



*Independent Statistics & Analysis*  
U.S. Energy Information  
Administration

# Electric Power Annual 2014

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EIA Electric Industry Data Collection

## Chapter 1

### National Summary Data

**Table 1.1. Total Electric Power Industry Summary Statistics, 2014 and 2013**

Net Generation and Consumption of Fuels for January through December														
Fuel	Facility Type	Total (All Sectors)			Electric Power Sector			Commercial		Industrial		Residential		
		Year 2014	Year 2013	Percentage Change	Electric Utilities		Independent Power Producers		Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
					Year 2014	Year 2013	Year 2014	Year 2013						
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	1,581,710	1,581,115	0.0%	1,173,073	1,188,452	395,701	379,270	595	839	12,341	12,554	0	0
Petroleum Liquids	Utility Scale Facilities	18,276	13,820	32.2%	10,696	9,446	6,789	3,761	247	118	544	495	0	0
Petroleum Coke	Utility Scale Facilities	11,955	13,344	-10.4%	9,147	9,522	1,410	1,780	9	5	1,389	2,036	0	0
Natural Gas	Utility Scale Facilities	1,126,609	1,124,836	0.2%	501,414	501,427	531,758	527,522	7,227	7,154	86,209	88,733	0	0
Other Gas	Utility Scale Facilities	12,022	12,853	-6.5%	112	798	3,246	3,524	0	0	8,664	8,531	0	0
Nuclear	Utility Scale Facilities	797,166	789,016	1.0%	419,871	406,114	377,295	382,902	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	259,367	268,565	-3.4%	238,185	243,040	19,861	22,018	38	44	1,282	3,463	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	279,213	253,508	10.1%	34,496	32,417	212,809	189,045	3,232	2,956	28,675	29,091	0	0
... Wind	Utility Scale Facilities	181,655	167,840	8.2%	27,671	26,436	153,825	141,306	107	61	53	37	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	17,691	9,036	95.8%	1,218	943	16,086	7,782	371	294	16	17	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	42,340	40,028	5.8%	3,050	2,534	11,977	9,768	74	34	27,239	27,691	0	0
... Other Biomass	Utility Scale Facilities	21,650	20,830	3.9%	1,441	1,499	16,161	15,419	2,681	2,567	1,367	1,346	0	0
... Geothermal	Utility Scale Facilities	15,877	15,775	0.6%	1,116	1,005	14,761	14,770	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-6,174	-4,681	31.9%	-5,144	-3,773	-1,030	-908	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	13,461	13,588	-0.9%	622	615	6,690	6,742	1,171	1,118	4,978	5,113	0	0
All Energy Sources	Utility Scale Facilities	4,093,606	4,065,964	0.7%	2,382,473	2,388,058	1,554,530	1,515,657	12,520	12,234	144,083	150,015	0	0
Estimated Distributed Solar Photovoltaic	Distributed Facilities	9,536	0	--	0	0	0	0	0	4,349	0	943	0	4,243
Estimated Total Solar Photovoltaic	All Facilities	24,785	0	--	1,094	0	13,769	0	4,720	0	960	0	4,243	0
Estimated Total Solar	All Facilities	27,227	0	--	1,218	0	16,086	0	4,720	0	960	0	4,243	0
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	853,634	860,729	-0.8%	624,235	638,327	224,568	217,219	202	513	4,629	4,670	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	31,531	23,231	35.7%	19,652	16,827	10,689	5,494	451	328	739	582	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	4,412	4,852	-9.1%	3,440	3,409	599	778	2	1	371	662	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,544,387	8,596,299	-0.6%	3,895,008	3,970,447	3,954,032	3,917,131	71,957	66,570	623,390	642,152	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	18,107	18,350	-1.3%	978	0	1,821	2,416	861	843	14,448	15,090	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	3,099	3,456	-10.3%	64	0	1,170	1,050	216	498	1,650	1,908	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,283	1,486	-13.7%	3	0	90	96	16	11	1,174	1,379	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	865,146	882,385	-2.0%	4,926	0	292,016	303,177	46,635	51,057	521,569	528,151	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	871,741	879,078	-0.8%	625,212	638,327	226,389	219,635	1,063	1,356	19,076	19,761	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	34,630	26,687	29.8%	19,716	16,827	11,859	6,544	667	826	2,389	2,490	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	5,695	6,338	-10.1%	3,443	3,409	689	875	18	12	1,545	2,041	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,409,532	9,478,685	-0.7%	3,899,934	3,970,447	4,246,048	4,220,309	118,591	117,626	1,144,959	1,170,303	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through December															
Total U.S. Electric Power Industry															
		Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)							
Sector	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	
Residential	1,407,208	1,394,812	0.9%	176,178	169,131	4.2%	12.52	12.13	3.2%						
Commercial	1,352,158	1,337,079	1.1%	145,253	137,188	5.9%	10.74	10.26	4.7%						
Industrial	997,576	985,352	1.2%	70,855	67,934	4.3%	7.10	6.89	3.0%						
Transportation	7,758	7,625	1.7%	810	805	0.7%	10.45	10.55	-0.9%						
All Sectors	3,764,700	3,724,868	1.1%	393,096	375,058	4.8%	10.44	10.07	3.7%						

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Coal generation and consumption includes anthracite, bituminous, subbituminous, lignite, waste coal, refined coal, synthetic coal, and coal-derived synthesis gas.

Petroleum Liquids includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.

Petroleum Coke includes petroleum coke and synthesis gas derived from petroleum coke.

Natural Gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.

Other Gases includes blast furnace gas and other manufactured and waste gases derived from fossil fuels.

Wood and Wood-Derived Fuels include wood, black liquor, and other wood waste.

Other Biomass includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, and other biomass.

Coal stocks include anthracite, bituminous, subbituminous, lignite, refined coal, and synthetic coal; waste coal is excluded.

Sales of electricity to ultimate customers and net generation may not correspond exactly for a particular month for a variety of reasons (e.g., sales data may include imported electricity).

Net generation is presented for the calendar month while sales of electricity to ultimate customers and associated revenue accumulate from bills collected for periods of time that vary depending

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

**(From Table 2.1.) Number of Ultimate Customers**

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2004	118,763,768	16,606,783	747,600	1,025	N/A	136,119,176
2005	120,760,839	16,871,940	733,862	518	N/A	138,367,159
2006	122,471,071	17,172,499	759,604	791	N/A	140,403,965
2007	123,949,916	17,377,219	793,767	750	N/A	142,121,652
2008	125,037,837	17,582,382	774,808	726	N/A	143,395,753
2009	125,208,829	17,562,235	757,537	704	N/A	143,529,305
2010	125,717,935	17,674,338	747,747	239	N/A	144,140,259
2011	126,143,072	17,638,062	727,920	92	N/A	144,509,146
2012	126,832,343	17,729,029	732,385	83	N/A	145,293,840
2013	127,777,153	17,679,562	831,790	75	N/A	146,288,580
2014	128,680,416	17,853,995	839,212	79	N/A	147,373,702

**(From Table 2.2.) Sales to Ultimate Customers**

**(Thousand Megawatthours)**

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2004	1,291,982	1,230,425	1,017,850	7,224	N/A	3,547,479
2005	1,359,227	1,275,079	1,019,156	7,506	N/A	3,660,969
2006	1,351,520	1,299,744	1,011,298	7,358	N/A	3,669,919
2007	1,392,241	1,336,315	1,027,832	8,173	N/A	3,764,561
2008	1,380,662	1,336,133	1,009,516	7,653	N/A	3,733,965
2009	1,364,758	1,306,853	917,416	7,768	N/A	3,596,795
2010	1,445,708	1,330,199	971,221	7,712	N/A	3,754,841
2011	1,422,801	1,328,057	991,316	7,672	N/A	3,749,846
2012	1,374,515	1,327,101	985,714	7,320	N/A	3,694,650
2013	1,394,812	1,337,079	985,352	7,625	N/A	3,724,868
2014	1,407,208	1,352,158	997,576	7,758	N/A	3,764,700

**(From Table 2.3.) Revenue From Ultimate Customers**

**(Million Dollars)**

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2004	115,577	100,546	53,477	519	N/A	270,119
2005	128,393	110,522	58,445	643	N/A	298,003
2006	140,582	122,914	62,308	702	N/A	326,506
2007	148,295	128,903	65,712	792	N/A	343,703
2008	155,496	137,036	70,231	820	N/A	363,583
2009	157,044	132,747	62,670	828	N/A	353,289
2010	166,778	135,554	65,772	814	N/A	368,918
2011	166,714	135,927	67,606	803	N/A	371,049
2012	163,280	133,898	65,761	747	N/A	363,687
2013	169,131	137,188	67,934	805	N/A	375,058
2014	176,178	145,253	70,855	810	N/A	393,096

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

**(From Table 2.4.) Average Price**

**(Cents per Kilowatthour)**

Year	Residential	Commercial	Industrial	Transportation	Other	Total
2004	8.95	8.17	5.25	7.18	N/A	7.61
2005	9.45	8.67	5.73	8.57	N/A	8.14
2006	10.40	9.46	6.16	9.54	N/A	8.90
2007	10.65	9.65	6.39	9.70	N/A	9.13
2008	11.26	10.26	6.96	10.71	N/A	9.74
2009	11.51	10.16	6.83	10.66	N/A	9.82
2010	11.54	10.19	6.77	10.56	N/A	9.83
2011	11.72	10.24	6.82	10.46	N/A	9.90
2012	11.88	10.09	6.67	10.21	N/A	9.84
2013	12.13	10.26	6.89	10.55	N/A	10.07
2014	12.52	10.74	7.10	10.45	N/A	10.44

**(From Tables 2.11. - 2.13.) Trade**

**(Thousand Megawatthours)**

Year	Purchases	Sales for Resale	Imports	Exports
2004	6,998,549	6,758,975	34,210	22,898
2005	6,092,285	6,071,659	43,929	19,151
2006	5,502,584	5,493,473	42,691	24,271
2007	5,411,422	5,479,394	51,396	20,144
2008	5,612,781	5,680,733	57,019	24,198
2009	5,028,647	5,065,031	52,191	18,138
2010	5,770,134	5,929,211	45,083	19,106
2011	5,024,621	5,143,121	52,300	15,049
2012	4,984,933	5,013,765	59,257	11,996
2013	4,684,977	4,842,508	68,947	11,373
2014	4,802,227	4,908,839	66,510	13,298

**(From Tables 3.1.A. and 3.1.B.) Net Generation (Thousand Megawatthours)**

Year	Coal	Petroleum	Natural Gas	Other Gas	Nuclear	Hydro Conventional	Wind
2004	1,978,301	121,145	710,100	15,252	788,528	268,417	14,144
2005	2,012,873	122,225	760,960	13,464	781,986	270,321	17,811
2006	1,990,511	64,166	816,441	14,177	787,219	289,246	26,589
2007	2,016,456	65,739	896,590	13,453	806,425	247,510	34,450
2008	1,985,801	46,243	882,981	11,707	806,208	254,831	55,363
2009	1,755,904	38,937	920,979	10,632	798,855	273,445	73,886
2010	1,847,290	37,061	987,697	11,313	806,968	260,203	94,652
2011	1,733,430	30,182	1,013,689	11,566	790,204	319,355	120,177
2012	1,514,043	23,190	1,225,894	11,898	769,331	276,240	140,822
2013	1,581,115	27,164	1,124,836	12,853	789,016	268,565	167,840
2014	1,581,710	30,232	1,126,609	12,022	797,166	259,367	181,655

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2004	575	38,117	14,811	15,421	-8,488	14,232	3,970,555
2005	550	38,856	14,692	15,420	-6,558	12,821	4,055,423
2006	508	38,762	14,568	16,099	-6,558	12,974	4,064,702
2007	612	39,014	14,637	16,525	-6,896	12,231	4,156,745
2008	864	37,300	14,840	17,734	-6,288	11,804	4,119,388
2009	891	36,050	15,009	18,443	-4,627	11,928	3,950,331
2010	1,212	37,172	15,219	18,917	-5,501	12,855	4,125,060
2011	1,818	37,449	15,316	19,222	-6,421	14,154	4,100,141
2012	4,327	37,799	15,562	19,823	-4,950	13,787	4,047,765
2013	9,036	40,028	15,775	20,830	-4,681	13,588	4,065,964
2014	17,691	42,340	15,877	21,650	-6,174	13,461	4,093,606

**(From Tables 4.2.A. and 4.2.B.) Net Summer Generating Capacity (Megawatts)**

Year	Coal	Petroleum	Natural Gas	Other Gas	Nuclear	Hydro Conventional	Wind
2004	313,020	59,119	371,011	2,296	99,628	77,641	6,456
2005	313,380	58,548	383,061	2,063	99,988	77,541	8,706
2006	312,956	58,097	388,294	2,256	100,334	77,821	11,329
2007	312,738	56,068	392,876	2,313	100,266	77,885	16,515
2008	313,322	57,445	397,460	1,995	100,755	77,930	24,651
2009	314,294	56,781	401,272	1,932	101,004	78,518	34,296
2010	316,800	55,647	407,028	2,700	101,167	78,825	39,135
2011	317,640	51,482	415,191	1,934	101,419	78,652	45,676
2012	309,680	47,167	422,364	1,946	101,885	78,738	59,075
2013	303,306	43,523	425,390	2,108	99,240	79,200	59,973
2014	299,094	41,135	432,150	1,914	98,569	79,677	64,232

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2004	398	6,182	2,152	3,529	20,764	746	962,942
2005	411	6,193	2,285	3,609	21,347	887	978,020
2006	411	6,372	2,274	3,727	21,461	882	986,215
2007	502	6,704	2,214	4,134	21,886	788	994,888
2008	536	6,864	2,229	4,186	21,858	942	1,010,171
2009	619	6,939	2,382	4,317	22,160	888	1,025,400
2010	866	7,037	2,405	4,369	22,199	884	1,039,062
2011	1,524	7,077	2,409	4,536	22,293	1,420	1,051,251
2012	3,170	7,508	2,592	4,811	22,368	1,729	1,063,033
2013	6,623	8,354	2,607	5,043	22,389	2,307	1,060,064
2014	10,323	8,368	2,514	5,167	22,485	2,793	1,068,422

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

**(From Chapter 5.) Consumption of Fossil Fuels**

Year	For Electricity Generation				For Useful Thermal Output			
	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Other Gas (Millions of BTU)	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Other Gas (Millions of BTU)
2004	1,020,523	203,494	5,674,580	135,144	24,275	25,870	1,052,100	218,295
2005	1,041,448	206,785	6,036,370	109,916	23,833	24,408	984,340	238,396
2006	1,030,556	110,634	6,461,615	114,665	23,227	20,371	942,817	226,464
2007	1,046,795	112,615	7,089,342	114,904	22,810	19,775	872,579	214,321
2008	1,042,335	80,932	6,895,843	96,757	22,168	12,016	793,537	203,236
2009	934,683	67,668	7,121,069	83,593	20,507	13,161	816,787	175,671
2010	979,684	65,071	7,680,185	90,058	21,727	10,161	821,775	172,081
2011	934,938	52,387	7,883,865	91,290	21,532	9,223	839,681	191,138
2012	825,734	40,977	9,484,710	103,353	19,333	9,828	886,103	199,121
2013	860,729	47,492	8,596,299	115,303	18,350	10,886	882,385	189,902
2014	853,634	53,593	8,544,387	110,010	18,107	9,513	865,146	194,088

Year	Total			
	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Other Gas (Millions of BTU)
2004	1,044,798	229,364	6,726,679	353,438
2005	1,065,281	231,193	7,020,709	348,312
2006	1,053,783	131,005	7,404,432	341,129
2007	1,069,606	132,389	7,961,922	329,225
2008	1,064,503	92,948	7,689,380	299,993
2009	955,190	80,830	7,937,856	259,265
2010	1,001,411	75,231	8,501,960	262,138
2011	956,470	61,610	8,723,546	282,428
2012	845,066	50,805	10,370,812	302,475
2013	879,078	58,378	9,478,685	305,205
2014	871,741	63,106	9,409,532	304,098

**(From Tables 6.1. and 7.1)**

**Year End Stocks, Annual Receipts and Average Costs**

Year	Electric Power Sector Year End Stocks		Annual Receipts at All Electricity Generators			Average Cost of Fuel at All Electricity Generators		
	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Coal (Dollars per MMBtu)	Petroleum (Dollars per MMBtu)	Natural Gas (Dollars per MMBtu)
2004	106,669	51,434	1,002,032	186,655	5,734,054	1.36	4.29	5.96
2005	101,137	50,062	1,021,437	194,733	6,181,717	1.54	6.44	8.21
2006	140,964	51,583	1,079,943	100,965	6,675,246	1.69	6.23	6.94
2007	151,221	47,203	1,054,664	88,347	7,200,316	1.77	7.17	7.11
2008	161,589	44,498	1,069,709	96,341	7,879,046	2.07	10.87	9.02
2009	189,467	46,181	981,477	88,951	8,118,550	2.21	7.02	4.74
2010	174,917	40,800	979,918	75,285	8,673,070	2.27	9.54	5.09
2011	172,387	37,387	956,538	66,058	9,056,164	2.39	12.48	4.72
2012	185,116	34,698	841,183	40,364	9,531,389	2.38	12.48	3.42

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

2013	147,884	33,622	823,222	43,714	8,503,424	2.34	11.57	4.33
2014	151,548	37,643	854,560	54,488	8,431,423	2.37	11.60	5.00

**(From Table 9.1.) Emissions**

**(Thousand Metric Tons)**

Year	Carbon Dioxide (CO <sub>2</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Nitrogen Oxides (NOx)
2004	2,486,982	10,309	4,143
2005	2,543,838	10,340	3,961
2006	2,488,918	9,524	3,799
2007	2,547,032	9,042	3,650
2008	2,484,012	7,830	3,330
2009	2,269,508	5,970	2,395
2010	2,388,596	5,400	2,491
2011	2,287,071	4,845	2,406
2012	2,156,875	3,704	2,148
2013	2,172,355	3,609	2,188
2014	2,160,342	3,485	2,178

**(From Tables 10.6. and 10.7.) Energy Efficiency**

Year	Savings		Incremental Costs		Life Cycle Savings		Life Cycle Costs	
	Energy (MWh)	Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)	Energy (MWh)	Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)
2013	24,681,523	19,599	2,872,171	1,945,877	251,464,746	134,861	6,029,552	3,996,230
2014	26,465,221	6,517	3,411,034	2,209,148	290,141,793	76,760	4,007,996	3,123,719

**(From Tables 10.8. and 10.9.) Demand Response**

Year	Yearly Energy and Demand Savings				Program Costs	
	Customers	Energy (MWh)	Potential Peak Demand (MW)	Actual Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)
2013	9,187,350	1,401,987	27,095	11,883	1,112,782	485,133
2014	9,265,629	1,436,449	31,191	12,683	1,217,796	447,659

**Table 1.2. Summary Statistics for the United States, 2004 - 2014**

Coal includes anthracite, bituminous, subbituminous and lignite coal. Starting in 2002 waste coal is included in all coal metrics except for year-end stocks. Starting in 2002 Synthetic coal is included in all coal metrics. Starting in 2011 Coal-derived synthesis gas is included in all coal metrics. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum includes Distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology) and waste oil. Prior to 2011 propane was in the Other Gas category. Beginning in 2004 small quantities of waste oil were excluded from petroleum stocks.

Natural gas includes a small number of generators for which waste heat is the primary energy source. Natural gas also includes a small amount of supplemental gaseous fuels that cannot be identified separately.

Prior to 2011, synthesis gas derived from petroleum coke was in the Other Gas category. Other Gas includes blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Conventional hydroelectric power excludes pumped storage facilities.

Wood and wood derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other biomass includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases). The reported summer capacity for other biomass also includes non-biogenic municipal solid waste.

Pumped storage is the capacity to generate electricity from water previously pumped to an elevated reservoir and then released through a conduit to turbine generators located at a lower level. The generation from a hydroelectric pumped storage facility is the net value of production minus the energy used for pumping.

Other energy sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources, and for generation values, non-biogenic municipal solid waste.

Costs of fuels for 2002 through 2007 include data from the Form EIA-423 for independent power producers, commercial power-producing facilities, and industrial power-producing facilities. Beginning in 2008, data are collected on the Form EIA-923 for utilities, independent power producers, commercial power-producing facilities, and industrial power-producing facilities. Receipts, cost, and quality data are collected from plants above a 50 MW threshold, and imputed for plants between 1 and 50 MW. Therefore, there may be a notable increase in fuel receipts beginning with 2008 data. Receipts of coal include imported coal.

N/A = Not available.

Notes: See Glossary reference for definitions. See Technical Notes Appendix for conversion to different units of measure. Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator. Dual-fired capacity returned to respective fuel categories for current and all historical years. New fuel switchable capacity tables have replaced dual-fired breakouts. Totals may not equal sum of components because of independent rounding.

In 2013, EIA revised its approach to estimating imports from Mexico.

Sources: U.S. Energy Information Administration Form EIA-411, 'Coordinated Bulk Power Supply Program Report;' Form EIA-412, 'Annual Electric Industry Financial Report'. The Form EIA-412 was terminated in 2003; Form EIA-767, 'Steam-Electric Plant Operation and Design Report' was suspended; Form EIA-860, 'Annual Electric Generator Report;' Form EIA-861, 'Annual Electric Power Industry Report;' Form EIA-923, 'Power Plant Operations Report' replaces several form(s) including: Form EIA-906, 'Power Plant Report;' Form EIA-920 'Combined Heat and Power Plant Report;' Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report;' and FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants,' and their predecessor forms. Federal Energy Regulatory Commission, FERC Form 1, 'Annual Report of Major Utilities, Licensees and Others;' FERC Form 1-F, 'Annual Report for Nonmajor Public Utilities and Licensees;' Rural Utilities Service (RUS) Form 7, 'Operating Report;' RUS Form 12, 'Operating Report.'

Imports and Exports: National Energy Board of Canada; FERC 714, Annual Electric Balancing Authority Area and Planning Report; California Energy Commission; and EIA estimates

**Table 1.3. Supply and Disposition of Electricity, 2004 through 2014**

**(From Chapter 2.) Supply (Million Megawatthours)**

Year	Generation					Total Imports	Total Supply
	Electric Utilities	IPP (Non-CHP)	IPP (CHP)	Commercial Sector	Industrial Sector		
2004	2,505	1,119	184	8	154	34	4,005
2005	2,475	1,247	180	8	145	44	4,099
2006	2,484	1,259	165	8	148	43	4,107
2007	2,504	1,324	177	8	143	51	4,208
2008	2,475	1,332	167	8	137	57	4,176
2009	2,373	1,278	159	8	132	52	4,003
2010	2,472	1,339	162	9	144	45	4,170
2011	2,461	1,331	156	10	142	52	4,152
2012	2,339	1,387	164	11	146	59	4,107
2013	2,388	1,368	148	12	150	69	4,135
2014	2,382	1,404	150	13	144	67	4,160

**(From Chapter 2.) Disposition (Million Megawatthours)**

Year	Retail Sales			Direct Use	Total Exports	Losses and Unaccounted For	Total Disposition
	Full-Service Providers	Energy-Only Providers	Facility Direct				
2004	3,318	222	8	168	23	266	4,005
2005	3,413	237	11	150	19	269	4,099
2006	3,438	219	12	147	24	266	4,107
2007	3,468	283	14	126	20	298	4,208
2008	3,436	284	14	132	24	286	4,176
2009	3,290	294	13	127	18	261	4,003
2010	3,365	379	10	132	19	264	4,170
2011	3,273	467	10	133	15	255	4,152
2012	3,172	514	8	138	12	263	4,107
2013	3,147	559	18	143	11	255	4,135
2014	3,185	563	16	139	13	244	4,160

N/A = Not Available.

Facility Direct Retail Sales typically represent bilateral electric power sales between industrial and commercial generating facilities.

Direct Use represents commercial and industrial facility use of onsite net electricity generation; electricity sales or transfers to adjacent or co-located facilities; and barter transactions. Losses and Unaccounted For includes: (1) reporting by utilities and power marketers that represent losses incurred in transmission and distribution, as well as volumes unaccounted for in their own energy balance; and (2) discrepancies among the differing categories upon balancing the table. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report" and predecessor form(s) including U.S. Energy Information Administration, Form EIA-906, "Power Plant Report;" and Form EIA-920, "Combined Heat and Power Plant Report;" Form EIA-861, "Annual Electric Power Industry Report;" and predecessor forms. Imports and Exports: Mexico data - DOE, Fossil Fuels, Office of Fuels Programs, Form OE-781R, "Annual Report of International Electrical Export/Import Data;" Canada data - National Energy Board of Canada (metered energy firm and interruptible).

## Chapter 2

### Electricity Sales

**Table 2.1. Number of Ultimate Customers Served by Sector, by Provider, 2004 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Total Electric Industry</b>					
2004	118,763,768	16,606,783	747,600	1,025	136,119,176
2005	120,760,839	16,871,940	733,862	518	138,367,159
2006	122,471,071	17,172,499	759,604	791	140,403,965
2007	123,949,916	17,377,219	793,767	750	142,121,652
2008	125,037,837	17,582,382	774,808	726	143,395,753
2009	125,208,829	17,562,235	757,537	704	143,529,305
2010	125,717,935	17,674,338	747,747	239	144,140,259
2011	126,143,072	17,638,062	727,920	92	144,509,146
2012	126,832,343	17,729,029	732,385	83	145,293,840
2013	127,777,153	17,679,562	831,790	75	146,288,580
2014	128,680,416	17,853,995	839,212	79	147,373,702
<b>Full-Service Providers</b>					
2004	116,325,747	16,161,269	733,809	941	133,221,766
2005	118,469,928	16,389,549	719,219	496	135,579,192
2006	120,677,627	16,673,766	745,645	764	138,097,802
2007	121,782,003	16,767,635	771,637	710	139,321,985
2008	122,706,203	16,932,969	756,094	696	140,395,962
2009	122,560,533	16,852,697	736,326	666	140,150,222
2010	121,555,089	16,675,341	718,652	198	138,949,280
2011	120,306,190	16,321,174	682,906	56	137,310,326
2012	118,650,233	16,111,883	681,074	48	135,443,238
2013	116,624,884	15,817,442	780,759	48	133,223,133
2014	117,230,661	15,942,158	789,803	50	133,962,672
<b>Energy-Only Providers</b>					
2004	2,438,021	445,514	13,791	84	2,897,410
2005	2,290,911	482,391	14,643	22	2,787,967
2006	1,793,444	498,733	13,959	27	2,306,163
2007	2,167,913	609,584	22,130	40	2,799,667
2008	2,331,634	649,413	18,714	30	2,999,791
2009	2,648,296	709,538	21,211	38	3,379,083
2010	4,162,846	998,997	29,095	41	5,190,979
2011	5,836,882	1,316,888	45,014	36	7,198,820
2012	8,182,110	1,617,146	51,311	35	9,850,602
2013	11,152,269	1,862,120	51,031	27	13,065,447
2014	11,449,755	1,911,837	49,409	29	13,411,030

N/A = Not Available.

Pursuant to applicable Texas statutes establishing competitive electricity markets within the Electric Reliability Council of Texas (ERCOT), all customers served by Retail Energy Providers must be provided bundled energy and delivery services, so they are included under "Full-Service Providers".

Full-Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full-Service Providers may purchase electricity from others (such as Independent Power Producers or other Full-Service Providers) prior to delivery. Direct sales from independent facility generators to end use consumers are reported under Full-Service Providers. Energy-Only Providers sell energy to end use customers; incumbent utility distribution firms provide Delivery-Only Services for these customers.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report." and Form EIA-861S, "Annual Electric Power Industry Report (Short Form)."

**Table 2.2. Sales and Direct Use of Electricity to Ultimate Customers by Sector, by Provider, 2004 through 2014 (Megawatthours)**

Year	Residential	Commercial	Industrial	Transportation	Total	Direct Use	Total End Use
<b>Total Electric Industry</b>							
2004	1,291,981,578	1,230,424,731	1,017,849,532	7,223,642	3,547,479,483	168,470,002	3,715,949,485
2005	1,359,227,107	1,275,079,020	1,019,156,065	7,506,321	3,660,968,513	150,015,531	3,810,984,044
2006	1,351,520,036	1,299,743,695	1,011,297,566	7,357,543	3,669,918,840	146,926,612	3,816,845,452
2007	1,392,240,996	1,336,315,196	1,027,831,925	8,172,595	3,764,560,712	125,670,185	3,890,230,897
2008	1,380,661,745	1,336,133,485	1,009,516,178	7,653,211	3,733,964,619	132,196,685	3,866,161,304
2009	1,364,758,153	1,306,852,524	917,416,468	7,767,989	3,596,795,134	126,937,958	3,723,733,092
2010	1,445,708,403	1,330,199,364	971,221,189	7,712,412	3,754,841,368	131,910,249	3,886,751,617
2011	1,422,801,093	1,328,057,439	991,315,564	7,672,084	3,749,846,180	132,754,037	3,882,600,217
2012	1,374,514,708	1,327,101,196	985,713,854	7,320,028	3,694,649,786	137,656,510	3,832,306,296
2013	1,394,812,129	1,337,078,777	985,351,874	7,625,041	3,724,867,821	143,461,937	3,868,329,758
2014	1,407,208,311	1,352,158,263	997,576,138	7,757,555	3,764,700,267	138,573,884	3,903,274,151
<b>Full-Service Providers</b>							
2004	1,272,237,425	1,116,497,417	933,529,502	3,188,466	3,325,452,810	N/A	3,325,452,810
2005	1,339,568,275	1,151,327,861	929,675,932	3,341,814	3,423,913,882	N/A	3,423,913,882
2006	1,337,837,993	1,170,661,399	939,194,648	3,040,062	3,450,734,102	N/A	3,450,734,102
2007	1,375,450,126	1,180,789,042	923,148,031	2,635,498	3,482,022,697	N/A	3,482,022,697
2008	1,363,664,159	1,173,581,515	909,792,014	2,540,452	3,449,578,140	N/A	3,449,578,140
2009	1,345,314,362	1,143,473,246	811,314,045	2,464,259	3,302,565,912	N/A	3,302,565,912
2010	1,409,355,244	1,123,328,313	840,439,791	2,440,567	3,375,563,915	N/A	3,375,563,915
2011	1,368,453,770	1,090,292,969	822,404,124	1,730,820	3,282,881,683	N/A	3,282,881,683
2012	1,297,818,441	1,073,346,766	807,805,140	1,389,340	3,180,359,687	N/A	3,180,359,687
2013	1,291,368,071	1,074,915,884	797,769,849	1,603,318	3,165,657,122	N/A	3,165,657,122
2014	1,301,458,851	1,083,806,639	814,206,541	1,787,408	3,201,259,439	N/A	3,201,259,439
<b>Energy-Only Providers</b>							
2004	19,744,153	113,927,314	84,320,030	4,035,176	222,026,673	N/A	222,026,673
2005	19,658,832	123,751,159	89,480,133	4,164,507	237,054,631	N/A	237,054,631
2006	13,682,043	129,082,296	72,102,918	4,317,481	219,184,738	N/A	219,184,738
2007	16,790,870	155,526,154	104,683,894	5,537,097	282,538,015	N/A	282,538,015
2008	16,997,586	162,551,970	99,724,164	5,112,759	284,386,479	N/A	284,386,479
2009	19,443,791	163,379,278	106,102,423	5,303,730	294,229,222	N/A	294,229,222
2010	36,353,159	206,871,051	130,781,398	5,271,845	379,277,453	N/A	379,277,453
2011	54,347,323	237,764,470	168,911,440	5,941,264	466,964,497	N/A	466,964,497
2012	76,696,267	253,754,430	177,908,714	5,930,688	514,290,099	N/A	514,290,099
2013	103,444,058	262,162,893	187,582,025	6,021,723	559,210,699	N/A	559,210,699
2014	105,749,460	268,351,624	183,369,597	5,970,147	563,440,828	N/A	563,440,828

N/A = Not Available.

Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electricity sales or transfers to adjacent or co-located facilities for which revenue information is not available.

Pursuant to applicable Texas statutes establishing competitive electricity markets within the Electric Reliability Council of Texas (ERCOT), all customers served by Retail Energy Providers must be provided bundled energy and delivery services, so they are included under "Full-Service Providers".

Full-Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full-Service Providers may purchase electricity from others (such as Independent Power Producers or other Full-Service Providers) prior to delivery. Direct sales from independent facility generators to end use consumers are reported under Full-Service Providers. Energy-Only Providers sell energy to end use customers; incumbent utility distribution firms provide Delivery-Only Services for these customers.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report.", Form EIA-861S, "Annual Electric Power Industry Report (Short Form)" and Form EIA-923, "Power Plant Operations Report"

**Table 2.3. Revenue from Sales of Electricity to Ultimate Customers by Sector, by Provider, 2004 through 2014 (Million Dollars)**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Total Electric Industry</b>					
2004	115,577	100,546	53,477	519	270,119
2005	128,393	110,522	58,445	643	298,003
2006	140,582	122,914	62,308	702	326,506
2007	148,295	128,903	65,712	792	343,703
2008	155,496	137,036	70,231	820	363,583
2009	157,044	132,747	62,670	828	353,289
2010	166,778	135,554	65,772	814	368,918
2011	166,714	135,927	67,606	803	371,049
2012	163,280	133,898	65,761	747	363,687
2013	169,131	137,188	67,934	805	375,058
2014	176,178	145,253	70,855	810	393,096
<b>Full-Service Providers</b>					
2004	113,306	89,597	47,993	238	251,134
2005	125,983	97,405	52,113	249	275,749
2006	138,608	107,432	56,385	257	302,683
2007	145,642	109,703	56,950	232	312,527
2008	152,520	115,413	61,117	252	329,301
2009	153,741	112,254	53,284	226	319,506
2010	161,221	110,298	54,582	233	326,334
2011	158,788	108,318	54,285	162	321,552
2012	152,817	106,012	52,667	132	311,628
2013	155,203	108,460	54,309	167	318,138
2014	160,637	113,880	57,140	187	331,845
<b>Competitive Service Providers</b>					
2004	2,272	10,949	5,484	281	18,985
2005	2,410	13,117	6,333	394	22,254
2006	1,974	15,482	5,922	445	23,823
2007	2,653	19,200	8,762	560	31,176
2008	2,977	21,623	9,114	568	34,282
2009	3,302	20,493	9,386	602	33,783
2010	5,557	25,256	11,190	581	42,584
2011	7,926	27,609	13,321	641	49,497
2012	10,464	27,886	13,094	615	52,059
2013	13,928	28,729	13,625	638	56,919
2014	15,541	31,373	13,715	623	61,251
<b>Energy-Only Providers</b>					
2004	1,086	6,859	3,881	201	12,027
2005	1,285	8,844	4,749	308	15,186
2006	1,127	10,792	4,510	356	16,784
2007	1,646	13,553	7,197	458	22,854
2008	1,859	15,661	7,506	448	25,474
2009	1,889	14,045	7,369	460	23,763
2010	3,226	16,994	8,664	424	29,308
2011	4,578	18,086	10,392	463	33,519
2012	5,776	17,397	9,895	432	33,500
2013	7,755	17,876	10,330	451	36,412
2014	9,079	19,948	10,813	436	40,277
<b>Delivery-Only Providers</b>					
2004	1,186	4,090	1,603	79	6,958
2005	1,125	4,273	1,584	86	7,068
2006	847	4,690	1,412	90	7,040
2007	1,007	5,647	1,565	102	8,322
2008	1,118	5,962	1,608	120	8,808
2009	1,413	6,448	2,017	143	10,021
2010	2,330	8,262	2,526	157	13,276
2011	3,348	9,523	2,929	178	15,978
2012	4,687	10,489	3,199	183	18,559
2013	6,172	10,853	3,295	187	20,507
2014	6,462	11,425	2,901	187	20,975

N/A = Not Available.

Pursuant to applicable Texas statutes establishing competitive electricity markets within the Electric Reliability Council of Texas (ERCOT), all customers served by Retail Energy Providers must be provided bundled energy and delivery services, so they are included under "Full-Service Providers".

Full-Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full-Service Providers may purchase electricity from others (such as Independent Power Producers or other Full-Service Providers) prior to delivery.

Direct sales from independent facility generators to end use consumers are reported under Full-Service Providers. Energy-Only Providers sell energy to end use customers; incumbent utility distribution firms provide Delivery-Only Services for these customers. Data reported under Competitive Service Providers represent the sum of Energy-Only and Delivery-Only Services." Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report." Form EIA-861S, "Annual Electric Power Industry Report (Short Form)."

**Table 2.4. Average Price of Electricity to Ultimate Customers****by End-Use Sectors 2004 through 2014 (Cents per kilowatthour)**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Total Electric Industry</b>					
2004	8.95	8.17	5.25	7.18	7.61
2005	9.45	8.67	5.73	8.57	8.14
2006	10.40	9.46	6.16	9.54	8.90
2007	10.65	9.65	6.39	9.70	9.13
2008	11.26	10.26	6.96	10.71	9.74
2009	11.51	10.16	6.83	10.66	9.82
2010	11.54	10.19	6.77	10.56	9.83
2011	11.72	10.24	6.82	10.46	9.90
2012	11.88	10.09	6.67	10.21	9.84
2013	12.13	10.26	6.89	10.55	10.07
2014	12.52	10.74	7.10	10.45	10.44
<b>Full-Service Providers</b>					
2004	8.91	8.02	5.14	7.47	7.55
2005	9.40	8.46	5.61	7.45	8.05
2006	10.36	9.18	6.0	8.44	8.77
2007	10.59	9.29	6.17	8.82	8.98
2008	11.18	9.83	6.72	9.91	9.55
2009	11.43	9.82	6.57	9.17	9.67
2010	11.44	9.82	6.49	9.55	9.67
2011	11.60	9.93	6.60	9.35	9.79
2012	11.77	9.88	6.52	9.50	9.80
2013	12.02	10.09	6.81	10.40	10.05
2014	12.34	10.51	7.02	10.49	10.37
<b>Competitive Service Providers</b>					
2004	11.51	9.61	6.50	6.95	8.55
2005	12.26	10.60	7.08	9.47	9.39
2006	14.43	11.99	8.21	10.32	10.87
2007	15.80	12.35	8.37	10.11	11.03
2008	17.51	13.30	9.14	11.11	12.05
2009	16.98	12.54	8.85	11.36	11.48
2010	15.29	12.21	8.56	11.03	11.23
2011	14.58	11.61	7.89	10.79	10.60
2012	13.64	10.99	7.36	10.38	10.12
2013	13.46	10.96	7.26	10.60	10.18
2014	14.70	11.69	7.48	10.44	10.87
<b>Energy-Only Providers</b>					
2004	5.50	6.02	4.60	4.99	5.42
2005	6.54	7.15	5.31	7.40	6.41
2006	8.23	8.36	6.25	8.24	7.66
2007	9.80	8.71	6.87	8.28	8.09
2008	10.94	9.63	7.53	8.77	8.96
2009	9.72	8.60	6.94	8.67	8.08
2010	8.88	8.21	6.62	8.05	7.73
2011	8.42	7.61	6.15	7.80	7.18
2012	7.53	6.86	5.56	7.29	6.51
2013	7.50	6.82	5.51	7.49	6.51
2014	8.59	7.43	5.90	7.31	7.15
<b>Delivery-Only Providers</b>					
2004	6.0	3.59	1.90	1.96	3.13
2005	5.72	3.45	1.77	2.07	2.98
2006	6.19	3.63	1.96	2.08	3.21
2007	6.0	3.63	1.50	1.84	2.95
2008	6.58	3.67	1.61	2.35	3.10
2009	7.27	3.95	1.90	2.69	3.41
2010	6.41	3.99	1.93	2.98	3.50
2011	6.16	4.01	1.73	2.99	3.42
2012	6.11	4.13	1.80	3.09	3.61
2013	5.97	4.14	1.76	3.11	3.67
2014	6.11	4.26	1.58	3.12	3.72

N/A = Not Available.

Pursuant to applicable Texas statutes establishing competitive electricity markets within the Electric Reliability Council of Texas (ERCOT), all customers served by Retail Energy Providers must be provided bundled energy and delivery services, so they are included under "Full-Service Providers".

Full-Service Providers sell bundled electricity services (e.g., both energy and delivery) to end users. Full-Service Providers may purchase electricity from others (such as Independent Power Producers or other Full-Service Providers) prior to delivery. Direct sales from independent facility generators to end use consumers are reported under Full-Service Providers. Energy-Only Providers sell energy to end use customers; incumbent utility distribution firms provide Delivery-Only Services for these customers. Data reported under Competitive Service Providers represent the sum of Energy-Only and Delivery-Only Services."

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report." Form EIA-861S, "Annual Electric Power Industry Report (Short Form)."

