell in the Northwest in April 2011. Nuclear generation decreased 5.3 percent as more nuclear plants were offline due to refueling outages in April 2011 than the previous year.

In April 2011, coal plants continued the spring build-up of coal for consumption in the summer months. However, this year's spring build-up of coal stocks has been less severe than last year's spring build-up of coal stocks. Accordingly, total coal stocks in April 2011 decreased 7.8 percent when compared to April 2010.

References for weather data:

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

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Table 2.1 Key Generation Indicators

	Total Generation	Nuclear Generation	Hydroelectric Generation
Total Change From:			
March 2011	-5.9%	-16.9%	-0.7%
April 2010	4.1%	-5.3%	67.3%
Year to Date	1.1%	-0.9%	37.5%
Latest 12 Month Period*	4.1%	1.3%	8.0%

Table 2.2 Key Consumption and Stocks Indicators

	Natural Gas Consumption	Coal Consumption	Coal Stocks
Total Change From:			
March 2011	4.7%	-7.5%	4.5%
April 2010	6.8%	-0.2%	-7.8%
Year to Date	3.2%	-3.6%	--
Latest 12 Month Period*	7.1%	2.5%	--

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

Net Generation (Total, All Sectors)

Table 3.1 Total Net Generation (All Sectors)

Net Generation (thousand megawatthours)	Apr-11	Apr-10	% Change	Mar-11	% Change
Coal	124,337	127,164	-2.2%	134,715	-7.7%
Petroleum Liquids	1,438	1,180	21.9%	1,238	16.2%
Natural Gas	66,908	64,240	4.2%	65,679	1.9%
Nuclear	54,547	57,611	-5.3%	65,662	-16.9%
Hydroelectric Conventional	31,162	18,630	67.3%	31,385	-0.7%
All Other	20,627	18,454	11.8%	19,155	7.7%
Total (All Energy Sources)	299,019	287,279	4.1%	317,835	-5.9%

Fossil Fuel Consumption for Electric Generation (Total, All Sectors)

Table 3.2 Total Consumption of Fossil Fuels for Electric Generation (All Sectors)

Consumption of Fossil Fuels	Apr-11	Apr-10	% Change	Mar-11	% Change
Coal (Thousand Short Tons)	66,928	67,090	-0.2%	72,330	-7.5%
Petroleum Liquids (Thousand Barrels)	2,423	1,958	23.7%	2,101	15.3%
Natural Gas (Million Cubic Feet)	525,011	491,678	6.8%	501,248	4.7%

Fossil Fuel Stocks (Electric Power Sector)

Table 3.3 Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Apr-11	Apr-10	% Change	Mar-11	% Change
Coal (Thousand Short Tons)	174,384	189,196	-7.8%	166,954	4.5%
Petroleum Liquids (Thousand Barrels)	33,386	37,938	-12.0%	34,827	-4.1%

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:
April 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	April 2011	568,887	5,690	272,032	257,741	112,638	75,578	1,292,566
Prior Period	January 2010	April 2010	598,445	6,783	265,691	260,061	81,925	65,380	1,278,285
Percent Difference			-4.9%	-16.1%	2.4%	-0.9%	37.5%	15.6%	1.1%

Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Coal	Petroleum Liquids	Natural Gas	Nuclear	Hydroelectric Conventional	All Other	Total
Current Period	May 2010	April 2011	1,821,192	22,303	988,156	804,649	287,765	210,243	4,134,308
Prior Period	May 2009	April 2010	1,780,043	21,776	928,644	793,936	266,471	181,292	3,972,162
Percent Difference			2.3%	2.4%	6.4%	1.3%	8.0%	16.0%	4.1%

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

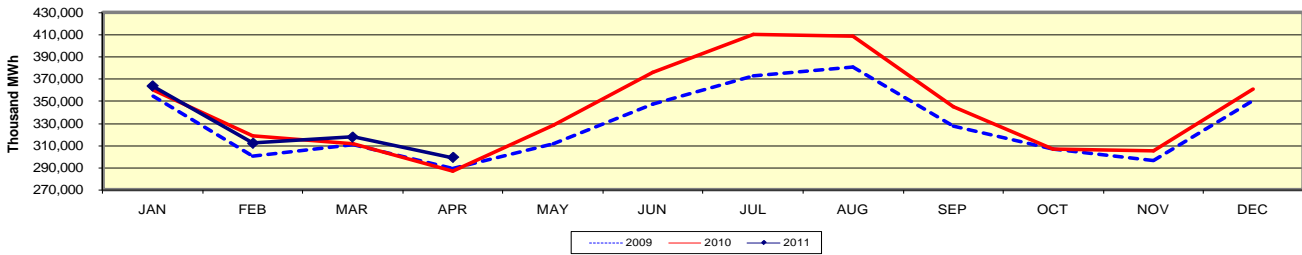


Figure 4.2 Fossil Fuel Generation Trends (Values as Indices, Jan. 2002 = 1.0)