**Table 2.5. Sales of Electricity to Ultimate Customers:  
Total by End-Use Sector, 2004 - December 2014 (Thousands Megawatthours)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2004	1,291,982	1,230,425	1,017,850	7,224	3,547,479
2005	1,359,227	1,275,079	1,019,156	7,506	3,660,969
2006	1,351,520	1,299,744	1,011,298	7,358	3,669,919
2007	1,392,241	1,336,315	1,027,832	8,173	3,764,561
2008	1,380,662	1,336,133	1,009,516	7,653	3,733,965
2009	1,364,758	1,306,853	917,416	7,768	3,596,795
2010	1,445,708	1,330,199	971,221	7,712	3,754,841
2011	1,422,801	1,328,057	991,316	7,672	3,749,846
2012	1,374,515	1,327,101	985,714	7,320	3,694,650
2013	1,394,812	1,337,079	985,352	7,625	3,724,868
2014	1,407,208	1,352,158	997,576	7,758	3,764,700
Year 2012					
January	125,881	105,239	79,205	650	310,975
February	107,975	100,080	78,298	629	286,983
March	99,362	102,474	81,298	597	283,731
April	88,103	101,037	81,030	590	270,760
May	100,895	110,800	84,678	595	296,968
June	122,934	118,009	83,619	597	325,160
July	154,579	128,535	87,219	629	370,963
August	147,941	128,106	88,105	633	364,785
September	118,831	116,585	82,060	613	318,090
October	96,669	110,471	82,996	599	290,735
November	97,155	101,641	78,847	569	278,212
December	114,188	104,122	78,360	619	297,288
Year 2013					
January	131,785	107,729	80,505	664	320,683
February	113,114	101,016	76,692	659	291,480
March	112,097	104,011	80,474	644	297,226
April	95,541	101,395	80,216	630	277,782
May	95,192	108,683	84,897	627	289,398
June	117,982	117,410	84,170	638	320,201
July	143,855	127,311	86,887	649	358,701
August	138,065	127,063	87,806	645	353,580
September	121,419	118,408	83,025	626	323,478
October	98,893	111,907	82,980	591	294,370
November	97,904	103,384	79,632	574	281,494
December	128,966	108,762	78,067	679	316,475
Year 2014					
January	146,511	113,866	80,149	712	341,238
February	128,475	104,353	75,413	700	308,941
March	114,233	106,968	80,539	648	302,388
April	92,290	102,459	80,505	640	275,894
May	95,727	109,666	85,383	646	291,421
June	118,049	118,423	85,711	609	322,792
July	137,028	125,434	88,417	645	351,524
August	135,830	125,603	89,808	642	351,883
September	120,741	120,049	85,489	628	326,907
October	98,038	113,023	84,994	625	296,680
November	99,486	104,245	81,044	637	285,413
December	120,801	108,070	80,123	626	309,620

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.

Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;

Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 2.6. Revenue from Sales of Electricity to Ultimate Customers:  
Total by End-Use Sector, 2004 - December 2014 (Million Dollars)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2004	115,577	100,546	53,477	519	270,119
2005	128,393	110,522	58,445	643	298,003
2006	140,582	122,914	62,308	702	326,506
2007	148,295	128,903	65,712	792	343,703
2008	155,496	137,036	70,231	820	363,583
2009	157,044	132,747	62,670	828	353,289
2010	166,778	135,554	65,772	814	368,918
2011	166,714	135,927	67,606	803	371,049
2012	163,280	133,898	65,761	747	363,687
2013	169,131	137,188	67,934	805	375,058
2014	176,178	145,253	70,855	810	393,096
Year 2012					
January	14,360	10,352	5,102	64	29,878
February	12,424	9,944	5,052	60	27,479
March	11,621	10,086	5,250	59	27,015
April	10,504	9,919	5,168	60	25,650
May	12,011	11,039	5,528	59	28,637
June	14,863	12,259	5,765	62	32,949
July	18,553	13,354	6,219	67	38,193
August	18,009	13,313	6,239	67	37,629
September	14,614	12,238	5,716	66	32,634
October	11,633	11,131	5,491	61	28,316
November	11,418	10,052	5,122	59	26,651
December	13,271	10,212	5,110	64	28,656
Year 2013					
January	15,100	10,527	5,233	70	30,929
February	13,153	10,158	5,105	70	28,485
March	13,016	10,421	5,345	66	28,849
April	11,397	10,099	5,279	65	26,839
May	11,805	11,112	5,732	66	28,715
June	14,793	12,501	6,102	69	33,465
July	18,193	13,624	6,473	71	38,361
August	17,294	13,581	6,474	69	37,418
September	15,192	12,468	5,998	68	33,727
October	12,225	11,504	5,700	62	29,492
November	11,843	10,365	5,294	60	27,563
December	15,120	10,829	5,197	69	31,215
Year 2014					
January	17,075	11,790	5,596	78	34,539
February	15,338	11,142	5,370	73	31,922
March	13,996	11,390	5,632	68	31,087
April	11,365	10,715	5,451	65	27,596
May	12,300	11,555	5,833	65	29,753
June	15,337	12,974	6,335	65	34,710
July	17,943	14,014	6,742	69	38,767
August	17,708	13,876	6,748	64	38,396
September	15,639	13,399	6,299	69	35,406
October	12,352	12,239	6,007	64	30,663
November	12,417	10,967	5,470	65	28,920
December	14,707	11,192	5,372	66	31,336

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.

Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;

Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 2.7. Average Price of Electricity to Ultimate Customers:  
Total by End-Use Sector, 2004 - December 2014 (Cents per Kilowatthour)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2004	8.95	8.17	5.25	7.18	7.61
2005	9.45	8.67	5.73	8.57	8.14
2006	10.40	9.46	6.16	9.54	8.90
2007	10.65	9.65	6.39	9.70	9.13
2008	11.26	10.26	6.96	10.71	9.74
2009	11.51	10.16	6.83	10.66	9.82
2010	11.54	10.19	6.77	10.56	9.83
2011	11.72	10.24	6.82	10.46	9.90
2012	11.88	10.09	6.67	10.21	9.84
2013	12.13	10.26	6.89	10.55	10.07
2014	12.52	10.74	7.10	10.45	10.44
Year 2012					
January	11.41	9.84	6.44	9.78	9.61
February	11.51	9.94	6.45	9.61	9.58
March	11.70	9.84	6.46	9.95	9.52
April	11.92	9.82	6.38	10.11	9.47
May	11.90	9.96	6.53	9.97	9.64
June	12.09	10.39	6.89	10.33	10.13
July	12.00	10.39	7.13	10.70	10.30
August	12.17	10.39	7.08	10.53	10.32
September	12.30	10.50	6.97	10.74	10.26
October	12.03	10.08	6.62	10.13	9.74
November	11.75	9.89	6.50	10.41	9.58
December	11.62	9.81	6.52	10.28	9.64
Year 2013					
January	11.46	9.77	6.50	10.53	9.64
February	11.63	10.06	6.66	10.56	9.77
March	11.61	10.02	6.64	10.25	9.71
April	11.93	9.96	6.58	10.28	9.66
May	12.40	10.22	6.75	10.50	9.92
June	12.54	10.65	7.25	10.76	10.45
July	12.65	10.70	7.45	10.97	10.69
August	12.53	10.69	7.37	10.77	10.58
September	12.51	10.53	7.22	10.88	10.43
October	12.36	10.28	6.87	10.46	10.02
November	12.10	10.03	6.65	10.49	9.79
December	11.72	9.96	6.66	10.20	9.86
Year 2014					
January	11.65	10.35	6.98	10.93	10.12
February	11.94	10.68	7.12	10.41	10.33
March	12.25	10.65	6.99	10.43	10.28
April	12.31	10.46	6.77	10.23	10.00
May	12.85	10.54	6.83	10.06	10.21
June	12.99	10.96	7.39	10.60	10.75
July	13.09	11.17	7.62	10.68	11.03
August	13.04	11.05	7.51	10.02	10.91
September	12.95	11.16	7.37	11.02	10.83
October	12.60	10.83	7.07	10.27	10.34
November	12.48	10.52	6.75	10.20	10.13
December	12.17	10.36	6.70	10.48	10.12

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.

Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.

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Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;

Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 2.8. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	47,212	48,369	53,107	44,938	19,107	27,472	557	577	119,983	121,357
Connecticut	12,778	13,135	12,894	13,009	3,515	3,490	169	190	29,354	29,825
Maine	4,661	4,662	3,985	4,016	3,357	3,177	0	0	12,003	11,855
Massachusetts	20,071	20,728	26,076	17,713	7,961	16,463	361	361	54,469	55,265
New Hampshire	4,510	4,554	4,465	4,517	1,969	1,973	0	0	10,944	11,043
Rhode Island	3,070	3,165	3,658	3,667	887	923	28	26	7,643	7,781
Vermont	2,121	2,125	2,031	2,017	1,418	1,446	0	0	5,570	5,588
Middle Atlantic	132,063	133,574	158,043	157,718	73,837	73,520	3,983	3,979	367,926	368,791
New Jersey	27,893	28,545	38,154	38,231	7,517	7,566	303	301	73,866	74,642
New York	49,975	50,777	76,541	76,342	18,003	17,911	2,853	2,864	147,372	147,895
Pennsylvania	54,195	54,252	43,348	43,145	48,318	48,043	827	814	146,688	146,254
East North Central	187,958	188,046	182,860	182,798	200,505	198,273	648	645	571,971	569,762
Illinois	46,009	46,372	50,619	50,473	44,330	44,387	582	573	141,540	141,805
Indiana	33,704	33,407	24,130	24,252	49,088	47,808	21	21	106,943	105,487
Michigan	33,515	34,013	37,349	37,698	32,446	31,322	4	6	103,314	103,038
Ohio	52,804	52,158	47,005	46,718	50,829	51,387	42	44	150,680	150,307
Wisconsin	21,926	22,096	23,757	23,658	23,812	23,370	0	0	69,495	69,124
West North Central	106,909	106,312	100,716	100,980	93,507	90,214	45	41	301,178	297,547
Iowa	14,427	14,626	12,339	12,445	20,436	19,635	0	0	47,202	46,705
Kansas	13,685	13,593	15,383	15,245	11,494	11,009	0	0	40,562	39,847
Minnesota	22,791	22,850	22,828	23,041	23,076	22,734	24	19	68,719	68,644
Missouri	35,793	35,318	30,665	30,515	17,399	17,551	22	22	83,878	83,407
Nebraska	10,028	10,062	9,526	9,387	10,668	11,251	0	0	30,222	30,701
North Dakota	5,358	5,039	5,403	5,685	7,479	5,309	0	0	18,240	16,033
South Dakota	4,827	4,824	4,572	4,662	2,955	2,724	0	0	12,355	12,210
South Atlantic	355,708	342,952	306,877	303,434	141,701	139,337	1,346	1,320	805,631	787,044
Delaware	4,645	4,570	4,197	4,158	2,496	2,620	0	0	11,338	11,348
District of Columbia	2,072	2,034	8,548	8,499	242	227	331	325	11,194	11,086
Florida	116,535	113,294	92,926	92,145	16,522	16,390	95	91	226,078	221,920
Georgia	57,167	53,544	46,608	45,353	31,849	31,443	165	156	135,790	130,497
Maryland	27,488	27,448	29,804	29,966	3,848	3,944	544	541	61,684	61,899
North Carolina	58,650	56,251	47,510	46,649	26,965	26,872	9	7	133,133	129,780
South Carolina	30,716	28,813	21,656	21,120	29,248	28,669	0	0	81,620	78,602
Virginia	46,444	45,416	47,752	47,751	17,701	17,150	202	195	112,098	110,512
West Virginia	11,991	11,582	7,876	7,794	12,829	12,021	0	4	32,696	31,400
East South Central	121,790	117,535	89,758	91,370	107,412	109,435	1	2	318,961	318,342
Alabama	32,930	31,379	22,929	22,603	34,635	33,870	0	0	90,494	87,852
Kentucky	27,400	26,788	19,157	21,004	32,283	36,972	0	0	78,839	84,764
Mississippi	18,922	18,462	14,175	14,188	16,312	16,132	0	0	49,409	48,782
Tennessee	42,538	40,906	33,497	33,575	24,182	22,462	1	2	100,219	96,944
West South Central	214,093	212,401	196,362	192,511	178,313	166,253	184	73	588,952	571,237
Arkansas	18,441	18,219	11,988	11,898	16,651	16,565	0	0	47,080	46,683
Louisiana	31,401	30,709	24,493	24,254	34,723	30,833	12	11	90,628	85,808
Oklahoma	23,351	23,200	20,449	19,843	17,773	16,886	0	0	61,573	59,929
Texas	140,900	140,273	139,432	136,516	109,165	101,968	172	61	389,670	378,817
Mountain	93,788	96,356	93,898	94,636	84,579	82,044	133	124	272,398	273,161
Arizona	32,346	33,104	29,290	30,039	14,662	12,519	0	0	76,298	75,662
Colorado	18,093	18,529	20,129	20,098	15,110	14,753	64	62	53,397	53,442
Idaho	8,135	8,619	6,128	6,250	8,970	9,338	0	0	23,233	24,208
Montana	4,969	4,926	4,903	4,890	4,230	4,229	0	0	14,102	14,045
Nevada	11,917	12,142	9,418	9,302	13,733	13,759	8	8	35,076	35,211
New Mexico	6,612	6,804	8,976	8,983	7,527	7,278	0	0	23,115	23,065
Utah	8,964	9,402	11,053	11,008	9,965	10,010	61	54	30,043	30,474
Wyoming	2,752	2,829	4,000	4,067	10,381	10,157	0	0	17,134	17,054
Pacific Contiguous	143,061	144,554	164,574	162,597	93,566	93,841	860	864	402,061	401,856
California	89,361	89,242	119,494	116,858	52,898	54,397	832	836	262,585	261,332
Oregon	18,618	19,329	16,039	16,080	12,654	12,210	23	22	47,335	47,641
Washington	35,083	35,983	29,040	29,659	28,013	27,235	5	6	92,141	92,883
Pacific Noncontiguous	4,627	4,713	5,963	6,095	5,049	4,963	0	0	15,640	15,771
Alaska	2,044	2,104	2,762	2,824	1,360	1,340	0	0	6,165	6,268
Hawaii	2,584	2,609	3,202	3,271	3,690	3,623	0	0	9,475	9,503
U.S. Total	1,407,208	1,394,812	1,352,158	1,337,079	997,576	985,352	7,758	7,625	3,764,700	3,724,868

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.  
 Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.  
 Notes: - See Glossary for definitions. - Values are final.  
 See Technical Notes for a discussion of the sample design for the Form EIA-826.  
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 Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

**Table 2.9. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2014 and 2013 (Million Dollars)**

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	8,414	7,846	7,806	6,277	2,263	3,365	58	70	18,541	17,558
Connecticut	2,523	2,306	2,005	1,904	454	440	22	20	5,004	4,669
Maine	712	669	506	471	300	265	0	0	1,518	1,406
Massachusetts	3,491	3,282	3,827	2,521	1,014	2,169	32	47	8,364	8,020
New Hampshire	791	744	640	611	235	225	0	0	1,666	1,579
Rhode Island	527	481	533	474	114	109	4	3	1,178	1,067
Vermont	371	364	296	296	145	157	0	0	811	817
Middle Atlantic	21,649	20,972	21,572	20,596	5,621	5,344	489	486	49,331	47,399
New Jersey	4,400	4,490	5,016	4,884	856	817	32	32	10,303	10,222
New York	10,031	9,544	12,341	11,722	1,184	1,179	394	391	23,951	22,836
Pennsylvania	7,218	6,938	4,216	3,991	3,581	3,348	63	64	15,078	14,341
East North Central	23,784	22,820	18,328	17,519	14,179	13,182	46	36	56,337	53,558
Illinois	5,481	4,928	4,688	4,111	3,037	2,638	40	31	13,246	11,707
Indiana	3,862	3,673	2,403	2,328	3,419	3,202	2	2	9,686	9,205
Michigan	4,846	4,962	4,060	4,171	2,491	2,417	0	1	11,398	11,550
Ohio	6,598	6,264	4,618	4,367	3,441	3,196	4	3	14,661	13,831
Wisconsin	2,996	2,993	2,558	2,542	1,791	1,730	0	0	7,345	7,265
West North Central	11,860	11,633	9,319	9,064	6,295	6,015	4	4	27,477	26,716
Iowa	1,610	1,615	1,070	1,050	1,167	1,104	0	0	3,847	3,769
Kansas	1,666	1,583	1,558	1,476	897	814	0	0	4,120	3,872
Minnesota	2,738	2,698	2,249	2,171	1,552	1,587	2	2	6,541	6,458
Missouri	3,808	3,745	2,729	2,687	1,106	1,105	2	2	7,644	7,538
Nebraska	1,043	1,038	831	807	797	837	0	0	2,671	2,683
North Dakota	490	459	475	477	570	378	0	0	1,535	1,315
South Dakota	505	495	406	397	206	190	0	0	1,118	1,081
South Atlantic	41,752	39,047	29,710	28,451	9,569	9,120	113	114	81,144	76,733
Delaware	617	592	441	424	214	221	0	0	1,272	1,237
District of Columbia	264	256	1,042	1,015	20	13	29	31	1,356	1,314
Florida	13,855	12,770	9,170	8,653	1,306	1,247	9	8	24,339	22,678
Georgia	6,659	6,136	4,827	4,529	2,116	1,972	12	13	13,614	12,650
Maryland	3,746	3,638	3,325	3,202	348	330	46	46	7,465	7,215
North Carolina	6,511	6,172	4,158	4,085	1,752	1,733	1	1	12,422	11,991
South Carolina	3,824	3,456	2,226	2,086	1,840	1,723	0	0	7,890	7,265
Virginia	5,155	4,925	3,893	3,820	1,220	1,136	17	16	10,284	9,897
West Virginia	1,120	1,103	629	636	753	745	0	0	2,502	2,485
East South Central	13,100	12,228	9,284	8,964	6,589	6,544	0	0	28,973	27,737
Alabama	3,782	3,533	2,474	2,377	2,131	2,014	0	0	8,386	7,924
Kentucky	2,785	2,623	1,808	1,798	1,833	2,094	0	0	6,425	6,515
Mississippi	2,141	1,990	1,525	1,433	1,077	1,023	0	0	4,744	4,445
Tennessee	4,392	4,083	3,477	3,357	1,549	1,413	0	0	9,418	8,853
West South Central	23,818	22,813	16,228	15,617	10,869	9,673	10	7	50,925	48,110
Arkansas	1,753	1,746	965	957	1,002	1,000	0	0	3,721	3,704
Louisiana	3,005	2,895	2,229	2,174	2,100	1,825	1	1	7,336	6,896
Oklahoma	2,343	2,244	1,654	1,541	1,039	927	0	0	5,036	4,713
Texas	16,716	15,926	11,380	10,945	6,727	5,920	9	6	34,832	32,797
Mountain	10,946	10,902	9,058	8,844	5,650	5,313	14	13	25,669	25,073
Arizona	3,849	3,878	2,968	2,958	948	833	0	0	7,764	7,669
Colorado	2,204	2,210	2,029	1,982	1,129	1,083	7	7	5,369	5,282
Idaho	791	804	476	460	574	569	0	0	1,841	1,833
Montana	506	509	473	466	232	230	0	0	1,211	1,205
Nevada	1,541	1,444	892	839	977	896	1	1	3,411	3,180
New Mexico	812	795	922	875	498	463	0	0	2,232	2,132
Utah	954	975	943	916	606	588	6	6	2,510	2,484
Wyoming	289	287	355	349	686	652	0	0	1,330	1,288
Pacific Contiguous	19,507	19,524	22,380	20,301	8,492	8,082	77	74	50,456	47,981
California	14,517	14,481	18,663	16,598	6,526	6,222	74	71	39,780	37,372
Oregon	1,949	1,913	1,404	1,396	755	708	2	2	4,110	4,019
Washington	3,041	3,129	2,314	2,307	1,211	1,152	0	0	6,566	6,589
Pacific Noncontiguous	1,348	1,346	1,568	1,554	1,328	1,294	0	0	4,244	4,194
Alaska	391	381	472	440	213	212	0	0	1,076	1,033
Hawaii	957	965	1,095	1,114	1,115	1,082	0	0	3,167	3,161
U.S. Total	176,178	169,131	145,253	137,188	70,855	67,934	810	805	393,096	375,058

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.

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Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

**Table 2.10. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, 2014 and 2013 (Cents per Kilowatthour)**

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	17.82	16.22	14.70	13.97	11.84	12.25	10.38	12.15	15.45	14.47
Connecticut	19.75	17.55	15.55	14.63	12.92	12.61	13.08	10.31	17.05	15.66
Maine	15.27	14.35	12.70	11.74	8.95	8.34	--	--	12.65	11.86
Massachusetts	17.39	15.83	14.68	14.23	12.74	13.18	8.76	13.06	15.35	14.51
New Hampshire	17.53	16.33	14.34	13.52	11.93	11.40	--	--	15.22	14.30
Rhode Island	17.17	15.20	14.56	12.92	12.86	11.82	14.89	13.03	15.41	13.72
Vermont	17.47	17.14	14.56	14.66	10.23	10.84	--	--	14.57	14.61
Middle Atlantic	16.39	15.70	13.65	13.06	7.61	7.27	12.28	12.23	13.41	12.85
New Jersey	15.78	15.73	13.15	12.77	11.38	10.80	10.43	10.60	13.95	13.69
New York	20.07	18.79	16.12	15.35	6.58	6.58	13.82	13.65	16.25	15.44
Pennsylvania	13.32	12.79	9.73	9.25	7.41	6.97	7.65	7.81	10.28	9.81
East North Central	12.65	12.14	10.02	9.58	7.07	6.65	7.10	5.61	9.85	9.40
Illinois	11.91	10.63	9.26	8.14	6.85	5.94	6.85	5.34	9.36	8.26
Indiana	11.46	10.99	9.96	9.60	6.97	6.70	10.20	9.87	9.06	8.73
Michigan	14.46	14.59	10.87	11.06	7.68	7.72	9.43	8.77	11.03	11.21
Ohio	12.50	12.01	9.83	9.35	6.77	6.22	8.78	6.62	9.73	9.20
Wisconsin	13.67	13.55	10.77	10.74	7.52	7.40	--	--	10.57	10.51
West North Central	11.09	10.94	9.25	8.98	6.73	6.67	8.84	8.73	9.12	8.98
Iowa	11.16	11.04	8.67	8.44	5.71	5.62	--	--	8.15	8.07
Kansas	12.17	11.64	10.13	9.68	7.80	7.39	--	--	10.16	9.72
Minnesota	12.01	11.81	9.85	9.42	6.72	6.98	9.79	9.79	9.52	9.41
Missouri	10.64	10.60	8.90	8.80	6.36	6.29	7.81	7.81	9.11	9.04
Nebraska	10.40	10.31	8.73	8.60	7.47	7.44	--	--	8.84	8.74
North Dakota	9.15	9.12	8.79	8.39	7.62	7.13	--	--	8.41	8.20
South Dakota	10.47	10.26	8.89	8.51	6.99	6.97	--	--	9.05	8.86
South Atlantic	11.74	11.39	9.68	9.38	6.75	6.55	8.40	8.64	10.07	9.75
Delaware	13.29	12.95	10.50	10.20	8.58	8.43	--	--	11.22	10.90
District of Columbia	12.74	12.57	12.19	11.94	8.41	5.54	8.80	9.52	12.11	11.85
Florida	11.89	11.27	9.87	9.39	7.90	7.61	9.25	8.69	10.77	10.22
Georgia	11.65	11.46	10.36	9.99	6.64	6.27	6.98	8.03	10.03	9.69
Maryland	13.63	13.25	11.15	10.68	9.04	8.36	8.50	8.47	12.10	11.66
North Carolina	11.10	10.97	8.75	8.76	6.50	6.45	7.84	7.94	9.33	9.24
South Carolina	12.45	11.99	10.28	9.88	6.29	6.01	--	--	9.67	9.24
Virginia	11.10	10.84	8.15	8.00	6.89	6.63	8.24	8.17	9.17	8.96
West Virginia	9.34	9.52	7.99	8.17	5.87	6.20	--	8.68	7.65	7.91
East South Central	10.76	10.40	10.34	9.81	6.13	5.98	8.57	11.68	9.08	8.71
Alabama	11.48	11.26	10.79	10.51	6.15	5.95	--	--	9.27	9.02
Kentucky	10.16	9.79	9.44	8.56	5.68	5.66	--	--	8.15	7.69
Mississippi	11.32	10.78	10.76	10.10	6.60	6.34	--	--	9.60	9.11
Tennessee	10.32	9.98	10.38	10.00	6.40	6.29	8.57	11.68	9.40	9.13
West South Central	11.12	10.74	8.26	8.11	6.10	5.82	5.44	10.08	8.65	8.42
Arkansas	9.51	9.59	8.05	8.05	6.02	6.04	11.35	11.58	7.90	7.93
Louisiana	9.57	9.43	9.10	8.96	6.05	5.92	9.27	9.45	8.09	8.04
Oklahoma	10.03	9.67	8.09	7.77	5.85	5.49	--	--	8.18	7.86
Texas	11.86	11.35	8.16	8.02	6.16	5.81	5.17	10.19	8.94	8.66
Mountain	11.67	11.31	9.65	9.35	6.68	6.48	10.49	10.47	9.42	9.18
Arizona	11.90	11.71	10.13	9.85	6.46	6.66	--	--	10.18	10.14
Colorado	12.18	11.93	10.08	9.86	7.47	7.34	10.79	10.55	10.06	9.88
Idaho	9.72	9.32	7.78	7.37	6.40	6.09	--	--	7.93	7.57
Montana	10.18	10.33	9.64	9.54	5.49	5.43	--	--	8.59	8.58
Nevada	12.93	11.89	9.47	9.01	7.12	6.52	9.25	8.47	9.73	9.03
New Mexico	12.28	11.68	10.27	9.74	6.61	6.36	--	--	9.65	9.25
Utah	10.65	10.37	8.53	8.32	6.08	5.87	10.34	10.68	8.35	8.15
Wyoming	10.50	10.16	8.88	8.57	6.61	6.42	--	--	7.76	7.55
Pacific Contiguous	13.64	13.51	13.60	12.49	9.08	8.61	8.91	8.54	12.55	11.94
California	16.25	16.23	15.62	14.20	12.34	11.44	8.90	8.54	15.15	14.30
Oregon	10.47	9.90	8.75	8.68	5.97	5.80	9.21	8.88	8.68	8.44
Washington	8.67	8.70	7.97	7.78	4.32	4.23	8.48	8.04	7.13	7.09
Pacific Noncontiguous	29.13	28.56	26.29	25.49	26.30	26.08	--	--	27.13	26.59
Alaska	19.14	18.12	17.09	15.58	15.66	15.83	--	--	17.46	16.49
Hawaii	37.04	36.98	34.21	34.05	30.22	29.87	--	--	33.43	33.26
U.S. Total	12.52	12.13	10.74	10.26	7.10	6.89	10.45	10.55	10.44	10.07

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Notes: - See Glossary for definitions. - Values are final.

See Technical Notes for a discussion of the sample design for the Form EIA-826.

Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.

Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

**Table 2.11. Electric Power Industry - Electricity Purchases,  
2004 through 2014 (Thousand Megawatthours)**

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2005	2,760,043	3,250,298	12,201	69,744	6,092,285
2006	2,605,315	2,793,288	26,628	77,353	5,502,584
2007	2,504,002	2,805,833	24,942	76,646	5,411,422
2008	2,483,927	3,024,730	25,431	78,693	5,612,781
2009	2,364,648	2,564,407	27,922	71,669	5,028,647
2010	2,353,086	3,319,211	23,976	73,861	5,770,134
2011	2,245,381	2,679,803	21,844	77,593	5,024,621
2012	2,148,346	2,740,043	17,726	78,818	4,984,933
2013	2,099,528	2,482,928	16,101	86,420	4,684,977
2014	2,145,378	2,559,875	17,000	79,975	4,802,227

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report" and Form EIA-923, "Power Plant Operations Report"

**Table 2.12. Electric Power Industry - Electricity Sales for Resale, 2004 through 2014 (Thousand Megawatthours)**

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2004	1,923,440	3,756,175	1,053,364	25,996	6,758,975
2005	1,925,710	2,867,048	1,252,796	26,105	6,071,659
2006	1,698,389	2,446,104	1,321,342	27,638	5,493,473
2007	1,603,179	2,476,740	1,368,310	31,165	5,479,394
2008	1,576,976	2,718,661	1,355,017	30,079	5,680,733
2009	1,495,636	2,240,399	1,295,857	33,139	5,065,031
2010	1,541,554	2,946,452	1,404,137	37,068	5,929,211
2011	1,529,434	2,206,981	1,372,306	34,400	5,143,121
2012	1,456,774	2,135,819	1,384,155	37,017	5,013,765
2013	1,472,124	2,036,460	1,298,528	35,396	4,842,508
2014	1,485,964	2,081,235	1,301,724	39,916	4,908,839

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report" and Form EIA-923, "Power Plant Operations Report"

**Table 2.13. Electric Power Industry - U.S. Electricity Imports from and Electricity Exports to Canada and Mexico, 2004-2014 (Megawatthours)**

Year	Canada		Mexico		U.S. Total	
	Imports from	Exports to	Imports from	Exports to	Imports	Exports
2004	33,007,487	22,482,109	1,202,576	415,754	34,210,063	22,897,863
2005	42,332,039	18,680,237	1,597,275	470,731	43,929,314	19,150,968
2006	41,544,052	23,405,387	1,147,258	865,948	42,691,310	24,271,335
2007	50,118,056	19,559,417	1,277,646	584,175	51,395,702	20,143,592
2008	55,731,229	23,614,158	1,288,152	584,001	57,019,381	24,198,159
2009	50,870,451	17,517,112	1,320,144	620,872	52,190,595	18,137,984
2010	43,763,091	18,481,678	1,320,095	624,502	45,083,186	19,106,180
2011	51,075,952	14,398,470	1,223,758	650,082	52,299,710	15,048,552
2012	57,971,110	11,392,267	1,285,959	603,382	59,257,069	11,995,649
2013	62,739,038	10,694,907	6,207,597	678,300	68,946,635	11,373,207
2014	59,369,660	12,860,889	7,140,624	437,364	66,510,284	13,298,253

Notes: In 2013, EIA revised its approach to estimating imports from Mexico.

Sources: National Energy Board of Canada; FERC 714, Annual Electric Balancing Authority Area and Planning Report; California Energy Commission; and EIA estimates.

**Table 2.14. Green Pricing Customers by End Use Sector,  
2005 through 2012 (Table Discontinued)**

Year	Residential	Commercial	Industrial	Transportation	Total
2005	871,774	70,303	695	--	942,772
2006	606,919	35,414	522	1	642,856
2007	773,391	61,608	553	99	835,651
2008	918,284	63,521	987	203	982,995
2009	1,058,185	64,139	1,454	--	1,123,778
2010	1,137,047	78,128	1,407	--	1,216,582
2011	1,187,867	89,677	1,440	--	1,278,984
2012	2,162,230	102,223	1,509	--	2,265,963

2012 was the last year this data was collected.

In 2006 the single largest provider of green pricing services in the country discontinued service in two States. More than 297,600 customers reverted to standard service tariffs, in Ohio and Pennsylvania.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

## Chapter 3

### Net Generation

**Table 3.1.A. Net Generation by Energy Source: Total (All Sectors), 2004 - 2014**  
 (Thousand Megawatthours)

Period	Coal	Generation at Utility Scale Facilities										Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
		Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other		Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
<b>Annual Totals</b>															
2004	1,978,301	100,391	20,754	710,100	15,252	788,528	268,417	575	82,492	-8,488	14,232	3,970,555	N/A	N/A	
2005	2,012,873	99,840	22,385	760,960	13,464	781,886	270,321	550	86,779	-6,558	12,821	4,055,423	N/A	N/A	
2006	1,990,511	44,460	19,706	816,441	14,177	787,219	289,246	508	96,018	-6,558	12,974	4,064,702	N/A	N/A	
2007	2,016,456	49,505	16,234	896,590	13,453	806,425	247,510	612	104,626	-6,896	12,231	4,156,745	N/A	N/A	
2008	1,985,801	31,917	14,325	882,981	11,707	806,208	254,831	864	125,237	-6,288	11,804	4,119,388	N/A	N/A	
2009	1,755,304	25,972	12,864	920,979	10,632	798,855	273,445	891	143,368	-4,627	11,928	3,950,331	N/A	N/A	
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	1,212	165,961	-5,501	12,855	4,125,060	N/A	N/A	
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	1,818	192,163	-6,421	14,154	4,100,141	N/A	N/A	
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	4,327	214,006	-4,950	13,787	4,047,765	N/A	N/A	
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	9,036	244,472	-4,681	13,588	4,065,964	N/A	N/A	
2014	1,581,710	18,276	11,955	1,126,609	12,022	797,166	259,367	17,691	261,522	-6,174	13,461	4,093,606	9,536	24,785	
<b>Year 2012</b>															
January	129,091	1,180	1,297	90,761	1,017	72,381	23,107	95	19,810	-348	1,137	339,528	N/A	N/A	
February	113,872	908	994	90,610	1,044	63,847	20,283	135	16,861	-237	1,072	309,389	N/A	N/A	
March	105,526	971	570	92,251	1,076	61,729	25,909	231	19,969	-281	1,140	309,091	N/A	N/A	
April	96,285	965	538	94,829	1,057	55,871	26,294	319	18,245	-265	1,091	295,228	N/A	N/A	
May	115,983	1,079	651	107,352	1,002	62,081	28,643	463	18,436	-371	1,200	336,518	N/A	N/A	
June	131,261	1,306	762	115,598	972	65,140	26,659	527	17,943	-507	1,166	360,826	N/A	N/A	
July	160,450	1,530	809	138,863	1,042	69,129	26,491	510	15,215	-619	1,218	414,640	N/A	N/A	
August	152,181	1,202	916	131,736	1,050	69,602	23,034	461	14,869	-529	1,178	395,700	N/A	N/A	
September	125,589	978	882	108,012	904	64,511	17,604	458	14,943	-431	1,135	334,585	N/A	N/A	
October	120,999	1,061	744	91,725	895	59,743	16,501	431	18,793	-378	1,135	311,651	N/A	N/A	
November	128,727	986	824	80,169	875	56,713	18,732	347	17,870	-409	1,140	305,975	N/A	N/A	
December	134,079	1,235	800	83,889	963	68,584	22,984	349	21,053	-576	1,176	334,635	N/A	N/A	
<b>Year 2013</b>															
January	138,105	1,733	1,042	88,559	1,144	71,406	24,829	310	21,208	-465	1,098	348,967	N/A	N/A	
February	123,547	1,130	867	80,283	968	61,483	20,418	433	19,898	-320	1,020	309,728	N/A	N/A	
March	130,634	990	1,007	84,725	1,070	62,947	20,534	619	22,191	-462	1,143	325,399	N/A	N/A	
April	111,835	995	891	78,036	1,020	56,767	25,097	667	23,294	-292	1,024	299,333	N/A	N/A	
May	119,513	1,067	1,345	83,816	1,088	62,948	28,450	753	22,502	-334	1,110	322,156	N/A	N/A	
June	138,283	1,035	1,307	99,615	1,048	66,430	27,384	871	20,084	-358	1,125	356,823	N/A	N/A	
July	152,867	1,458	1,354	120,771	1,148	70,539	27,255	829	17,764	-340	1,201	394,846	N/A	N/A	
August	149,426	1,076	1,372	121,156	1,143	71,344	21,633	944	16,438	-465	1,217	385,286	N/A	N/A	
September	133,110	964	1,222	102,063	1,087	65,799	16,961	949	18,043	-439	1,182	340,941	N/A	N/A	
October	120,996	945	1,074	88,587	1,072	63,184	17,199	988	20,070	-373	1,185	314,925	N/A	N/A	
November	120,940	989	850	84,287	1,060	64,975	17,677	824	22,206	-413	1,143	314,540	N/A	N/A	
December	141,860	1,438	1,013	92,936	1,006	71,294	21,128	850	20,776	-421	1,141	353,021	N/A	N/A	
<b>Year 2014</b>															
January	157,097	5,913	1,158	91,061	933	73,163	21,634	751	24,742	-290	1,092	377,255	530	1,227	1,281
February	143,294	1,847	916	75,942	817	62,639	17,396	835	20,166	-445	941	324,348	564	1,316	1,398
March	136,443	2,002	1,186	78,151	866	62,397	24,257	1,317	24,534	-421	1,093	331,823	769	1,904	2,086
April	109,281	911	842	76,782	854	56,385	25,440	1,487	24,989	-378	1,039	297,631	839	2,100	2,326
May	118,786	960	1,084	89,120	944	62,947	26,544	1,750	22,073	-601	1,118	324,724	927	2,384	2,676
June	137,577	889	1,131	98,468	969	68,138	25,744	1,923	22,541	-653	1,117	357,844	934	2,512	2,858
July	149,627	992	1,050	115,081	1,069	71,940	24,357	1,788	19,256	-545	1,163	385,780	975	2,501	2,763
August	148,452	1,014	1,036	122,348	1,135	71,129	19,807	1,870	17,141	-840	1,239	384,341	967	2,585	2,846
September	126,110	929	1,019	106,582	1,126	67,636	16,074	1,832	19,061	-642	1,169	330,887	898	2,463	2,721
October	111,296	908	609	97,683	1,082	62,391	17,159	1,717	21,002	-448	1,122	314,522	819	2,303	2,536
November	119,127	963	775	84,354	1,073	65,140	18,625	1,380	25,428	-531	1,161	317,495	673	1,904	2,052
December	124,620	947	1,149	91,038	1,153	73,363	22,329	1,032	21,590	-480	1,218	337,957	651	1,587	1,682

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Other Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Other includes non-biofuel municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biofuel municipal solid waste and tire-derived fuels are reclassified as other renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

See Glossary for definitions of values and fuel types. See Technical Notes for a discussion of sample design for the Form EIA-423 Power Plant Operations Report.

Total may not equal sum of components because of independent rounding. NM=Not measured due to large standard error. W-Withheld to avoid disclosure of individual company data.