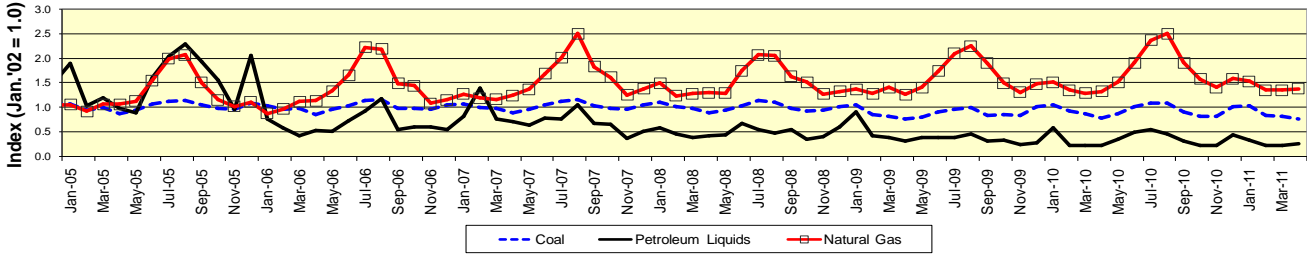


Figure 4.3 Nuclear and Hydroelectric Generation Trends (Values as Indices, Jan. 2002 = 1.0)

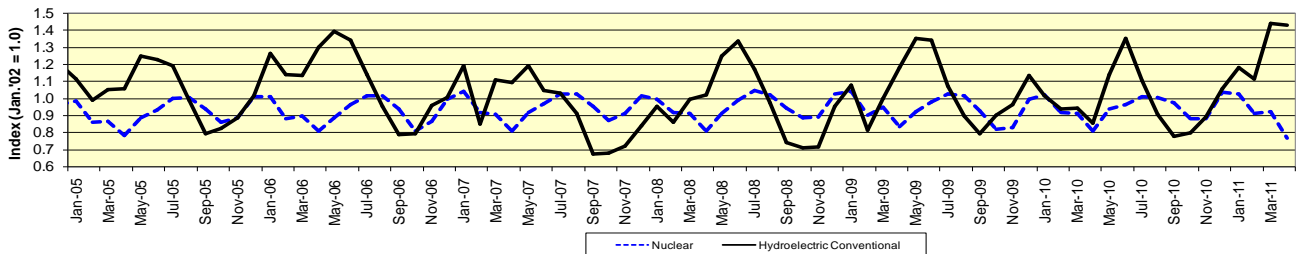


Table 5.1 Trends in Fossil Fuel Consumption For Electric Generation, Total (All Sectors)

Year-to-Date Comparison

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	January 2011	April 2011	303,050	9,741	2,090,909
Prior Period	January 2010	April 2010	314,407	11,685	2,026,435
Percent Difference			-3.6%	-16.6%	3.2%

Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Natural Gas (Million Cubic Feet)
Current Period	May 2010	April 2011	968,198	38,097	7,697,942
Prior Period	May 2009	April 2010	944,996	36,796	7,185,499
Percent Difference			2.5%	3.5%	7.1%

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

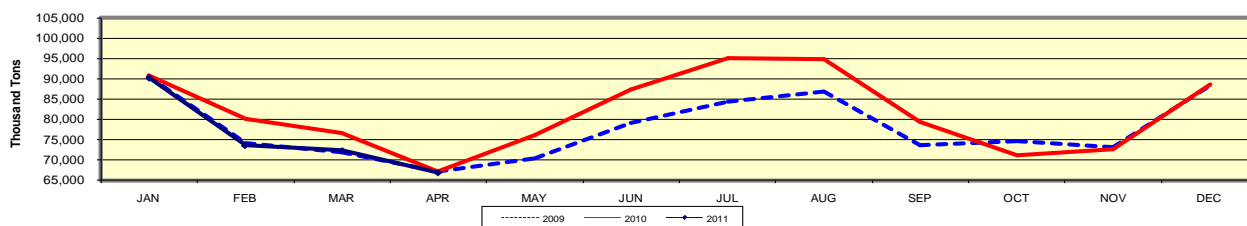


Figure 5.2 Trend in Total Petroleum Liquids Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