Display values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-406, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.1.B. Net Generation from Renewable Sources: Total (All Sectors), 2004 - 2014**  
 (Thousands Megawatthours)

Period	Wind	Generation at Utility Scale Facilities									Total Renewable Generation at Utility Scale Facilities	Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
		Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Distributed Solar Photovoltaic Generation			Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
<b>Annual Totals</b>														
2004	14,144	6	569	38,117	5,128	8,151	2,141	14,811	268,417	351,485	N/A	N/A	N/A	
2005	17,811	16	535	38,856	5,142	8,330	1,948	14,692	270,321	357,651	N/A	N/A	N/A	
2006	26,589	15	493	38,762	5,677	8,478	1,944	14,568	289,246	385,772	N/A	N/A	N/A	
2007	34,450	16	596	39,014	6,158	8,304	2,063	14,637	247,510	352,747	N/A	N/A	N/A	
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932	N/A	N/A	N/A	
2009	73,886	157	735	36,050	7,924	8,058	2,461	15,009	273,445	417,724	N/A	N/A	N/A	
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376	N/A	N/A	N/A	
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336	N/A	N/A	N/A	
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573	N/A	N/A	N/A	
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073	N/A	N/A	N/A	
2014	181,655	15,250	2,441	42,340	11,220	7,228	3,202	15,877	259,367	538,579	9,536	24,785	27,227	
<b>Year 2012</b>														
January	13,632	82	13	3,314	806	589	206	1,263	23,107	43,013	N/A	N/A	N/A	
February	11,052	106	29	3,111	735	561	209	1,193	20,283	37,279	N/A	N/A	N/A	
March	14,026	163	68	3,034	801	597	226	1,285	25,909	46,109	N/A	N/A	N/A	
April	12,709	223	96	2,704	766	598	219	1,248	26,294	44,858	N/A	N/A	N/A	
May	12,541	337	125	2,937	804	633	217	1,304	28,643	47,541	N/A	N/A	N/A	
June	11,972	391	136	3,081	790	627	195	1,277	26,659	45,128	N/A	N/A	N/A	
July	8,822	392	117	3,352	855	651	216	1,321	26,491	42,216	N/A	N/A	N/A	
August	8,469	369	93	3,370	861	621	244	1,304	23,034	38,364	N/A	N/A	N/A	
September	8,790	373	85	3,227	808	600	218	1,300	17,604	33,005	N/A	N/A	N/A	
October	12,636	365	66	3,113	861	601	254	1,329	16,501	35,726	N/A	N/A	N/A	
November	11,649	316	31	3,190	827	604	253	1,347	18,732	36,950	N/A	N/A	N/A	
December	14,524	333	16	3,365	890	639	244	1,390	22,984	44,385	N/A	N/A	N/A	
<b>Year 2013</b>														
January	14,739	299	11	3,400	870	579	239	1,382	24,829	46,347	N/A	N/A	N/A	
February	14,076	387	45	3,083	782	507	213	1,236	20,418	40,749	N/A	N/A	N/A	
March	15,756	547	72	3,300	917	601	240	1,378	20,534	43,345	N/A	N/A	N/A	
April	17,476	573	93	2,863	848	576	256	1,274	25,097	49,058	N/A	N/A	N/A	
May	16,239	649	104	3,174	923	620	238	1,308	28,450	51,704	N/A	N/A	N/A	
June	13,748	749	122	3,330	890	617	221	1,278	27,384	48,338	N/A	N/A	N/A	
July	11,094	743	85	3,536	911	640	246	1,337	27,255	45,847	N/A	N/A	N/A	
August	9,634	845	99	3,634	962	628	258	1,322	21,633	39,015	N/A	N/A	N/A	
September	11,674	874	75	3,353	884	597	235	1,299	16,961	35,952	N/A	N/A	N/A	
October	13,635	875	112	3,341	863	606	262	1,363	17,199	38,256	N/A	N/A	N/A	
November	15,803	775	49	3,407	888	594	283	1,230	17,677	40,707	N/A	N/A	N/A	
December	13,967	804	46	3,606	920	621	296	1,366	21,128	42,754	N/A	N/A	N/A	
<b>Year 2014</b>														
January	17,911	697	54	3,626	967	584	299	1,355	21,634	47,127	530	1,227	1,281	
February	14,009	752	83	3,265	930	490	267	1,206	17,396	38,397	564	1,316	1,398	
March	17,736	1,135	182	3,609	961	599	291	1,338	24,257	50,108	769	1,904	2,086	
April	18,636	1,261	226	3,230	957	586	267	1,314	25,440	51,916	839	2,100	2,326	
May	15,601	1,457	292	3,290	944	635	270	1,332	26,544	50,366	927	2,384	2,676	
June	15,799	1,578	345	3,622	943	613	271	1,293	25,744	50,208	934	2,512	2,858	
July	12,187	1,525	262	3,807	1,035	646	261	1,320	24,357	45,402	975	2,501	2,763	
August	10,171	1,618	261	3,761	988	647	245	1,329	19,807	38,828	967	2,585	2,846	
September	11,520	1,574	258	3,462	932	606	234	1,308	16,074	35,968	888	2,463	2,721	
October	14,508	1,484	233	3,422	854	603	269	1,345	17,159	39,878	819	2,303	2,536	
November	18,867	1,232	148	3,508	820	612	258	1,362	18,625	45,432	673	1,904	2,052	
December	14,711	936	95	3,737	890	609	268	1,375	22,329	44,950	651	1,587	1,682	

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Notes: Beginning with 2001 data, non-biocgenic municipal solid waste and fire-derived fuels are reclassified as non-renewable energy sources and included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.2.A. Net Generation by Energy Source: Electric Utilities, 2004 - 2014**  
**(Thousand Megawatthours)**

Period	Generation at Utility Scale Facilities										Other	Total
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage		
<b>Annual Totals</b>												
2004	1,513,641	62,196	11,498	199,662	374	475,682	245,546	6	3,686	-7,526	467	2,505,231
2005	1,484,855	58,572	11,150	238,204	10	436,296	245,553	16	4,930	-5,383	643	2,474,846
2006	1,471,421	31,269	9,634	282,088	30	425,341	261,864	15	6,573	-5,281	700	2,483,656
2007	1,490,885	33,325	7,395	313,785	141	427,555	226,734	11	8,943	-5,328	586	2,504,131
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	17	11,291	-5,143	545	2,475,367
2009	1,322,092	16,035	7,162	349,166	96	417,275	247,198	28	14,569	-3,369	483	2,372,776
2010	1,378,028	17,256	8,807	392,616	52	424,843	236,104	101	17,826	-4,468	462	2,471,632
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	216	21,717	-5,492	604	2,460,851
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	639	27,378	-4,202	603	2,339,172
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	943	31,474	-3,773	615	2,388,058
2014	1,173,073	10,696	9,147	501,414	112	419,871	238,185	1,218	33,278	-5,144	622	2,382,473
<b>Year 2012</b>												
January	96,773	858	843	36,484	0	38,270	20,835	20	2,600	-301	53	196,498
February	86,462	699	658	35,281	0	33,117	18,363	21	2,103	-202	53	176,554
March	80,689	784	256	36,916	0	30,601	23,555	40	2,657	-209	43	175,331
April	75,146	766	293	38,669	0	27,884	24,174	49	2,325	-250	41	169,095
May	87,924	816	380	45,633	0	31,384	26,049	63	2,582	-291	53	194,593
June	100,022	934	473	48,423	0	34,052	24,540	78	2,370	-429	52	210,514
July	121,051	1,133	467	57,832	0	35,999	24,766	77	1,751	-530	48	242,595
August	115,044	906	477	53,961	0	36,149	21,575	66	1,785	-445	59	229,579
September	94,983	737	520	44,430	0	33,384	16,308	63	1,751	-368	62	191,871
October	90,324	787	409	38,288	0	31,289	14,911	59	2,432	-323	48	178,825
November	96,094	717	454	33,438	0	29,038	15,928	52	2,422	-355	46	178,834
December	101,368	755	434	35,538	0	33,656	20,933	52	2,601	-499	45	194,884
<b>Year 2013</b>												
January	103,536	1,018	700	39,880	71	36,748	22,563	31	2,935	-404	45	207,123
February	91,384	723	616	36,248	63	31,144	18,316	43	2,661	-270	47	180,975
March	97,675	755	687	37,661	59	31,426	18,349	65	2,781	-362	54	189,129
April	84,352	744	574	33,545	38	28,991	22,654	67	2,986	-232	42	173,761
May	90,053	785	1,035	36,891	61	32,977	25,924	81	2,755	-260	52	190,354
June	104,679	751	966	45,152	68	34,504	24,686	94	2,352	-261	43	213,033
July	114,402	950	976	52,966	66	36,733	24,705	89	2,156	-238	62	232,867
August	113,917	794	952	55,077	76	37,177	19,864	101	1,956	-417	60	229,557
September	99,056	664	905	45,845	75	34,459	15,422	98	2,493	-347	49	198,719
October	91,694	699	759	39,850	61	31,605	15,619	105	2,577	-307	51	182,713
November	92,146	731	609	36,703	78	32,939	15,597	81	3,004	-331	56	181,991
December	105,558	832	743	41,610	81	37,412	18,964	88	2,819	-326	55	207,837
<b>Year 2014</b>												
January	115,862	2,445	949	41,208	13	38,847	19,673	53	3,286	-218	47	222,165
February	104,638	1,051	706	33,600	7	32,937	15,973	61	2,698	-361	34	191,345
March	97,957	1,037	953	35,116	9	32,612	22,423	91	3,296	-355	57	193,194
April	77,724	711	572	34,890	20	30,312	22,977	98	3,274	-301	52	170,329
May	89,103	709	833	41,226	12	33,760	23,933	114	2,632	-506	49	191,866
June	104,523	650	894	44,315	5	35,898	23,790	127	2,613	-557	53	212,311
July	112,875	711	792	50,296	7	38,031	22,624	131	2,261	-445	62	227,343
August	112,568	711	778	54,553	6	37,182	18,261	130	1,894	-740	60	225,392
September	94,482	711	750	46,260	5	35,296	14,895	136	2,377	-461	50	194,390
October	82,991	652	457	42,360	4	32,017	15,863	134	2,826	-351	48	176,990
November	87,064	643	577	37,477	9	34,552	17,369	91	3,473	-441	55	180,869
December	93,287	666	887	40,114	15	38,428	20,415	72	2,749	-409	56	196,279

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See Note Technical Note 1 for additional information.

Other Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920, Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

**Table 3.2.B. Net Generation from Renewable Sources: Electric Utilities, 2004 - 2014**  
 (Thousand Megawatthours)

Period	Wind	Generation at Utility Scale Facilities									Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
		Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation
<b>Annual Totals</b>													
2004	405	6	0	1,209	460	198	166	1,248	245,546	249,238	N/A	N/A	N/A
2005	1,046	16	0	1,829	503	250	175	1,126	245,553	250,499	N/A	N/A	N/A
2006	2,351	15	0	1,937	705	228	190	1,162	261,884	268,452	N/A	N/A	N/A
2007	4,361	10	1	2,226	751	240	226	1,139	226,734	235,687	N/A	N/A	N/A
2008	6,899	16	1	1,888	844	211	252	1,197	229,645	240,953	N/A	N/A	N/A
2009	10,348	28	1	1,748	866	184	261	1,182	247,198	261,815	N/A	N/A	N/A
2010	13,089	101	0	2,328	879	154	259	1,118	236,104	254,031	N/A	N/A	N/A
2011	17,140	187	29	2,023	957	165	295	1,137	291,413	313,346	N/A	N/A	N/A
2012	22,926	551	89	1,836	1,022	184	265	1,143	252,936	280,953	N/A	N/A	N/A
2013	26,436	841	102	2,534	1,114	197	188	1,005	243,040	275,457	N/A	N/A	N/A
2014	27,671	1,094	124	3,050	1,068	191	182	1,116	238,185	272,681	0	1,094	1,218
<b>Year 2012</b>													
January	2,222	15	5	172	76	13	19	99	20,835	23,454	N/A	N/A	N/A
February	1,745	18	3	158	76	12	20	92	18,363	20,487	N/A	N/A	N/A
March	2,306	30	10	136	80	16	23	95	23,555	26,252	N/A	N/A	N/A
April	2,022	37	12	92	85	17	22	87	24,174	26,547	N/A	N/A	N/A
May	2,197	53	10	157	90	18	24	97	26,049	28,694	N/A	N/A	N/A
June	2,019	69	9	132	84	14	27	92	24,540	26,987	N/A	N/A	N/A
July	1,361	66	11	165	93	15	22	96	24,766	26,594	N/A	N/A	N/A
August	1,370	59	8	184	94	17	24	96	21,575	23,426	N/A	N/A	N/A
September	1,375	57	6	156	83	15	28	95	16,308	18,122	N/A	N/A	N/A
October	2,078	51	7	124	92	17	23	99	14,911	17,402	N/A	N/A	N/A
November	2,029	48	4	178	85	16	17	97	16,928	19,402	N/A	N/A	N/A
December	2,203	48	4	182	85	14	16	99	20,933	23,586	N/A	N/A	N/A
<b>Year 2013</b>													
January	2,532	26	4	185	87	14	18	99	22,563	25,529	N/A	N/A	N/A
February	2,294	36	7	174	79	13	13	88	18,316	21,020	N/A	N/A	N/A
March	2,374	56	9	190	96	14	13	94	18,349	21,196	N/A	N/A	N/A
April	2,682	60	7	103	92	18	17	74	22,654	25,706	N/A	N/A	N/A
May	2,382	68	13	175	95	18	19	67	25,924	28,760	N/A	N/A	N/A
June	1,945	79	14	195	88	17	13	93	24,686	27,131	N/A	N/A	N/A
July	1,703	76	13	234	88	18	17	96	24,705	26,950	N/A	N/A	N/A
August	1,457	90	11	252	121	17	16	92	19,864	21,921	N/A	N/A	N/A
September	2,032	90	8	244	93	16	15	92	15,422	18,013	N/A	N/A	N/A
October	2,105	96	9	259	92	18	16	86	15,619	18,301	N/A	N/A	N/A
November	2,607	78	3	251	90	18	14	24	15,975	19,060	N/A	N/A	N/A
December	2,324	84	3	272	91	14	18	100	18,964	21,871	N/A	N/A	N/A
<b>Year 2014</b>													
January	2,790	49	5	280	91	11	15	98	19,673	23,013	0	49	53
February	2,252	53	8	252	83	10	16	84	15,973	18,732	0	53	61
March	2,801	80	11	284	85	16	12	97	22,423	25,810	0	80	91
April	2,892	86	12	175	87	19	13	89	22,977	26,350	0	86	98
May	2,221	100	13	189	87	18	20	97	23,933	26,679	0	100	114
June	2,146	118	10	255	89	17	14	92	23,790	26,530	0	118	127
July	1,761	120	11	272	97	19	20	93	22,624	25,015	0	120	131
August	1,380	117	12	296	97	16	12	93	18,251	20,274	0	117	130
September	1,806	115	11	262	90	16	11	91	14,895	17,297	0	115	126
October	2,338	107	17	265	90	18	19	97	15,863	18,813	0	107	124
November	3,012	85	6	251	85	16	15	93	17,369	20,932	0	85	91
December	2,272	63	9	270	86	15	15	91	20,415	23,235	0	63	72

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

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423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.3.A. Net Generation by Energy Source: Independent Power Producers, 2004 - 2014**  
 (Thousands Megawatthours)

Period	Generation at Utility Scale Facilities										Other	Total
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage		
<b>Annual Totals</b>												
2004	443,547	33,574	7,410	427,510	3,194	312,846	19,518	569	48,067	-962	7,856	1,303,129
2005	507,199	37,096	9,664	445,625	3,767	345,690	21,486	535	51,173	-1,174	6,285	1,422,346
2006	498,316	10,396	8,409	452,329	4,223	361,877	24,390	492	58,853	-1,277	6,412	1,424,421
2007	507,406	13,645	6,942	500,967	3,901	378,869	19,109	601	65,150	-1,569	6,191	1,501,212
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	847	84,928	-1,145	6,414	1,498,982
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	863	100,997	-1,259	6,146	1,437,061
2010	449,709	5,117	3,497	508,774	2,915	382,126	22,351	1,105	119,851	-1,035	6,345	1,500,754
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	1,511	140,442	-928	7,059	1,487,335
2012	354,076	2,757	1,758	627,833	2,964	374,509	20,923	3,525	156,539	-748	7,030	1,551,186
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	7,782	181,263	-908	6,742	1,515,657
2014	395,701	6,789	1,410	531,758	3,246	377,295	19,861	16,086	196,723	-1,030	6,690	1,554,530
<b>Year 2012</b>												
January	31,101	224	206	46,574	263	34,111	1,995	72	14,612	-47	577	129,688
February	26,312	147	169	48,027	256	30,730	1,678	108	12,298	-35	546	120,236
March	23,721	127	138	48,085	261	31,128	2,117	181	14,894	-71	587	121,167
April	20,138	141	87	49,080	254	27,987	1,940	256	13,658	-15	561	114,087
May	27,005	210	121	53,993	244	30,697	2,379	382	13,456	-80	599	129,007
June	30,125	314	119	59,262	253	31,088	1,942	430	13,178	-78	612	137,247
July	38,127	340	146	72,301	266	33,130	1,586	415	10,878	-89	620	157,719
August	35,897	235	202	69,198	266	33,453	1,305	378	10,476	-84	588	151,914
September	29,513	186	151	55,837	232	31,126	1,135	376	10,645	-62	575	129,715
October	29,028	204	156	45,919	225	28,455	1,395	356	13,823	-55	575	120,080
November	31,554	213	130	39,163	211	27,674	1,590	283	12,867	-54	580	114,213
December	31,555	415	133	40,394	253	34,928	1,862	287	15,752	-77	610	126,112
<b>Year 2013</b>												
January	33,416	635	149	40,509	313	34,658	1,938	269	15,567	-61	545	127,938
February	31,100	346	132	36,722	261	30,340	1,736	374	14,766	-50	497	116,224
March	31,794	187	151	39,104	259	31,522	1,878	531	16,778	-80	574	122,699
April	26,434	206	144	37,081	284	27,776	2,189	573	17,890	-60	528	113,045
May	28,327	228	101	39,353	306	29,871	2,194	643	17,152	-74	574	118,674
June	32,481	241	141	46,520	280	31,926	2,365	745	15,065	-97	586	130,253
July	37,252	460	167	58,993	315	33,807	2,224	710	12,812	-103	605	147,241
August	34,371	239	211	57,526	300	34,167	1,525	813	11,692	-47	587	141,386
September	32,990	262	141	48,349	298	31,340	1,297	819	12,955	-92	561	128,919
October	28,248	202	149	41,022	343	31,578	1,339	849	14,846	-66	558	119,069
November	27,712	212	144	39,663	289	32,037	1,494	718	16,558	-82	554	119,297
December	35,144	544	151	42,679	274	33,881	1,839	738	15,181	-95	574	130,911
<b>Year 2014</b>												
January	40,054	3,281	109	41,761	253	34,316	1,837	681	18,727	-72	533	141,480
February	37,580	698	123	35,129	204	29,702	1,316	753	15,039	-84	472	120,930
March	37,333	880	129	35,402	206	29,785	1,715	1,196	18,569	-66	571	125,720
April	30,554	160	141	34,693	211	26,072	2,332	1,355	19,166	-77	516	115,124
May	28,635	203	125	40,419	271	29,187	2,477	1,596	16,817	-95	569	120,205
June	31,947	193	108	46,588	252	32,240	1,850	1,755	17,275	-96	565	132,678
July	35,597	236	128	56,400	276	33,909	1,641	1,618	14,183	-100	584	144,474
August	34,761	261	123	59,257	309	33,946	1,458	1,709	12,495	-101	594	144,913
September	30,580	171	145	62,430	293	32,238	1,091	1,670	12,267	-91	562	132,366
October	27,332	209	51	47,683	331	30,374	1,200	1,556	15,642	-97	566	124,857
November	31,053	268	88	39,234	292	30,569	1,155	1,260	19,441	-90	578	123,869
December	30,274	228	139	42,652	349	34,935	1,767	939	16,102	-71	580	127,913

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See Note Technical Note 1 for precision information.

Other Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920, Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-923, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

**Table 3.3.B. Net Generation from Renewable Sources: Independent Power Producers, 2004 - 2014**  
 (Thousand Megawatthours)

Period	Wind	Generation at Utility Scale Facilities								Total Renewable Generation at Utility Scale Facilities	Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
		Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric			Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation
<b>Annual Totals</b>													
2004	13,739	0	569	8,528	4,377	6,978	884	13,563	19,518	68,154	N/A	N/A	N/A
2005	16,764	0	535	8,741	4,308	7,092	701	13,566	21,486	73,195	N/A	N/A	N/A
2006	24,238	0	493	8,404	4,771	7,259	774	13,406	24,390	83,736	N/A	N/A	N/A
2007	30,069	6	595	8,486	5,177	7,061	839	13,496	19,109	84,860	N/A	N/A	N/A
2008	48,464	60	787	8,750	6,057	6,975	1,040	13,643	23,451	109,226	N/A	N/A	N/A
2009	63,538	129	734	8,990	6,718	6,829	1,095	13,826	24,308	126,168	N/A	N/A	N/A
2010	81,547	316	789	9,118	7,227	6,742	1,116	14,101	22,351	143,306	N/A	N/A	N/A
2011	102,981	734	777	8,709	7,120	6,217	1,237	14,180	26,117	168,071	N/A	N/A	N/A
2012	117,822	2,737	787	9,214	7,852	6,056	1,176	14,419	20,923	180,987	N/A	N/A	N/A
2013	141,306	6,969	813	9,768	8,442	5,838	1,139	14,770	22,018	211,063	N/A	N/A	N/A
2014	153,825	13,769	2,317	11,977	9,062	5,838	1,261	14,761	19,861	232,670	0	13,769	16,086
<b>Year 2012</b>													
January	11,402	63	8	799	650	498	98	1,165	1,995	16,679	N/A	N/A	N/A
February	9,301	82	26	754	582	471	89	1,101	1,678	14,084	N/A	N/A	N/A
March	11,713	123	58	757	644	496	94	1,190	2,117	17,192	N/A	N/A	N/A
April	10,680	172	84	624	606	492	96	1,161	1,940	15,854	N/A	N/A	N/A
May	10,338	267	116	656	639	522	93	1,207	2,379	16,217	N/A	N/A	N/A
June	9,948	303	127	802	633	526	84	1,185	1,942	15,551	N/A	N/A	N/A
July	7,457	309	106	882	687	537	91	1,225	1,586	12,878	N/A	N/A	N/A
August	7,095	293	85	876	687	504	107	1,208	1,305	12,160	N/A	N/A	N/A
September	7,411	297	79	792	649	491	96	1,205	1,135	12,156	N/A	N/A	N/A
October	10,550	297	59	752	689	490	112	1,231	1,395	15,574	N/A	N/A	N/A
November	9,613	256	27	733	661	499	111	1,250	1,590	14,740	N/A	N/A	N/A
December	12,313	275	12	786	725	531	106	1,291	1,862	17,901	N/A	N/A	N/A
<b>Year 2013</b>													
January	12,197	262	7	826	691	479	90	1,283	1,938	17,775	N/A	N/A	N/A
February	11,774	336	38	717	622	419	86	1,148	1,736	16,875	N/A	N/A	N/A
March	13,374	468	63	797	728	493	102	1,284	1,878	19,188	N/A	N/A	N/A
April	14,786	487	86	673	676	460	95	1,201	2,189	20,652	N/A	N/A	N/A
May	13,848	552	91	743	733	500	87	1,241	2,194	19,989	N/A	N/A	N/A
June	11,796	638	108	799	705	502	77	1,185	2,365	18,176	N/A	N/A	N/A
July	9,386	639	73	859	723	519	84	1,241	2,224	15,746	N/A	N/A	N/A
August	8,173	725	88	949	741	507	92	1,231	1,525	14,030	N/A	N/A	N/A
September	9,636	752	67	845	700	478	89	1,207	1,297	15,070	N/A	N/A	N/A
October	11,521	746	103	781	678	489	99	1,278	1,339	17,035	N/A	N/A	N/A
November	13,183	671	47	857	710	483	118	1,206	1,494	18,769	N/A	N/A	N/A
December	11,631	696	42	921	734	509	120	1,266	1,839	17,758	N/A	N/A	N/A
<b>Year 2014</b>													
January	15,104	631	50	993	775	466	132	1,257	1,837	21,244	0	631	681
February	11,744	678	75	898	753	406	116	1,122	1,316	17,108	0	678	753
March	14,921	1,024	171	1,007	780	498	123	1,240	1,715	21,480	0	1,024	1,196
April	15,729	1,140	214	865	780	469	98	1,225	2,332	22,853	0	1,140	1,355
May	13,369	1,317	279	818	770	512	113	1,235	2,477	20,891	0	1,317	1,596
June	13,641	1,420	335	1,062	761	493	117	1,201	1,850	20,880	0	1,420	1,755
July	10,416	1,366	251	1,103	835	515	88	1,227	1,641	17,442	0	1,366	1,618
August	8,782	1,460	249	1,076	794	519	88	1,236	1,458	15,661	0	1,460	1,709
September	9,704	1,423	247	1,025	750	483	89	1,217	1,091	16,028	0	1,423	1,670
October	12,154	1,339	217	974	681	487	98	1,248	1,200	18,398	0	1,339	1,556
November	15,835	1,118	142	1,080	664	495	97	1,269	1,155	21,856	0	1,118	1,260
December	12,425	852	87	1,077	720	495	101	1,284	1,787	18,827	0	852	939

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Notes: Beginning with 2001 data, non-biocgenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.4.A. Net Generation by Energy Source: Commercial Sector, 2004 - 2014**  
 (Thousands Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
													Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation	
<b>Annual Totals</b>																
2004	1,340	493	7	3,969	0	0	105	0	1,575	0	781	8,270	N/A	N/A	N/A	N/A
2005	1,353	368	7	4,249	0	0	86	0	1,673	0	756	8,492	N/A	N/A	N/A	N/A
2006	1,310	228	7	4,356	0	0	92	0	1,619	0	758	8,371	N/A	N/A	N/A	N/A
2007	1,371	180	9	4,257	0	0	77	0	1,614	0	764	8,273	N/A	N/A	N/A	N/A
2008	1,261	136	6	4,188	0	0	60	0	1,555	0	720	7,926	N/A	N/A	N/A	N/A
2009	1,096	157	5	4,225	0	0	71	0	1,769	0	842	8,165	N/A	N/A	N/A	N/A
2010	1,111	117	7	4,725	3	0	80	5	1,709	0	834	8,592	N/A	N/A	N/A	N/A
2011	1,049	86	3	5,487	3	0	26	84	2,392	0	950	10,080	N/A	N/A	N/A	N/A
2012	883	191	6	6,603	0	0	28	148	2,397	0	1,046	11,301	N/A	N/A	N/A	N/A
2013	839	118	5	7,154	0	0	44	294	2,662	0	1,118	12,234	N/A	N/A	N/A	N/A
2014	595	247	9	7,227	0	0	38	371	2,862	0	1,171	12,520	4,349	4,720	4,720	
<b>Year 2012</b>																
January	83	14	1	543	0	0	3	4	194	0	76	916	N/A	N/A	N/A	N/A
February	81	15	1	531	0	0	2	5	188	0	77	900	N/A	N/A	N/A	N/A
March	74	12	1	537	0	0	2	9	195	0	82	911	N/A	N/A	N/A	N/A
April	66	17	0	510	0	0	2	13	195	0	86	888	N/A	N/A	N/A	N/A
May	69	12	0	541	0	0	3	16	199	0	90	930	N/A	N/A	N/A	N/A
June	79	21	0	585	0	0	2	18	186	0	84	975	N/A	N/A	N/A	N/A
July	83	18	1	716	0	0	2	16	203	0	96	1,135	N/A	N/A	N/A	N/A
August	81	18	1	620	0	0	2	15	213	0	96	1,046	N/A	N/A	N/A	N/A
September	66	14	1	537	0	0	2	18	201	0	91	930	N/A	N/A	N/A	N/A
October	57	19	1	513	0	0	2	15	207	0	91	904	N/A	N/A	N/A	N/A
November	67	15	1	488	0	0	2	11	206	0	86	876	N/A	N/A	N/A	N/A
December	771	15	1	483	0	0	2	9	210	0	91	888	N/A	N/A	N/A	N/A
<b>Year 2013</b>																
January	89	19	1	562	0	0	4	9	212	0	85	981	N/A	N/A	N/A	N/A
February	811	14	1	512	0	0	4	15	187	0	74	888	N/A	N/A	N/A	N/A
March	78	7	1	574	0	0	4	22	220	0	90	995	N/A	N/A	N/A	N/A
April	63	7	0	541	0	0	4	25	210	0	95	946	N/A	N/A	N/A	N/A
May	69	8	0	546	0	0	5	27	229	0	97	981	N/A	N/A	N/A	N/A
June	75	7	0	593	0	0	5	30	223	0	93	1,026	N/A	N/A	N/A	N/A
July	76	13	0	779	0	0	5	28	235	0	100	1,236	N/A	N/A	N/A	N/A
August	71	7	1	697	0	0	4	29	238	0	101	1,147	N/A	N/A	N/A	N/A
September	60	6	1	652	0	0	3	30	222	0	99	1,073	N/A	N/A	N/A	N/A
October	49	7	1	550	0	0	2	32	226	0	96	961	N/A	N/A	N/A	N/A
November	60	8	0	525	0	0	2	24	223	0	92	936	N/A	N/A	N/A	N/A
December	68	16	1	623	0	0	3	23	236	0	95	1,064	N/A	N/A	N/A	N/A
<b>Year 2014</b>																
January	76	102	1	651	0	0	4	16	264	0	104	1,218	253	269	269	
February	79	37	1	533	0	0	3	20	216	0	71	961	271	292	292	
March	66	30	1	529	0	0	4	29	230	0	84	972	364	394	394	
April	47	9	1	509	0	0	4	33	229	0	96	927	394	427	427	
May	39	8	0	557	0	0	4	38	238	0	102	986	433	471	471	
June	42	8	0	605	0	0	3	39	245	0	99	1,041	431	470	470	
July	50	9	0	701	0	0	3	38	263	0	109	1,173	447	485	485	
August	42	7	1	722	0	0	3	39	256	0	110	1,181	440	479	479	
September	36	8	1	657	0	0	3	35	243	0	104	1,086	396	432	432	
October	31	9	1	601	0	0	2	36	230	0	97	1,008	355	390	390	
November	44	9	1	560	0	0	2	28	218	0	98	960	287	314	314	
December	45	10	1	602	0	0	2	20	230	0	97	1,007	278	298	298	

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Other Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as other renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

See Glossary for definitions of values and fuel types. See Technical Notes for a discussion of sampling design in the Form EIA-423 and other forms.

Total may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Display values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920, Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.4.B. Net Generation from Renewable Sources: Commercial Sector, 2004 - 2014**  
 (Thousand Megawatthours)

Period	Wind	Generation at Utility Scale Facilities									Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
		Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation
<b>Annual Totals</b>													
2004	0	0	0	13	172	945	444	0	105	1,680	N/A	N/A	N/A
2005	0	0	0	16	218	953	486	0	86	1,759	N/A	N/A	N/A
2006	0	0	0	21	173	956	470	0	93	1,713	N/A	N/A	N/A
2007	0	0	0	15	203	962	434	0	77	1,691	N/A	N/A	N/A
2008	0	0	0	21	234	911	389	0	60	1,615	N/A	N/A	N/A
2009	0	0	0	20	318	1,045	386	0	71	1,839	N/A	N/A	N/A
2010	16	5	0	21	256	1,031	386	0	80	1,794	N/A	N/A	N/A
2011	51	84	0	26	952	971	393	0	26	2,502	N/A	N/A	N/A
2012	54	148	0	24	848	1,070	402	0	28	2,573	N/A	N/A	N/A
2013	61	294	0	34	925	1,149	493	0	44	3,000	N/A	N/A	N/A
2014	107	371	0	74	905	1,202	575	0	38	3,271	4,349	4,720	4,720
<b>Year 2012</b>													
January	6	4	0	2	73	77	35	0	3	200	N/A	N/A	N/A
February	5	5	0	2	70	78	34	0	2	196	N/A	N/A	N/A
March	5	9	0	2	70	85	33	0	2	206	N/A	N/A	N/A
April	5	13	0	2	69	88	31	0	2	210	N/A	N/A	N/A
May	4	16	0	2	68	92	33	0	3	218	N/A	N/A	N/A
June	4	18	0	2	66	85	29	0	2	206	N/A	N/A	N/A
July	3	16	0	2	68	98	31	0	2	221	N/A	N/A	N/A
August	3	15	0	2	74	98	36	0	2	230	N/A	N/A	N/A
September	3	18	0	2	70	93	33	0	2	221	N/A	N/A	N/A
October	5	15	0	2	73	93	34	0	2	225	N/A	N/A	N/A
November	5	11	0	2	75	88	37	0	2	219	N/A	N/A	N/A
December	5	9	0	2	72	93	37	0	2	222	N/A	N/A	N/A
<b>Year 2013</b>													
January	6	9	0	2	77	87	40	0	4	225	N/A	N/A	N/A
February	5	15	0	2	68	76	35	0	4	206	N/A	N/A	N/A
March	5	22	0	3	79	93	40	0	4	246	N/A	N/A	N/A
April	5	25	0	1	66	99	39	0	4	239	N/A	N/A	N/A
May	5	27	0	2	80	101	41	0	5	261	N/A	N/A	N/A
June	4	30	0	2	81	96	40	0	5	258	N/A	N/A	N/A
July	3	28	0	3	84	102	43	0	5	268	N/A	N/A	N/A
August	3	29	0	3	84	103	46	0	4	271	N/A	N/A	N/A
September	4	30	0	2	77	102	38	0	3	255	N/A	N/A	N/A
October	5	32	0	4	77	98	41	0	2	259	N/A	N/A	N/A
November	8	24	0	5	72	94	44	0	2	250	N/A	N/A	N/A
December	7	23	0	5	79	98	47	0	3	262	N/A	N/A	N/A
<b>Year 2014</b>													
January	9	16	0	11	85	107	51	0	4	284	253	269	269
February	8	20	0	10	79	74	46	0	3	240	271	292	292
March	8	29	0	7	79	86	50	0	4	263	364	394	394
April	8	33	0	2	74	98	47	0	4	266	394	427	427
May	6	38	0	7	70	105	49	0	4	280	433	471	471
June	9	39	0	10	77	102	46	0	3	287	431	470	470
July	8	38	0	7	87	112	49	0	3	304	447	485	485
August	6	39	0	6	81	113	50	0	3	298	440	479	479
September	8	35	0	4	78	107	47	0	3	281	396	432	432
October	11	36	0	4	69	99	47	0	2	268	355	390	390
November	13	28	0	2	56	101	45	0	2	247	287	314	314
December	10	20	0	4	68	99	48	0	2	252	278	298	298

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Notes: Beginning with 2001 data, non-biocgenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.5.A. Net Generation by Energy Source: Industrial Sector, 2004 - 2014**  
 (Thousand Megawatthours)

Period	Coal	Generation at Utility Scale Facilities										Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
		Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other		Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
<b>Annual Totals</b>															
2004	19,773	4,128	1,839	78,959	11,684	0	3,248	0	29,164	0	5,129	153,925	N/A	N/A	N/A
2005	19,466	3,804	1,564	72,882	9,687	0	3,195	0	29,003	0	5,137	144,739	N/A	N/A	N/A
2006	19,464	2,567	1,656	77,669	9,923	0	2,899	0	28,972	0	5,103	148,254	N/A	N/A	N/A
2007	16,694	2,355	1,889	77,580	8,411	0	1,590	0	28,919	0	4,690	142,128	N/A	N/A	N/A
2008	15,703	1,555	1,664	76,421	8,507	0	1,676	0	27,462	0	4,125	137,113	N/A	N/A	N/A
2009	13,686	1,474	1,489	75,748	7,574	0	1,668	0	26,033	0	4,457	132,329	N/A	N/A	N/A
2010	18,441	844	1,414	81,583	8,543	0	1,668	2	26,574	0	5,214	144,082	N/A	N/A	N/A
2011	14,490	657	1,234	81,911	8,624	0	1,799	7	27,612	0	5,541	141,875	N/A	N/A	N/A
2012	12,603	563	2,359	86,500	8,913	0	2,353	14	27,693	0	5,108	146,107	N/A	N/A	N/A
2013	12,554	495	2,036	88,733	8,531	0	3,463	17	29,074	0	5,113	150,015	N/A	N/A	N/A
2014	12,341	544	1,389	86,209	8,664	0	1,282	16	28,659	0	4,978	144,083	943	960	960
<b>Year 2012</b>															
January	1,135	84	247	7,096	754	0	275	1	2,405	0	431	12,425	N/A	N/A	N/A
February	1,017	46	167	6,771	788	0	240	1	2,272	0	396	11,699	N/A	N/A	N/A
March	1,041	49	176	6,713	815	0	234	1	2,224	0	428	11,681	N/A	N/A	N/A
April	935	41	158	6,571	803	0	178	1	2,067	0	403	11,158	N/A	N/A	N/A
May	984	41	150	7,186	758	0	212	1	2,199	0	458	11,988	N/A	N/A	N/A
June	1,035	37	170	7,327	719	0	175	1	2,208	0	418	12,091	N/A	N/A	N/A
July	1,189	39	195	8,013	776	0	137	2	2,383	0	454	13,190	N/A	N/A	N/A
August	1,159	43	235	7,956	784	0	152	2	2,395	0	434	13,160	N/A	N/A	N/A
September	1,026	40	210	7,209	672	0	159	2	2,346	0	406	12,069	N/A	N/A	N/A
October	990	50	179	7,006	670	0	192	1	2,331	0	422	11,841	N/A	N/A	N/A
November	1,012	41	239	7,080	664	0	213	1	2,375	0	428	12,052	N/A	N/A	N/A
December	1,078	51	233	7,573	709	0	186	NM	2,490	0	430	12,751	N/A	N/A	N/A
<b>Year 2013</b>															
January	1,064	61	192	7,608	759	0	324	1	2,493	0	423	12,924	N/A	N/A	N/A
February	983	47	118	6,801	644	0	363	1	2,284	0	402	11,642	N/A	N/A	N/A
March	1,086	42	169	7,387	752	0	302	1	2,411	0	425	12,576	N/A	N/A	N/A
April	986	37	173	6,689	698	0	250	2	2,208	0	358	11,580	N/A	N/A	N/A
May	1,063	46	209	7,025	721	0	328	2	2,366	0	387	12,147	N/A	N/A	N/A
June	1,048	36	201	7,351	699	0	328	2	2,444	0	402	12,511	N/A	N/A	N/A
July	1,138	36	211	8,033	767	0	320	2	2,561	0	434	13,502	N/A	N/A	N/A
August	1,066	36	208	7,856	767	0	240	2	2,551	0	468	13,195	N/A	N/A	N/A
September	1,004	33	175	7,218	714	0	239	2	2,373	0	473	12,230	N/A	N/A	N/A
October	1,005	37	166	7,165	667	0	239	2	2,421	0	481	12,182	N/A	N/A	N/A
November	1,022	37	98	7,395	694	0	206	1	2,421	0	442	12,317	N/A	N/A	N/A
December	1,089	47	118	8,025	650	0	322	1	2,540	0	417	13,210	N/A	N/A	N/A
<b>Year 2014</b>															
January	1,105	85	100	7,441	667	0	120	1	2,466	0	408	12,391	51	52	52
February	998	61	86	6,680	606	0	104	1	2,212	0	363	11,112	54	55	55
March	1,087	56	103	7,105	651	0	114	1	2,439	0	382	11,937	77	78	78
April	955	32	128	6,690	624	0	127	2	2,319	0	375	11,251	84	85	85
May	1,009	40	126	6,918	662	0	130	2	2,385	0	397	11,667	92	94	94
June	1,065	37	130	6,960	711	0	100	2	2,409	0	400	11,814	93	95	95
July	1,105	37	129	7,685	786	0	89	2	2,549	0	408	12,790	97	99	99
August	1,081	35	134	7,716	820	0	96	2	2,496	0	476	12,856	96	98	98
September	1,013	39	123	7,234	828	0	86	2	2,275	0	444	12,044	88	89	89
October	942	39	101	7,028	748	0	93	1	2,303	0	411	11,667	83	84	84
November	966	42	108	7,083	772	0	99	1	2,297	0	429	11,787	67	68	66
December	1,015	42	121	7,670	790	0	125	1	2,510	0	484	12,757	61	62	62

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Other Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as other renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

See Glossary for definitions of values in bold. See Technical Notes for a discussion of sample design for the Form EIA-423 and other forms.

Total may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

Display values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-423, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.5.B. Net Generation from Renewable Sources: Industrial Sector, 2004 - 2014**  
 (Thousand Megawatthours)

Period	Wind	Generation at Utility Scale Facilities									Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
		Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation
<b>Annual Totals</b>													
2004	0	0	0	28,367	120	30	647	0	3,248	32,413	N/A	N/A	N/A
2005	0	0	0	28,271	113	34	585	0	3,195	32,199	N/A	N/A	N/A
2006	0	0	0	28,400	29	35	509	0	2,899	31,872	N/A	N/A	N/A
2007	0	0	0	28,287	27	40	565	0	1,590	30,509	N/A	N/A	N/A
2008	0	0	0	26,641	21	0	800	0	1,676	29,138	N/A	N/A	N/A
2009	0	0	0	25,292	22	0	718	0	1,868	27,901	N/A	N/A	N/A
2010	0	2	0	25,706	15	0	853	0	1,668	28,244	N/A	N/A	N/A
2011	5	7	0	26,691	15	2	900	0	1,799	29,418	N/A	N/A	N/A
2012	19	14	0	26,725	81	10	857	0	2,353	30,060	N/A	N/A	N/A
2013	37	17	0	27,691	178	2	1,166	0	3,463	32,554	N/A	N/A	N/A
2014	53	16	0	27,239	185	-2	1,185	0	1,282	29,957	943	960	960
<b>Year 2012</b>													
January	2	1	0	2,340	7	1	55	0	275	2,680	N/A	N/A	N/A
February	2	1	0	2,197	6	0	66	0	240	2,513	N/A	N/A	N/A
March	2	1	0	2,140	7	0	76	0	234	2,459	N/A	N/A	N/A
April	2	1	0	1,986	7	11	71	0	178	2,247	N/A	N/A	N/A
May	1	1	0	2,122	7	11	67	0	212	2,412	N/A	N/A	N/A
June	1	1	0	2,144	7	11	55	0	175	2,384	N/A	N/A	N/A
July	1	2	0	2,303	7	11	72	0	137	2,522	N/A	N/A	N/A
August	1	2	0	2,308	7	11	77	0	152	2,548	N/A	N/A	N/A
September	1	2	0	2,277	6	1	61	0	159	2,506	N/A	N/A	N/A
October	2	1	0	2,235	7	1	86	0	192	2,525	N/A	N/A	N/A
November	1	1	0	2,277	7	1	88	0	213	2,588	N/A	N/A	N/A
December	2	NM	0	2,394	8	1	84	0	186	2,676	N/A	N/A	N/A
<b>Year 2013</b>													
January	3	1	0	2,386	14	0	91	0	324	2,818	N/A	N/A	N/A
February	2	1	0	2,190	13	0	80	0	363	2,648	N/A	N/A	N/A
March	3	1	0	2,310	14	0	85	0	302	2,715	N/A	N/A	N/A
April	3	2	0	2,086	14	0	106	0	250	2,460	N/A	N/A	N/A
May	4	2	0	2,254	15	0	92	0	328	2,695	N/A	N/A	N/A
June	3	2	0	2,335	15	1	90	0	328	2,774	N/A	N/A	N/A
July	2	2	0	2,441	15	0	102	0	320	2,883	N/A	N/A	N/A
August	2	2	0	2,430	15	1	105	0	240	2,793	N/A	N/A	N/A
September	2	2	0	2,263	15	0	93	0	239	2,614	N/A	N/A	N/A
October	4	2	0	2,296	15	0	106	0	239	2,661	N/A	N/A	N/A
November	5	1	0	2,294	16	0	106	0	206	2,629	N/A	N/A	N/A
December	5	1	0	2,408	17	0	111	0	322	2,863	N/A	N/A	N/A
<b>Year 2014</b>													
January	7	1	0	2,343	16	0	101	0	120	2,586	51	52	52
February	4	1	0	2,105	14	0	89	0	104	2,317	54	55	55
March	5	1	0	2,311	16	0	106	0	114	2,555	77	78	78
April	6	2	0	2,188	17	-1	109	0	127	2,447	84	85	85
May	4	2	0	2,276	16	0	89	0	130	2,517	92	94	94
June	3	2	0	2,295	16	0	95	0	100	2,511	93	95	95
July	3	2	0	2,426	16	0	104	0	89	2,640	97	99	99
August	2	2	0	2,384	15	0	95	0	96	2,594	96	98	98
September	2	2	0	2,171	14	0	88	0	86	2,362	88	89	89
October	5	1	0	2,180	14	0	105	0	93	2,397	83	84	84
November	6	1	0	2,175	15	0	101	0	99	2,397	67	68	68
December	4	1	0	2,386	15	0	104	0	125	2,636	61	62	62

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Notes: Beginning with 2001 data, non-biocgenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other Renewable Sources.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W-Withheld to avoid disclosure of individual company data.

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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

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Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3.6. Net Generation by Energy Source: Residential Sector, 2014**  
**(Thousand Megawatthours)**

Period	Distributed Generation	
		Estimated Distributed Solar Photovoltaic Generation
Annual Totals		
2014		4,243
Year 2014		
January		226
February		238
March		328
April		361
May		402
June		410
July		431
August		431
September		404
October		382
November		319
December		311

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Sources:

Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

**Table 3. Utility Scale Facility Net Generation  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers						
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	Year	Year	
New England	110,898	115,430	-3.9%	3,700	3,812	101,916	104,880	1,389	1,207	3,892	5,537
Connecticut	33,677	36,611	+8.4%	53	56	32,709	34,500	440	547	473	616
Maine	13,249	14,030	+5.6%	1	1	9,804	10,206	208	206	9,236	4,717
Massachusetts	31,112	32,885	+5.4%	680	611	25,687	31,572	600	527	162	175
New Hampshire	19,538	19,779	+1.2%	2,086	2,267	17,353	17,411	69	70	31	30
Rhode Island	6,282	6,247	-0.6%	11	11	6,203	6,182	68	54	0	0
Vermont	7,031	6,895	-2.1%	868	872	6,160	6,009	4	3	0	0
Middle Atlantic	426,232	427,653	-0.3%	34,057	34,844	385,297	386,152	2,195	2,049	4,693	4,608
New Jersey	68,051	64,751	-5.1%	-117	-123	66,874	63,519	562	562	691	793
New York	137,122	136,117	-0.7%	34,083	33,860	100,914	100,185	1,174	1,132	951	939
Pennsylvania	221,058	226,786	+2.5%	91	1,106	217,509	222,449	417	355	3,041	2,876
East North Central	619,897	622,073	-0.3%	286,108	326,582	321,771	283,232	2,007	2,041	10,011	10,219
Illinois	202,144	203,005	+0.4%	10,457	11,572	188,360	188,129	538	644	2,789	2,660
Indiana	115,395	110,403	-4.5%	100,983	96,048	111,160	10,900	214	220	3,039	3,236
Michigan	106,817	105,418	-1.3%	84,075	83,171	20,419	19,873	972	861	1,351	1,512
Ohio	134,476	137,284	+2.0%	43,291	88,764	90,205	47,464	107	186	874	871
Wisconsin	61,093	65,963	+7.4%	47,302	47,027	11,628	16,865	176	130	1,959	1,940
West North Central	338,303	330,302	-2.4%	291,920	286,360	41,763	39,121	618	585	4,002	4,237
Iowa	56,853	56,671	-0.3%	43,022	41,933	11,546	12,403	220	217	2,064	2,118
Kansas	49,728	48,473	-2.6%	38,670	39,809	10,022	8,588	0	0	36	76
Minnesota	56,998	51,297	-11.1%	45,963	41,156	9,437	8,471	215	183	1,384	1,487
Missouri	87,854	91,627	+4.1%	80,711	82,971	2,249	2,186	165	166	51	57
Nebraska	39,431	37,165	-6.1%	6,563	6,170	2,511	1,633	17	18	34	333
North Dakota	36,463	35,022	-4.1%	32,088	31,044	4,260	3,812	0	0	124	185
South Dakota	10,999	10,109	-8.8%	9,345	8,031	1,650	2,078	0	0	0	0
South Atlantic	784,957	769,976	-3.2%	660,841	627,856	104,719	112,274	1,262	1,236	18,135	19,610
Delaware	7,704	7,761	+0.7%	4,49	26	6,766	6,772	7	4	882	959
District of Columbia	68	68	2.7%	0	0	0	0	68	66	0	0
Florida	230,016	222,399	-3.4%	211,971	202,527	12,844	14,301	67	64	5,135	5,507
Georgia	125,837	120,954	-4.0%	109,523	107,083	11,620	9,120	30	28	4,665	4,723
Maryland	37,834	35,851	-5.5%	20	30	37,049	35,055	414	444	350	323
North Carolina	128,144	125,936	-2.1%	119,432	116,317	6,648	6,522	195	171	1,869	2,927
South Carolina	97,158	95,250	-2.0%	93,547	91,796	1,710	1,461	6	9	1,895	1,984
Virginia	77,137	76,897	-0.3%	62,967	63,725	11,488	10,668	476	451	2,206	2,053
West Virginia	81,069	75,863	-6.8%	63,332	46,351	16,594	28,376	0	0	1,133	1,136
East South Central	374,871	372,776	-0.6%	326,545	325,527	39,665	36,332	155	220	8,486	10,696
Alabama	149,340	150,573	+0.8%	112,341	115,027	33,162	31,398	0	0	3,838	4,148
Kentucky	90,896	88,741	-1.3%	90,133	89,098	164	210	0	0	599	433
Mississippi	55,127	52,810	-4.4%	47,084	45,413	6,191	4,580	21	23	1,831	2,794
Tennessee	79,507	79,652	+0.2%	76,987	75,989	167	144	134	198	2,219	3,321
West South Central	673,607	669,387	-0.6%	250,342	252,255	346,869	342,730	932	887	73,664	73,515
Arkansas	61,592	60,322	-2.1%	48,763	46,548	11,051	11,901	8	6	1,780	1,668
Louisiana	104,229	102,010	-2.2%	58,518	56,226	14,154	15,458	190	203	31,367	30,123
Oklahoma	70,156	73,674	+4.8%	53,349	51,214	19,588	19,588	0	NM	842	792
Texas	47,630	45,930	-3.5%	46,741	46,325	30,645	29,633	734	734	39,674	40,731
Mountain	375,333	378,452	+0.8%	300,038	294,549	69,519	75,172	479	462	3,361	3,265
Arizona	112,267	113,326	+0.9%	94,847	92,741	17,254	20,428	166	157	0	0
Colorado	53,847	62,937	+1.7%	43,240	42,509	10,510	10,331	26	34	71	64
Idaho	15,184	15,186	0.0%	9,628	9,600	4,997	4,976	5	0	554	609
Montana	30,258	27,687	-9.3%	12,329	7,362	17,906	20,310	0	0	22	15
Nevada	36,001	36,444	+1.2%	27,756	27,884	7,905	8,207	95	98	241	251
New Mexico	32,306	35,871	+9.9%	26,422	29,833	5,741	5,947	112	89	30	2
Utah	43,783	42,517	-3.0%	40,741	39,527	1,937	1,853	83	84	1,023	1,053
Wyoming	49,696	52,483	+5.3%	45,069	48,089	3,266	3,120	0	0	1,361	1,274
Pacific Contiguous	375,262	374,146	-0.3%	217,897	221,675	137,095	131,756	2,929	2,886	17,341	17,828
California	198,808	200,077	+0.6%	71,037	78,408	109,784	103,107	2,802	2,762	15,184	15,800
Oregon	60,120	59,896	-0.4%	44,565	43,254	14,754	15,948	97	98	703	595
Washington	116,334	114,173	-1.9%	102,294	100,014	12,557	12,701	30	26	1,454	1,433
Pacific Noncontiguous	16,247	16,764	+3.1%	11,027	11,600	4,097	4,007	555	660	568	497
Alaska	6,043	6,497	+7.0%	5,510	5,852	243	234	172	300	118	111
Hawaii	10,204	10,267	+0.6%	5,517	5,748	3,854	3,773	383	360	451	386
U.S. Total	4,093,606	4,065,964	-0.7%	2,382,473	2,388,058	1,554,530	1,515,657	12,520	12,234	144,083	150,015

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NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.8. Utility Scale Facility Net Generation from Coal  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers				
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	
2014	2013		2014	2013	2014	2013	2014	2013	
New England	5,011	6,169	-19.5%	1,311	1,464	3,646	4,650	0	53
Connecticut	826	661	+21.2%	0	0	826	681	0	0
Maine	70	62	+26.1%	0	0	40	35	0	28
Massachusetts	2,795	3,959	-29.4%	0	0	2,772	3,934	0	23
New Hampshire	1,311	1,464	-10.4%	1,311	1,464	0	0	0	0
Rhode Island	0	0	-	0	0	0	0	0	0
Vermont	0	0	-	0	0	0	0	0	0
Middle Atlantic	86,097	95,162	-9.5%	0	15	85,244	94,355	17	18
New Jersey	2,519	2,022	+24.6%	0	0	2,519	2,022	0	0
New York	4,592	4,697	-2.2%	0	15	4,283	4,375	0	310
Pennsylvania	78,986	88,443	-10.7%	0	0	78,442	87,959	17	18
East North Central	365,059	372,100	-1.9%	227,157	271,646	134,684	97,208	184	262
Illinois	87,282	87,927	-0.7%	9,986	10,918	75,505	75,282	40	51
Indiana	97,549	92,672	+5.3%	91,963	87,229	5,505	5,309	62	116
Michigan	52,900	56,291	-6.0%	52,275	55,616	371	334	79	91
Ohio	89,873	94,564	-5.0%	36,335	78,059	53,304	16,282	NM	3
Wisconsin	37,449	40,645	-7.9%	36,597	39,824	0	0	1	851
West North Central	217,856	219,787	-0.9%	214,617	216,345	31	30	225	242
Iowa	33,733	33,302	+1.3%	31,756	31,194	0	0	140	150
Kansas	28,752	29,767	-3.4%	28,752	29,767	0	0	0	0
Minnesota	27,957	23,518	+18.9%	27,248	22,790	0	0	9	0
Missouri	72,409	76,105	-4.9%	72,409	75,853	31	30	76	92
Nebraska	24,101	26,101	-7.4%	24,539	24,434	0	0	34	33
North Dakota	27,394	27,478	-0.3%	27,334	27,377	0	0	0	69
South Dakota	2,699	2,849	-5.6%	2,699	2,849	0	0	0	0
South Atlantic	292,303	268,582	+8.8%	253,587	219,054	36,297	47,260	48	45
Delaware	865	1,545	+44.0%	0	0	865	1,545	0	0
District of Columbia	0	0	-	0	0	0	0	0	0
Florida	52,054	46,343	+12.3%	50,276	44,743	1,516	1,400	0	0
Georgia	45,295	40,233	+12.6%	44,844	39,768	0	0	0	451
Maryland	17,603	15,538	+13.3%	0	0	17,444	15,395	2	41
North Carolina	49,238	47,072	+4.6%	48,057	44,974	852	1,778	23	34
South Carolina	28,914	24,407	+18.5%	28,748	24,248	0	0	0	167
Virginia	20,819	21,161	-1.6%	19,043	19,736	1,297	891	22	7
West Virginia	77,515	72,284	+7.2%	62,618	45,585	14,323	26,252	0	574
East South Central	177,521	171,541	+3.5%	173,827	167,204	2,464	2,925	11	26
Alabama	47,302	47,050	+0.5%	47,170	46,860	0	0	0	131
Kentucky	83,602	83,303	+0.4%	83,602	83,303	0	0	0	0
Mississippi	10,743	8,701	+23.5%	8,279	5,777	2,464	2,925	0	0
Tennessee	35,875	32,486	+10.4%	34,776	31,264	0	0	11	26
West South Central	230,521	232,137	-0.7%	123,496	124,738	106,583	106,932	0	0
Arkansas	33,221	31,889	+4.2%	29,544	27,822	3,619	3,981	0	57
Louisiana	19,221	20,844	-7.8%	8,558	9,843	10,683	11,001	0	0
Oklahoma	29,906	29,991	+0.3%	27,630	27,746	1,890	1,873	0	366
Texas	148,174	149,404	-0.9%	92,564	59,244	90,399	90,071	0	0
Mountain	104,559	203,689	-3.8%	175,630	100,037	17,921	17,193	0	1,063
Arizona	42,665	43,492	-1.9%	42,665	43,492	0	0	0	0
Colorado	32,545	33,703	-3.4%	32,443	33,584	94	112	0	8
Idaho	78	92	-15.2%	0	0	0	0	0	78
Montana	15,579	14,880	+4.7%	289	298	15,282	14,572	0	9
Nevada	6,548	5,255	+24.6%	5,126	3,863	1,422	1,391	0	0
New Mexico	20,352	24,145	+15.7%	20,356	24,145	0	0	0	0
Utah	33,377	34,285	-2.6%	32,510	33,382	419	413	0	0
Wyoming	43,409	46,437	-6.5%	42,241	45,271	704	704	0	464
Pacific Contiguous	10,717	11,323	-5.3%	3,193	3,759	7,175	7,173	0	349
California	805	823	-2.2%	0	0	499	469	0	305
Oregon	3,193	3,759	+15.1%	3,193	3,759	0	0	0	0
Washington	6,720	6,740	-0.3%	0	0	6,676	6,704	0	44
Pacific Noncontiguous	2,069	2,028	+2.0%	257	191	1,657	1,545	111	246
Alaska	558	625	+10.6%	257	191	191	188	111	246
Hawaii	1,511	1,404	+7.7%	0	0	1,466	1,357	0	45
U.S. Total	1,581,710	1,581,115	0.0%	1,173,073	1,188,452	395,701	595	839	12,341
									12,554

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NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.9. Utility Scale Facility Net Generation from Petroleum Liquids  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers						
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	Year	Year	
2014	2013		2014	2013	2014	2013	2014	2013	2014	2013	
New England	2,201	-1.0%	295	258	154	1,769	841	124	65	47	36
Connecticut	513	303	67.9%	0	6	403	206	7	2	6	1
Maine	305	239	27.6%	1	1	261	204	2	2	41	32
Massachusetts	1,005	390	157.4%	131	71	793	287	80	31	1	1
New Hampshire	287	105	175.0%	108	62	163	28	16	14	0	0
Rhode Island	85	51	74.9%	11	11	60	26	NM	NM	0	0
Vermont	5	5	7.2%	4	4	0	0	1	1	0	0
Middle Atlantic	3,245	1,417	129.0%	936	471	2,136	835	80	20	92	91
New Jersey	467	107	336.3%	2	0	462	100	1	1	2	6
New York	2,138	1,007	112.1%	933	470	1,045	444	76	17	83	77
Pennsylvania	641	302	112.2%	1	0	630	291	2	2	8	9
East North Central	750	597	25.5%	468	479	253	102	5	3	24	14
Illinois	87	72	19.8%	29	25	58	47	0	0	0	0
Indiana	164	139	17.7%	149	131	0	0	1	1	14	7
Michigan	140	130	8.0%	136	126	NM	0	2	1	3	3
Ohio	307	227	35.3%	111	172	192	52	0	0	5	3
Wisconsin	52	29	79.0%	44	25	3	2	2	0	3	1
West North Central	349	295	18.0%	329	287	13	41	5	2	2	2
Iowa	59	69	-14.2%	58	68	1	1	0	0	0	0
Kansas	45	51	-12.2%	45	51	0	0	0	0	0	0
Minnesota	63	27	130.2%	45	21	12	3	5	2	1	1
Missouri	107	65	62.9%	107	65	0	0	0	0	0	0
Nebraska	43	43	0.0%	43	43	0	0	0	0	0	0
North Dakota	20	33	-21.2%	20	33	0	0	0	0	0	1
South Dakota	7	7	-4.2%	7	7	0	0	0	0	0	0
South Atlantic	3,427	1,562	119.4%	2,326	1,182	976	247	27	21	97	112
Delaware	183	23	699.9%	9	0	175	23	0	0	0	0
District of Columbia	0	0	-	0	0	0	0	0	0	0	0
Florida	527	498	6.0%	500	474	5	41	0	0	22	20
Georgia	180	68	165.8%	99	20	39	31	3	2	39	45
Maryland	463	190	144.5%	12	21	428	148	23	19	1	1
North Carolina	460	218	111.3%	416	202	28	5	0	0	15	10
South Carolina	246	103	137.6%	219	91	17	31	0	0	10	9
Virginia	1,205	313	284.6%	935	226	258	61	1	1	10	26
West Virginia	163	150	8.6%	136	147	27	3	0	0	0	0
East South Central	418	325	28.5%	386	304	12	1	0	0	19	20
Alabama	98	74	32.3%	71	58	11	1	0	0	16	16
Kentucky	120	107	13.0%	120	107	0	0	0	0	0	0
Mississippi	14	14	0.8%	13	11	0	0	0	0	1	3
Tennessee	185	130	41.9%	182	129	1	0	0	0	2	1
West South Central	192	198	-3.4%	91	72	89	107	1	0	11	19
Arkansas	29	42	-29.8%	19	26	7	15	0	0	3	1
Louisiana	48	54	-11.8%	13	11	29	27	0	0	6	16
Oklahoma	12	10	22.4%	12	1	0	0	0	NM	0	1
Texas	103	92	10.1%	47	26	53	65	11	0	1	2
Mountain	246	210	14.5%	213	190	20	18	0	0	8	0
Arizona	57	43	32.3%	57	43	0	0	0	0	0	0
Colorado	10	10	-2.6%	10	10	0	0	0	0	0	0
Idaho	0	0	-97.4%	0	0	0	0	0	0	0	0
Montana	26	15	77.1%	9	2	17	12	0	0	0	0
Nevada	15	19	-20.4%	13	15	2	4	0	0	0	0
New Mexico	63	58	9.2%	63	56	0	2	0	0	0	0
Utah	24	26	-6.5%	23	25	1	1	0	0	1	0
Wyoming	45	39	14.8%	38	39	0	0	0	0	7	0
Pacific Contiguous	81	79	3.0%	47	41	20	16	1	2	13	20
California	47	48	-1.2%	33	32	10	6	1	1	4	8
Oregon	10	6	60.7%	10	6	0	0	0	0	0	0
Washington	24	24	-3.4%	5	3	10	9	0	1	9	11
Pacific Noncontiguous	7,372	8,041	-8.3%	5,635	6,266	1,500	1,590	5	6	231	180
Alaska	446	819	-45.6%	398	770	0	0	3	4	44	44
Hawaii	6,926	7,223	-4.1%	5,236	5,495	1,500	1,590	2	2	187	136
U.S. Total	18,276	13,820	32.2%	10,696	9,446	6,789	3,761	247	118	544	495

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.10. Utility Scale Facility Net Generation from Petroleum Coke  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers						
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	Year	Year	
2014	2013		2014	2013	2014	2013	2014	2013	2014	2013	
New England	0	0	—	0	0	0	0	0	0	0	
Connecticut	0	0	—	0	0	0	0	0	0	0	
Maine	0	0	—	0	0	0	0	0	0	0	
Massachusetts	0	0	—	0	0	0	0	0	0	0	
New Hampshire	0	0	—	0	0	0	0	0	0	0	
Rhode Island	0	0	—	0	0	0	0	0	0	0	
Vermont	0	0	—	0	0	0	0	0	0	0	
Middle Atlantic	192	212	-9.8%	0	0	0	0	0	192	212	
New Jersey	NM	55	NM	0	0	0	0	0	NM	55	
New York	0	0	—	0	0	0	0	0	0	0	
Pennsylvania	162	158	2.5%	0	0	0	0	0	162	158	
East North Central	3,317	3,269	1.5%	1,985	1,692	989	1,210	0	0	343	366
Illinois	0	0	—	0	0	0	0	0	0	0	
Indiana	1,199	1,433	-16.4%	1,199	1,433	0	0	0	0	0	
Michigan	911	403	126.3%	698	198	50	70	0	0	163	134
Ohio	939	1,159	-18.9%	0	0	939	1,140	0	0	0	NM
Wisconsin	267	274	-2.5%	88	61	0	0	0	0	179	213
West North Central	85	72	16.9%	0	0	0	0	9	5	76	67
Iowa	85	72	16.9%	0	0	0	0	9	5	76	67
Kansas	0	0	—	0	0	0	0	0	0	0	
Minnesota	0	0	—	0	0	0	0	0	0	0	
Missouri	0	0	—	0	0	0	0	0	0	0	
Nebraska	0	0	—	0	0	0	0	0	0	0	
North Dakota	0	0	—	0	0	0	0	0	0	0	
South Dakota	0	0	—	0	0	0	0	0	0	0	
South Atlantic	1,549	2,270	-31.8%	1,361	2,063	0	0	0	0	198	207
Delaware	0	0	—	0	0	0	0	0	0	0	
District of Columbia	0	0	—	0	0	0	0	0	0	0	
Florida	1,351	2,063	-34.5%	1,351	2,063	0	0	0	0	0	
Georgia	198	207	-4.4%	0	0	0	0	0	0	198	207
Maryland	0	0	—	0	0	0	0	0	0	0	
North Carolina	0	0	—	0	0	0	0	0	0	0	
South Carolina	0	0	—	0	0	0	0	0	0	0	
Virginia	0	0	—	0	0	0	0	0	0	0	
West Virginia	0	0	—	0	0	0	0	0	0	0	
East South Central	1,033	1,302	-20.7%	1,033	1,302	0	0	0	0	0	
Alabama	0	0	—	0	0	0	0	0	0	0	
Kentucky	1,033	1,302	-20.7%	1,033	1,302	0	0	0	0	0	
Mississippi	0	0	—	0	0	0	0	0	0	0	
Tennessee	0	0	—	0	0	0	0	0	0	0	
West South Central	5,359	5,749	-6.8%	4,779	4,465	0	101	0	0	580	1,183
Arkansas	0	0	—	0	0	0	0	0	0	0	
Louisiana	5,183	4,891	6.0%	4,779	4,465	0	0	0	0	404	426
Oklahoma	0	0	—	0	0	0	0	0	0	0	
Texas	175	859	-79.5%	0	0	0	101	0	0	176	757
Mountain	403	448	-10.1%	0	0	403	448	0	0	0	0
Arizona	0	0	—	0	0	0	0	0	0	0	
Colorado	0	0	—	0	0	0	0	0	0	0	
Idaho	0	0	—	0	0	0	0	0	0	0	
Montana	403	448	-10.1%	0	0	403	448	0	0	0	0
Nevada	0	0	—	0	0	0	0	0	0	0	
New Mexico	0	0	—	0	0	0	0	0	0	0	
Utah	0	0	—	0	0	0	0	0	0	0	
Wyoming	0	0	—	0	0	0	0	0	0	0	
Pacific Contiguous	19	21	-9.5%	0	0	19	21	0	0	0	0
California	19	21	-9.5%	0	0	19	21	0	0	0	0
Oregon	0	0	—	0	0	0	0	0	0	0	
Washington	0	0	—	0	0	0	0	0	0	0	
Pacific Noncontiguous	0	0	—	0	0	0	0	0	0	0	
Alaska	0	0	—	0	0	0	0	0	0	0	
Hawaii	0	0	—	0	0	0	0	0	0	0	
U.S. Total	11,955	13,344	-10.4%	9,147	9,522	1,410	1,780	9	5	1,389	2,036

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.11. Utility Scale Facility Net Generation from Natural Gas  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	Year	Year
New England	47,890	-52,153	343	240	44,999	48,333	862	1,584	2,726	
Connecticut	14,684	16,780	-5.0%	11	0	13,811	14,863	394	206	468
Maine	4,344	4,872	-10.9%	0	0	2,906	26	16	666	1,941
Massachusetts	18,498	21,257	-13.0%	289	204	17,594	20,434	485	474	119
New Hampshire	4,398	4,100	7.0%	30	25	4,312	4,030	15	16	31
Rhode Island	5,963	6,139	-2.9%	0	0	5,920	6,099	43	40	0
Vermont	2	3	-18.6%	2	3	0	0	0	0	0
Middle Atlantic	138,811	131,369	5.7%	11,998	13,352	123,946	115,301	1,010	996	1,857
New Jersey	31,410	27,077	16.0%	76	39	30,757	26,449	183	174	394
New York	54,389	54,364	0.0%	11,914	13,310	41,560	40,093	688	710	228
Pennsylvania	53,021	49,938	6.2%	9	3	51,639	48,759	139	113	1,235
East North Central	59,251	57,998	2.2%	24,274	23,739	32,392	31,623	1,346	1,429	1,238
Illinois	5,465	6,828	-20.0%	383	579	4,167	5,297	490	591	425
Indiana	9,572	9,032	6.0%	6,951	6,453	2,055	2,080	111	63	455
Michigan	12,523	12,341	1.5%	3,325	2,658	8,500	8,946	518	489	180
Ohio	23,636	21,694	9.0%	6,590	9,956	16,901	11,505	95	180	51
Wisconsin	8,054	8,102	-0.6%	7,025	4,095	769	3,795	132	107	127
West North Central	11,844	15,104	-21.6%	9,763	12,637	1,697	1,992	206	207	189
Iowa	1,373	1,430	-4.0%	1,277	1,327	0	0	38	31	58
Kansas	1,453	1,980	-26.6%	1,412	1,905	0	0	0	41	76
Minnesota	3,870	6,301	-38.6%	3,140	5,067	554	1,025	110	109	65
Missouri	4,044	4,400	-8.1%	2,892	3,361	1,143	967	91	66	3
Nebraska	4,061	4,401	-7.4%	463	463	0	0	0	0	0
North Dakota	234	54	33.4%	213	37	0	0	0	22	17
South Dakota	465	502	-7.4%	465	502	0	0	0	0	0
South Atlantic	261,545	259,918	0.2%	208,804	208,648	39,508	38,477	473	496	2,769
Delaware	6,297	5,931	6.2%	34	24	5,624	5,104	0	0	638
District of Columbia	68	66	2.7%	0	0	0	0	68	66	0
Florida	140,034	138,966	0.8%	131,477	128,205	7,258	9,282	32	30	1,267
Georgia	40,961	40,330	1.6%	29,764	31,143	10,830	8,593	0	0	377
Maryland	2,506	2,888	-13.2%	0	0	2,089	2,445	364	388	53
North Carolina	28,738	27,983	2.7%	25,224	24,949	3,419	2,936	0	5	94
South Carolina	11,407	11,834	-3.6%	10,087	10,505	1,266	1,266	3	5	30
Virginia	20,882	22,651	-7.8%	12,047	13,781	8,530	8,622	5	3	299
West Virginia	653	270	142.3%	181	41	472	229	0	0	0
East South Central	89,575	84,798	5.6%	50,980	48,944	36,779	33,042	141	193	1,674
Alabama	48,270	46,586	3.6%	14,388	14,394	32,907	31,199	0	0	975
Kentucky	2,500	1,418	76.2%	2,104	1,013	151	201	0	0	244
Mississippi	32,606	31,777	2.6%	28,539	28,761	3,714	1,643	21	23	331
Tennessee	6,200	5,017	23.6%	5,949	4,775	6	0	120	170	124
West South Central	297,097	298,504	-0.5%	83,866	86,215	149,151	148,589	868	846	63,212
Arkansas	9,614	12,139	-20.8%	2,025	4,116	7,307	7,759	3	1	279
Louisiana	56,121	52,510	6.9%	27,878	24,227	2,266	3,313	190	203	25,786
Oklahoma	26,841	30,656	-11.4%	17,485	21,863	6,022	8,166	0	NM	135
Texas	204,424	203,989	0.2%	36,741	36,741	139,352	139,352	676	696	37,074
Mountain	83,134	65,269	-24.5%	57,688	53,862	23,866	29,840	398	362	1,256
Arizona	27,242	29,686	8.2%	13,261	11,533	13,869	18,014	132	138	0
Colorado	11,954	10,709	11.6%	9,272	7,897	2,666	2,788	7	7	18
Idaho	2,553	3,392	-24.7%	1,246	1,610	1,276	1,739	0	0	30
Montana	515	614	-16.1%	471	577	44	38	0	0	0
Nevada	22,961	24,767	-7.3%	20,263	21,356	2,406	3,096	64	67	238
New Mexico	8,976	8,975	0.0%	5,802	5,483	3,035	3,405	109	88	30
Utah	8,376	6,606	26.8%	7,307	5,373	526	744	83	84	460
Wyoming	557	512	8.7%	23	33	55	18	0	0	479
Pacific Contiguous	144,184	145,310	-0.8%	50,551	50,434	79,438	80,325	1,822	1,750	12,372
California	120,426	119,523	0.8%	36,002	35,398	70,438	69,790	1,733	1,655	12,253
Oregon	12,699	14,363	-11.6%	4,917	5,169	7,636	9,067	77	76	50
Washington	11,059	11,424	-3.2%	9,632	9,868	1,364	1,468	12	19	50
Pacific Noncontiguous	3,288	3,421	-3.9%	3,219	3,356	0	0	2	5	67
Alaska	3,288	3,421	-3.9%	3,219	3,356	0	0	2	5	67
Hawaii	0	0	-1	0	0	0	0	0	0	0
U.S. Total	1,126,609	1,124,836	0.2%	501,414	501,427	531,758	527,522	7,227	7,154	86,209
										88,733

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.12. Utility Scale Facility Net Generation from Other Gases  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers						
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	Year	Year	
2014	2013		2014	2013	2014	2013	2014	2013	2014	2013	
New England	0	0	-	0	0	0	0	0	0	0	
Connecticut	0	0	-	0	0	0	0	0	0	0	
Maine	0	0	-	0	0	0	0	0	0	0	
Massachusetts	0	0	-	0	0	0	0	0	0	0	
New Hampshire	0	0	-	0	0	0	0	0	0	0	
Rhode Island	0	0	-	0	0	0	0	0	0	0	
Vermont	0	0	-	0	0	0	0	0	0	0	
Middle Atlantic	652	873	-25.3%	0	0	0	0	0	602	873	
New Jersey	162	223	-27.6%	0	0	0	0	0	162	223	
New York	0	0	-	0	0	0	0	0	0	0	
Pennsylvania	491	650	-24.5%	0	0	0	0	0	491	650	
East North Central	4,549	4,675	-2.7%	112	73	1,761	1,651	0	0	2,676	2,951
Illinois	338	356	-5.0%	0	0	8	17	0	0	330	339
Indiana	2,161	2,410	-10.3%	20	4	0	0	0	2,142	2,405	
Michigan	1,120	957	17.1%	92	68	1,028	888	0	0	0	0
Ohio	929	953	-2.5%	0	0	725	746	0	0	204	207
Wisconsin	0	0	-	0	0	0	0	0	0	0	0
West North Central	40	42	-3.5%	0	0	0	0	0	40	42	
Iowa	0	0	-	0	0	0	0	0	0	0	0
Kansas	0	0	-	0	0	0	0	0	0	0	0
Minnesota	0	0	-	0	0	0	0	0	0	0	0
Missouri	0	0	-	0	0	0	0	0	0	0	0
Nebraska	0	0	-	0	0	0	0	0	0	0	0
North Dakota	40	42	-3.5%	0	0	0	0	0	40	42	
South Dakota	0	0	-	0	0	0	0	0	0	0	0
South Atlantic	264	190	38.9%	0	0	0	0	0	264	190	
Delaware	235	155	45.7%	0	0	0	0	0	236	155	
District of Columbia	0	0	-	0	0	0	0	0	0	0	0
Florida	7	5	42.8%	0	0	0	0	0	7	5	
Georgia	0	0	-	0	0	0	0	0	0	0	0
Maryland	0	0	-	0	0	0	0	0	0	0	0
North Carolina	0	0	-	0	0	0	0	0	0	0	0
South Carolina	0	0	-	0	0	0	0	0	0	0	0
Virginia	0	0	-	0	0	0	0	0	0	0	0
West Virginia	31	30	3.1%	0	0	0	0	0	31	30	
East South Central	193	281	-31.0%	0	0	0	0	0	193	281	
Alabama	180	268	-32.6%	0	0	0	0	0	180	268	
Kentucky	0	0	-	0	0	0	0	0	0	0	0
Mississippi	0	0	-	0	0	0	0	0	0	0	0
Tennessee	13	13	2.2%	0	0	0	0	0	13	13	
West South Central	4,249	4,646	-8.5%	0	725	1,144	1,457	0	0	3,106	2,464
Arkansas	0	0	-	0	0	0	0	0	0	0	0
Louisiana	1,943	2,246	-13.5%	0	725	0	0	0	0	1,943	1,521
Oklahoma	0	0	-	0	0	0	0	0	0	0	0
Texas	2,307	2,400	-3.9%	0	0	1,144	1,457	0	0	1,163	943
Mountain	342	289	18.2%	0	0	51	61	0	0	351	283
Arizona	0	0	-	0	0	0	0	0	0	0	0
Colorado	0	0	-	0	0	0	0	0	0	0	0
Idaho	0	0	-	0	0	0	0	0	0	0	0
Montana	0	0	-38.9%	0	0	0	0	0	0	0	0
Nevada	5	6	-18.3%	0	0	5	6	0	0	0	0
New Mexico	0	0	-	0	0	0	0	0	0	0	0
Utah	0	2	-100.0%	0	0	0	0	0	0	0	2
Wyoming	337	281	19.8%	0	0	0	0	0	337	281	
Pacific Contiguous	1,670	1,816	-8.0%	0	0	337	410	0	0	1,333	1,406
California	1,333	1,406	-5.2%	0	0	0	0	0	0	1,333	1,406
Oregon	0	0	-	0	0	0	0	0	0	0	0
Washington	337	410	-17.8%	0	0	337	410	0	0	0	0
Pacific Noncontiguous	62	41	50.5%	0	0	0	0	0	0	62	41
Alaska	0	0	-	0	0	0	0	0	0	0	0
Hawaii	62	41	50.5%	0	0	0	0	0	0	62	41
U.S. Total	12,022	12,853	-6.5%	112	798	3,246	3,524	0	0	8,664	8,531

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.13. Utility Scale Facility Net Generation from Nuclear Energy  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers			
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	Year 2014	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	36,839	-0.9%	0	0	36,839	37,183	0	0
Connecticut	15,841	17,080	-7.3%	0	15,841	17,080	0	0
Maine	0	0	0	0	0	0	0	0
Massachusetts	5,769	4,331	33.2%	0	5,769	4,331	0	0
New Hampshire	10,168	10,927	-6.9%	0	10,168	10,927	0	0
Rhode Island	0	0	-	0	0	0	0	0
Vermont	5,061	4,846	4.4%	0	5,061	4,846	0	0
Middle Atlantic	153,260	156,849	-2.3%	0	153,260	156,849	0	0
New Jersey	31,507	33,380	-5.6%	0	31,507	33,380	0	0
New York	43,039	44,756	-3.8%	0	43,039	44,756	0	0
Pennsylvania	78,715	78,714	0.0%	0	78,715	78,714	0	0
East North Central	154,835	153,849	0.6%	25,423	22,879	129,412	130,970	0
Illinois	97,858	97,131	0.7%	0	97,858	97,131	0	0
Indiana	0	0	-	0	0	0	0	0
Michigan	31,246	28,921	8.0%	25,423	22,879	5,823	6,042	0
Ohio	16,284	16,121	1.0%	0	16,284	16,121	0	0
Wisconsin	9,447	11,675	-19.1%	0	9,447	11,675	0	0
West North Central	44,796	38,429	16.6%	40,644	33,108	4,152	5,321	0
Iowa	4,152	5,321	-22.0%	0	4,152	5,321	0	0
Kansas	8,558	7,168	19.4%	8,558	7,168	0	0	0
Minnesota	12,707	10,708	18.7%	12,707	10,708	0	0	0
Missouri	9,275	8,367	10.9%	9,275	8,367	0	0	0
Nebraska	10,102	6,865	47.1%	10,102	6,865	0	0	0
North Dakota	0	0	-	0	0	0	0	0
South Dakota	0	0	-	0	0	0	0	0
South Atlantic	198,388	197,513	0.4%	184,045	183,249	14,343	14,264	0
Delaware	0	0	-	0	0	0	0	0
District of Columbia	0	0	-	0	0	0	0	0
Florida	27,868	26,526	5.1%	27,868	26,526	0	0	0
Georgia	32,570	32,903	-1.0%	32,570	32,903	0	0	0
Maryland	14,343	14,264	0.6%	0	14,343	14,264	0	0
North Carolina	40,967	40,242	1.8%	40,967	40,242	0	0	0
South Carolina	52,419	54,252	-3.4%	52,419	54,252	0	0	0
Virginia	30,221	29,326	3.1%	30,221	29,326	0	0	0
West Virginia	0	0	-	0	0	0	0	0
East South Central	79,166	80,174	-1.3%	79,166	80,174	0	0	0
Alabama	41,244	40,816	1.0%	41,244	40,816	0	0	0
Kentucky	0	0	-	0	0	0	0	0
Mississippi	10,252	10,865	-5.6%	10,252	10,865	0	0	0
Tennessee	27,670	28,494	-2.9%	27,670	28,494	0	0	0
West South Central	71,077	67,215	5.7%	31,790	28,900	39,287	38,315	0
Arkansas	14,478	11,945	21.2%	14,478	11,945	0	0	0
Louisiana	17,311	16,954	2.1%	17,311	16,954	0	0	0
Oklahoma	0	0	-	0	0	0	0	0
Texas	39,281	38,815	2.5%	0	39,281	38,815	0	0
Mountain	32,321	31,451	2.8%	32,321	31,451	0	0	0
Arizona	32,321	31,451	2.8%	32,321	31,451	0	0	0
Colorado	0	0	-	0	0	0	0	0
Idaho	0	0	-	0	0	0	0	0
Montana	0	0	-	0	0	0	0	0
Nevada	0	0	-	0	0	0	0	0
New Mexico	0	0	-	0	0	0	0	0
Utah	0	0	-	0	0	0	0	0
Wyoming	0	0	-	0	0	0	0	0
Pacific Contiguous	26,483	26,373	0.4%	26,483	26,373	0	0	0
California	16,986	17,912	-5.2%	16,986	17,912	0	0	0
Oregon	0	0	-	0	0	0	0	0
Washington	9,497	8,461	12.2%	9,497	8,461	0	0	0
Pacific Noncontiguous	0	0	-	0	0	0	0	0
Alaska	0	0	-	0	0	0	0	0
Hawaii	0	0	-	0	0	0	0	0
U.S. Total	797,166	789,016	1.0%	419,871	406,114	377,295	382,902	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.14. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers			
	Generation at Utility Scale Facilities		Percentage Change		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Year 2014	Year 2013		Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	7,500	7,611	-1.4%	6,000	6,085	5,219	6,140	NM <sup>1</sup>
Connecticut	434	462	-6.0%	34	36	460	366	0
Maine	3,622	3,560	1.8%	0	0	3,231	3,124	0
Massachusetts	902	992	-9.0%	176	270	715	712	NM <sup>1</sup>
New Hampshire	1,381	1,427	-3.2%	301	358	1,060	1,069	0
Rhode Island	4	4	-10.0%	0	0	4	4	0
Vermont	1,175	1,286	-8.6%	386	421	789	865	0
Middle Atlantic	28,745	27,516	4.5%	21,509	21,429	7,165	6,020	3
New Jersey	17	18	-5.4%	0	0	17	18	0
New York	26,087	24,973	4.5%	21,428	20,327	4,588	4,579	3
Pennsylvania	2,641	2,525	4.6%	81	1,102	2,560	1,423	0
East North Central	5,053	4,454	13.4%	4,326	4,009	538	260	3
Illinois	132	120	10.0%	46	46	83	73	3
Indiana	371	387	-4.1%	371	387	0	0	0
Michigan	1,600	1,419	12.8%	1,468	1,293	103	97	0
Ohio	476	549	-13.0%	227	549	251	0	0
Wisconsin	2,472	1,979	24.9%	2,214	1,734	100	90	0
West North Central	11,328	9,450	19.9%	11,105	9,170	203	190	0
Iowa	879	749	17.3%	872	743	6	6	0
Kansas	16	15	11.7%	0	0	16	15	0
Minnesota	548	511	7.3%	348	251	181	170	0
Missouri	697	1,136	-38.6%	697	1,136	0	0	0
North Dakota	1,111	1,124	-1.1%	1,116	1,124	0	0	0
South Dakota	2,531	1,652	36.7%	2,531	1,652	0	0	0
South Atlantic	14,414	18,749	-23.1%	11,700	14,678	2,138	2,493	17
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	-1	0	0	0	0	0
Florida	211	254	-16.8%	211	254	0	0	0
Georgia	3,064	3,714	-17.5%	3,036	3,677	10	14	0
Maryland	1,616	1,727	-6.5%	0	0	1,616	1,727	0
North Carolina	4,758	6,901	-31.1%	4,684	5,943	58	62	14
South Carolina	2,569	3,160	-18.7%	2,492	3,056	75	100	3
Virginia	955	1,254	-23.8%	882	1,171	63	78	0
West Virginia	1,242	1,739	-28.6%	398	578	317	502	0
East South Central	21,511	28,618	-24.8%	21,503	27,534	8	9	0
Alabama	9,467	12,899	-26.6%	9,467	12,899	0	0	0
Kentucky	3,144	3,275	-4.0%	3,136	3,266	8	9	0
Mississippi	0	0	-1	0	0	0	0	0
Tennessee	8,901	12,443	-28.5%	8,901	11,369	0	0	0
West South Central	5,544	6,357	-12.8%	4,401	5,235	1,144	1,122	0
Arkansas	2,640	2,655	-0.6%	2,620	2,609	20	46	0
Louisiana	1,050	1,045	4.4%	0	0	1,090	1,045	0
Texas	1,428	2,178	-34.4%	1,428	2,178	0	0	0
Mountain	386	460	-19.5%	386	446	33	31	0
Arizona	32,322	29,228	10.2%	31,158	25,051	1,193	4,171	6
Colorado	6,116	5,915	3.4%	6,116	5,915	0	0	0
Idaho	1,770	1,213	45.9%	1,568	1,216	196	80	6
Montana	9,002	8,472	6.2%	8,209	7,846	794	627	0
Nevada	11,483	9,638	19.1%	11,328	6,247	155	3,391	0
New Mexico	2,393	2,682	-10.9%	2,352	2,628	37	54	0
Utah	98	92	7.1%	98	92	0	0	0
Wyoming	633	505	25.3%	626	495	7	10	0
Pacific Contiguous	131,256	135,007	-2.8%	130,022	133,394	1,230	1,608	4
California	16,531	23,755	-30.4%	15,830	22,657	697	1,093	4
Oregon	35,262	33,098	6.5%	35,018	32,854	244	244	0
Washington	79,463	78,155	1.7%	79,175	77,883	289	272	0
Pacific Noncontiguous	1,633	1,514	7.9%	1,562	1,454	18	15	0
Alaska	1,539	1,435	7.2%	1,539	1,435	0	0	0
Hawaii	94	78	20.2%	24	19	18	15	0
U.S. Total	259,367	268,565	-3.4%	238,185	243,040	19,861	22,018	38
							44	1,282
								3,463