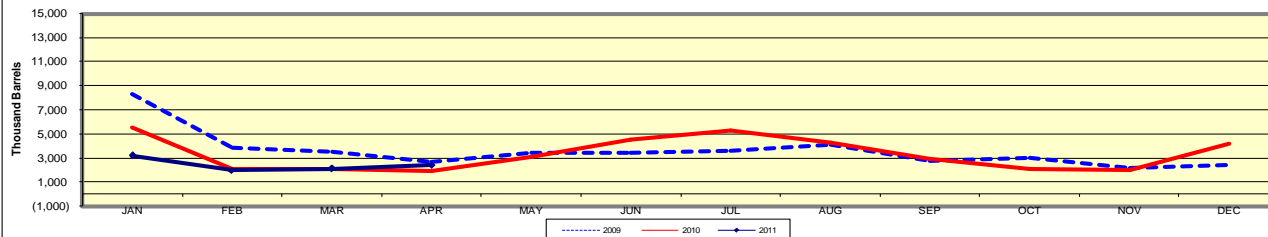


Figure 5.3 Trend in Total Natural Gas Consumption For Electric Generation (All Sectors): 2009, 2010, and 2011

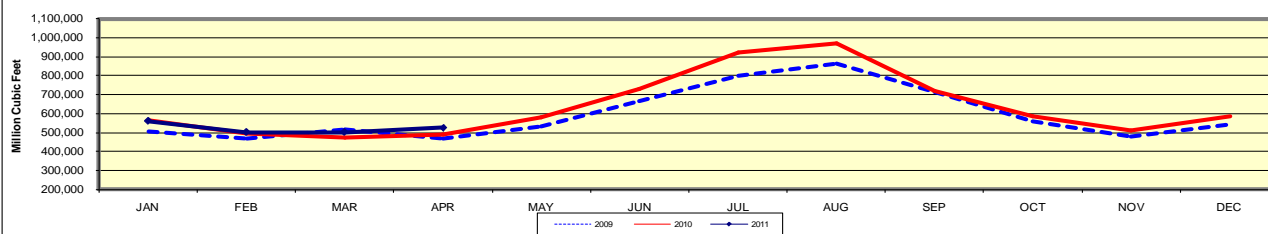
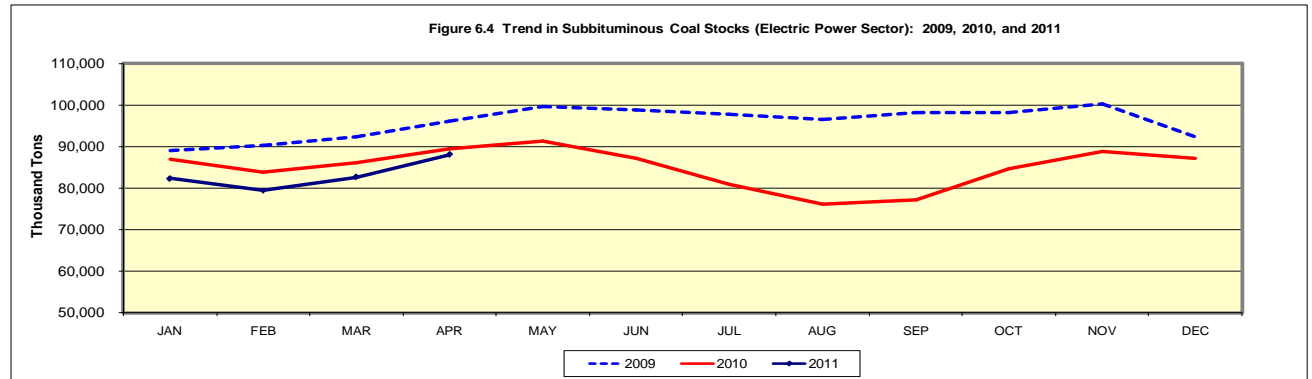
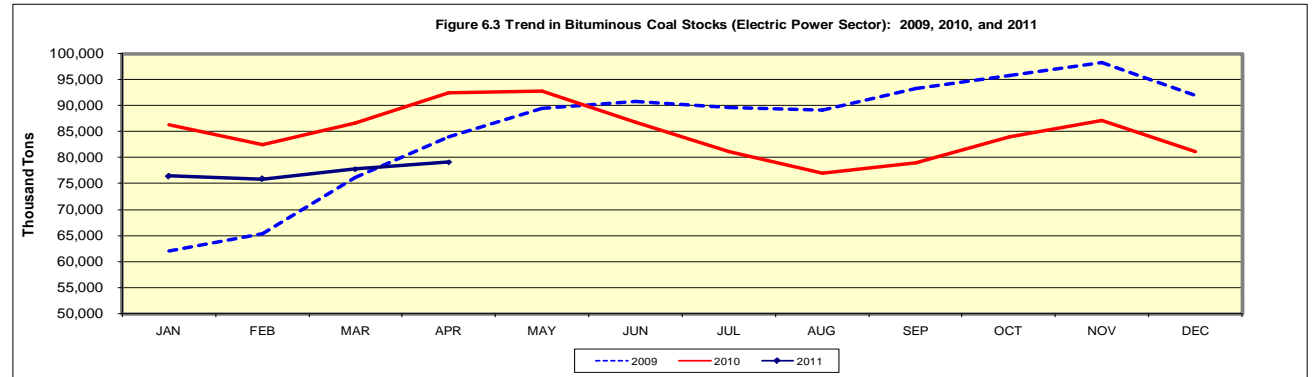
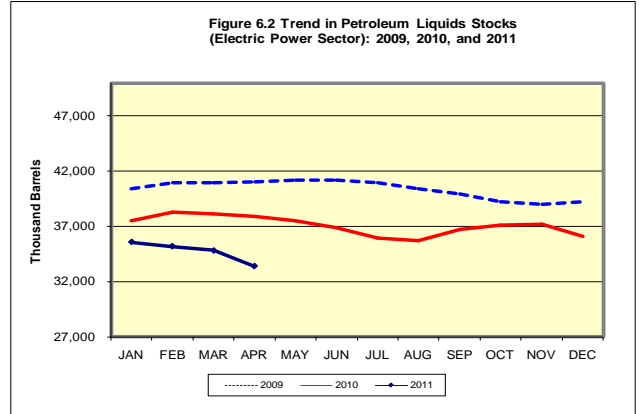
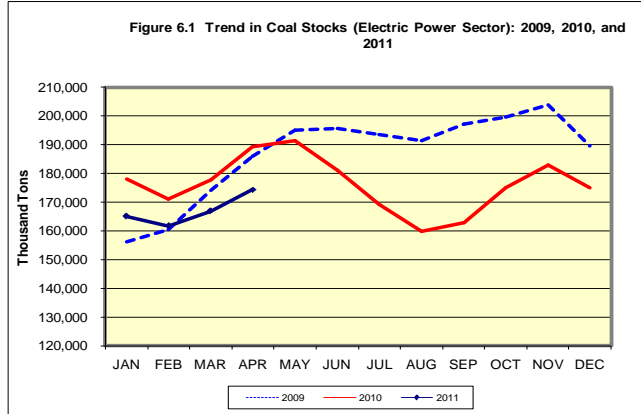


Table 6.1 Trends in Total Fossil Fuel Stocks (Electric Power Sector)

Fossil Fuel Stocks	Apr-11	Apr-10	% Change	Mar-11	% Change
Coal, Total (Thousand Short Tons)	174,384	189,196	-7.8%	166,954	4.5%
Bituminous (includes anthracite and coal syntfuel)	79,123	92,499	-14.5%	77,779	1.7%
Subbituminous	88,028	89,476	-1.6%	82,695	6.4%
Lignite	7,232	7,221	0.2%	6,480	11.6%
Petroleum Liquids (Thousand Barrels)	33,386	37,938	-12.0%	34,827	-4.1%



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

Data for:
April 2011

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

Zone	Apr-11	Apr-10	% Change	Mar-11	% Change
Northeast	59	70	-15.7%	61	5.5%
South	69	77	-10.6%	74	4.1%
Midwest	66	70	-5.9%	69	4.6%
West	82	83	-1.5%	85	-0.6%

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

Zone	April 2011		
	Less than 30 days	30 to 60 days	Greater than 60 days
Northeast	12.7%	43.6%	43.7%
South	3.9%	38.6%	57.5%
Midwest	9.8%	35.5%	54.6%
West	0.7%	21.6%	77.6%
U.S. Total	6.3%	35.1%	58.6%

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

Zone	Coal	Apr-11		Apr-10		% Change of Stocks	Mar-11		% Change of Stocks
		Stocks (000 tons)	Days of Burn	Stocks (000 tons)	Days of Burn		Stocks (000 tons)	Days of Burn	
Northeast	Bituminous	7,698	60	8,888	70	-13.4%	7,031	62	9.5%
	Subbituminous	646	48	1,055	70	-38.8%	568	52	13.7%
South	Bituminous	45,208	72	52,312	80	-13.6%	44,071	78	2.6%
	Subbituminous	5,878	53	6,705	62	-12.3%	5,176	50	13.6%
Midwest	Bituminous	15,628	64	19,079	76	-18.1%	15,484	67	0.9%
	Subbituminous	44,090	67	44,119	68	-0.1%	42,023	69	4.9%
West	Bituminous	7,240	114	7,756	117	-6.7%	7,079	118	2.3%
	Subbituminous	30,898	77	31,489	77	-1.9%	29,281	80	5.5%
U.S. Total	Bituminous	75,774	71	88,034	80	-13.9%	73,665	76	2.9%
	Subbituminous	81,511	69	83,368	71	-2.2%	77,047	71	5.8%

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

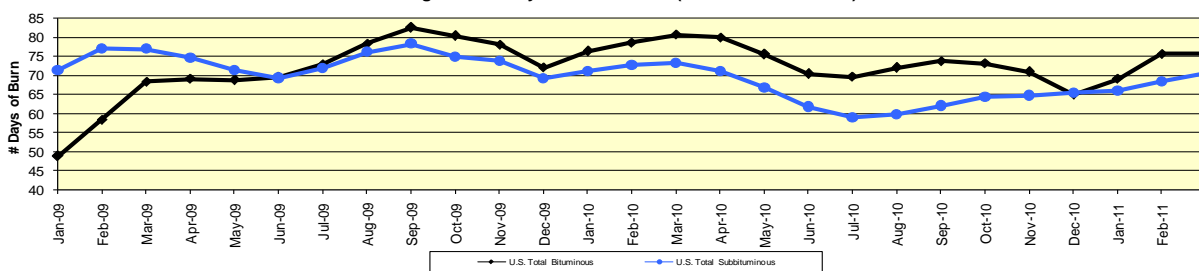
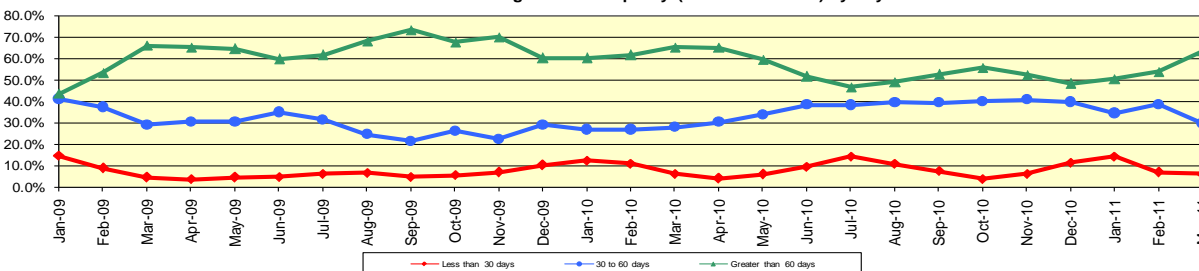


Figure 7.2 U.S. Total Percent of Non-Lignite Coal Capacity (Net Summer MW) by Days of Burn



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

Data for:
April 2011

Retail Sales

Table 8.1 Retail Sales (Million kWh)

Ultimate Customer	Apr-11	Apr-10	% Change	Mar-11	% Change
Residential	94,401	88,175	7.1%	105,476	-10.5%
Commercial	100,014	99,709	0.3%	103,551	-3.4%
Industrial	79,600	77,977	2.1%	81,263	-2.0%
Transportation	580	604	-4.0%	657	-11.7%
All Sectors	274,595	266,465	3.1%	290,947	-5.6%