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Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.15. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers			
	Generation at Utility Scale Facilities		Percentage Change		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Year 2014	Year 2013		Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	9,957	9,421	563	868	7,423	6,202	153	175
Connecticut	769	652	17.9%	0	748	626	21	26
Maine	4,402	4,892	-8.2%	0	2,724	2,642	93	91
Massachusetts	1,730	1,448	19.4%	73	66	1,623	1,366	31
New Hampshire	1,952	1,695	15.2%	335	359	1,579	1,297	38
Rhode Island	226	53	329.4%	0	0	219	53	8
Vermont	788	745	5.8%	475	444	310	298	3
Middle Atlantic	14,063	13,089	7.4%	310	215	12,222	11,522	648
New Jersey	1,538	1,447	6.1%	41	41	1,217	1,164	276
New York	6,447	5,888	9.5%	269	175	5,704	5,254	212
Pennsylvania	6,080	5,764	5.7%	0	0	5,301	5,104	160
East North Central	26,651	24,889	7.1%	2,977	2,795	21,602	20,072	270
Illinois	10,699	10,285	4.0%	13	4	10,682	10,282	4
Indiana	3,989	3,888	2.6%	302	315	3,599	3,511	21
Michigan	6,674	5,514	21.0%	1,327	1,190	4,393	3,357	195
Ohio	2,026	2,009	0.8%	28	28	1,619	1,619	10
Wisconsin	3,262	3,192	2.2%	1,307	1,259	1,309	1,303	41
West North Central	51,532	46,412	11.0%	15,223	14,287	35,533	31,481	143
Iowa	16,573	15,727	5.4%	9,058	8,600	7,387	7,075	33
Kansas	10,904	9,491	14.9%	902	917	10,006	8,574	0
Minnesota	11,457	9,871	16.1%	2,392	2,143	8,957	7,170	61
Missouri	1,255	1,241	1.2%	47	41	1,173	1,186	32
North Dakota	2,501	1,849	40.6%	24	268	2,511	1,583	18
South Dakota	6,206	5,524	12.3%	1,953	1,707	4,260	3,812	0
South Atlantic	21,503	19,022	13.0%	1,911	1,303	9,257	7,348	484
Delaware	131	107	23.0%	6	2	101	71	4
District of Columbia	0	0	-	0	0	0	0	0
Florida	5,073	4,659	8.9%	288	262	2,784	2,221	34
Georgia	4,283	3,839	11.6%	1	0	740	512	27
Maryland	989	941	5.1%	9	8	817	773	25
North Carolina	3,276	2,955	10.9%	6	7	1,977	1,512	157
South Carolina	2,442	2,226	9.7%	468	439	328	86	0
Virginia	3,852	2,906	32.5%	1,133	674	1,054	753	234
West Virginia	1,456	1,391	4.7%	0	0	1,456	1,391	0
East South Central	5,876	5,761	2.0%	90	99	422	355	3
Alabama	2,779	2,876	-3.4%	1	0	244	199	0
Kentucky	448	327	37.1%	88	98	5	0	0
Mississippi	1,508	1,448	4.1%	1	0	13	12	0
Tennessee	1,141	1,110	2.8%	0	0	160	144	3
West South Central	58,681	53,653	9.4%	1,960	1,951	51,259	46,107	64
Arkansas	1,530	1,601	-4.4%	0	0	98	100	5
Louisiana	2,780	2,787	-0.3%	0	0	85	73	0
Oklahoma	12,275	11,506	6.7%	1,646	1,630	10,367	9,550	0
Texas	42,096	37,760	11.5%	314	321	40,707	36,362	59
Mountain	29,524	26,536	10.3%	3,284	3,238	25,844	23,146	74
Arizona	3,845	2,733	40.5%	421	302	3,996	2,411	24
Colorado	7,747	7,536	2.8%	171	172	7,560	7,342	13
Idaho	3,477	3,152	10.3%	173	144	2,028	2,610	5
Montana	1,987	1,760	12.9%	233	237	1,741	1,517	0
Nevada	4,067	3,690	10.2%	0	0	4,033	3,656	31
New Mexico	2,813	2,600	8.2%	103	57	2,707	2,540	3
Utah	1,256	932	34.8%	275	251	981	681	0
Wyoming	4,406	4,433	-0.6%	1,908	2,045	2,498	2,389	0
Pacific Contiguous	59,938	53,034	13.0%	7,711	7,472	48,555	41,888	1,101
California	41,917	35,578	17.8%	2,292	2,214	37,907	31,514	1,064
Oregon	8,914	8,635	3.2%	1,428	1,467	6,832	6,603	20
Washington	9,108	8,822	3.2%	3,990	3,792	3,816	3,771	17
Pacific Noncontiguous	1,420	1,324	7.2%	147	127	914	844	250
Alaska	214	197	8.7%	100	99	52	46	56
Hawaii	1,206	1,127	7.0%	47	29	861	798	194
U.S. Total	279,213	253,508	10.1%	34,496	32,417	212,809	189,045	3,232
							2,956	28,675
								29,091

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.16. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector			
			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities	Percentage Change	Year 2014	Year 2013	Generation at Utility Scale Facilities	Year 2014	Year 2013	Generation at Utility Scale Facilities	Year 2014	Year 2013
New England	-451	-381	22.3%	0	0	-451	-368	0	0	0
Connecticut	0	-1	-745.3%	0	0	7	1	0	0	0
Maine	0	0	0	0	0	0	0	0	0	0
Massachusetts	-455	-368	24.5%	0	0	-455	-368	0	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0	0	0
Middle Atlantic	-1,307	-1,184	10.4%	-728	-645	-579	-539	0	0	0
New Jersey	-237	-202	17.2%	-237	-202	0	0	0	0	0
New York	-491	-443	10.9%	-491	-443	0	0	0	0	0
Pennsylvania	-579	-539	7.4%	0	0	-579	-539	0	0	0
East North Central	-701	-871	-19.5%	-701	-871	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	0	0	0	0	0
Michigan	-701	-871	-19.5%	-701	-871	0	0	0	0	0
Ohio	0	0	0	0	0	0	0	0	0	0
Wisconsin	0	0	0	0	0	0	0	0	0	0
West North Central	19	296	-93.6%	19	296	0	0	0	0	0
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	0	0	0	0	0	0	0	0	0	0
Minnesota	0	0	0	0	0	0	0	0	0	0
Missouri	19	296	-93.6%	19	296	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	0	0	0
South Atlantic	-2,883	-2,411	19.5%	-2,882	-2,411	0	0	0	0	0
Delaware	0	0	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0	0
Georgia	-781	-427	82.7%	-781	-427	0	0	0	0	0
Maryland	0	0	0	0	0	0	0	0	0	0
North Carolina	78	0	-78	0	0	0	0	0	0	0
South Carolina	-884	-795	11.3%	-884	-795	0	0	0	0	0
Virginia	-1,295	-1,189	8.9%	-1,295	-1,189	0	0	0	0	0
West Virginia	0	0	0	0	0	0	0	0	0	0
East South Central	-491	-42	NM	-491	-42	0	0	0	0	0
Alabama	0	0	0	0	0	0	0	0	0	0
Kentucky	0	0	0	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0	0	0	0
Tennessee	-491	-42	NM	-491	-42	0	0	0	0	0
West South Central	-39	-48	-18.7%	-39	-48	0	0	0	0	0
Arkansas	67	31	117.6%	67	31	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0	0	0	0
Oklahoma	-106	-78	34.8%	-106	-78	0	0	0	0	0
Texas	0	0	0	0	0	0	0	0	0	0
Mountain	-211	-256	-17.5%	-211	-256	0	0	0	0	0
Arizona	14	24	-42.8%	14	24	0	0	0	0	0
Colorado	-225	-280	-19.7%	-225	-280	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	0	0	0
Montana	0	0	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	0	0	0
Pacific Contiguous	-109	203	-153.8%	-109	203	0	0	0	0	0
California	-105	196	-153.4%	-105	196	0	0	0	0	0
Oregon	0	0	0	0	0	0	0	0	0	0
Washington	-5	7	-166.1%	-5	7	0	0	0	0	0
Pacific Noncontiguous	0	0	0	0	0	0	0	0	0	0
Alaska	0	0	0	0	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0	0	0	0
U.S. Total	-6,174	-4,681	31.9%	-5,144	-3,773	-1,030	-908	0	0	0

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.17. Utility Scale Facility Net Generation from Other Energy Sources  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities	Percentage Change	Electric Utilities		Independent Power Producers			
			Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	1,931	2,049	1,820	1,761	1,820	105	110	132
Connecticut	606	711	565	0	566	688	18	23
Maine	406	401	16,0%	0	0	166	105	87
Massachusetts	878	876	0,3%	0	0	878	876	0
New Hampshire	50	61	-18,6%	0	0	50	61	0
Rhode Island	0	0	--	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0
Middle Atlantic	2,473	2,349	5,3%	31	7	1,902	1,809	438
New Jersey	640	625	2,4%	0	0	395	386	143
New York	933	884	5,6%	31	7	706	686	196
Pennsylvania	900	841	7,1%	0	0	801	737	99
East North Central	1,134	1,113	1,9%	88	140	141	137	198
Illinois	282	285	-1,1%	0	0	0	0	0
Indiana	391	442	-11,7%	29	96	0	0	19
Michigan	404	312	29,3%	32	14	152	139	179
Ohio	-3	8	-144,5%	0	0	-11	-2	0
Wisconsin	62	66	-6,5%	27	30	0	0	0
West North Central	455	415	9,6%	230	230	134	103	30
Iowa	0	0	--	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0
Minnesota	397	361	10,0%	173	176	134	103	30
Missouri	26	16	62,5%	26	16	0	0	0
Nebraska	0	0	--	0	0	0	0	0
North Dakota	31	30	-17,4%	31	38	0	0	0
South Dakota	0	0	--	0	0	0	0	0
South Atlantic	4,448	4,580	-2,9%	0	0	2,199	2,194	213
Delaware	0	0	--	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0
Florida	2,891	3,086	-6,3%	0	0	1,281	1,393	0
Georgia	67	88	-23,7%	0	0	0	0	67
Maryland	313	303	3,5%	0	0	313	302	0
North Carolina	631	567	11,3%	0	0	313	229	0
South Carolina	46	62	-25,4%	0	0	5	5	0
Virginia	500	475	5,3%	0	0	287	265	213
West Virginia	0	0	--	0	0	0	0	0
East South Central	69	18	291,2%	50	9	0	0	0
Alabama	NM	3	NM	0	0	0	0	NM
Kentucky	50	9	481,7%	50	9	0	0	0
Mississippi	4	5	-16,5%	0	0	0	0	4
Tennessee	14	1	NM	0	0	0	0	14
West South Central	925	974	-5,0%	0	0	12	-11	0
Arkansas	13	21	-36,4%	0	0	0	0	13
Louisiana	533	679	-21,5%	0	0	0	0	533
Oklahoma	-2	2	-214,1%	0	0	0	0	-2
Texas	38	272	40,0%	0	0	12	-11	0
Mountain	594	715	-16,9%	18	26	273	346	0
Arizona	0	3	-100,0%	0	0	0	0	0
Colorado	47	46	1,5%	0	0	4	8	0
Idaho	75	77	-2,8%	0	0	0	0	75
Montana	265	332	-20,3%	0	0	265	332	0
Nevada	15	25	-41,1%	15	25	0	0	0
New Mexico	1	1	-7,1%	1	1	0	0	0
Utah	118	161	-26,7%	0	0	4	5	0
Wyoming	74	69	6,9%	0	0	0	0	74
Pacific Contiguous	1,022	980	4,3%	-1	-1	321	317	0
California	848	816	3,9%	-1	-1	213	215	0
Oregon	43	35	23,8%	0	0	43	35	0
Washington	131	129	1,7%	0	0	65	67	0
Pacific Noncontiguous	403	394	2,3%	208	205	8	13	187
Alaska	-2	0	800,0%	-2	0	0	0	0
Hawaii	405	394	2,8%	211	205	8	13	187
U.S. Total	13,461	13,588	-0,9%	622	615	6,690	6,742	1,171
						5,113	4,978	

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.18. Utility Scale Facility Net Generation from Wind  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers				
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year	Percentage Change	Year	Year	Year	Year	Year	Year	
2014	2013		2014	2013	2014	2013	2014	2013	
New England	2,055	1,840	9.3%	259	189	1,763	1,676	32	15
Connecticut	0	0	-	0	0	0	0	0	0
Maine	1,097	1,048	4.7%	0	0	1,097	1,048	0	0
Massachusetts	226	205	9.8%	62	62	135	128	25	15
New Hampshire	412	389	5.8%	0	0	412	389	0	0
Rhode Island	10	3	282.9%	0	0	2	3	8	0
Vermont	311	236	31.9%	190	127	121	109	0	0
Middle Atlantic	7,556	6,902	9.5%	0	0	7,554	6,899	0	0
New Jersey	23	11	110.1%	0	0	23	11	0	0
New York	3,968	3,539	12.1%	0	0	3,966	3,536	0	0
Pennsylvania	3,565	3,352	6.3%	0	0	3,565	3,352	0	0
East North Central	20,218	18,610	8.6%	2,381	2,205	17,790	16,374	5	1
Illinois	10,083	9,625	4.8%	13	4	10,066	9,622	4	0
Indiana	3,496	3,481	0.4%	0	0	3,495	3,480	1	1
Michigan	3,868	2,800	38.2%	1,327	1,190	2,541	1,609	0	0
Ohio	1,153	1,146	0.7%	14	14	1,104	1,102	0	0
Wisconsin	1,618	1,558	3.9%	1,026	997	585	561	0	7
West North Central	49,249	44,436	10.8%	14,742	13,791	34,473	30,614	34	31
Iowa	16,307	15,568	4.7%	9,034	8,576	7,269	6,989	4	4
Kansas	10,845	9,433	15.0%	902	917	9,943	8,516	0	0
Minnesota	9,691	8,259	17.3%	1,941	1,762	7,720	6,469	30	28
Missouri	1,131	1,167	-3.1%	0	0	1,167	1,167	0	0
Nebraska	2,122	1,800	18.6%	226	219	2,511	1,953	0	0
North Dakota	6,203	5,519	12.4%	1,953	1,707	4,260	3,812	0	0
South Dakota	2,336	2,688	-13.1%	688	610	1,650	2,078	0	0
South Atlantic	1,780	1,712	3.9%	0	0	1,775	1,708	5	4
Delaware	5	4	13.3%	0	0	0	0	5	4
District of Columbia	0	0	-	0	0	0	0	0	0
Florida	0	0	-	0	0	0	0	0	0
Georgia	0	0	-	0	0	0	0	0	0
Maryland	324	322	0.6%	0	0	324	322	0	0
North Carolina	0	0	-	0	0	0	0	0	0
South Carolina	0	0	-	0	0	0	0	0	0
Virginia	0	0	-	0	0	0	0	0	0
West Virginia	1,451	1,387	4.7%	0	0	1,451	1,387	0	0
East South Central	51	47	9.4%	0	0	51	47	0	0
Alabama	0	0	-	0	0	0	0	0	0
Kentucky	0	0	-	0	0	0	0	0	0
Mississippi	0	0	-	0	0	0	0	0	0
Tennessee	51	47	9.4%	0	0	51	47	0	0
West South Central	51,942	47,036	10.4%	1,941	1,951	49,977	45,085	24	0
Arkansas	0	0	-	0	0	0	0	0	0
Louisiana	0	0	-	0	0	0	0	0	0
Oklahoma	11,937	11,162	6.9%	1,646	1,630	10,291	9,532	0	0
Texas	40,005	35,674	11.3%	295	321	36,969	35,553	24	0
Mountain	20,232	19,651	5.0%	2,473	2,585	17,777	16,689	3	8
Arizona	468	450	4.1%	0	0	468	450	0	0
Colorado	7,399	7,204	2.3%	169	171	7,196	7,026	0	5
Idaho	2,806	2,460	14.1%	164	133	2,641	2,328	0	0
Montana	1,974	1,755	12.5%	233	237	1,741	1,517	0	0
Nevada	300	251	19.8%	0	0	300	251	0	0
New Mexico	2,275	2,193	3.7%	0	0	2,272	2,190	3	3
Utah	690	540	22.3%	0	0	660	540	0	0
Wyoming	4,406	4,433	-0.6%	1,908	2,045	2,498	2,389	0	0
Pacific Contiguous	27,816	27,282	2.0%	5,762	5,615	22,029	21,664	3	1
California	12,992	12,822	1.3%	846	892	12,142	11,928	3	1
Oregon	7,555	7,456	1.3%	1,368	1,397	6,198	6,059	0	0
Washington	7,268	7,004	3.8%	3,579	3,327	3,689	3,678	0	0
Pacific Noncontiguous	731	649	12.6%	100	99	631	550	0	0
Alaska	152	145	4.6%	100	99	52	46	0	0
Hawaii	579	503	15.0%	0	0	579	503	0	0
U.S. Total	181,655	167,840	8.2%	27,671	26,436	153,825	141,306	107	61
								53	37

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NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.19. Utility Scale Facility Net Generation from Biomass by State, by Sector, 2014 and 2013 (Thousand Megawatthours)**

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
	Year 2014	Percentage Change	Electric Utilities		Independent Power Producers			
			Generation at Utility Scale Facilities	Year 2014	Year 2013	Generation at Utility Scale Facilities	Year 2014	Year 2013
New England	7,559	-7,489	16.9%	620	676	5,100	4,485	1,675
Connecticut	757	652	-16.1%	0	0	736	626	21
Maine	3,394	3,846	+16.7%	0	0	1,627	1,506	93
Massachusetts	1,192	1,137	-5.4%	0	0	1,198	1,137	NM
New Hampshire	1,541	1,306	-18.0%	335	359	1,168	907	38
Rhode Island	207	48	-329.4%	0	0	207	48	0
Vermont	453	491	-7.8%	285	317	165	172	3
Middle Atlantic	5,859	5,619	-4.3%	269	175	4,153	4,190	537
New Jersey	998	999	0.5%	0	0	829	841	169
New York	2,408	2,282	-5.5%	269	175	1,668	1,651	212
Pennsylvania	2,453	2,338	-4.9%	0	0	1,666	1,697	156
East North Central	6,226	6,150	-1.2%	586	584	3,618	3,578	262
Illinois	568	608	-6.8%	0	0	566	608	0
Indiana	391	376	-3.8%	300	315	4	0	20
Michigan	2,806	2,715	-3.4%	0	0	1,852	1,747	195
Ohio	818	817	-0.2%	5	7	473	481	7
Wisconsin	1,643	1,634	0.6%	281	262	723	742	41
West North Central	2,271	1,973	-15.1%	481	496	1,048	864	109
Iowa	266	159	-67.8%	25	24	118	86	30
Kansas	59	58	-2.1%	0	0	64	58	0
Minnesota	1,763	1,610	-9.5%	362	381	834	699	30
Missouri	116	74	-56.2%	0	41	33	22	32
Nebraska	64	71	-4.6%	41	48	0	0	18
North Dakota	1	5	-51.6%	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	0
South Atlantic	18,479	16,632	-11.1%	1,700	1,205	6,537	5,206	392
Delaware	76	57	-33.4%	0	0	60	57	0
District of Columbia	0	0	-1	0	0	0	0	0
Florida	4,831	4,449	-8.6%	98	92	2,733	2,183	33
Georgia	4,163	3,825	-8.9%	0	0	624	501	24
Maryland	567	556	-2.0%	0	0	408	401	21
North Carolina	2,547	2,610	-2.4%	0	0	1,331	1,221	80
South Carolina	2,438	2,226	-9.5%	468	439	323	86	0
Virginia	3,852	2,906	-32.5%	1,133	674	1,054	753	234
West Virginia	5	4	15.4%	0	0	5	4	0
East South Central	5,797	5,694	-1.8%	90	99	346	290	0
Alabama	2,779	2,876	-3.4%	1	0	244	199	0
Kentucky	448	327	-37.1%	88	98	5	0	0
Mississippi	1,508	1,448	-4.1%	1	0	13	12	0
Tennessee	1,062	1,043	-1.9%	0	0	84	79	0
West South Central	6,456	6,454	0.0%	18	0	1,002	862	38
Arkansas	1,530	1,601	-4.4%	0	0	98	100	5
Louisiana	2,789	2,787	-0.3%	0	0	85	73	0
Oklahoma	338	344	-1.6%	0	0	16	16	0
Texas	13,639	17,223	+5.0%	181	0	863	671	33
Mountain	1,071	1,067	-0.5%	52	39	662	585	51
Arizona	231	171	-34.6%	21	26	210	146	0
Colorado	126	84	-49.3%	3	2	123	82	0
Idaho	593	652	-9.2%	9	11	208	243	5
Montana	13	5	154.2%	0	0	0	0	0
Nevada	25	24	1.2%	0	0	25	24	0
New Mexico	14	19	-23.4%	0	0	14	19	0
Utah	73	71	-2.3%	0	0	73	71	0
Wyoming	0	0	-1	0	0	0	0	0
Pacific Contiguous	9,881	9,446	-4.6%	658	732	5,652	5,128	1,005
California	6,891	6,635	-3.8%	183	205	5,092	4,670	968
Oregon	1,151	994	-15.7%	64	63	433	366	20
Washington	1,840	1,817	-1.3%	411	465	127	93	17
Pacific Noncontiguous	397	381	-4.0%	37	29	0	0	250
Alaska	63	52	-20.1%	0	0	0	56	46
Hawaii	334	329	-1.4%	37	29	0	0	194
U.S. Total	63,989	60,858	-5.1%	4,491	4,034	28,137	25,187	2,755
							2,601	28,606
								29,037

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.20. Utility Scale Facility Net Generation from Geothermal  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector				Commercial Sector		Industrial Sector		
			Electric Utilities		Independent Power Producers						
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		
Year	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	0	--	0	0	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	3,338	3,029	10.2%	275	251	3,063	2,778	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	78	40	98.6%	0	0	79	40	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,729	2,670	2.2%	0	0	2,729	2,670	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	522	319	63.6%	275	251	247	68	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	12,285	12,471	-1.5%	841	754	11,445	11,717	0	0	0	0
California	12,102	12,307	-1.7%	841	754	11,261	11,553	0	0	0	0
Oregon	183	165	11.4%	0	0	183	165	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	254	275	-7.6%	0	0	254	275	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	254	275	-7.6%	0	0	254	275	0	0	0	0
U.S. Total	15,871	15,775	0.6%	1,116	1,005	14,761	14,770	0	0	0	0

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.21. Utility Scale Facility Net Generation from Solar Photovoltaic by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers			
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014
New England	399	124	+162.3%	11	4	334	118	5
Connecticut	12	0	-	0	0	12	0	0
Maine	0	0	-	0	0	0	0	0
Massachusetts	305	105	+191.3%	11	4	289	100	5
New Hampshire	0	0	-	0	0	0	0	0
Rhode Island	10	2	+388.5%	0	0	10	2	0
Vermont	24	17	+36.1%	0	0	24	17	0
Middle Atlantic	647	568	+14.0%	41	41	486	434	111
New Jersey	514	437	+17.6%	41	41	365	312	107
New York	71	67	+5.4%	0	0	71	67	0
Pennsylvania	62	63	-1.1%	0	0	50	55	4
East North Central	207	129	+60.8%	11	7	194	119	3
Illinois	50	52	-3.8%	0	0	50	52	0
Indiana	102	31	+234.4%	2	0	101	31	0
Michigan	0	0	-	0	0	0	0	0
Ohio	54	46	+16.4%	9	7	42	37	3
Wisconsin	1	0	-	0	0	1	0	0
West North Central	11	3	+319.8%	0	0	11	3	0
Iowa	0	0	-	0	0	0	0	0
Kansas	0	0	-	0	0	0	0	0
Minnesota	3	3	-2.0%	0	0	3	3	0
Missouri	9	0	-	0	0	9	0	0
Nebraska	0	0	-	0	0	0	0	0
North Dakota	0	0	-	0	0	0	0	0
South Dakota	0	0	-	0	0	0	0	0
South Atlantic	1,118	576	+94.3%	87	85	945	435	86
Delaware	50	45	+10.7%	6	2	42	43	2
District of Columbia	0	0	-	0	0	0	0	0
Florida	117	108	+8.5%	65	68	51	38	2
Georgia	119	14	+722.4%	1	0	116	11	3
Maryland	98	63	+54.6%	9	9	86	51	4
North Carolina	729	345	+111.5%	6	7	646	291	77
South Carolina	5	0	NM	0	0	5	0	0
Virginia	0	0	-	0	0	0	0	0
West Virginia	0	0	-	0	0	0	0	0
East South Central	27	20	+34.8%	0	0	25	18	3
Alabama	0	0	-	0	0	0	0	0
Kentucky	0	0	-	0	0	0	0	0
Mississippi	0	0	-	0	0	0	0	0
Tennessee	27	20	+34.8%	0	0	25	18	3
West South Central	282	163	+73.2%	0	0	280	161	2
Arkansas	0	0	-	0	0	0	0	0
Louisiana	0	0	-	0	0	0	0	0
Oklahoma	0	0	-	0	0	0	0	0
Texas	282	163	+73.2%	0	0	280	161	2
Mountain	4,206	3,661	+27.7%	584	333	3,632	2,892	67
Arizona	2,536	2,022	+25.5%	401	276	2,114	1,727	24
Colorado	253	248	+1.9%	0	0	241	234	12
Idaho	0	0	-	0	0	0	0	0
Montana	0	0	-	0	0	0	0	0
Nevada	897	633	+41.9%	0	0	864	598	31
New Mexico	515	388	+32.7%	103	57	412	331	0
Utah	2	2	+6.4%	0	0	2	2	0
Wyoming	0	0	-	0	0	0	0	0
Pacific Contiguous	8,361	3,226	+159.2%	430	371	7,834	2,769	93
California	8,336	3,205	+160.1%	423	364	7,816	2,755	93
Oregon	24	20	+17.3%	6	7	18	14	0
Washington	1	1	+4.3%	1	1	0	0	0
Pacific Noncontiguous	39	19	+101.7%	10	0	29	19	0
Alaska	0	0	-	0	0	0	0	0
Hawaii	39	19	+101.7%	10	0	29	19	0
U.S. Total	15,250	8,121	+87.8%	1,094	841	13,769	6,969	371
							294	16
								17

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.22. Utility Scale Facility Net Generation from Solar Thermal  
by State, by Sector, 2014 and 2013 (Thousand Megawatthours)

Census Division and State	All Sectors		Electric Power Sector		Commercial Sector		Industrial Sector	
			Electric Utilities		Independent Power Producers			
	Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Year	2014	2013	Percentage Change	Year	2014	Year	2013	Year
New England	2	2	-10.6%	0	0	2	2	0
Connecticut	0	0	--	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0
Massachusetts	2	2	-10.6%	0	0	2	2	0
New Hampshire	0	0	--	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0
New York	0	0	--	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0
South Atlantic	124	102	22.2%	124	102	0	0	0
Delaware	0	0	--	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0
Florida	124	102	22.2%	124	102	0	0	0
Georgia	0	0	--	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0
Mountain	720	262	259.3%	0	0	720	202	0
Arizona	604	89	576.3%	0	0	604	89	0
Colorado	0	0	--	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0
Nevada	116	113	3.0%	0	0	116	113	0
New Mexico	0	0	--	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0
Pacific Contiguous	1,595	609	162.1%	0	0	1,595	609	0
California	1,595	609	162.1%	0	0	1,595	609	0
Oregon	0	0	--	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0
U.S. Total	2,441	915	166.9%	124	102	2,317	813	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 3.23. Useful Thermal Output by Energy Source: Total Combined Heat and Power (All Sectors), 2004 - 2014**  
(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2004	351,871	80,824	16,659	654,242	126,157	667,341	45,456	1,942,550
2005	341,806	79,362	13,021	624,008	138,469	664,691	41,400	1,902,757
2006	332,548	54,224	24,009	603,288	126,049	689,549	49,308	1,878,973
2007	326,803	50,882	25,373	554,394	116,313	651,230	46,822	1,771,816
2008	315,244	29,554	18,263	509,330	110,680	610,131	23,729	1,616,931
2009	281,557	32,591	20,308	513,002	99,556	546,974	33,287	1,527,276
2010	300,303	19,914	21,448	524,494	91,439	581,310	28,755	1,567,662
2011	286,210	15,230	21,552	535,150	103,615	586,299	31,067	1,579,124
2012	252,605	12,452	24,419	556,945	113,147	580,513	24,571	1,564,653
2013	243,043	12,828	25,224	553,696	103,719	611,443	22,171	1,572,124
2014	232,509	11,990	23,457	545,624	104,868	624,086	21,390	1,563,923
Year 2012								
January	25,211	2,281	2,292	47,409	9,732	49,808	2,107	138,839
February	22,416	961	2,017	43,785	9,416	47,023	2,035	127,654
March	21,458	1,057	2,012	44,005	9,956	48,544	1,937	128,970
April	18,141	850	1,507	44,946	10,053	44,838	1,866	122,201
May	20,238	923	1,627	45,801	9,832	47,116	2,073	127,611
June	19,799	878	1,881	47,072	9,567	46,476	2,182	127,855
July	21,190	913	2,175	52,025	9,516	48,617	2,028	136,463
August	21,162	908	2,386	50,360	9,883	48,931	2,145	135,775
September	19,447	782	2,072	45,635	8,567	48,066	1,957	126,527
October	20,317	999	2,205	44,727	8,350	49,311	2,034	127,943
November	21,049	920	2,165	43,801	8,466	49,926	2,039	128,366
December	22,177	979	2,079	47,379	9,809	51,858	2,168	136,450
Year 2013								
January	22,527	1,347	2,290	46,795	9,100	53,279	1,887	137,225
February	20,302	1,158	1,850	42,052	8,059	47,778	1,774	122,972
March	21,781	913	2,166	46,138	8,872	51,075	1,972	132,917
April	18,929	975	1,789	44,169	8,493	49,214	1,833	125,403
May	19,531	984	2,151	44,384	8,700	49,408	1,551	126,709
June	19,011	924	2,215	44,436	8,337	49,882	1,824	126,628
July	20,221	887	2,370	49,098	8,886	53,519	1,953	136,934
August	19,643	819	2,691	48,839	8,644	52,218	2,074	134,927
September	18,556	808	2,017	45,755	8,338	48,342	1,898	125,715
October	19,549	888	2,071	45,314	8,378	50,312	1,823	128,335
November	21,524	914	1,615	46,565	8,160	52,107	1,767	132,650
December	21,471	2,213	1,999	50,152	9,751	54,309	1,814	141,708
Year 2014								
January	22,969	2,284	1,900	55,295	8,694	53,678	1,670	146,489
February	21,093	1,305	1,687	43,162	7,847	49,183	1,427	125,704
March	22,495	1,162	1,947	45,530	8,700	53,280	1,720	134,833
April	17,984	801	2,149	42,114	8,220	51,553	1,774	124,596
May	18,456	842	2,082	43,071	8,308	50,115	1,683	124,557
June	18,058	845	2,122	42,523	8,626	51,604	1,813	125,592
July	18,908	795	2,147	45,823	8,838	52,903	1,816	131,228
August	18,663	817	2,006	47,255	9,139	53,504	1,891	133,276
September	17,474	685	2,109	44,117	8,852	49,239	1,814	124,291
October	17,413	835	1,417	45,279	8,897	52,054	1,901	127,796
November	18,904	865	1,835	44,308	9,331	51,860	1,818	128,922
December	20,093	754	2,055	47,146	9,415	55,115	2,064	136,641

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

Beginning with the collection of Form EIA-923 in January 2008, the methodology for separating the fuel used for electricity generation and useful thermal output from combined heat and power plants changed. The new methodology was retroactively applied to 2004-2007. See the Technical Notes (Appendix C) for further information.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy

Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

**Table 3.24. Useful Thermal Output by Energy Source: Electric Power Sector Combined Heat and Power, 2004 - 2014**  
**(Billion Btus)**

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2004	39,014	5,731	2,486	239,416	18,200	17,347	3,822	326,017
2005	39,652	5,571	2,238	239,324	36,694	18,240	3,884	345,605
2006	38,133	4,812	2,253	207,095	22,567	17,284	4,435	296,579
2007	38,260	5,294	1,862	212,705	20,473	19,166	4,459	302,219
2008	37,220	5,479	1,353	204,167	22,109	17,052	4,854	292,234
2009	38,015	5,341	1,445	190,875	19,830	17,625	5,055	278,187
2010	38,325	4,702	1,108	186,772	19,707	17,589	5,040	273,244
2011	35,209	4,484	1,231	190,712	20,435	16,029	6,044	274,143
2012	26,093	4,405	1,246	200,294	20,948	16,369	5,545	274,900
2013	21,306	4,614	993	188,094	10,303	16,225	4,966	246,501
2014	15,513	4,931	936	182,148	7,732	17,736	5,666	234,662
Year 2012								
January	2,725	514	122	17,364	1,820	1,457	454	24,454
February	2,268	350	118	15,957	1,730	1,345	449	22,217
March	2,127	235	114	14,749	1,906	1,533	529	21,193
April	1,623	291	95	15,972	1,739	1,094	440	21,254
May	2,208	381	120	17,100	1,629	1,117	420	22,974
June	2,155	400	63	17,381	1,669	1,342	468	23,476
July	2,304	360	103	18,668	1,770	1,254	429	24,888
August	2,415	370	105	18,647	1,785	1,355	486	25,163
September	2,203	355	104	16,124	1,736	1,237	447	22,206
October	2,180	387	98	15,749	1,750	1,505	456	22,125
November	1,954	377	98	15,033	1,575	1,536	468	21,041
December	1,932	384	107	17,550	1,840	1,596	500	23,909
Year 2013								
January	1,963	270	89	15,710	847	1,725	358	20,963
February	1,672	337	74	14,419	718	1,424	409	19,053
March	1,871	392	92	15,592	649	1,516	424	20,536
April	1,652	394	93	14,876	803	1,341	345	19,504
May	1,715	412	79	15,015	852	1,001	343	19,417
June	1,743	380	53	15,252	860	1,204	446	19,938
July	1,915	401	91	17,084	1,010	1,260	478	22,238
August	1,878	396	86	16,963	1,013	1,309	472	22,116
September	1,751	409	69	15,582	882	1,173	443	20,307
October	1,357	427	89	14,781	942	1,340	402	19,339
November	2,061	388	84	15,694	869	1,444	429	20,968
December	1,729	409	95	17,126	858	1,488	418	22,122
Year 2014								
January	1,494	649	89	17,244	725	1,595	453	22,249
February	1,501	379	69	14,726	518	1,586	425	19,203
March	1,896	429	85	15,719	407	1,702	488	20,726
April	1,378	372	93	13,949	602	1,411	384	18,189
May	1,287	391	83	14,379	613	1,095	381	18,229
June	1,264	402	1	14,490	503	1,390	537	18,587
July	1,261	414	48	15,510	580	1,444	508	19,764
August	1,233	483	92	15,970	635	1,408	478	20,299
September	1,045	274	92	14,627	736	1,273	509	18,555
October	945	414	93	14,607	805	1,550	504	18,918
November	1,133	399	93	14,885	736	1,594	463	19,303
December	1,077	327	97	16,042	872	1,689	537	20,640

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

Beginning with the collection of Form EIA-923 in January 2008, the methodology for separating the fuel used for electricity generation and useful thermal output from combined heat and power plants changed. The new methodology was retroactively applied to 2004-2007. See the Technical Notes (Appendix C) for further information.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy

Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

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**Table 3.25. Useful Thermal Output by Energy Source: Commercial Sector Combined Heat and Power, 2004 - 2014  
(Billion Btus)**

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2004	22,450	4,118	165	21,851	0	8,936	6,350	63,871
2005	22,601	3,518	166	20,227	0	8,647	5,921	61,081
2006	22,186	2,092	172	19,370	0	9,359	6,242	59,422
2007	22,595	1,640	221	20,040	0	6,651	3,983	55,131
2008	22,991	1,822	177	20,183	0	8,863	6,054	60,091
2009	20,057	1,095	155	25,902	0	8,450	5,761	61,420
2010	19,216	845	216	29,791	13	7,917	5,333	63,330
2011	17,234	687	111	24,848	14	7,433	5,988	56,314
2012	13,992	523	229	27,922	0	7,970	6,426	57,063
2013	10,942	1,017	222	27,562	0	7,054	5,693	52,489
2014	11,081	820	327	26,876	0	7,610	5,123	51,837
Year 2012								
January	1,539	235	29	2,378	0	681	593	5,455
February	1,340	13	25	2,289	0	624	506	4,798
March	1,216	35	23	2,179	0	613	467	4,533
April	941	6	2	2,027	0	632	456	4,063
May	1,072	8	0	2,100	0	650	580	4,410
June	1,072	15	0	2,209	0	633	609	4,539
July	1,163	113	22	2,822	0	699	537	5,356
August	1,159	30	26	2,708	0	723	579	5,224
September	1,019	8	25	2,493	0	654	558	4,757
October	950	6	27	2,324	0	723	508	4,537
November	1,152	30	24	2,204	0	626	488	4,525
December	1,369	25	26	2,190	0	712	544	4,866
Year 2013								
January	1,259	339	32	2,301	0	607	501	5,039
February	1,171	133	29	2,101	0	538	471	4,444
March	1,102	10	28	2,223	0	617	557	4,537
April	742	11	4	1,916	0	619	505	3,797
May	856	22	0	1,989	0	606	372	3,844
June	807	25	0	2,162	0	617	484	4,095
July	800	57	2	2,617	0	575	515	4,566
August	807	20	28	2,557	0	575	510	4,497
September	744	12	25	2,327	0	590	480	4,178
October	677	21	24	2,266	0	571	450	4,008
November	911	41	21	2,370	0	530	415	4,289
December	1,065	326	29	2,732	0	610	432	5,194
Year 2014								
January	1,344	446	32	4,690	0	711	440	7,663
February	1,353	174	28	2,043	0	553	311	4,461
March	1,265	99	33	1,834	0	621	438	4,290
April	850	13	31	1,732	0	543	424	3,593
May	772	15	16	1,833	0	659	425	3,720
June	831	10	0	1,876	0	686	402	3,805
July	930	13	5	2,052	0	677	415	4,090
August	722	9	41	2,264	0	671	450	4,155
September	637	6	38	2,118	0	630	464	3,893
October	571	7	29	2,162	0	618	455	3,841
November	862	14	36	2,095	0	590	441	4,038
December	945	14	39	2,177	0	652	459	4,286

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy

Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

**Table 3.26. Useful Thermal Output by Energy Source: Industrial Sector Combined Heat and Power, 2004 - 2014  
(Billion Btus)**

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2004	290,407	70,976	14,008	392,974	107,956	641,058	35,284	1,552,663
2005	279,552	70,273	10,616	364,457	101,775	637,803	31,594	1,496,071
2006	272,229	47,320	21,584	376,822	103,481	662,906	38,630	1,522,971
2007	265,948	43,948	23,290	321,648	95,840	625,413	38,380	1,414,466
2008	255,032	22,253	16,733	284,980	88,571	584,216	12,821	1,264,606
2009	223,485	26,155	18,708	296,225	79,726	520,898	22,471	1,187,669
2010	242,762	14,366	20,124	307,931	71,719	555,804	18,382	1,231,088
2011	233,767	10,059	20,209	319,590	83,167	562,838	19,035	1,248,666
2012	212,520	7,524	22,944	328,729	92,199	556,174	12,599	1,232,689
2013	210,795	7,196	24,009	338,041	93,416	588,165	11,512	1,273,134
2014	199,512	6,120	22,167	334,901	97,137	596,087	10,600	1,266,524
Year 2012								
January	20,947	1,532	2,141	27,667	7,912	47,670	1,060	108,930
February	18,809	598	1,874	25,539	7,686	45,053	1,080	100,639
March	18,116	787	1,875	27,078	8,050	46,398	941	103,244
April	15,577	552	1,410	26,947	8,314	43,112	970	96,884
May	16,959	534	1,507	26,601	8,203	45,350	1,073	100,227
June	16,572	463	1,818	27,482	7,899	44,501	1,105	99,839
July	17,723	440	2,051	30,535	7,745	46,664	1,061	106,219
August	17,588	508	2,255	29,005	8,098	46,854	1,080	105,388
September	16,225	419	1,943	27,018	6,831	46,176	952	99,564
October	17,187	607	2,080	26,654	6,601	47,083	1,070	101,281
November	17,942	513	2,044	26,564	6,892	47,763	1,082	102,800
December	18,875	570	1,946	27,640	7,969	49,551	1,124	107,675
Year 2013								
January	19,306	737	2,168	28,784	8,253	50,947	1,028	111,223
February	17,459	687	1,746	25,532	7,341	45,816	894	99,475
March	18,808	511	2,046	28,323	8,223	48,942	991	107,844
April	16,535	569	1,692	27,378	7,690	47,255	983	102,102
May	16,960	550	2,072	27,380	7,848	47,801	836	103,448
June	16,461	519	2,162	27,022	7,476	48,061	894	102,595
July	17,506	429	2,278	29,397	7,876	51,684	960	110,130
August	16,958	403	2,577	29,318	7,632	50,334	1,092	108,314
September	16,061	388	1,923	27,846	7,457	46,579	975	101,230
October	17,514	440	1,958	28,267	7,435	48,401	972	104,988
November	18,551	485	1,510	28,500	7,291	50,133	923	107,393
December	18,676	1,478	1,875	30,294	8,893	52,211	964	114,392
Year 2014								
January	19,390	1,104	1,779	33,178	7,969	51,175	777	115,373
February	17,597	742	1,584	26,211	7,330	46,825	691	100,980
March	18,701	620	1,828	27,834	8,293	50,693	794	108,763
April	15,213	416	2,024	26,342	7,618	49,395	967	101,974
May	15,871	435	1,982	26,785	7,695	48,127	877	101,772
June	15,564	431	2,119	26,069	8,123	49,321	875	102,502
July	16,219	367	2,094	28,160	8,258	50,552	893	106,542
August	16,256	324	1,873	28,847	8,504	51,208	963	107,975
September	15,340	405	1,978	27,225	8,116	47,165	841	101,070
October	15,458	414	1,293	28,359	8,092	49,667	942	104,225
November	16,404	452	1,696	27,149	8,595	49,460	913	104,669
December	17,500	411	1,916	28,743	8,543	52,500	1,068	110,681

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.