Average Retail Price

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

Ultimate Customer	Apr-11	Apr-10	% Change	Mar-11	% Change
Residential	11.80	11.76	0.3%	11.64	1.4%
Commercial	10.12	9.99	1.3%	10.05	0.7%
Industrial	6.60	6.59	0.2%	6.59	0.2%
Transportation	10.29	11.25	-8.5%	10.85	-5.2%
All Sectors	9.68	9.58	1.0%	9.66	0.2%

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

Census Division	Residential			All Sectors		
	Apr-11	Apr-10	% Change	Apr-11	Apr-10	% Change
New England	15.86	16.92	-6.3%	14.31	15.08	-5.1%
Middle Atlantic	15.68	15.97	-1.8%	13.00	13.08	-0.6%
East North Central	11.68	11.68	0.0%	8.91	8.89	0.2%
West North Central	9.95	9.52	4.5%	7.88	7.39	6.6%
South Atlantic	11.30	11.25	0.4%	9.60	9.42	1.9%
East South Central	10.24	9.87	3.7%	8.23	7.87	4.6%
West South Central	10.74	11.08	-3.1%	8.38	8.64	-3.0%
Mountain	10.35	10.16	1.9%	8.28	8.23	0.6%
Pacific Contiguous	12.09	11.80	2.5%	10.83	10.53	2.8%
Pacific Noncontiguous	26.56	22.72	16.9%	24.52	20.60	19.0%
U.S. Total	11.80	11.76	0.3%	9.68	9.58	1.0%

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

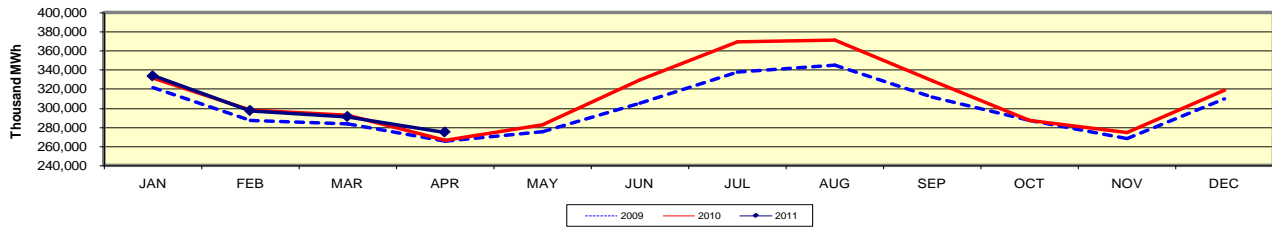
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2011	April 2011	468,037	410,830	315,362	2,584	1,196,813
Prior Period	January 2010	April 2010	471,645	409,931	304,277	2,721	1,188,573
Percent Difference			-0.8%	0.2%	3.6%	-5.0%	0.7%

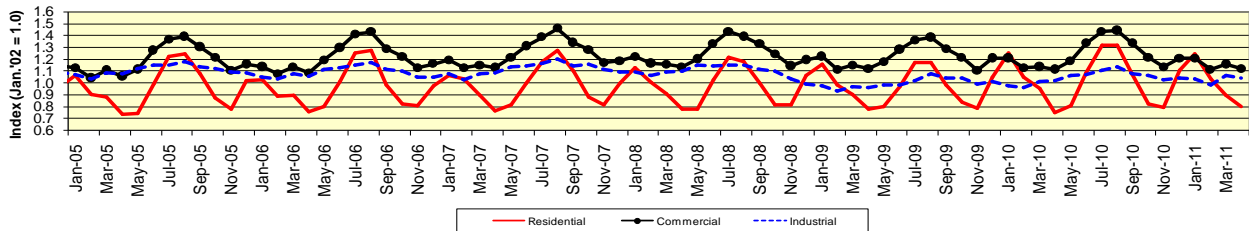
Comparison to Prior Twelve-Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	May 2010	April 2011	1,447,149	1,330,222	973,250	7,602	3,758,224
Prior Period	May 2009	April 2010	1,386,488	1,305,552	927,837	7,773	3,627,651
Percent Difference			4.4%	1.9%	4.9%	-2.2%	3.6%