See the Technical Notes for fuel conversion factors.

Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.

Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.

Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.

Beginning with the collection of Form EIA-923 in January 2008, the methodology for separating the fuel used for electricity generation and useful thermal output from combined heat and power plants changed. The new methodology was retroactively applied to 2004-2007. See the Technical Notes (Appendix C) for further information.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy

Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;

Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

## Chapter 4

### Generation Capacity

**Table 4.1. Count of Electric Power Industry Power Plants, by Sector, by Predominant Energy Sources within Plant, 2004 through 2014**

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources
Total (All Sectors)									
2004	625	1,143	1,670	46	66	1,425	749	39	28
2005	619	1,133	1,664	44	66	1,422	781	39	29
2006	616	1,148	1,659	46	66	1,421	843	39	29
2007	606	1,163	1,659	46	66	1,424	929	39	25
2008	598	1,170	1,655	43	66	1,423	1,076	39	29
2009	593	1,168	1,652	43	66	1,427	1,219	39	28
2010	580	1,169	1,657	48	66	1,432	1,355	39	32
2011	589	1,146	1,646	41	66	1,434	1,582	40	54
2012	557	1,129	1,714	44	66	1,426	1,956	41	64
2013	518	1,101	1,725	44	63	1,435	2,299	41	78
2014	491	1,082	1,749	43	62	1,441	2,674	41	94
Electric Utilities									
2004	357	816	722	2	37	908	65	34	1
2005	353	813	743	1	37	906	71	34	1
2006	353	832	758	1	37	905	84	34	1
2007	351	851	767	1	37	904	93	34	1
2008	348	866	774	--	37	902	107	34	1
2009	340	855	768	--	34	887	129	34	1
2010	333	855	775	3	34	888	155	34	--
2011	332	829	777	--	34	884	189	35	1
2012	315	815	797	--	34	875	238	36	5
2013	300	795	787	1	32	873	253	36	15
2014	286	780	803	1	32	889	272	35	20
Independent Power Producers, Non-Combined Heat and Power Plants									
2004	100	173	355	1	29	457	478	5	2
2005	101	170	357	2	29	456	502	5	2
2006	101	166	356	2	29	458	552	5	2
2007	101	166	364	1	29	462	625	5	1
2008	99	166	365	--	29	464	751	5	2
2009	100	173	377	1	32	485	868	5	2
2010	102	175	380	1	32	488	966	5	6
2011	98	166	373	--	32	490	1,106	5	12
2012	88	150	368	--	32	494	1,388	5	16
2013	86	147	384	1	31	505	1,670	5	15
2014	87	148	395	1	30	499	2,006	5	18
Independent Power Producers, Combined Heat and Power Plants									
2004	48	15	180	3	--	--	30	--	--
2005	48	14	177	3	--	--	33	--	--
2006	50	15	173	4	--	--	32	--	--
2007	48	12	170	4	--	--	32	--	--
2008	47	12	169	3	--	--	36	--	--
2009	51	10	166	3	--	--	41	--	--
2010	48	10	161	2	--	--	41	--	--
2011	45	11	156	1	--	--	38	--	1
2012	42	12	157	2	--	--	47	--	--
2013	35	11	152	2	--	--	51	--	5
2014	30	9	145	2	--	--	54	--	7
Commercial Sector									
2004	21	65	121	1	--	9	46	--	--
2005	20	64	113	1	--	9	48	--	--
2006	22	62	109	1	--	9	47	--	--
2007	20	64	106	1	--	9	47	--	1
2008	20	62	106	1	--	9	49	--	1
2009	18	68	107	1	--	9	47	--	1
2010	17	69	110	1	--	9	57	--	1
2011	22	80	118	--	--	10	105	--	2
2012	22	89	153	--	--	9	129	--	2
2013	19	92	164	--	--	9	160	--	3
2014	17	93	169	--	--	10	178	1	6
Industrial Sector									
2004	99	74	292	39	--	51	130	--	25
2005	97	72	274	37	--	51	127	--	26
2006	90	73	263	38	--	49	128	--	26
2007	86	70	252	39	--	49	132	--	22
2008	84	64	241	39	--	48	133	--	25
2009	84	62	234	38	--	46	134	--	24
2010	80	60	231	41	--	47	136	--	25
2011	92	60	222	40	--	50	144	--	38
2012	90	63	239	42	--	48	154	--	41
2013	78	56	238	40	--	47	165	--	40
2014	71	52	237	39	--	43	164	--	43

Notes: The number of power plants for each energy source is the number of sites for which the respective energy source was reported as the most predominant energy source for at least one of its generators. If all generators for a site have the same energy source reported as the most predominant, that site will be counted once under that energy source. However, if the most predominant energy source is not the same for all generators within a site, the site is counted more than once, based on the number of most predominant energy sources for generators at a site. In general, this table translates the number of generators by energy source into the number of sites represented by the generators for an energy source. Therefore, the count for Total (All Sectors) above is the sum of the counts for each sector by energy source and does not necessarily represent unique sites. In addition, changes to predominant energy sources and status codes from year to year may result in changes to previously-posted data.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

In 2011, EIA corrected the NAICS codes of several plants which resulted in a net capacity shift from the electric utility sector to the commercial sector.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.2.A. Existing Net Summer Capacity by Energy Source and Producer Type, 2004 through 2014 (Megawatts)**

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewable Sources	Hydroelectric Pumped Storage	Other Energy Sources	Total
Total (All Sectors)										
2004	313,020.0	59,119.0	371,011.0	2,296.0	99,628.0	77,641.0	18,717.0	20,764.0	746.0	962,942.0
2005	313,380.0	58,548.0	383,061.0	2,063.0	99,988.0	77,541.0	21,205.0	21,347.0	887.0	978,020.0
2006	312,956.0	58,097.0	388,294.0	2,256.0	100,334.0	77,821.0	24,113.0	21,461.0	882.0	986,215.0
2007	312,738.0	56,068.0	392,876.0	2,313.0	100,266.0	77,885.0	30,069.0	21,886.0	788.0	994,888.0
2008	313,322.0	57,445.0	397,460.0	1,995.0	100,755.0	77,930.0	38,466.0	21,858.0	942.0	1,010,171.0
2009	314,294.1	56,780.5	401,271.8	1,932.4	101,003.7	78,517.7	48,552.0	22,160.4	887.8	1,025,400.4
2010	316,800.1	55,646.9	407,028.4	2,700.3	101,167.4	78,824.7	53,811.3	22,198.9	883.8	1,039,061.8
2011	317,640.3	51,481.6	415,191.3	1,934.2	101,418.8	78,651.6	61,221.0	22,292.6	1,419.6	1,051,251.0
2012	309,680.4	47,167.2	422,364.4	1,945.6	101,885.0	78,738.0	77,155.2	22,368.3	1,728.9	1,063,033.0
2013	303,306.3	43,523.0	425,389.7	2,107.8	99,240.3	79,200.0	82,600.1	22,389.3	2,307.0	1,060,063.5
2014	299,094.2	41,135.4	432,150.3	1,914.3	98,569.3	79,677.3	90,603.7	22,485.1	2,792.6	1,068,422.2
Electric Utilities										
2004	235,976.0	31,415.0	131,734.0	58.0	60,651.0	71,696.0	960.0	18,048.0	13.0	550,550.0
2005	229,705.0	30,867.0	147,752.0	--	56,564.0	71,568.0	1,545.0	18,195.0	39.0	556,235.0
2006	230,644.0	30,419.0	157,742.0	104.0	56,143.0	71,840.0	2,291.0	18,301.0	39.0	567,523.0
2007	231,289.0	29,115.0	162,756.0	104.0	54,211.0	72,186.0	2,806.0	18,693.0	39.0	571,200.0
2008	231,857.0	30,657.0	173,106.0	--	54,376.0	72,142.0	4,066.0	18,664.0	39.0	584,908.0
2009	234,396.6	30,174.1	180,570.7	--	54,355.2	72,689.7	5,613.9	18,930.0	39.0	596,769.2
2010	235,706.8	28,971.9	184,230.5	539.0	54,369.3	72,973.9	6,316.1	18,968.5	--	602,076.0
2011	236,391.7	27,669.9	193,630.5	--	54,351.6	72,182.4	7,811.1	19,062.2	5.3	611,104.7
2012	232,078.5	26,731.8	206,774.4	--	54,716.7	72,505.1	9,823.8	19,093.9	60.7	621,784.9
2013	228,478.0	24,648.8	208,485.7	12.0	52,399.1	72,755.2	10,118.4	19,114.9	787.3	616,799.4
2014	219,837.9	24,045.0	215,690.8	12.0	52,390.9	73,725.4	10,893.7	19,121.3	914.5	616,631.5
Independent Power Producers, Non-Combined Heat and Power Plants										
2004	67,242.0	25,918.0	190,855.0	8.0	38,978.0	5,274.0	12,070.0	2,717.0	46.0	343,106.0
2005	73,734.0	26,041.0	188,043.0	12.0	43,424.0	5,284.0	13,864.0	3,152.0	46.0	353,601.0
2006	72,730.0	25,384.0	184,196.0	20.0	44,190.0	5,263.0	15,865.0	3,160.0	46.0	350,854.0
2007	71,943.0	24,818.0	184,888.0	8.0	46,055.0	5,346.0	21,002.0	3,193.0	26.0	357,278.0
2008	71,864.0	24,823.0	179,169.0	--	46,379.0	5,433.0	28,139.0	3,193.0	46.0	359,044.0
2009	70,122.5	24,657.1	176,034.8	7.6	46,648.5	5,469.6	36,556.4	3,230.4	45.9	362,772.8
2010	71,214.4	24,866.8	178,190.4	7.6	46,798.1	5,488.6	41,013.7	3,230.4	76.9	370,886.9
2011	72,119.5	22,398.2	176,516.5	--	47,067.2	5,539.0	46,698.4	3,230.4	169.2	373,739.0
2012	69,068.4	18,643.9	170,653.8	--	47,168.3	5,568.6	60,116.8	3,274.4	470.2	374,964.4
2013	67,153.5	17,444.7	171,653.6	47.0	46,841.2	5,762.2	64,890.5	3,274.4	231.2	377,298.3
2014	71,994.6	15,724.4	172,224.5	47.0	46,178.4	5,651.2	72,144.4	3,358.4	238.7	387,561.6
Independent Power Producers, Combined Heat and Power Plants										
2004	5,609.0	677.0	32,600.0	289.0	--	1.0	555.0	--	--	39,731.0
2005	5,560.0	530.0	31,740.0	289.0	--	1.0	614.0	--	--	38,735.0
2006	5,837.0	970.0	30,031.0	325.0	--	1.0	628.0	--	--	37,793.0
2007	5,885.0	907.0	29,468.0	339.0	--	--	656.0	--	--	37,254.0
2008	5,927.0	900.0	29,575.0	206.0	--	--	701.0	--	--	37,309.0
2009	5,939.5	897.0	28,875.4	205.8	--	--	739.9	--	--	36,657.6
2010	5,450.6	766.0	29,005.6	182.3	--	--	845.5	--	--	36,250.0
2011	5,146.0	317.0	29,372.6	30.0	--	--	792.9	--	53.0	35,711.5
2012	4,755.9	317.2	29,128.6	83.0	--	--	981.2	--	--	35,265.9
2013	4,313.7	322.2	29,081.2	83.0	--	4.3	945.1	--	121.8	34,871.3
2014	4,073.0	308.2	27,676.7	83.0	--	--	885.9	--	335.8	33,362.6
Commercial Sector										
2004	368.0	321.0	1,069.0	5.0	--	22.0	404.0	--	--	2,188.0
2005	397.0	333.0	1,024.0	5.0	--	25.0	435.0	--	--	2,219.0
2006	428.0	341.0	1,040.0	5.0	--	25.0	433.0	--	--	2,272.0
2007	428.0	348.0	1,064.0	5.0	--	22.0	443.0	--	3.0	2,312.0
2008	428.0	352.0	1,059.0	5.0	--	22.0	444.0	--	3.0	2,312.0
2009	423.7	348.3	1,104.7	4.7	--	21.7	480.1	--	2.8	2,386.0
2010	418.2	368.2	1,154.5	4.7	--	21.7	519.7	--	2.8	2,489.8
2011	435.7	406.3	1,282.6	--	--	233.5	694.1	--	4.2	3,056.4
2012	435.6	442.7	1,544.9	--	--	18.4	776.8	--	4.2	3,222.6
2013	341.9	455.7	1,778.9	--	--	17.8	947.6	--	9.1	3,551.0
2014	290.1	463.5	1,832.6	--	--	21.4	1,066.8	5.4	15.6	3,695.4
Industrial Sector										
2004	3,825.0	789.0	14,753.0	1,937.0	--	648.0	4,728.0	--	687.0	27,367.0
2005	3,984.0	777.0	14,501.0	1,757.0	--	662.0	4,747.0	--	802.0	27,230.0
2006	3,317.0	983.0	15,285.0	1,802.0	--	693.0	4,896.0	--	797.0	27,773.0
2007	3,194.0	880.0	14,699.0	1,858.0	--	331.0	5,163.0	--	720.0	26,844.0
2008	3,246.0	713.0	14,551.0	1,784.0	--	334.0	5,116.0	--	854.0	26,599.0
2009	3,411.8	704.0	14,686.2	1,714.3	--	336.7	5,161.7	--	800.1	26,814.8
2010	4,010.1	674.0	14,447.4	1,966.7	--	340.5	5,116.3	--	804.1	27,359.1
2011	3,547.4	689.6	14,389.1	1,904.2	--	696.7	5,224.5	--	1,187.9	27,639.4
2012	3,342.0	1,031.6	14,262.7	1,862.6	--	645.9	5,456.6	--	1,193.8	27,795.2
2013	3,019.2	651.6	14,390.3	1,965.8	--	660.5	5,698.5	--	1,157.6	27,543.5
2014	2,898.6	594.3	14,725.7	1,772.3	--	279.3	5,612.9	--	1,288.0	27,171.1

Notes: Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; coal synfuel and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011, coal-derived synthesis gas was included in Other Gases. Petroleum includes distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), waste oil, and beginning in 2011, synthetic gas and propane. Prior to 2011, synthetic gas and propane were included in Other Gases. Other Gases also includes blast furnace gas. Prior to 2011, waste heat was included in Natural Gas. Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities. Other Renewable Sources include wood, black liquor, other wood waste, municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind. Other Energy Sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources. In 2011, EIA corrected the NAICS codes of several plants which resulted in a net capacity shift from the electric utility sector to the commercial sector.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.2.B. Existing Net Summer Capacity of Other Renewable Sources by Producer Type,  
2004 through 2014 (Megawatts) (Page 1)**

Year	Wind	Solar Thermal and Photovoltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Total (Other Renewable Sources)
Total (All Sectors)						
2004	6,456.0	398.0	6,182.0	2,152.0	3,529.0	18,717.0
2005	8,706.0	411.0	6,193.0	2,285.0	3,609.0	21,205.0
2006	11,329.0	411.0	6,372.0	2,274.0	3,727.0	24,113.0
2007	16,515.0	502.0	6,704.0	2,214.0	4,134.0	30,069.0
2008	24,651.0	536.0	6,864.0	2,229.0	4,186.0	38,466.0
2009	34,295.8	618.5	6,939.3	2,381.9	4,316.5	48,552.0
2010	39,134.5	866.4	7,037.3	2,404.6	4,368.5	53,811.3
2011	45,675.9	1,523.5	7,076.5	2,409.2	4,535.9	61,221.0
2012	59,074.8	3,170.1	7,507.6	2,592.1	4,810.6	77,155.2
2013	59,973.4	6,622.5	8,354.2	2,607.0	5,043.0	82,600.1
2014	64,231.5	10,323.3	8,368.1	2,514.3	5,166.5	90,603.7
Electric Utilities						
2004	326.0	10.0	313.0	152.0	160.0	960.0
2005	765.0	11.0	391.0	242.0	136.0	1,545.0
2006	1,441.0	11.0	428.0	240.0	172.0	2,291.0
2007	1,928.0	12.0	418.0	158.0	290.0	2,806.0
2008	3,190.0	14.0	427.0	159.0	276.0	4,066.0
2009	4,654.8	42.0	431.3	158.9	326.9	5,613.9
2010	5,338.3	79.2	414.3	158.9	325.4	6,316.1
2011	6,735.2	202.4	359.1	158.9	355.5	7,811.1
2012	8,488.7	332.2	364.1	162.1	476.7	9,823.8
2013	8,424.7	487.9	564.3	164.1	477.4	10,118.4
2014	9,022.6	568.5	654.8	164.1	483.7	10,893.7
Independent Power Producers, Non-Combined Heat and Power Plants						
2004	6,130.0	388.0	1,138.0	2,000.0	2,414.0	12,070.0
2005	7,941.0	400.0	1,033.0	2,044.0	2,447.0	13,864.0
2006	9,888.0	400.0	1,037.0	2,034.0	2,505.0	15,865.0
2007	14,587.0	489.0	1,066.0	2,056.0	2,803.0	21,002.0
2008	21,461.0	521.0	1,196.0	2,070.0	2,891.0	28,139.0
2009	29,639.8	575.4	1,220.2	2,223.0	2,898.0	36,556.4
2010	33,783.9	779.9	1,274.5	2,245.7	2,929.7	41,013.7
2011	38,911.8	1,262.6	1,312.5	2,250.3	2,961.2	46,698.4
2012	50,547.6	2,730.7	1,398.8	2,384.2	3,055.5	60,116.8
2013	51,497.8	5,934.0	1,845.4	2,401.1	3,212.2	64,890.5
2014	55,133.0	9,523.7	1,816.6	2,308.8	3,362.3	72,144.4

Notes: Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass includes municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

\* = Value is less than half of the smallest unit of measure.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.2.B. Existing Net Summer Capacity of Other Renewable Sources by Producer Type,  
2004 through 2014 (Megawatts) (Page 2)**

Year	Wind	Solar Thermal and Photovoltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Total (Other Renewable Sources)
Independent Power Producers, Combined Heat and Power Plants						
2004	--	--	179.0	--	375.0	555.0
2005	--	--	218.0	--	395.0	614.0
2006	--	--	212.0	--	416.0	628.0
2007	--	--	210.0	--	446.0	656.0
2008	--	--	223.0	--	478.0	701.0
2009	--	--	237.2	--	502.7	739.9
2010	--	--	392.8	--	452.7	845.5
2011	--	--	356.3	--	436.6	792.9
2012	--	--	489.8	45.8	445.6	981.2
2013	--	--	469.2	41.8	434.1	945.1
2014	--	--	465.5	41.4	379.0	885.9
Commercial Sector						
2004	--	--	7.0	--	397.0	404.0
2005	--	--	7.0	--	428.0	435.0
2006	--	--	7.0	--	426.0	433.0
2007	--	--	8.0	--	435.0	443.0
2008	--	--	8.0	--	436.0	444.0
2009	1.2	0.1	7.6	--	471.2	480.1
2010	10.5	5.9	7.6	--	495.7	519.7
2011	24.6	54.1	7.6	--	607.8	694.1
2012	29.8	99.9	7.6	--	639.5	776.8
2013	33.2	192.9	8.4	--	713.1	947.6
2014	51.6	223.4	65.4	--	726.4	1,066.8
Industrial Sector						
2004	--	--	4,545.0	--	183.0	4,728.0
2005	--	--	4,545.0	--	202.0	4,747.0
2006	--	--	4,688.0	--	208.0	4,896.0
2007	--	1.0	5,002.0	--	160.0	5,163.0
2008	--	1.0	5,010.0	--	105.0	5,116.0
2009	--	1.0	5,043.0	--	117.7	5,161.7
2010	1.8	1.4	4,948.1	--	165.0	5,116.3
2011	4.3	4.4	5,041.0	--	174.8	5,224.5
2012	8.7	7.3	5,247.3	--	193.3	5,456.6
2013	17.7	7.7	5,466.9	--	206.2	5,698.5
2014	24.3	7.7	5,365.8	--	215.1	5,612.9

Notes: Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass includes municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

\* = Value is less than half of the smallest unit of measure.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.3. Existing Capacity by Energy Source, 2014 (Megawatts)**

Energy Source	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal	1,145	325,831.5	299,094.2	300,699.8
Petroleum	3,573	46,897.8	41,135.4	44,739.7
Natural Gas	5,727	495,120.2	432,150.3	464,784.7
Other Gases	93	2,227.6	1,914.3	1,889.9
Nuclear	99	103,860.4	98,569.3	100,610.3
Hydroelectric Conventional	4,029	78,792.9	79,677.3	79,090.6
Wind	1,032	65,300.1	64,231.5	64,325.1
Solar Thermal and Photovoltaic	1,249	10,437.7	10,323.3	10,167.4
Wood and Wood-Derived Fuels	366	9,524.4	8,368.1	8,432.5
Geothermal	194	3,757.0	2,514.3	2,757.2
Other Biomass	1,951	5,958.6	5,166.5	5,237.3
Hydroelectric Pumped Storage	156	21,601.5	22,485.1	22,468.3
Other Energy Sources	131	3,267.7	2,792.6	2,825.7
Total	19,745	1,172,577.4	1,068,422.2	1,108,028.5

Notes: Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; coal synfuel and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011, coal-derived synthesis gas was included in Other Gases.

Petroleum includes distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), waste oil, and beginning in 2011, synthetic gas and propane. Prior to 2011, synthetic gas and propane were included in Other Gases.

Other Gases includes blast furnace gas. Prior to 2011, waste heat was included in Natural Gas.

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass include municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Other Energy Sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

In 2011, EIA corrected the NAICS codes of several plants which resulted in a net capacity shift from the electric utility sector to the commercial sector.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.4. Existing Capacity by Producer Type, 2014 (Megawatts)**

<b>Producer Type</b>	<b>Number of Generators</b>	<b>Generator Nameplate Capacity</b>	<b>Net Summer Capacity</b>	<b>Net Winter Capacity</b>
Electric Power Sector				
Electric Utilities	9,510	675,675.4	616,631.5	637,857.0
Independent Power Producers, Non-Combined Heat and Power Plants	6,975	423,782.6	387,561.6	401,581.5
Independent Power Producers, Combined Heat and Power Plants	559	37,890.2	33,362.6	35,972.8
Total	17,044	1,137,348.2	1,037,555.7	1,075,411.3
Commercial and Industrial Sectors				
Commercial Sector	1,085	4,123.4	3,695.4	3,843.6
Industrial Sector	1,616	31,105.8	27,171.1	28,773.6
Total	2,701	35,229.2	30,866.5	32,617.2
All Sectors				
Total	19,745	1,172,577.4	1,068,422.2	1,108,028.5

## Notes:

See Glossary reference for definitions.

Totals may not equal sum of components because of independent rounding.

In the case of some wind, solar and wave energy sites, the capacity for multiple generators is reported in a single generator record and is presented as a single generator in the generator count.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.5. Planned Generating Capacity Changes, by Energy Source, 2015-2019 (Page 1)**

Energy Source	Generator Additions		Generator Retirements		Net Capacity Additions	
	Number of Generators	Net Summer Capacity	Number of Generators	Net Summer Capacity	Number of Generators	Net Summer Capacity
<b>Year 2015</b>						
U.S. Total	704	21,965.9	234	18,351.4	470	3,614.5
Coal	2	52.2	95	13,325.5	-93	-13,273.3
Petroleum	24	24.2	44	902.8	-20	-878.6
Natural Gas	76	6,192.8	61	3,964.2	15	2,228.6
Other Gases	--	--	--	--	--	--
Nuclear	1	1,122.0	--	--	1	1,122.0
Hydroelectric Conventional	38	370.0	10	110.4	28	259.6
Wind	98	10,364.7	2	3.1	96	10,361.6
Solar Thermal and Photovoltaic	425	3,466.4	--	--	425	3,466.4
Wood and Wood-Derived Fuels	3	95.2	4	23.0	-1	72.2
Geothermal	4	31.8	--	--	4	31.8
Other Biomass	24	137.0	16	21.4	8	115.6
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	9	109.6	2	1.0	7	108.6
<b>Year 2016</b>						
U.S. Total	446	27,588.9	111	7,928.9	335	19,660.0
Coal	1	275.0	47	6,546.0	-46	-6,271.0
Petroleum	7	34.8	14	143.0	-7	-108.2
Natural Gas	133	9,892.1	29	1,100.9	104	8,791.2
Other Gases	--	--	--	--	--	--
Nuclear	--	--	--	--	--	--
Hydroelectric Conventional	15	252.0	10	115.1	5	136.9
Wind	74	8,404.3	--	--	74	8,404.3
Solar Thermal and Photovoltaic	181	8,448.4	--	--	181	8,448.4
Wood and Wood-Derived Fuels	1	62.0	2	13.5	-1	48.5
Geothermal	--	--	--	--	--	--
Other Biomass	28	75.3	9	10.4	19	64.9
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	6	145.0	--	--	6	145.0
<b>Year 2017</b>						
U.S. Total	119	17,463.8	65	8,524.0	54	8,939.8
Coal	--	--	19	5,729.0	-19	-5,729.0
Petroleum	--	--	7	504.1	-7	-504.1
Natural Gas	65	14,700.1	28	2,127.5	37	12,572.6
Other Gases	--	--	--	--	--	--
Nuclear	--	--	--	--	--	--
Hydroelectric Conventional	8	164.5	1	103.8	7	60.7
Wind	21	1,783.1	3	39.4	18	1,743.7
Solar Thermal and Photovoltaic	17	655.0	--	--	17	655.0
Wood and Wood-Derived Fuels	1	42.0	--	--	1	42.0
Geothermal	--	--	--	--	--	--
Other Biomass	3	19.6	7	20.2	-4	-0.6
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	4	99.5	--	--	4	99.5

Notes: These data reflect plans as of December 31, 2014

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, coal synfuel, refined coal, and coal-derived synthesis gas.

Petroleum includes distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), waste oil, synthetic gas, and propane.

Other Gases also includes blast furnace gas.

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass include municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Other Energy Sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

In the case of wind, solar and wave energy sites, the capacity for multiple generators is reported in a single generator record and is presented as a single generator in the generator count.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.5. Planned Generating Capacity Changes, by Energy Source, 2015-2019 (Page 2)**

Energy Source	Generator Additions		Generator Retirements		Net Capacity Additions	
	Number of Generators	Net Summer Capacity	Number of Generators	Net Summer Capacity	Number of Generators	Net Summer Capacity
<b>Year 2018</b>						
U.S. Total	109	19,533.8	19	2,841.3	90	16,692.5
Coal	1	17.0	9	2,413.9	-8	-2,396.9
Petroleum	--	--	4	65.6	-4	-65.6
Natural Gas	91	17,937.9	4	241.0	87	17,696.9
Other Gases	3	403.0	--	--	3	403.0
Nuclear	--	--	--	--	--	--
Hydroelectric Conventional	4	179.6	1	103.8	3	75.8
Wind	3	365.3	1	17.0	2	348.3
Solar Thermal and Photovoltaic	3	350.0	--	--	3	350.0
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	1	25.0	--	--	1	25.0
Other Biomass	2	31.1	--	--	2	31.1
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	1	224.9	--	--	1	224.9
<b>Year 2019</b>						
U.S. Total	34	9,983.9	22	1,948.3	12	8,035.6
Coal	1	350.0	8	877.9	-7	-527.9
Petroleum	--	--	3	6.0	-3	-6.0
Natural Gas	24	6,170.4	9	453.5	15	5,716.9
Other Gases	--	--	--	--	--	--
Nuclear	2	2,200.0	1	609.9	1	1,590.1
Hydroelectric Conventional	1	122.0	--	--	1	122.0
Wind	2	706.5	--	--	2	706.5
Solar Thermal and Photovoltaic	1	300.0	1	1.0	--	299.0
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	3	135.0	--	--	3	135.0
Other Biomass	--	--	--	--	--	--
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	--	--	--	--	--	--
<b>Years 2015-2019</b>						
U.S. Total	1,412	96,536.3	451	39,593.9	961	56,942.4
Coal	5	694.2	178	28,892.3	-173	-28,198.1
Petroleum	31	59.0	72	1,621.5	-41	-1,562.5
Natural Gas	389	54,893.3	131	7,887.1	258	47,006.2
Other Gases	3	403.0	--	--	3	403.0
Nuclear	3	3,322.0	1	609.9	2	2,712.1
Hydroelectric Conventional	66	1,088.1	22	433.1	44	655.0
Wind	198	21,623.9	6	59.5	192	21,564.4
Solar Thermal and Photovoltaic	627	13,219.8	1	1.0	626	13,218.8
Wood and Wood-Derived Fuels	5	199.2	6	36.5	-1	162.7
Geothermal	8	191.8	--	--	8	191.8
Other Biomass	57	263.0	32	52.0	25	211.0
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	20	579.0	2	1.0	18	578.0

Notes: These data reflect plans as of December 31, 2014

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, coal synfuel, refined coal, and coal-derived synthesis gas.

Petroleum includes distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), waste oil, synthetic gas, and propane.

Other Gases also includes blast furnace gas.

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass include municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Other Energy Sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

In the case of wind, solar and wave energy sites, the capacity for multiple generators is reported in a single generator record and is presented as a single generator in the generator count.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.6. Capacity Additions, Retirements and Changes by Energy Source, 2014 (Count, Megawatts)**

Energy Source	Generator Additions				Generator Retirements			
	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal	1	106.2	52.0	52.0	53	5,083.4	4,489.7	4,552.3
Petroleum	28	62.2	62.0	62.0	55	1,261.0	1,018.6	1,120.0
Natural Gas	92	9,275.2	8,300.8	8,849.5	87	4,184.5	3,834.4	3,918.8
Other Gases	--	--	--	--	4	40.0	40.0	40.0
Nuclear	--	--	--	--	1	563.4	612.4	622.4
Hydroelectric Conventional	16	177.9	176.2	170.5	5	133.4	134.8	134.8
Wind	50	4,685.5	4,594.5	4,594.5	4	75.2	75.2	75.2
Solar Thermal and Photovoltaic	353	3,692.7	3,624.5	3,594.4	5	7.9	6.3	6.1
Wood and Wood-Derived Fuels	3	130.5	105.5	109.5	6	131.9	131.4	131.5
Geothermal	1	20.0	11.5	22.5	--	--	--	--
Other Biomass	63	112.6	106.7	106.5	12	19.9	19.4	19.4
Hydroelectric Pumped Storage	--	--	--	--	--	--	--	--
Other Energy Sources	2	39.0	28.0	28.0	4	30.0	29.7	29.7
Total	609	18,301.8	17,061.7	17,589.4	236	11,530.6	10,391.9	10,650.2

Energy Source	Other Changes to Existing Capacity			
	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity	
Coal	994.2	225.6	-624.3	
Petroleum	-1,696.9	-1,431.0	-1,614.2	
Natural Gas	1,860.9	2,294.2	1,679.4	
Other Gases	-183.9	-153.5	-170.0	
Nuclear	0.3	-58.6	253.0	
Hydroelectric Conventional	167.6	435.9	378.1	
Wind	-22.4	-261.2	-261.8	
Solar Thermal and Photovoltaic	79.2	82.6	86.7	
Wood and Wood-Derived Fuels	48.4	39.8	34.1	
Geothermal	-28.0	-104.2	-70.7	
Other Biomass	34.0	36.2	32.0	
Hydroelectric Pumped Storage	--	95.8	114.2	
Other Energy Sources	530.5	487.3	480.4	
Total	1,783.9	1,688.9	316.9	

Notes: Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal, coal synfuel, refined coal, and coal-derived synthesis gas.

Petroleum includes distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, petroleum coke (converted to liquid petroleum, see Technical Notes for conversion methodology), waste oil, synthetic gas, and propane.

Other Gases also includes blast furnace gas and other manufactured and waste gases derived from fossil fuels.

Hydroelectric Conventional capacity includes conventional hydroelectric power excluding pumped storage facilities.

Wood and wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.

Other Biomass include municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).

Other Energy Sources include batteries, hydrogen, purchased steam, sulfur, tire-derived fuels and other miscellaneous energy sources.

Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.

In the case of some wind, solar and wave energy sites, the capacity for multiple generators is reported in a single generator record and is presented as a single generator in the generator count.

Other Changes to Existing Capacity reflect uprates, derates, repowerings, and changes to previously reported generator capacity.

\* = Value is less than half of the smallest unit of measure.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

Table 4.7.A. Net Summer Capacity of Utility Scale Units by Technology and by State, 2014 and 2013 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	4,577.6	4,403.4	22,853.0	23,564.2	1,775.4	1,753.4	3.0	3.0	4,046.3	4,645.4	52.9	33,308.2	34,422.3	
Connecticut	336.6	4,403.4	6,312.8	6,274.1	29.4	29.4	0.0	0.0	2,122.5	2,102.5	30.9	30.9	8,832.3	8,769.5
Maine	1,795.4	1,809.6	2,653.0	2,667.3	0.0	0.0	0.0	0.0	0.0	0.0	22.0	4,470.4	4,498.9	
Massachusetts	909.9	746.5	9,791.0	10,526.8	1,746.0	1,724.0	3.0	3.0	677.6	677.3	0.0	0.0	13,127.7	13,677.6
New Hampshire	935.4	930.5	2,236.7	2,236.7	0.0	0.0	0.0	0.0	1,246.2	1,246.2	0.0	0.0	4,418.3	4,413.4
Rhode Island	50.3	46.5	1,759.8	1,759.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,810.1	1,809.3
Vermont	550.0	535.7	99.5	99.5	0.0	0.0	0.0	0.0	619.4	619.4	0.0	0.0	649.5	1,254.6
Middle Atlantic	10,552.7	10,086.6	69,330.4	69,239.5	3,409.1	3,341.0	40.0	40.0	19,182.6	19,294.3	11.2	11.2	102,526.0	101,954.6
New Jersey	645.9	575.5	14,211.4	13,862.4	420.0	420.0	0.0	0.0	4,110.1	4,107.5	11.2	11.2	19,398.6	18,996.6
New York	7,047.2	6,649.2	26,499.3	26,428.0	1,406.1	1,400.0	20.0	20.0	5,431.5	5,421.0	0.0	0.0	40,404.1	39,918.2
Pennsylvania	2,859.6	2,863.9	28,619.7	28,929.1	1,583.0	1,521.0	20.0	20.0	9,641.0	9,706.8	0.0	0.0	42,723.3	43,039.8
East North Central	9,702.9	9,077.8	120,747.9	122,181.5	1,872.0	1,872.0	25.5	20.0	18,873.3	18,838.1	111.0	109.1	151,332.6	152,098.5
Illinois	3,717.9	3,718.2	29,442.1	29,654.6	0.0	0.0	1.5	0.0	11,564.1	11,577.5	1.0	0.0	44,726.6	44,950.3
Indiana	1,966.0	1,711.6	25,445.0	25,396.6	0.0	0.0	0.0	0.0	0.0	0.0	88.0	88.0	27,499.0	27,196.2
Michigan	2,146.7	1,849.5	22,433.3	22,477.6	1,872.0	1,872.0	0.0	0.0	3,982.0	3,929.1	0.9	0.0	30,434.9	30,128.2
Ohio	714.8	703.6	28,633.7	29,264.1	0.0	0.0	24.0	20.0	2,134.0	2,134.0	0.0	0.0	31,506.5	32,481.7
Wisconsin	1,157.5	1,094.9	14,793.8	15,028.6	0.0	0.0	0.0	0.0	1,193.2	1,197.5	21.1	21.1	17,165.6	17,342.1
West North Central	18,835.5	18,191.6	62,269.6	62,092.9	657.0	657.0	2.0	1.0	5,806.0	5,888.0	44.5	24.5	87,614.6	86,855.0
Iowa	5,727.5	5,207.5	10,157.7	10,120.1	0.0	0.0	0.0	0.0	601.4	601.4	20.0	0.0	16,506.6	15,929.0
Kansas	2,990.9	2,990.9	10,059.9	10,077.3	0.0	0.0	0.0	0.0	1,175.0	1,175.0	0.8	0.8	14,226.6	14,244.0
Minnesota	3,423.9	3,467.5	10,583.9	10,598.3	0.0	0.0	1.0	1.0	1,594.0	1,673.0	18.4	18.4	15,621.2	15,758.2
Missouri	1,050.8	1,039.1	18,887.8	18,910.6	657.0	657.0	1.0	0.0	1,193.0	1,194.0	0.0	0.0	21,789.6	21,800.7
Nebraska	1,105.4	819.1	6,384.4	6,384.9	0.0	0.0	0.0	0.0	1,242.6	1,244.6	0.0	0.0	8,732.4	8,448.6
North Dakota	2,279.0	2,279.0	4,505.6	4,281.4	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	6,789.9	6,565.7
South Dakota	2,258.0	2,388.5	1,690.3	1,720.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,948.3	4,108.8
South Atlantic	12,847.4	12,360.5	162,622.3	160,969.0	7,905.2	7,905.2	34.0	32.0	24,559.1	24,562.6	970.7	930.0	208,938.7	206,759.3
Delaware	43.8	38.3	3,042.4	3,207.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,088.2	3,245.7
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	1,310.5	1,303.2	53,780.8	53,125.5	0.0	0.0	0.0	0.0	3,572.0	3,572.0	776.7	780.0	59,440.0	58,780.7
Georgia	2,863.4	2,813.6	29,419.1	29,473.5	1,862.2	1,862.2	0.0	0.0	4,061.0	4,061.0	44.0	0.0	38,249.7	38,210.3
Maryland	955.5	910.3	9,600.2	9,713.1	0.0	0.0	0.0	0.0	1,707.8	1,716.0	0.0	0.0	12,263.5	12,339.4
North Carolina	3,258.5	2,892.1	22,005.4	21,939.5	86.0	86.0	0.0	0.0	5,094.1	5,076.1	54.0	54.0	30,498.0	30,047.7
South Carolina	1,779.5	1,769.5	11,772.3	11,974.9	2,716.0	2,716.0	0.0	0.0	6,556.2	6,556.2	0.0	0.0	22,824.0	23,016.6
Virginia	1,750.2	1,747.5	17,637.2	16,162.0	3,241.0	3,241.0	0.0	0.0	3,568.0	3,581.3	96.0	96.0	26,292.4	24,827.8
West Virginia	886.0	886.0	15,355.9	15,364.1	0.0	0.0	34.0	32.0	0.0	0.0	0.0	0.0	16,275.9	16,282.1
East South Central	7,953.8	7,986.2	70,314.0	70,632.1	1,616.3	1,616.3	0.0	0.0	9,875.6	9,857.5	159.7	151.4	89,919.4	90,243.5
Alabama	3,866.9	3,948.6	23,000.0	23,361.1	0.0	0.0	0.0	0.0	5,064.6	5,043.4	0.0	0.0	31,953.3	32,353.1
Kentucky	905.6	901.4	19,972.2	20,102.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,877.8	21,003.6
Mississippi	274.7	278.2	14,247.4	13,718.2	0.0	0.0	0.0	0.0	1,408.5	1,413.4	159.7	151.4	16,090.3	15,561.2
Tennessee	2,886.6	2,850.8	13,094.4	13,450.6	1,616.3	1,616.3	0.0	0.0	3,400.7	3,400.7	0.0	0.0	29,998.0	21,325.6
West South Central	22,335.5	19,933.9	146,300.7	144,309.4	288.0	288.0	36.0	36.0	8,912.4	8,904.4	499.2	425.9	178,371.8	173,897.6
Arkansas	1,632.0	1,632.6	11,274.0	11,306.3	28.0	28.0	0.0	0.0	1,819.6	1,810.0	0.0	0.0	14,753.6	14,785.9
Louisiana	642.1	642.9	23,605.8	23,257.3	0.0	0.0	0.0	0.0	2,132.8	2,125.4	275.8	202.3	26,656.5	26,227.9
Oklahoma	4,718.9	4,078.3	19,069.3	18,963.9	260.0	260.0	0.0	0.0	0.0	0.0	0.0	0.0	24,048.2	23,300.2
Texas	15,342.5	13,582.1	92,351.6	90,781.9	0.0	0.0	36.0	36.0	4,960.0	4,960.0	223.4	223.6	112,913.5	109,583.6
Mountain	20,705.8	19,834.8	64,260.2	63,937.0	778.8	778.8	2.6	2.6	3,937.0	3,937.0	111.4	111.4	89,795.8	88,601.6
Arizona	4,401.2	4,157.5	19,694.4	19,599.1	216.3	216.3	0.0	0.0	3,937.0	3,937.0	0.0	0.0	28,248.9	27,909.9
Colorado	3,374.6	3,122.8	10,986.2	11,074.8	562.5	562.5	0.0	0.0	0.0	0.0	9.3	9.3	14,932.6	14,769.4
Idaho	3,776.1	3,771.5	1,152.9	1,157.4	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	4,943.8	4,923.7
Montana	3,397.3	3,373.5	2,888.7	2,911.7	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,330.0	6,329.2
Nevada	2,226.5	1,967.5	8,258.4	8,654.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,485.2	10,652.1
New Mexico	1,146.6	1,060.4	6,920.8	6,874.9	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.0	8,072.0	7,937.9
Utah	667.1	666.0	7,626.4	7,000.3	0.0	0.0	0.0	0.0	0.0	0.0	31.8	31.8	8,325.3	7,696.1
Wyoming	1,714.7	1,715.6	6,732.1	6,654.2	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,458.0	8,381.3
Pacific Contiguous	61,714.2	58,902.3	51,636.0	53,355.5	4,183.3	4,177.6	8.0	6.0	3,377.0	3,373.0	566.3	275.4	121,479.4	120,089.8
California	25,022.8	22,516.6	43,052.5	44,927.2	3,869.3	3,863.6	8.0	6.0	2,240.0	2,240.0	453.6	218.6	74,646.2	73,772.0
Oregon	12,043.1	12,026.1	3,841.1	3,635.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15,884.2	15,661.5
Washington	24,648.3	24,359.6	4,737.0	4,792.9	314.0	314.0	0.0	0.0	1,137.0	1,133.0	112.7	56.8	30,949.0	30,656.3
Pacific Noncontiguous	1,055.6	1,021.0	3,965.5	4,045.7	0.0	0.0	48.0	48.0	0.0	0.0	66.6	26.6	5,135.7	5,141.3
Alaska	502.7	482.6	1,894.5	1,874.4	0.0	0.0	27.0	27.0	0.0	0.0	40.0	0.0	2,464.2	2,384.0
Hawaii	552.9	538.4	2,071.0	2,171.3	0.0	0.0	21.0	21.0	0.0	0.0	26.6	26.6	2,671.5	2,757.3
U.S. Total	170,281.0	161,800.1	774,294.2	774,326.8	22,485.1	22,389.3	199.1	188.6	98,569.3	99,240.3	2,593.5	2,118.4	1,068,422.5	1,060,063.5

Values are final.