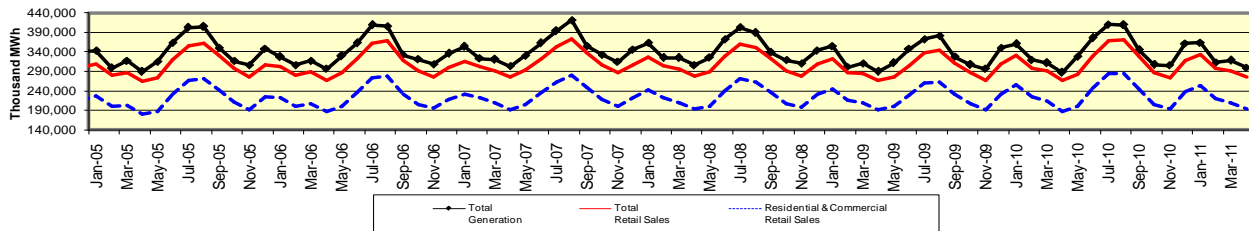
**Figure 9.1
Trends in Total Retail Sales of Electricity (All Sectors):
2009, 2010, and 2011**



**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:
April 2011

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

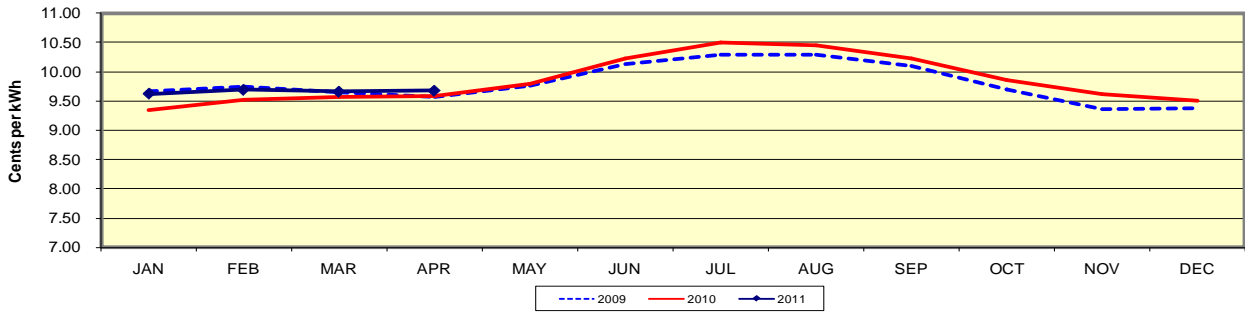
Year-to-Date Comparison

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	January 2011	April 2011	11.36	10.04	6.66	10.64	9.66
Prior Period	January 2010	April 2010	11.04	9.90	6.54	10.82	9.50
Percent Difference			2.9%	1.4%	1.8%	-1.7%	1.7%

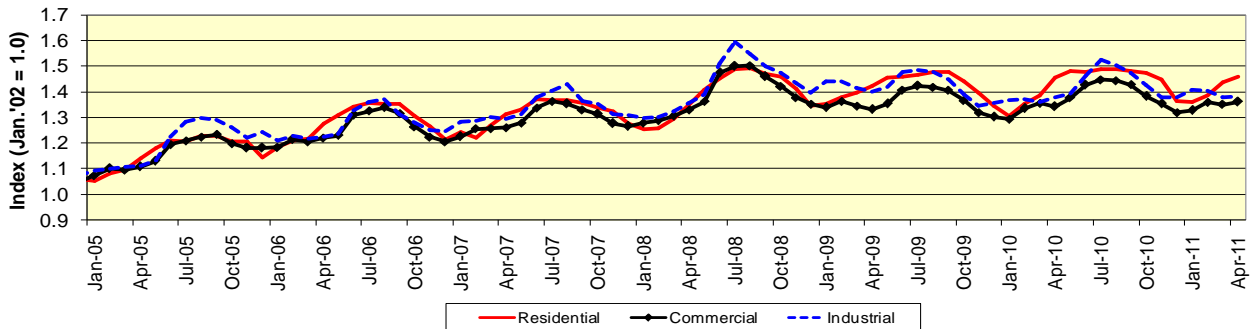
Comparison to Prior 12 Month Period

	Starting Month	Ending Month	Residential	Commercial	Industrial	Transportation	Total (All Sectors)
Current Period	May 2010	April 2011	11.68	10.30	6.82	10.90	9.93
Prior Period	May 2009	April 2010	11.45	10.14	6.73	10.76	9.77
Percent Difference			2.0%	1.6%	1.3%	1.3%	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:
April 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	April 2011	316	345	-29	-8.4%	56	30	26	86.7%
Prior Period	April 2010	263	345	-82	-23.8%	34	30	4	13.3%
Percent Difference		20.2%				64.7%			