## NOTES:

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report. This exclusion may represent a significant portion of capacity for some technologies such as solar photovoltaic generation.

Concentrated Solar Power Energy Storage is included in "Renewable sources"; it is not included in "Other Energy Storage".

Sources: U.S. Energy Information Administration, Form EIA-860, "Annual Electric Generator Report" and Form EIA-860M, "Monthly Update to the Annual Electric Generator Report."

Table 4.7.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, 2014 and 2013 (Megawatts)

Census Division and State	Summer Capacity at Utility Scale Facilities														Distributed Capacity		Summer Capacity From Utility Scale Facilities and Distributed Capacity				
	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Distributed Solar Photovoltaic Capacity		Estimated Total Solar Photovoltaic Capacity		Estimated Total Solar Capacity		
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	
New England	808.2	797.5	328.1	154.8	0.0	0.0	1,965.8	1,952.6	1,475.5	1,498.5	0.0	0.0	4,577.6	4,403.4	576.2	N/A	904.3	N/A	904.3	N/A	
Connecticut	0.0	0.0	10.0	5.0	0.0	0.0	122.2	122.2	204.4	204.4	0.0	0.0	336.6	331.6	87.3	N/A	97.3	N/A	97.3	N/A	
Maine	430.6	430.6	0.0	0.0	0.0	0.0	733.0	726.7	631.8	652.3	0.0	0.0	1,795.4	1,809.6	9.2	N/A	92.2	N/A	92.2	N/A	
Massachusetts	82.6	72.7	281.0	130.7	0.0	0.0	263.0	263.0	283.3	280.1	0.0	0.0	909.9	746.5	433.5	N/A	714.5	N/A	714.5	N/A	
New Hampshire	171.0	171.0	0.0	0.0	0.0	0.0	521.3	514.4	243.1	245.1	0.0	0.0	935.4	930.5	10.7	N/A	107.1	N/A	107.1	N/A	
Rhode Island	3.8	3.0	6.9	6.9	0.0	0.0	2.7	2.7	36.9	36.9	0.0	0.0	50.3	49.5	7.7	N/A	14.6	N/A	14.6	N/A	
Vermont	120.2	120.2	30.2	12.2	0.0	0.0	323.6	323.6	76.0	79.7	0.0	0.0	550.0	535.7	27.9	N/A	58.1	N/A	58.1	N/A	
Middle Atlantic	3,098.5	3,082.2	489.6	434.9	0.0	0.0	5,618.8	5,227.8	1,345.8	1,353.7	0.0	0.0	10,552.7	10,088.6	1,150.7	N/A	1,640.3	N/A	1,640.3	N/A	
New Jersey	7.6	7.5	395.2	337.9	0.0	0.0	12.3	3.3	230.8	226.8	0.0	0.0	845.9	575.5	739.1	N/A	1,134.3	N/A	1,134.3	N/A	
New York	1,747.0	1,730.8	52.3	46.2	0.0	0.0	4,713.1	4,332.3	534.8	539.9	0.0	0.0	7,047.2	6,649.2	267.9	N/A	320.2	N/A	320.2	N/A	
Pennsylvania	1,343.9	1,343.9	42.1	40.8	0.0	0.0	893.4	892.2	580.2	587.0	0.0	0.0	2,859.6	2,863.9	143.7	N/A	185.8	N/A	185.8	N/A	
East North Central	7,362.4	6,897.8	159.9	113.0	0.0	0.0	918.2	912.3	1,242.4	1,154.7	0.0	0.0	9,702.9	9,077.8	116.6	N/A	276.5	N/A	276.5	N/A	
Illinois	3,526.8	3,525.1	31.9	31.6	0.0	0.0	34.1	34.1	125.1	127.4	0.0	0.0	3,717.9	3,718.2	14.1	N/A	46.0	N/A	46.0	N/A	
Indiana	1,739.7	1,539.7	91.1	49.3	0.0	0.0	60.4	60.4	74.8	62.2	0.0	0.0	1,966.0	1,711.6	6.7	N/A	97.8	N/A	97.8	N/A	
Michigan	1,360.1	1,080.3	0.0	0.0	0.0	0.0	333.1	331.4	453.5	437.8	0.0	0.0	2,146.7	1,849.5	25.7	N/A	25.7	N/A	25.7	N/A	
Ohio	424.1	424.1	35.9	32.1	0.0	0.0	101.9	101.9	152.9	145.5	0.0	0.0	714.8	703.6	52.6	N/A	88.5	N/A	88.5	N/A	
Wisconsin	331.7	328.6	1.0	0.0	0.0	0.0	388.7	384.5	436.1	381.8	0.0	0.0	1,157.5	1,094.9	17.4	N/A	18.4	N/A	18.4	N/A	
West North Central	15,008.5	14,398.2	9.4	1.7	0.0	0.0	3,300.8	3,292.2	516.8	499.5	0.0	0.0	18,835.6	18,191.6	125.8	N/A	135.2	N/A	135.2	N/A	
Iowa	5,562.2	5,047.0	0.0	0.0	0.0	0.0	144.9	144.9	20.4	15.6	0.0	0.0	5,727.5	5,207.5	20.5	N/A	20.5	N/A	20.5	N/A	
Kansas	2,968.9	2,968.9	0.0	0.0	0.0	0.0	7.0	7.0	15.0	15.0	0.0	0.0	2,990.9	2,990.9	2.3	N/A	2.3	N/A	2.3	N/A	
Minnesota	2,787.8	2,843.7	1.7	1.7	0.0	0.0	195.0	184.2	439.4	437.9	0.0	0.0	3,423.9	3,467.5	15.8	N/A	17.5	N/A	17.5	N/A	
Missouri	458.5	458.5	7.7	0.0	0.0	0.0	568.1	570.3	16.5	10.3	0.0	0.0	1,050.8	1,039.1	85.9	N/A	93.6	N/A	93.6	N/A	
Nebraska	811.9	530.4	0.0	0.0	0.0	0.0	277.8	277.8	15.7	10.9	0.0	0.0	1,105.4	819.1	0.8	N/A	0.8	N/A	0.8	N/A	
North Dakota	1,759.2	1,759.2	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	2,279.0	2,279.0	0.2	N/A	0.2	N/A	0.2	N/A	
South Dakota	660.0	790.5	0.0	0.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,258.0	2,388.5	0.3	N/A	0.3	N/A	0.3	N/A	
South Atlantic	745.3	705.3	910.0	546.7	0.0	0.0	7,198.0	7,193.2	3,994.1	3,915.3	0.0	0.0	12,847.4	12,360.5	397.2	N/A	1,307.2	N/A	1,307.2	N/A	
Delaware	2.0	2.0	29.6	28.3	0.0	0.0	0.0	0.0	12.2	8.0	0.0	0.0	438.0	38.3	39.1	N/A	68.7	N/A	68.7	N/A	
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6	N/A	16.6	N/A	16.6	N/A	
Florida	0.0	0.0	72.9	66.4	0.0	0.0	54.5	54.5	1,183.1	1,182.3	0.0	0.0	1,310.5	1,303.2	64.5	N/A	137.4	N/A	137.4	N/A	
Georgia	0.0	0.0	68.6	61.1	0.0	0.0	2,047.6	2,044.9	747.2	707.6	0.0	0.0	2,963.4	2,813.6	49.4	N/A	118.0	N/A	118.0	N/A	
Maryland	160.0	120.0	60.4	55.2	0.0	0.0	590.0	590.0	145.1	145.1	0.0	0.0	955.5	910.3	150.6	N/A	211.0	N/A	211.0	N/A	
North Carolina	0.0	0.0	676.0	333.2	0.0	0.0	1,999.1	1,997.0	583.4	561.9	0.0	0.0	3,258.5	2,892.1	56.8	N/A	732.8	N/A	732.8	N/A	
South Carolina	0.0	0.0	2.5	2.5	0.0	0.0	1,340.3	1,340.3	436.7	426.7	0.0	0.0	1,779.5	1,769.5	2.6	N/A	5.3	N/A	5.3	N/A	
Virginia	0.0	0.0	0.0	0.0	0.0	0.0	866.0	866.0	884.2	881.5	0.0	0.0	1,750.2	1,747.5	15.1	N/A	15.1	N/A	15.1	N/A	
West Virginia	563.3	563.3	0.0	0.0	0.0	0.0	300.5	300.5	2.2	2.2	0.0	0.0	886.0	886.0	2.4	N/A	2.4	N/A	2.4	N/A	
East South Central	29.1	29.1	45.2	13.6	0.0	0.0	6,722.4	6,719.4	1,167.1	1,224.1	0.0	0.0	7,953.8	7,986.2	48.5	N/A	93.7	N/A	93.7	N/A	
Alabama	0.0	0.0	0.0	0.0	0.0	0.0	3,271.0	3,272.6	615.9	676.4	0.0	0.0	3,896.9	3,948.6	1.8	N/A	1.8	N/A	1.8	N/A	
Kentucky	0.0	0.0	0.0	0.0	0.0	0.0	835.3	831.1	70.3	70.3	0.0	0.0	905.6	901.4	8.2	N/A	8.2	N/A	8.2	N/A	
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.7	278.2	0.0	0.0	274.7	278.2	1.4	N/A	1.4	N/A	1.4	N/A
Tennessee	29.1	29.1	45.2	13.6	0.0	0.0	2,616.1	2,616.1	196.2	199.2	0.0	0.0	2,886.6	2,858.0	37.1	N/A	82.3	N/A	82.3	N/A	
West South Central	17,773.6	15,454.8	185.7	125.9	0.0	0.0	3,049.6	3,072.2	1,326.6	1,281.0	0.0	0.0	22,335.5	19,933.9	176.2	N/A	361.9	N/A	361.9	N/A	
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	1,323.6	1,324.2	308.4	308.4	0.0	0.0	1,632.0	1,632.6	3.2	N/A	3.2	N/A	3.2	N/A	
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0	192.0	450.1	450.9	0.0	0.0	642.1	642.9	75.4	N/A	75.4	N/A	75.4	N/A	
Oklahoma	3,779.5	3,132.9	0.0	0.0	0.0	0.0	863.2	867.2	76.2	76.2	0.0	0.0	4,718.9	4,076.3	1.6	N/A	1.6	N/A	1.6	N/A	
Texas	13,994.1	13,212.9	185.7	125.9	0.0	0.0	670.8	688.8	491.9	445.5	0.0	0.0	15,342.5	13,582.1	96.0	N/A	281.7	N/A	281.7	N/A	
Mountain	7,074.6	6,775.7	2,030.4	1,472.5	363.9	363.9	10,560.3	10,551.0	178.2	184.8	486.9	486.9	20,705.8	19,834.8	873.8	N/A	2,904.2	N/A	3,268.1	N/A	
Arizona	237.3	237.3	1,112.9	866.9	295.4	295.4	2,720.9	2,719.4	34.7	38.5	0.0	0.0	4,401.2	4,157.5	511.7	N/A	1,624.6	N/A	1,920.0	N/A	
Colorado	2,543.9	2,302.9	127.0	120.2	0.0	0.0	676.3	672.3	27.4	27.4	0.0	0.0	3,374.6	3,122.8	212.2	N/A	339.2	N/A	339.2	N/A	
Idaho	962.7	962.7	0.0	0.0	0.0	0.0	2,707.7	2,704.5	95.7	94.3	10.0	10.0	3,776.1	3,771.5	3.0	N/A	3.0	N/A	3.0	N/A	
Montana	636.7	612.4	0.0	0.0	0.0	0.0	2,757.6	2,758.1	3.0	3.0	0.0	0.0	3,397.3	3,373.5	8.3	N/A	8.3	N/A	8.3	N/A	
Nevada	150.0	150.0	539.6	292.1	68.5	68.5	1,051.4	1,051.4	3.2	3.2	413.8	402.3	2,226.5	1,967.5	49.0	N/A	588.6	N/A	657.1	N/A	
New Mexico	812.3	777.5	249.6	192.0	0.0	0.0	82.9	82.9	2.2	6.4	1.6	1.6	1,148.6	1,060.4	62.0	N/A	311.6	N/A	311.6	N/A	
Utah	324.4	324.4	1.3	1.3	0.0	0.0	256.4	255.3	12.0												

Table 4.7.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, 2014 and 2013 (Megawatts)

Census Division and State	Natural Gas Fired Combined Cycle		Natural Gas Fired Combustion Turbine		Other Natural Gas		Coal		Petroleum Coke		Petroleum Liquids		Other Gases		Total Fossil Fuels	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	11,742.0	11,720.9	1,110.1	1,111.3	963.4	884.9	2,076.8	2,382.7	0.0	0.0	6,960.7	7,464.4	0.0	0.0	22,853.0	23,564.2
Connecticut	2,504.6	2,504.6	482.2	482.2	64.7	75.9	383.4	383.4	0.0	0.0	2,877.9	2,828.0	0.0	0.0	6,312.8	6,274.1
Maine	1,250.0	1,250.0	297.2	297.2	119.0	119.0	85.0	85.0	0.0	0.0	901.8	916.1	0.0	0.0	2,653.0	2,667.3
Massachusetts	5,054.2	5,033.1	326.9	328.1	769.3	679.6	1,074.5	1,380.4	0.0	0.0	2,566.3	3,105.6	0.0	0.0	9,791.2	10,526.8
New Hampshire	1,201.0	1,201.0	3.8	3.8	0.0	0.0	533.9	533.9	0.0	0.0	498.0	498.0	0.0	0.0	2,236.7	2,236.7
Rhode Island	1,732.2	1,732.2	0.0	0.0	10.4	10.4	0.0	0.0	0.0	0.0	17.2	17.2	0.0	0.0	1,759.8	1,759.8
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	99.5	0.0	0.0	99.5	99.5
Middle Atlantic	23,322.4	22,426.7	8,808.6	8,760.8	11,069.0	10,148.3	18,582.4	19,095.8	11.6	11.6	7,436.0	8,695.9	100.4	100.4	69,330.4	69,239.5
New Jersey	6,620.9	5,952.0	4,081.5	4,062.8	51.6	670.4	1,870.0	1,988.8	11.6	11.6	1,128.2	1,296.8	0.0	0.0	14,211.4	13,982.4
New York	8,250.0	8,236.0	3,048.1	3,017.0	8,758.8	7,679.3	2,498.9	2,507.3	0.0	0.0	3,943.5	4,988.4	0.0	0.0	26,499.3	26,428.0
Pennsylvania	8,451.5	8,338.7	1,679.0	1,681.0	1,795.6	1,798.6	14,213.5	14,599.7	0.0	0.0	2,379.7	2,410.7	100.4	100.4	28,619.7	28,929.1
East North Central	16,384.7	16,267.1	25,665.9	25,701.7	3,656.7	3,626.7	70,837.2	72,138.7	521.6	570.1	2,747.8	2,935.9	934.7	941.3	120,747.9	122,181.5
Illinois	2,972.4	2,957.7	10,183.3	10,169.6	231.6	228.0	15,254.9	15,496.4	0.0	0.0	682.2	883.2	117.7	117.7	29,442.1	29,654.6
Indiana	2,480.2	2,471.2	3,142.6	3,119.6	76.0	87.0	18,599.0	18,648.2	274.0	274.0	273.3	268.4	599.9	606.5	25,445.0	25,396.6
Michigan	4,291.6	4,210.1	3,556.8	3,614.4	3,051.3	3,117.1	10,948.4	10,946.5	47.2	47.2	538.0	542.3	0.0	0.0	22,433.3	22,477.6
Ohio	3,974.6	3,965.2	5,427.7	5,426.7	131.4	133.4	18,894.8	18,894.8	142.0	142.0	656.9	844.9	217.1	217.1	28,633.7	29,624.1
Wisconsin	2,665.2	2,662.9	3,355.5	3,371.4	166.4	139.5	7,950.9	8,150.8	58.4	106.9	597.4	597.1	0.0	0.0	14,793.8	15,028.6
West North Central	5,731.8	5,730.6	11,494.8	11,334.4	3,315.9	3,170.7	37,602.3	37,701.1	32.0	32.0	4,084.4	4,115.7	8.4	8.4	62,269.6	62,092.9
Iowa	1,111.0	1,112.8	1,104.4	1,105.6	344.2	292.6	6,563.0	6,562.3	32.0	32.0	1,003.1	1,014.8	0.0	0.0	10,157.7	10,120.1
Kansas	0.0	0.0	2,363.8	2,350.7	2,061.0	1,996.2	5,097.1	5,188.1	0.0	0.0	538.0	542.3	0.0	0.0	10,059.9	10,077.3
Minnesota	2,158.2	2,158.2	2,575.7	2,580.4	263.9	231.2	4,788.1	4,822.3	0.0	0.0	798.0	806.2	0.0	0.0	10,583.9	10,598.3
Missouri	1,830.0	1,830.0	3,355.4	3,370.9	230.8	230.8	12,326.6	12,332.9	0.0	0.0	1,145.0	1,146.0	0.0	0.0	18,887.8	18,910.6
Nebraska	342.6	339.6	1,152.9	1,152.2	407.3	416.7	4,170.5	4,167.9	0.0	0.0	313.7	315.3	0.0	0.0	6,384.4	6,384.9
North Dakota	0.0	0.0	249.0	80.0	0.0	0.0	4,184.6	4,128.4	0.0	0.0	64.6	64.6	8.4	8.4	4,505.6	4,281.4
South Dakota	290.0	290.0	694.6	694.6	8.7	12.6	4,96.6	0.0	0.0	0.0	222.0	226.5	0.0	0.0	1,690.3	1,720.3
South Atlantic	47,131.3	44,984.5	31,856.0	31,813.3	4,937.4	4,667.4	63,864.2	64,428.1	669.8	669.8	14,026.6	14,139.9	135.0	135.0	162,622.3	160,969.0
Delaware	1,196.0	1,196.0	31.0	181.0	876.0	876.0	410.0	575.0	0.0	0.0	114.4	114.4	0.0	0.0	265.0	304.2
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	25,257.6	24,667.9	8,404.0	8,405.4	2,792.3	2,647.3	10,177.0	10,117.0	598.0	598.0	6,653.9	6,701.9	0.0	0.0	53,780.8	53,125.5
Georgia	7,961.8	7,921.8	7,823.4	7,799.1	115.0	123.4	12,412.1	12,412.1	83.8	83.8	1,120.7	1,101.7	0.0	0.0	29,419.1	29,473.5
Maryland	250.0	230.0	1,470.9	1,590.4	325.8	325.8	4,739.0	4,757.0	0.0	0.0	2,814.5	2,809.9	0.0	0.0	9,600.2	9,713.1
North Carolina	4,738.5	4,706.6	6,031.7	6,035.7	0.0	0.0	10,832.8	10,794.8	0.0	0.0	402.4	402.4	0.0	0.0	22,005.4	21,939.5
South Carolina	2,409.0	2,416.0	2,855.6	2,841.2	270.8	110.8	5,575.5	5,945.5	0.0	0.0	661.4	661.4	0.0	0.0	11,772.3	11,974.9
Virginia	5,318.4	3,846.2	3,879.1	3,877.6	557.5	546.9	5,541.9	5,554.1	0.0	0.0	2,340.3	2,337.2	0.0	0.0	17,637.2	16,162.0
West Virginia	0.0	0.0	1,071.3	1,073.9	0.0	0.0	14,273.6	14,273.6	0.0	0.0	11.0	11.0	0.0	0.0	15,355.9	15,364.1
East South Central	18,222.1	17,642.3	12,887.5	12,829.5	2,744.1	2,744.4	36,209.7	37,111.0	0.0	0.0	150.8	205.1	99.8	99.8	70,314.0	70,632.1
Alabama	9,391.3	9,373.1	2,530.6	2,530.6	189.3	178.3	10,746.4	11,136.7	0.0	0.0	42.6	42.6	99.8	99.8	23,000.0	23,361.1
Kentucky	0.0	0.0	4,870.6	4,812.6	0.0	0.0	15,089.7	15,219.7	0.0	0.0	11.9	69.9	0.0	0.0	19,972.2	20,102.2
Mississippi	7,427.8	6,666.2	1,716.9	1,716.9	2,533.6	2,566.1	2,526.0	2,526.0	0.0	0.0	43.1	43.0	0.0	0.0	14,247.4	13,719.2
Tennessee	1,403.0	1,403.0	3,769.4	3,769.4	21.2	0.0	7,847.6	8,228.6	0.0	0.0	53.2	49.6	0.0	0.0	13,094.4	13,450.6
West South Central	58,639.7	55,721.7	12,267.3	12,311.6	36,052.4	36,759.5	37,921.9	37,956.7	903.2	984.2	185.4	198.8	330.8	379.9	146,300.7	144,309.4
Arkansas	4,597.3	4,630.5	729.3	727.6	810.7	813.7	5,124.5	5,123.3	0.0	0.0	12.2	12.2	0.0	0.0	11,274.0	11,306.3
Louisiana	7,548.1	7,053.4	2,649.8	2,640.4	9,022.4	9,068.5	3,418.6	3,437.8	892.6	973.6	49.1	49.3	25.2	34.3	23,605.8	23,257.3
Oklahoma	7,161.8	7,097.5	1,194.7	1,189.9	5,381.1	5,297.9	5,305.1	5,305.0	0.0	0.0	74.4	74.4	0.0	0.0	19,069.3	18,963.9
Texas	39,332.5	36,940.3	7,693.5	7,753.7	20,838.2	21,577.3	24,121.5	24,091.5	10.6	10.6	49.7	62.9	305.6	345.6	92,351.6	90,781.9
Mountain	21,945.4	21,173.9	8,921.5	8,869.8	3,213.4	3,395.2	29,670.0	30,022.9	52.0	52.0	370.8	328.7	87.1	94.9	64,260.2	63,937.0
Arizona	9,888.7	9,806.4	2,367.6	2,367.6	1,177.6	1,177.6	6,170.0	6,157.0	0.0	0.0	90.5	90.5	0.0	0.0	19,694.4	19,599.1
Colorado	2,651.7	2,731.7	2,535.3	2,539.3	349.0	352.3	5,281.8	5,281.8	0.0	0.0	168.4	169.8	0.0	0.0	10,986.2	11,074.8
Idaho	568.5	567.5	557.5	543.0	4.3	4.3	17.2	17.2	0.0	0.0	5.4	5.4	0.0	0.0	1,152.9	1,137.4
Montana	0.0	0.0	362.1	362.1	54.0	54.0	2,419.1	2,442.1	52.0	52.0	0.0	0.0	1.5	1.5	2,888.7	2,911.7
Nevada	5,418.6	5,410.5	1,385.6	1,385.6	451.1	587.1	997.4	1,295.4	0.0	0.0	6.0	6.0	0.0	0.0	8,258.7	8,684.6
New Mexico	1,493.9	1,456.4	1,039.6	1,035.4	849.4	888.7	3,471.0	3,471.0	0.0	0.0	66.9	23.4	0.0	0.0	6,920.8	6,874.9
Utah	1,830.0	1,201.0	520.2	520.2	322.4	325.3	4,926.0	4,926.0	0.0	0.0	27.8	27.8	0.0	0.0	7,626.4	7,000.3
Wyoming	94.0	0.0	153.6	116.6	5.6	6.0	6,387.5	6,432.4	0.0	0.0	5.8	5.8	85.6	93.4	6,732.1	6,654.2
Pacific Contiguous	24,981.9	25,609.5	11,371.4	11,347.1	12,611.3	13,554.1	2,043.6	2,177.8	0.0	0.0	410.7	448.3	211.7	211.7	51,630.6	53,355.5
California	19,352.3	19,924.0	10,596.4	10,572.1	12,378.0	13,516.5	118.6	252.8	0.0	0.0	395.5	433.1	211.7	211.7	43,052.5	44,927.2
Oregon	2,916.6	2,916.6	133.8	133.8	205.7	0.0	585.0	585.0	0.0	0.0	0.0	0.0	0.0			

**Table 4.8.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels, January 2013–December 2014**

Period	Coal		Natural Gas			Petroleum		
	Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Steam Turbine	Petroleum Liquids Fired Combustion Turbine	Internal Combustion Engine	
<b>Annual Factors</b>								
2013	59.7%	48.2%	4.9%	10.6%	6.1%	12.1%	0.8%	2.2%
2014	61.0%	48.3%	5.2%	10.4%	8.5%	12.5%	1.1%	1.4%
<b>Year 2013</b>								
January	61.2%	46.3%	3.6%	7.3%	4.6%	10.0%	0.7%	2.7%
February	60.6%	46.7%	3.4%	6.7%	4.7%	9.7%	0.4%	2.0%
March	57.7%	44.1%	4.0%	6.8%	5.7%	9.6%	0.3%	1.9%
April	51.3%	40.4%	4.3%	7.3%	6.1%	11.6%	0.6%	2.4%
May	52.9%	41.5%	4.5%	9.5%	5.2%	13.0%	0.7%	2.1%
June	63.4%	50.9%	5.1%	14.7%	6.9%	15.4%	0.8%	1.7%
July	67.9%	58.3%	8.5%	18.6%	8.4%	17.5%	2.1%	2.3%
August	66.3%	60.2%	6.8%	17.6%	8.5%	14.4%	0.9%	2.2%
September	61.2%	52.6%	5.6%	14.0%	6.7%	14.1%	1.3%	2.0%
October	54.4%	45.4%	3.9%	8.5%	5.5%	12.7%	0.7%	2.0%
November	56.2%	44.9%	3.9%	7.1%	4.5%	7.3%	0.6%	2.2%
December	63.7%	47.1%	4.6%	8.5%	6.1%	10.2%	0.7%	2.7%
<b>Year 2014</b>								
January	71.2%	47.2%	6.6%	10.0%	7.8%	19.5%	3.8%	2.3%
February	71.9%	42.5%	4.7%	9.2%	8.7%	12.0%	0.9%	1.5%
March	61.7%	39.7%	4.7%	7.2%	7.1%	13.7%	1.1%	1.4%
April	51.1%	40.3%	3.8%	7.2%	7.9%	9.4%	0.5%	1.0%
May	54.1%	45.0%	5.0%	9.8%	7.8%	10.2%	0.6%	1.6%
June	64.8%	51.1%	5.4%	11.8%	7.6%	14.8%	0.9%	1.3%
July	67.9%	57.7%	6.2%	15.2%	9.7%	15.0%	1.0%	1.5%
August	67.5%	61.0%	6.6%	16.9%	11.0%	14.4%	1.3%	1.5%
September	59.2%	55.4%	5.7%	12.7%	9.5%	13.5%	0.7%	1.4%
October	50.7%	49.0%	5.2%	10.6%	8.8%	8.6%	0.7%	1.3%
November	56.0%	43.7%	4.5%	7.6%	8.3%	7.7%	0.8%	1.2%
December	56.6%	46.2%	4.1%	5.9%	7.2%	10.7%	0.6%	1.1%

Values are final.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

**Table 4.8.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-December 2014**

Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Municipal Solid Waste	Other Biomass Including Wood	Geothermal
Annual Factors								
2013	89.9%	38.9%	32.4%	NA	NA	68.9%	56.7%	73.6%
2014	91.7%	37.3%	34.0%	25.9%	19.8%	68.9%	58.9%	74.0%
Year 2013								
January	93.9%	42.3%	33.5%	NA	NA	66.0%	56.5%	76.9%
February	90.3%	38.3%	35.4%	NA	NA	65.2%	56.0%	76.1%
March	83.4%	34.8%	35.9%	NA	NA	69.0%	55.4%	76.8%
April	77.6%	44.4%	41.1%	NA	NA	66.9%	44.8%	73.3%
May	83.3%	48.4%	37.0%	NA	NA	70.4%	50.5%	71.7%
June	93.1%	48.3%	32.4%	NA	NA	71.0%	54.8%	72.4%
July	95.6%	46.8%	25.3%	NA	NA	71.1%	58.2%	73.3%
August	96.7%	37.2%	22.0%	NA	NA	71.9%	64.8%	72.5%
September	92.2%	29.9%	27.4%	NA	NA	69.4%	61.1%	73.6%
October	85.7%	29.2%	31.0%	NA	NA	66.6%	57.9%	74.7%
November	91.0%	31.1%	37.0%	NA	NA	69.5%	61.0%	68.8%
December	96.6%	35.9%	31.3%	NA	NA	69.9%	59.0%	73.0%
Year 2014								
January	99.1%	36.7%	40.3%	NA	NA	68.1%	60.0%	74.0%
February	94.0%	32.6%	34.8%	NA	NA	68.3%	59.5%	73.3%
March	84.5%	40.7%	39.8%	NA	NA	69.6%	59.7%	73.5%
April	78.8%	44.5%	43.2%	NA	NA	69.9%	49.5%	74.6%
May	85.2%	44.6%	34.9%	NA	NA	70.6%	48.2%	73.2%
June	95.4%	44.8%	36.5%	NA	NA	70.8%	63.0%	73.4%
July	97.5%	41.3%	27.0%	NA	NA	73.1%	63.4%	72.5%
August	96.4%	33.7%	22.5%	30.9%	25.4%	71.1%	62.8%	73.0%
September	94.6%	28.2%	26.1%	30.7%	26.3%	68.9%	61.2%	74.2%
October	84.5%	29.2%	31.6%	26.5%	21.1%	64.4%	56.5%	73.9%
November	91.3%	32.6%	42.3%	22.3%	13.8%	66.1%	62.1%	77.3%
December	99.6%	37.8%	30.4%	15.1%	5.6%	65.4%	60.8%	75.5%

Values are final. NA = Not Available

Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.

Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

**Table 4.9. Total Capacity of Distributed and Dispersed Generators by Technology Type,  
2005 through 2014**

Year	Capacity (MW)										Number of Generators
	Internal Combustion	Combustion Turbine	Steam Turbine	Hydro	Wind	Photovoltaic	Storage	Other	Wind and Other	Total	
<b>Distributed Generators</b>											
2005	4,025.0	1,917.0	1,830.0	999.0	--	--	--	--	995.0	9,766.0	17,371
2006	3,646.0	1,298.0	2,582.0	806.0	--	--	--	--	1,081.0	9,411.0	5,044
2007	4,624.0	1,990.0	3,596.0	1,051.0	--	--	--	--	1,441.0	12,702.0	7,103
2008	5,112.0	1,949.0	3,060.0	1,154.0	--	--	--	--	1,588.0	12,863.0	9,591
2009	4,339.0	4,147.0	4,621.0	1,166.0	--	--	--	--	1,729.0	16,002.0	13,006
2010	886.8	186.0	109.9	97.4	98.9	236.3	--	372.7	--	1,988.0	15,630
2011	791.1	115.5	64.9	97.9	36.7	314.8	0.2	264.3	--	1,685.4	20,941
2012	756.1	105.8	60.2	119.9	252.9	543.7	15.2	324.4	--	1,990.6	28,252
2013	981.3	106.4	31.1	103.9	78.3	556.0	2.0	89.0	--	1,947.4	196,141
2014	813.8	81.3	12.9	108.2	33.7	692.0	7.2	101.0	--	1,855.5	203,099
<b>Dispersed Generators</b>											
2005	4,290.0	335.0	126.0	2.0	--	--	--	--	13.0	4,766.0	11,373
2006	6,524.0	346.0	157.0	3.0	--	--	--	--	8.0	7,037.0	9,536
2007	7,866.0	268.0	102.0	31.0	--	--	--	--	30.0	8,297.0	11,057
2008	9,335.0	86.0	248.0	34.0	--	--	--	--	70.0	9,773.0	12,262
2009	9,751.0	329.0	204.0	81.0	--	--	--	--	108.0	10,475.0	13,928
2010	2,771.2	64.4	13.8	8.4	6.3	95.2	7.0	17.9	--	2,984.2	16,874
2011	2,916.9	40.3	14.6	6.0	3.2	2.7	8.0	7.9	--	2,999.6	14,123
2012	3,180.9	49.8	--	2.2	3.1	8.5	7.7	13.5	--	3,265.5	14,557
2013	3,249.7	159.8	17.0	1.9	4.5	21.6	8.7	25.8	--	3,489.0	17,929
2014	3,479.3	169.7	16.7	0.7	3.7	14.3	6.6	5.7	--	3,696.8	22,599
<b>Distributed and Dispersed Generators</b>											
2005	8,315.0	2,252.0	1,956.0	1,001.0	--	--	--	--	1,008.0	14,532.0	28,744
2006	10,170.0	1,644.0	2,739.0	809.0	--	--	--	--	1,089.0	16,448.0	14,580
2007	12,490.0	2,258.0	3,698.0	1,082.0	--	--	--	--	1,471.0	20,999.0	18,160
2008	14,447.0	2,035.0	3,308.0	1,188.0	--	--	--	--	1,658.0	22,636.0	21,853
2009	14,090.0	4,476.0	4,825.0	1,247.0	--	--	--	--	1,837.0	26,477.0	26,934
2010	3,658.0	250.4	123.7	105.8	105.2	331.5	7.0	390.6	--	4,972.2	32,504
2011	3,708.0	155.8	79.5	103.9	39.9	317.5	8.2	272.2	--	4,685.0	35,064
2012	3,937.0	155.6	60.2	122.1	256.0	552.2	22.9	337.9	--	5,256.1	42,809
2013	4,231.0	266.2	48.1	105.8	82.8	577.6	10.7	114.8	--	5,436.4	214,070
2014	4,293.1	251.0	29.6	108.9	37.5	706.3	13.8	106.7	--	5,552.2	225,698

Starting in 2013, the residential sector is now included and all net metering units are excluded.

Distributed and Dispersed generator data in 2005 include a significant number of generators reported by one respondent, which may be for residential applications.

Prior to 2010, data contains generators over and under 1 MW; from 2010 forward, data contains only generators under 1 MW.

Distributed generators are commercial and industrial generators which are connected to the grid. Dispersed generators are commercial and industrial generators which are not connected to the grid. Both types may be installed at or near a customer's site, or at other locations. They may be owned by either the customers of the distribution utility or by the utility. Other includes generators for which technology is not specified.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 4.10. Net Metering Customers and Capacity by Technology Type, by End Use Sector, 2004 through 2014**

Year	Capacity (MW)					Customers				
	Residential	Commercial	Industrial	Transportation	Total	Residential	Commercial	Industrial	Transportation	Total
<b>Historical Data</b>										
2004	N/A	N/A	N/A	N/A	N/A	14,114	1,494	215	3	15,826
2005	N/A	N/A	N/A	N/A	N/A	19,244	1,565	337	--	21,146
2006	N/A	N/A	N/A	N/A	N/A	30,689	2,553	376	--	33,618
2007	N/A	N/A	N/A	N/A	N/A	44,450	3,513	391	--	48,354
2008	N/A	N/A	N/A	N/A	N/A	64,400	5,305	304	--	70,009
2009	N/A	N/A	N/A	N/A	N/A	88,205	7,365	919	--	96,489
<b>Photovoltaic</b>										
2010	697,890	517,861	243,051	--	1,458,802	137,618	11,897	1,225	--	150,740
2011	1,024,139	1,089,275	381,670	--	2,495,410	198,255	18,345	2,418	--	219,018
2012	1,542,226	1,741,821	395,328	--	3,679,630	294,437	27,611	1,317	--	323,365
2013	2,286,567	2,294,831	565,982	--	5,147,380	442,195	35,379	2,480	--	480,054
2014	3,452,987	2,933,122	710,719	--	7,096,828	642,276	43,335	3,131	--	688,742
<b>Wind</b>										
2010	83,797	26,106	6,392	--	116,295	3,467	583	37	--	4,087
2011	28,063	44,373	9,932	--	82,368	4,456	905	50	--	5,411
2012	33,484	74,620	17,495	--	125,599	4,796	1,143	48	--	5,987
2013	38,987	92,818	14,659	--	146,464	5,265	1,308	92	--	6,665
2014	37,918	101,622	25,426	--	164,966	5,379	1,351	94	--	6,824
<b>Other</b>										
2010	11,455	34,752	24,835	--	71,042	767	271	56	--	1,094
2011	5,030	49,010	56,681	--	110,721	807	242	100	--	1,149
2012	7,539	65,821	83,170	--	156,530	862	314	122	--	1,298
2013	6,785	80,405	80,568	--	167,758	598	331	169	--	1,098
2014	7,633	102,797	98,277	--	208,707	857	397	201	--	1,455
<b>All Technologies</b>										
2010	793,142	578,719	274,278	--	1,646,139	141,852	12,751	1,318	--	155,921
2011	1,057,232	1,182,658	448,283	--	2,688,173	203,518	19,492	2,568	--	225,578
2012	1,583,249	1,882,262	495,993	--	3,961,504	300,095	29,068	1,487	--	330,650
2013	2,332,339	2,468,054	661,209	--	5,461,602	448,058	37,018	2,741	--	487,817
2014	3,498,538	3,137,541	834,422	--	7,470,501	648,512	45,083	3,426	--	697,021

Starting in 2013, there is no maximum capacity on installed units.