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	April 2011	2,601	89	Current Period	May 2010	April 2011	4,487	1,500
Prior Period	January 2010	April 2010	2,575	46	Prior Period	May 2009	April 2010	4,481	1,215
Percent Difference			1.0%	93.5%	Percent Difference			0.1%	23.5%

Figure 11.1 Deviation From Normal: Heating Degree Days, 2011

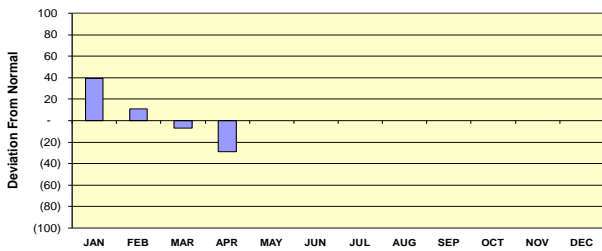


Figure 11.2 Deviation From Normal: Cooling Degree Days, 2011

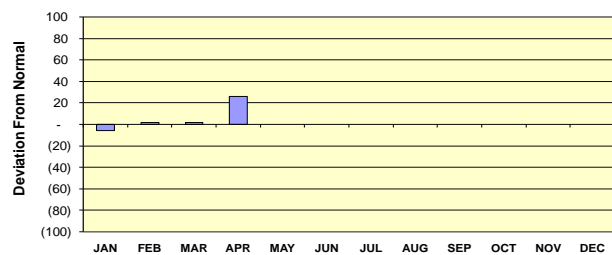


Figure 11.3 Trend in Heating Degree Days: 2010, 2011, and Normal

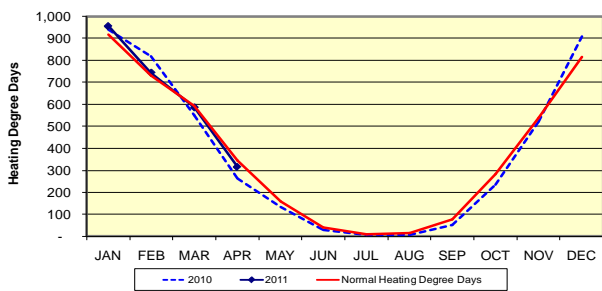


Figure 11.4 Trend in Cooling Degree Days: 2010, 2011, and Normal

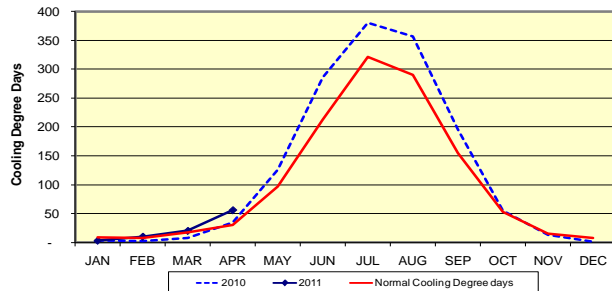


Figure 11.5 Trend in Cumulative Heating Degree Days: 2010, 2011, and Normal

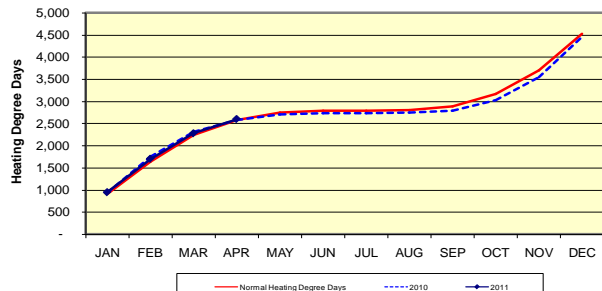
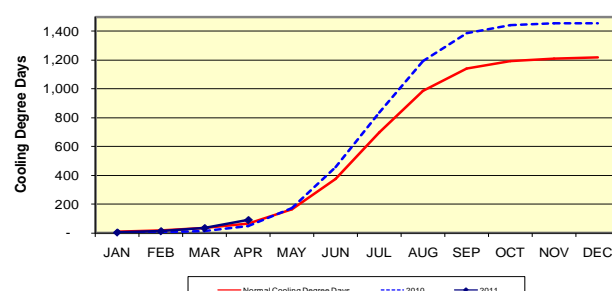


Figure 11.6 Trend in Cumulative Cooling Degree Days: 2010, 2011, and Normal



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.