Capacity and customer count was not collected by technology type before 2010.

N/A = Not Available.

Total customer count for the years 2007, 2009, and 2010 were revised based on requests from respondents.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 4.11. Fuel-Switching Capacity of Operable Generators Reporting Natural Gas as the Primary Fuel, by Producer Type, 2014  
(Megawatts, Percent)**

Producer Type	Total Net Summer Capacity of All Generators Reporting Natural Gas as the Primary Fuel	Fuel-Switchable Part of Total			
		Net Summer Capacity of Natural Gas-Fired Generators Reporting the Ability to Switch to Petroleum Liquids	Fuel Switchable Capacity as Percent of Total	Maximum Achievable Net Summer Capacity Using Petroleum Liquids	Fuel Switchable Net Summer Capacity Reported to Have No Factors that Limit the Ability to Switch to Petroleum Liquids
Electric Utilities	215,690.8	79,928.9	37.1%	79,014.3	17,496.7
Independent Power Producers, Non-Combined Heat and Power Plants	172,224.5	43,419.4	25.2%	40,531.6	8,870.5
Independent Power Producers, Combined Heat and Power Plants	27,676.7	5,138.5	18.6%	4,954.9	504.6
Electric Power Sector Subtotal	415,592.0	128,486.8	30.9%	124,500.9	26,871.8
Commercial Sector	1,832.6	800.2	43.7%	765.0	101.4
Industrial Sector	14,725.7	1,090.7	7.4%	1,068.1	258.5
All Sectors	432,150.3	130,377.7	30.2%	126,333.9	27,231.7

Notes: Petroleum liquids include distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, waste oil, and propane.  
Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.12. Fuel-Switching Capacity of Operable Generators Reporting Petroleum Liquids as the Primary Fuel, by Producer Type, 2014 (Megawatts, Percent)**

Producer Type	Total Net Summer Capacity of All Generators Reporting Petroleum Liquids as the Primary Fuel	Fuel-Switchable Part of Total		
		Net Summer Capacity of Petroleum Liquids-Fired Generators Reporting the Ability to Switch to Natural Gas	Fuel Switchable Capacity as Percent of Total	Maximum Achievable Net Summer Capacity Using Natural Gas
Electric Utilities	22,294.0	5,671.8	25.4%	6,493.2
Independent Power Producers, Non-Combined Heat and Power Plants	15,588.4	5,871.6	37.7%	4,644.4
Independent Power Producers, Combined Heat and Power Plants	256.2	--	0.0%	--
Electric Power Sector Subtotal	38,138.6	11,543.4	30.3%	11,137.6
Commercial Sector	463.5	21.2	4.6%	21.1
Industrial Sector	343.1	64.9	18.9%	58.9
All Sectors	38,945.2	11,629.5	29.9%	11,217.6

Notes: Petroleum liquids include distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, waste oil, and propane.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.13. Fuel-Switching Capacity of Operable Generators Reporting Natural Gas as the Primary Fuel, by Type of Prime Mover, 2014 (Megawatts, Percent)**

Prime Mover Type	Number of Natural Gas-Fired Generators Reporting the Ability to Switch to Petroleum Liquids	Net Summer Capacity of Natural Gas-Fired Generators Reporting the Ability to Switch to Petroleum Liquids	Fuel Switchable Net Summer Capacity Reported to Have No Factors that Limit the Ability to Switch to Petroleum Liquids
Steam Generator	178	28,133.5	8,767.9
Combined Cycle	411	45,051.7	6,383.4
Internal Combustion	314	1,000.0	312.0
Gas Turbine	916	56,192.5	11,768.4
All Fuel Switchable Prime Movers	1,819	130,377.7	27,231.7

Notes: Petroleum liquids include distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, waste oil, and propane.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 4.14. Fuel-Switching Capacity of Operable Generators Reporting Natural Gas as the Primary Fuel,**

**by Year of Initial Commercial Operation, 2014 (Megawatts, Percent)**

Year of Initial Commercial Operation	Number of Natural Gas-Fired Generators Reporting the Ability to Switch to Petroleum Liquids	Net Summer Capacity of Natural Gas-Fired Generators Reporting the Ability to Switch to Petroleum Liquids	Fuel Switchable Net Summer Capacity Reported to Have No Factors that Limit the Ability to Switch to Petroleum Liquids
Pre-1970	289	12,454.6	5,169.1
1970-1974	338	17,648.0	6,483.6
1975-1979	93	10,147.5	2,252.6
1980-1984	48	1,019.5	216.3
1985-1989	90	2,781.9	391.0
1990-1994	219	12,124.9	1,584.9
1995-1999	131	9,611.6	1,843.5
2000-2004	390	37,954.5	8,045.5
2005-2009	128	16,065.4	1,155.4
2010-2014	93	10,569.8	89.8
Total	1,819	130,377.7	27,231.7

Notes: Petroleum liquids include distillate fuel oil (all diesel and No. 1, No. 2, and No. 4 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil), jet fuel, kerosene, waste oil, and propane.

Source: U.S. Energy Information Administration, Form EIA-860, "Annual Electric Generator Report."

## Chapter 5

# Consumption of Fossil Fuels

**Table 5.1.A. Coal: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,020,523	772,224	240,235	377	7,687
2005	1,041,448	761,349	272,218	377	7,504
2006	1,030,556	753,390	269,412	347	7,408
2007	1,046,795	764,765	276,581	361	5,089
2008	1,042,335	760,326	276,565	369	5,075
2009	934,683	695,615	234,077	317	4,674
2010	979,684	721,431	249,814	314	8,125
2011	934,938	689,316	239,541	347	5,735
2012	825,734	615,467	205,295	307	4,665
2013	860,729	638,327	217,219	513	4,670
2014	853,634	624,235	224,568	202	4,629
<b>Year 2012</b>					
January	70,744	52,338	17,967	29	410
February	62,974	46,908	15,665	27	374
March	57,468	43,413	13,640	26	388
April	51,806	39,920	11,507	23	356
May	62,801	46,900	15,517	22	361
June	71,656	53,708	17,543	26	379
July	86,516	64,433	21,603	28	452
August	82,676	61,480	20,730	28	439
September	69,478	51,516	17,558	24	381
October	66,486	49,060	17,044	21	361
November	69,913	51,276	18,245	25	366
December	73,217	54,516	18,275	27	398
<b>Year 2013</b>					
January	75,049	55,688	18,919	55	386
February	67,129	49,022	17,700	50	358
March	70,469	52,038	17,979	49	404
April	60,807	45,540	14,852	40	374
May	64,688	48,328	15,922	40	399
June	75,054	56,015	18,605	38	395
July	83,213	61,387	21,360	38	429
August	81,970	61,396	20,127	38	408
September	72,723	53,126	19,179	38	380
October	66,348	49,423	16,521	37	367
November	65,959	49,621	15,930	42	366
December	77,319	56,743	20,125	47	404
<b>Year 2014</b>					
January	83,647	61,084	22,129	27	407
February	76,160	55,073	20,699	27	362
March	72,124	51,559	20,147	22	396
April	58,065	41,151	16,541	16	357
May	64,033	47,114	16,521	12	385
June	74,328	55,542	18,365	15	406
July	81,495	60,238	20,821	16	420
August	81,074	60,222	20,422	14	417
September	69,127	50,728	17,998	12	389
October	61,129	44,987	15,772	11	359
November	64,651	46,561	17,720	14	356
December	67,799	49,976	17,434	16	373

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.1.B. Coal: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	24,275	0	3,809	1,540	18,926
2005	23,833	0	3,918	1,544	18,371
2006	23,227	0	3,834	1,539	17,854
2007	22,810	0	3,795	1,566	17,449
2008	22,168	0	3,689	1,652	16,827
2009	20,507	0	3,935	1,481	15,091
2010	21,727	0	3,808	1,406	16,513
2011	21,532	0	3,628	1,321	16,584
2012	19,333	0	2,790	1,143	15,400
2013	18,350	0	2,416	843	15,090
2014	18,107	978	1,821	861	14,448
<b>Year 2012</b>					
January	2,021	0	289	127	1,605
February	1,797	0	232	108	1,458
March	1,609	0	212	101	1,295
April	1,370	0	166	79	1,125
May	1,518	0	230	86	1,202
June	1,486	0	229	83	1,174
July	1,598	0	247	91	1,260
August	1,631	0	275	93	1,264
September	1,473	0	235	83	1,154
October	1,545	0	239	80	1,226
November	1,600	0	218	99	1,283
December	1,685	0	218	113	1,354
<b>Year 2013</b>					
January	1,699	0	225	94	1,381
February	1,527	0	198	88	1,242
March	1,631	0	203	83	1,345
April	1,442	0	192	59	1,191
May	1,479	0	194	66	1,219
June	1,428	0	197	63	1,168
July	1,527	0	219	63	1,245
August	1,496	0	215	63	1,218
September	1,404	0	196	58	1,150
October	1,470	0	164	53	1,253
November	1,599	0	212	70	1,318
December	1,647	0	203	83	1,362
<b>Year 2014</b>					
January	1,773	114	171	105	1,384
February	1,641	97	167	105	1,271
March	1,722	95	199	96	1,332
April	1,425	81	162	66	1,115
May	1,450	81	146	59	1,164
June	1,413	63	153	63	1,134
July	1,466	78	150	70	1,169
August	1,451	70	149	58	1,175
September	1,355	70	121	52	1,113
October	1,359	66	122	47	1,123
November	1,480	76	138	68	1,198
December	1,573	86	142	74	1,271

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.1.C. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,044,798	772,224	244,044	1,917	26,613
2005	1,065,281	761,349	276,135	1,922	25,875
2006	1,053,783	753,390	273,246	1,886	25,262
2007	1,069,606	764,765	280,377	1,927	22,537
2008	1,064,503	760,326	280,254	2,021	21,902
2009	955,190	695,615	238,012	1,798	19,766
2010	1,001,411	721,431	253,621	1,720	24,638
2011	956,470	689,316	243,168	1,668	22,319
2012	845,066	615,467	208,085	1,450	20,065
2013	879,078	638,327	219,635	1,356	19,761
2014	871,741	625,212	226,389	1,063	19,076
<b>Year 2012</b>					
January	72,764	52,338	18,256	155	2,015
February	64,771	46,908	15,897	135	1,832
March	59,077	43,413	13,852	128	1,684
April	53,176	39,920	11,673	102	1,481
May	64,319	46,900	15,748	108	1,563
June	73,142	53,708	17,772	109	1,553
July	88,115	64,433	21,850	120	1,712
August	84,307	61,480	21,004	120	1,703
September	70,951	51,516	17,793	107	1,535
October	68,030	49,060	17,283	101	1,587
November	71,512	51,276	18,464	124	1,649
December	74,901	54,516	18,493	141	1,751
<b>Year 2013</b>					
January	76,748	55,688	19,144	149	1,767
February	68,656	49,022	17,897	137	1,600
March	72,100	52,038	18,182	132	1,748
April	62,249	45,540	15,044	100	1,565
May	66,168	48,328	16,116	105	1,618
June	76,482	56,015	18,802	102	1,563
July	84,740	61,387	21,580	100	1,674
August	83,466	61,396	20,342	102	1,626
September	74,127	53,126	19,375	96	1,530
October	67,818	49,423	16,685	91	1,620
November	67,559	49,621	16,142	112	1,683
December	78,966	56,743	20,327	130	1,765
<b>Year 2014</b>					
January	85,420	61,198	22,300	132	1,791
February	77,801	55,170	20,866	131	1,633
March	73,846	51,654	20,346	118	1,729
April	59,489	41,232	16,703	82	1,472
May	65,483	47,195	16,667	72	1,549
June	75,741	55,606	18,518	78	1,540
July	82,961	60,316	20,970	85	1,589
August	82,526	60,292	20,571	72	1,591
September	70,482	50,798	18,118	64	1,502
October	62,488	45,053	15,895	58	1,482
November	66,131	46,637	17,858	82	1,554
December	69,372	50,062	17,576	90	1,644

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.1.D. Coal: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btu)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	20,375,751	15,610,335	4,606,584	8,251	150,581
2005	20,801,716	15,397,688	5,250,824	8,314	144,889
2006	20,527,410	15,211,077	5,166,001	7,526	142,807
2007	20,841,871	15,436,110	5,287,202	7,833	110,727
2008	20,548,610	15,189,050	5,242,194	8,070	109,296
2009	18,240,611	13,744,178	4,390,596	7,007	98,829
2010	19,196,315	14,333,496	4,709,686	6,815	146,318
2011	18,074,298	13,551,416	4,399,144	7,263	116,475
2012	15,867,141	11,995,971	3,767,011	6,383	97,775
2013	16,509,468	12,421,537	3,981,216	9,444	97,270
2014	16,472,004	12,217,628	4,154,134	4,344	95,898
<b>Year 2012</b>					
January	1,348,608	1,012,122	327,295	595	8,595
February	1,194,392	905,071	280,975	570	7,777
March	1,105,492	846,083	250,739	543	8,127
April	1,007,851	785,334	214,575	473	7,469
May	1,216,206	920,501	287,764	454	7,487
June	1,383,256	1,050,959	323,743	548	8,005
July	1,688,679	1,271,150	407,424	612	9,493
August	1,601,665	1,207,322	384,462	588	9,293
September	1,322,241	998,493	315,266	495	7,986
October	1,262,892	947,165	307,710	439	7,578
November	1,338,310	997,932	332,222	507	7,648
December	1,397,549	1,053,838	334,837	558	8,316
<b>Year 2013</b>					
January	1,437,357	1,079,455	348,957	1,011	7,934
February	1,285,305	951,650	325,325	916	7,414
March	1,357,798	1,015,890	332,574	894	8,440
April	1,168,918	885,167	275,255	719	7,777
May	1,248,079	943,332	295,610	732	8,405
June	1,447,978	1,096,663	342,282	735	8,297
July	1,599,995	1,195,369	394,949	717	8,961
August	1,569,213	1,196,057	363,938	714	8,504
September	1,393,265	1,037,738	346,865	710	7,952
October	1,263,088	956,093	298,689	666	7,641
November	1,263,059	963,935	290,733	764	7,628
December	1,475,413	1,100,190	366,039	867	8,318
<b>Year 2014</b>					
January	1,629,049	1,202,969	417,069	589	8,423
February	1,484,641	1,085,437	391,078	585	7,541
March	1,413,884	1,017,112	387,962	493	8,318
April	1,127,192	807,693	311,840	338	7,320
May	1,239,709	927,469	304,012	273	7,956
June	1,439,870	1,091,640	339,459	326	8,446
July	1,566,788	1,177,989	379,727	339	8,733
August	1,552,663	1,174,260	369,470	295	8,637
September	1,318,826	987,034	323,487	249	8,055
October	1,161,615	867,552	286,399	221	7,443
November	1,241,104	908,616	324,843	300	7,344
December	1,296,664	969,857	318,789	335	7,684

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.1.E. Coal: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	564,497	0	87,981	34,538	441,978
2005	548,666	0	88,364	34,616	425,685
2006	532,561	0	84,335	34,086	414,140
2007	521,717	0	83,838	34,690	403,189
2008	503,096	0	81,416	36,163	385,517
2009	462,674	0	90,867	32,651	339,156
2010	490,931	0	90,184	30,725	370,022
2011	479,822	0	84,855	28,056	366,911
2012	420,923	0	58,275	23,673	338,975
2013	401,108	0	47,677	18,535	334,897
2014	391,550	18,332	37,139	18,805	317,274
<b>Year 2012</b>					
January	43,026	0	6,114	2,569	34,343
February	38,171	0	4,911	2,228	31,032
March	35,483	0	4,736	2,034	28,712
April	30,144	0	3,638	1,591	24,915
May	33,661	0	5,066	1,809	26,787
June	32,897	0	4,881	1,829	26,186
July	35,103	0	5,153	2,015	27,936
August	35,456	0	5,494	1,993	27,968
September	32,151	0	4,857	1,728	25,566
October	33,618	0	4,902	1,615	27,101
November	34,627	0	4,274	1,960	28,393
December	36,586	0	4,246	2,303	30,036
<b>Year 2013</b>					
January	36,987	0	4,287	2,076	30,623
February	33,266	0	3,683	1,946	27,637
March	35,908	0	4,150	1,846	29,912
April	31,406	0	3,702	1,279	26,425
May	32,408	0	3,873	1,451	27,084
June	31,344	0	3,978	1,402	25,965
July	33,467	0	4,395	1,402	27,671
August	32,657	0	4,286	1,397	26,974
September	30,797	0	4,015	1,275	25,506
October	32,206	0	3,187	1,148	27,871
November	35,050	0	4,209	1,523	29,318
December	35,613	0	3,911	1,791	29,911
<b>Year 2014</b>					
January	38,562	2,143	3,420	2,286	30,713
February	35,455	1,819	3,386	2,301	27,949
March	37,670	1,807	4,257	2,115	29,492
April	30,526	1,528	3,245	1,435	24,318
May	31,345	1,548	3,073	1,299	25,425
June	30,577	1,185	3,131	1,411	24,850
July	31,888	1,483	3,128	1,556	25,722
August	31,443	1,328	3,069	1,257	25,789
September	29,329	1,280	2,590	1,103	24,356
October	29,267	1,233	2,414	990	24,630
November	31,820	1,387	2,769	1,472	26,193
December	33,667	1,591	2,658	1,582	27,836

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.1.F. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	20,940,247	15,610,335	4,694,565	42,789	592,559
2005	21,350,382	15,397,688	5,339,188	42,931	570,574
2006	21,059,972	15,211,077	5,250,336	41,612	556,948
2007	21,363,588	15,436,110	5,371,039	42,523	513,916
2008	21,051,706	15,189,050	5,323,610	44,233	494,813
2009	18,703,284	13,744,178	4,481,463	39,658	437,985
2010	19,687,246	14,333,496	4,799,870	37,540	516,341
2011	18,554,120	13,551,416	4,483,999	35,319	483,385
2012	16,288,063	11,995,971	3,825,286	30,056	436,750
2013	16,910,576	12,421,537	4,028,894	27,979	432,167
2014	16,863,554	12,235,960	4,191,273	23,149	413,173
<b>Year 2012</b>					
January	1,391,633	1,012,122	333,409	3,164	42,938
February	1,232,563	905,071	285,886	2,797	38,809
March	1,140,974	846,083	255,475	2,577	36,839
April	1,037,996	785,334	218,213	2,064	32,384
May	1,249,868	920,501	292,830	2,263	34,274
June	1,416,152	1,050,959	328,624	2,377	34,192
July	1,723,783	1,271,150	412,576	2,627	37,429
August	1,637,121	1,207,322	389,956	2,581	37,261
September	1,354,391	998,493	320,123	2,223	33,552
October	1,296,510	947,165	312,612	2,054	34,679
November	1,372,937	997,932	336,496	2,468	36,041
December	1,434,135	1,053,838	339,084	2,862	38,352
<b>Year 2013</b>					
January	1,474,344	1,079,455	353,245	3,088	38,556
February	1,318,570	951,650	329,008	2,862	35,051
March	1,393,706	1,015,890	336,724	2,740	38,353
April	1,200,325	885,167	278,957	1,998	34,202
May	1,280,487	943,332	299,483	2,183	35,489
June	1,479,322	1,096,663	346,260	2,137	34,262
July	1,633,462	1,195,369	399,343	2,118	36,631
August	1,601,870	1,196,057	368,224	2,110	35,478
September	1,424,061	1,037,738	350,880	1,985	33,458
October	1,295,294	956,093	301,876	1,813	35,512
November	1,298,109	963,935	294,943	2,287	36,945
December	1,511,026	1,100,190	369,950	2,657	38,229
<b>Year 2014</b>					
January	1,667,611	1,205,112	420,488	2,875	39,135
February	1,520,096	1,087,256	394,464	2,886	35,490
March	1,451,555	1,018,919	392,218	2,608	37,809
April	1,157,718	809,221	315,085	1,773	31,638
May	1,271,054	929,017	307,084	1,572	33,381
June	1,470,447	1,092,825	342,590	1,737	33,296
July	1,598,676	1,179,472	382,854	1,896	34,455
August	1,584,106	1,175,589	372,539	1,552	34,426
September	1,348,155	988,314	326,078	1,352	32,411
October	1,190,882	868,785	288,813	1,211	32,073
November	1,272,924	910,003	327,612	1,772	33,537
December	1,330,331	971,447	321,447	1,917	35,520

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

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See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.A. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Thousand Barrels)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	165,107	103,793	56,342	760	4,212
2005	165,137	98,223	62,154	580	4,180
2006	73,821	53,529	17,179	327	2,786
2007	82,433	56,910	22,793	250	2,480
2008	53,846	38,995	13,152	160	1,538
2009	43,562	31,847	9,880	184	1,652
2010	40,103	30,806	8,278	164	855
2011	27,326	20,844	5,633	133	716
2012	22,604	17,521	4,110	272	702
2013	23,231	16,827	5,494	328	582
2014	31,531	19,652	10,689	451	739
<b>Year 2012</b>					
January	1,933	1,495	317	28	93
February	1,544	1,245	218	18	64
March	1,629	1,360	188	16	65
April	1,612	1,339	204	17	52
May	1,864	1,441	341	25	57
June	2,320	1,733	519	24	44
July	2,683	2,032	568	32	51
August	2,014	1,597	338	27	52
September	1,591	1,279	242	18	51
October	1,722	1,372	265	21	64
November	1,648	1,282	294	23	48
December	2,045	1,345	617	23	60
<b>Year 2013</b>					
January	2,962	1,809	1,036	47	69
February	1,890	1,279	526	35	51
March	1,639	1,334	232	24	50
April	1,685	1,335	282	24	43
May	1,789	1,419	294	20	55
June	1,699	1,321	319	18	41
July	2,546	1,732	740	31	43
August	1,776	1,402	306	26	41
September	1,591	1,170	361	19	40
October	1,581	1,247	270	21	44
November	1,657	1,305	282	24	46
December	2,416	1,473	848	38	57
<b>Year 2014</b>					
January	10,190	4,468	5,487	112	122
February	3,117	1,879	1,099	58	81
March	3,476	1,917	1,443	43	72
April	1,556	1,283	200	31	42
May	1,647	1,296	274	22	56
June	1,502	1,179	246	27	50
July	1,696	1,308	311	24	53
August	1,751	1,310	372	23	45
September	1,645	1,296	274	24	50
October	1,550	1,218	251	28	53
November	1,681	1,230	362	28	60
December	1,721	1,268	368	30	54

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.B. Petroleum Liquids: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Thousand Barrels)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	20,654	0	1,501	1,203	17,951
2005	20,494	0	1,392	1,004	18,097
2006	14,077	0	1,153	559	12,365
2007	13,462	0	1,303	441	11,718
2008	7,533	0	1,311	461	5,762
2009	8,128	0	1,301	293	6,534
2010	4,866	0	1,086	212	3,567
2011	3,826	0	1,004	168	2,654
2012	3,097	0	992	122	1,984
2013	3,456	0	1,050	498	1,908
2014	3,099	64	1,170	216	1,650
<b>Year 2012</b>					
January	554	0	117	51	386
February	242	0	81	4	158
March	267	0	53	8	207
April	211	0	66	2	144
May	229	0	86	2	141
June	215	0	90	4	121
July	222	0	82	23	117
August	221	0	82	7	132
September	194	0	79	2	112
October	271	0	87	2	182
November	228	0	84	8	135
December	242	0	85	8	149
<b>Year 2013</b>					
January	473	0	63	214	196
February	311	0	79	55	178
March	235	0	89	3	143
April	245	0	89	3	153
May	248	0	92	7	149
June	230	0	86	6	139
July	220	0	90	13	117
August	209	0	90	5	114
September	203	0	94	3	106
October	229	0	99	10	120
November	234	0	88	12	134
December	619	0	92	167	360
<b>Year 2014</b>					
January	643	45	189	115	294
February	336	5	88	44	199
March	301	7	101	27	165
April	203	0	86	4	114
May	211	1	89	5	116
June	208	1	90	3	114
July	195	1	93	4	97
August	201	1	108	3	89
September	173	1	62	2	109
October	208	0	92	2	114
November	220	0	90	4	125
December	200	1	80	4	114

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Thousand Barrels)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	185,761	103,793	57,843	1,963	22,162
2005	185,631	98,223	63,546	1,584	22,278
2006	87,898	53,529	18,332	886	15,150
2007	95,895	56,910	24,097	691	14,198
2008	61,379	38,995	14,463	621	7,300
2009	51,690	31,847	11,181	477	8,185
2010	44,968	30,806	9,364	376	4,422
2011	31,152	20,844	6,637	301	3,370
2012	25,702	17,521	5,102	394	2,685
2013	26,687	16,827	6,544	826	2,490
2014	34,630	19,716	11,859	667	2,389
<b>Year 2012</b>					
January	2,487	1,495	433	79	479
February	1,787	1,245	299	22	222
March	1,897	1,360	241	24	272
April	1,824	1,339	270	18	196
May	2,093	1,441	427	27	198
June	2,534	1,733	608	28	165
July	2,905	2,032	650	55	167
August	2,236	1,597	421	34	184
September	1,784	1,279	322	20	163
October	1,993	1,372	351	23	246
November	1,875	1,282	378	32	184
December	2,287	1,345	702	31	209
<b>Year 2013</b>					
January	3,435	1,809	1,099	261	265
February	2,202	1,279	604	90	229
March	1,874	1,334	321	27	193
April	1,930	1,335	371	27	196
May	2,037	1,419	386	27	204
June	1,929	1,321	405	24	179
July	2,766	1,732	829	44	160
August	1,985	1,402	396	32	155
September	1,794	1,170	455	22	146
October	1,810	1,247	369	31	164
November	1,891	1,305	369	36	181
December	3,035	1,473	940	205	417
<b>Year 2014</b>					
January	10,833	4,513	5,677	227	416
February	3,453	1,885	1,187	101	280
March	3,776	1,924	1,545	70	237
April	1,760	1,283	286	35	156
May	1,858	1,296	363	27	172
June	1,711	1,180	336	30	164
July	1,890	1,309	404	28	150
August	1,952	1,311	481	26	134
September	1,818	1,297	336	26	159
October	1,758	1,219	343	30	166
November	1,900	1,230	453	32	186
December	1,921	1,269	449	34	169

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.D. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,031,954	651,712	350,093	4,544	25,606
2005	1,035,045	618,811	387,355	3,469	25,410
2006	459,392	335,130	105,312	1,963	16,987
2007	512,423	355,999	139,977	1,505	14,942
2008	332,367	242,379	79,816	957	9,215
2009	266,508	196,346	59,277	1,101	9,784
2010	244,114	188,987	49,042	970	5,115
2011	163,954	125,755	33,166	801	4,233
2012	134,956	105,179	24,081	1,618	4,078
2013	139,139	101,217	32,504	2,038	3,380
2014	188,814	118,226	63,488	2,765	4,335
<b>Year 2012</b>					
January	11,656	9,046	1,892	167	551
February	9,260	7,500	1,282	106	372
March	9,708	8,119	1,111	97	380
April	9,570	7,972	1,196	98	304
May	11,111	8,649	1,979	148	335
June	13,900	10,391	3,117	141	251
July	16,184	12,289	3,412	190	293
August	12,079	9,621	2,001	159	298
September	9,471	7,653	1,416	106	297
October	10,239	8,185	1,552	127	376
November	9,855	7,694	1,743	139	279
December	11,923	8,060	3,380	139	343
<b>Year 2013</b>					
January	17,827	10,919	6,205	295	408
February	11,312	7,630	3,161	219	302
March	9,826	8,042	1,344	148	292
April	10,063	8,024	1,639	149	252
May	10,659	8,502	1,716	125	317
June	10,195	7,967	1,880	112	236
July	15,284	10,417	4,430	190	247
August	10,630	8,488	1,739	164	238
September	9,514	7,058	2,105	118	233
October	9,466	7,532	1,550	130	255
November	9,876	7,826	1,630	151	270
December	14,487	8,812	5,107	236	332
<b>Year 2014</b>					
January	61,099	26,764	32,930	677	728
February	18,754	11,328	6,590	352	483
March	20,890	11,527	8,674	259	430
April	9,348	7,754	1,156	194	243
May	9,751	7,743	1,548	138	322
June	9,007	7,112	1,434	169	292
July	10,168	7,894	1,817	148	309
August	10,531	7,956	2,172	144	259
September	9,826	7,826	1,563	150	287
October	9,239	7,328	1,431	173	307
November	9,976	7,379	2,067	174	356
December	10,225	7,614	2,105	188	319

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.E. Petroleum Liquids: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	124,809	0	8,592	7,219	108,997
2005	125,689	0	8,134	6,145	111,410
2006	87,137	0	6,740	3,481	76,916
2007	82,768	0	7,602	2,754	72,412
2008	45,481	0	7,644	2,786	35,051
2009	48,912	0	7,557	1,802	39,552
2010	29,243	0	6,402	1,297	21,545
2011	22,799	0	5,927	1,039	15,833
2012	18,233	0	5,871	746	11,616
2013	20,717	0	6,176	3,292	11,248
2014	18,181	395	6,802	1,311	9,672
<b>Year 2012</b>					
January	3,326	0	697	315	2,313
February	1,422	0	479	24	919
March	1,564	0	315	49	1,200
April	1,234	0	388	11	835
May	1,345	0	510	14	821
June	1,256	0	530	24	702
July	1,304	0	482	146	676
August	1,302	0	489	42	771
September	1,135	0	468	14	653
October	1,600	0	511	11	1,077
November	1,338	0	498	48	792
December	1,408	0	505	46	857
<b>Year 2013</b>					
January	2,962	0	373	1,437	1,151
February	1,884	0	464	356	1,064
March	1,379	0	524	19	835
April	1,448	0	528	18	902
May	1,464	0	548	38	878
June	1,359	0	506	36	818
July	1,294	0	530	82	682
August	1,221	0	524	34	663
September	1,179	0	542	19	618
October	1,350	0	581	64	705
November	1,379	0	515	75	789
December	3,798	0	541	1,114	2,143
<b>Year 2014</b>					
January	3,814	282	1,058	705	1,769
February	2,010	33	520	269	1,189
March	1,781	44	589	164	984
April	1,190	2	503	22	663
May	1,223	4	522	27	670
June	1,219	4	529	18	668
July	1,130	4	548	24	554
August	1,158	7	631	15	504
September	1,001	5	362	10	624
October	1,214	2	544	13	656
November	1,281	2	529	21	728
December	1,161	7	468	23	663

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.2.F. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,156,763	651,712	358,685	11,763	134,603
2005	1,160,733	618,811	395,489	9,614	136,820
2006	546,529	335,130	112,052	5,444	93,903
2007	595,191	355,999	147,579	4,259	87,354
2008	377,848	242,379	87,460	3,743	44,266
2009	315,420	196,346	66,834	2,903	49,336
2010	273,357	188,987	55,444	2,267	26,660
2011	186,753	125,755	39,093	1,840	20,066
2012	153,189	105,179	29,952	2,364	15,695
2013	159,855	101,217	38,681	5,330	14,628
2014	206,995	118,621	70,291	4,076	14,008
<b>Year 2012</b>					
January	14,982	9,046	2,589	483	2,864
February	10,682	7,500	1,761	131	1,291
March	11,271	8,119	1,425	146	1,580
April	10,803	7,972	1,584	109	1,139
May	12,456	8,649	2,489	162	1,156
June	15,156	10,391	3,647	165	952
July	17,488	12,289	3,893	337	969
August	13,381	9,621	2,490	201	1,069
September	10,606	7,653	1,883	120	950
October	11,839	8,185	2,064	138	1,453
November	11,194	7,694	2,241	187	1,071
December	13,330	8,060	3,885	185	1,200
<b>Year 2013</b>					
January	20,788	10,919	6,578	1,732	1,559
February	13,197	7,630	3,625	576	1,366
March	11,204	8,042	1,868	167	1,127
April	11,512	8,024	2,167	167	1,154
May	12,123	8,502	2,264	163	1,194
June	11,554	7,967	2,385	148	1,054
July	16,577	10,417	4,960	271	929
August	11,850	8,488	2,263	198	901
September	10,693	7,058	2,646	138	851
October	10,817	7,532	2,131	194	960
November	11,255	7,826	2,145	226	1,059
December	18,285	8,812	5,648	1,350	2,475
<b>Year 2014</b>					
January	64,913	27,046	33,988	1,382	2,498
February	20,764	11,361	7,110	621	1,672
March	22,671	11,571	9,262	424	1,414
April	10,537	7,756	1,659	216	906
May	10,974	7,747	2,070	164	992
June	10,226	7,116	1,963	186	960
July	11,298	7,898	2,365	173	863
August	11,689	7,963	2,803	159	764
September	10,827	7,831	1,925	161	910
October	10,453	7,330	1,975	185	963
November	11,257	7,381	2,596	195	1,085
December	11,386	7,621	2,573	211	982

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	7,677	4,150	2,985	1	541
2005	8,330	4,130	3,746	1	452
2006	7,363	3,619	3,286	1	456
2007	6,036	2,808	2,715	2	512
2008	5,417	2,296	2,704	1	416
2009	4,821	2,761	1,724	1	335
2010	4,994	3,325	1,354	2	313
2011	5,012	3,449	1,277	1	286
2012	3,675	2,105	756	1	812
2013	4,852	3,409	779	1	662
2014	4,412	3,440	599	2	371
<b>Year 2012</b>					
January	476	297	92	0	87
February	363	230	77	0	56
March	226	107	61	0	58
April	212	120	37	0	55
May	255	150	51	0	55
June	280	169	53	0	58
July	307	182	62	0	63
August	338	170	87	0	80
September	314	180	61	0	73
October	280	156	64	0	60
November	314	175	55	0	84
December	308	170	56	0	82
<b>Year 2013</b>					
January	385	253	67	0	65
February	314	220	62	0	32
March	364	236	67	0	60
April	342	217	62	0	63
May	469	361	41	0	68
June	476	348	63	0	66
July	474	337	72	0	65
August	491	332	93	0	66
September	442	326	60	0	57
October	404	289	64	0	51
November	308	217	60	0	30
December	381	272	69	0	39
<b>Year 2014</b>					
January	436	349	55	0	32
February	361	275	56	0	30
March	421	332	57	0	31
April	303	212	55	0	36
May	393	314	49	0	30
June	418	339	46	0	33
July	385	299	54	0	33
August	382	298	51	0	33
September	372	281	62	0	29
October	230	178	23	0	29
November	288	228	33	0	27
December	424	335	60	0	29

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.B. Petroleum Coke: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,043	0	237	8	798
2005	783	0	206	8	568
2006	1,259	0	195	9	1,055
2007	1,262	0	162	11	1,090
2008	897	0	119	9	769
2009	1,007	0	126	8	873
2010	1,059	0	98	11	950
2011	1,080	0	112	6	962
2012	1,346	0	113	11	1,222
2013	1,486	0	96	11	1,379
2014	1,283	3	90	16	1,174
<b>Year 2012</b>					
January	128	0	11	1	116
February	108	0	11	1	96
March	108	0	10	1	97
April	87	0	9	0	78
May	91	0	11	0	80
June	100	0	6	0	94
July	118	0	9	1	108
August	133	0	10	1	122
September	116	0	9	1	105
October	117	0	9	1	107
November	122	0	9	1	112
December	118	0	10	1	107
<b>Year 2013</b>					
January	137	0	9	2	127
February	103	0	7	1	94
March	129	0	9	1	119
April	114	0	9	0	105
May	130	0	8	0	123
June	130	0	5	0	125
July	140	0	9	0	132
August	162	0	8	1	152
September	115	0	7	1	107
October	118	0	9	1	108
November	92	0	8	1	83
December	115	0	9	1	105
<b>Year 2014</b>					
January	105	0	9	2	95
February	93	1	7	1	84
March	106	0	8	2	96
April	116	0	9	2	105
May	110	0	8	1	102
June	109	0	0	0	109
July	114	0	5	0	109
August	112	0	9	2	101
September	113	0	9	2	102
October	86	0	9	1	75
November	104	1	9	2	92
December	114	0	9	2	103

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	8,721	4,150	3,223	9	1,339
2005	9,113	4,130	3,953	9	1,020
2006	8,622	3,619	3,482	10	1,511
2007	7,299	2,808	2,877	12	1,602
2008	6,314	2,296	2,823	10	1,184
2009	5,828	2,761	1,850	9	1,209
2010	6,053	3,325	1,452	12	1,264
2011	6,092	3,449	1,388	6	1,248
2012	5,021	2,105	869	13	2,034
2013	6,338	3,409	875	12	2,041
2014	5,695	3,443	689	18	1,545
<b>Year 2012</b>					
January	605	297	103	2	203
February	470	230	88	1	152
March	335	107	72	1	155
April	299	120	46	0	133
May	346	150	61	0	135
June	380	169	59	0	152
July	426	182	72	1	171
August	471	170	97	1	203
September	430	180	70	1	178
October	397	156	73	1	167
November	435	175	63	1	196
December	426	170	66	1	188
<b>Year 2013</b>					
January	522	253	76	2	191
February	416	220	69	2	126
March	493	236	76	2	180
April	456	217	71	0	168
May	600	361	48	0	191
June	606	348	68	0	191
July	614	337	80	0	197
August	653	332	101	2	218
September	558	326	67	1	164
October	522	289	73	1	158
November	400	217	68	1	114
December	496	272	78	2	144
<b>Year 2014</b>					
January	541	349	63	2	127
February	454	276	63	2	113
March	527	332	65	2	128
April	418	212	64	2	141
May	504	314	57	1	132
June	527	339	46	0	141
July	499	299	58	0	142
August	494	298	59	2	134
September	485	281	70	2	131
October	316	178	32	2	104
November	393	229	42	2	120
December	538	335	69	2	132

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.D. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	216,047	116,086	83,979	33	15,949
2005	234,217	115,727	105,163	33	13,295
2006	208,518	102,117	92,643	33	13,726
2007	170,166	77,941	77,135	45	15,045
2008	152,933	64,843	76,416	37	11,638
2009	136,474	77,919	48,776	32	9,747
2010	141,774	94,331	38,235	44	9,165
2011	144,406	99,257	36,923	20	8,206
2012	105,488	60,862	21,643	39	22,944
2013	138,774	97,626	22,052	38	19,058
2014	123,736	95,642	17,032	59	11,003
<b>Year 2012</b>					
January	13,587	8,575	2,622	5	2,385
February	10,411	6,655	2,212	4	1,540
March	6,477	3,067	1,748	4	1,659
April	6,099	3,455	1,068	0	1,576
May	7,347	4,327	1,464	0	1,556
June	8,142	4,967	1,528	0	1,647
July	8,862	5,293	1,759	4	1,806
August	9,726	4,939	2,498	4	2,285
September	9,046	5,209	1,746	4	2,087
October	8,023	4,491	1,824	5	1,703
November	8,977	5,008	1,569	4	2,396
December	8,791	4,876	1,605	4	2,306
<b>Year 2013</b>					
January	11,015	7,296	1,909	5	1,806
February	9,000	6,373	1,737	5	885
March	10,473	6,823	1,887	5	1,758
April	9,805	6,228	1,738	1	1,837
May	13,517	10,387	1,165	0	1,965
June	13,631	9,956	1,774	0	1,901
July	13,647	9,726	2,052	0	1,868
August	14,164	9,616	2,654	5	1,888
September	12,723	9,379	1,709	4	1,631
October	11,347	8,075	1,813	4	1,455
November	8,860	6,258	1,684	3	915
December	10,593	7,508	1,931	5	1,149
<b>Year 2014</b>					
January	12,292	9,793	1,536	5	957
February	10,115	7,684	1,550	5	876
March	11,869	9,312	1,595	6	957
April	8,322	5,675	1,567	6	1,074
May	10,936	8,642	1,385	3	906
June	11,682	9,405	1,307	0	971
July	10,785	8,297	1,532	1	954
August	10,717	8,302	1,453	8	954
September	10,595	7,987	1,762	7	839
October	6,429	4,902	674	6	847
November	8,073	6,291	948	7	827
December	11,921	9,351	1,723	7	840

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.E. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	29,342	0	6,768	226	22,347
2005	22,224	0	5,935	228	16,061
2006	38,169	0	5,672	236	32,262
2007	38,033	0	4,710	303	33,019
2008	27,100	0	3,441	243	23,416
2009	29,974	0	3,652	213	26,109
2010	31,303	0	2,855	296	28,152
2011	31,943	0	3,244	153	28,546
2012	38,777	0	3,281	315	35,181
2013	40,846	0	2,769	305	37,772
2014	36,602	90	2,597	449	33,467
<b>Year 2012</b>					
January	3,667	0	315	40	3,312
February	3,132	0	307	34	2,791
March	3,138	0	304	32	2,802
April	2,481	0	264	2	2,215
May	2,628	0	315	0	2,313
June	2,922	0	160	0	2,763
July	3,418	0	269	30	3,120
August	3,816	0	279	36	3,502
September	3,349	0	274	35	3,040
October	3,402	0	257	37	3,108
November	3,480	0	256	33	3,191
December	3,343	0	283	36	3,024
<b>Year 2013</b>					
January	3,724	0	249	45	3,430
February	2,852	0	208	40	2,604
March	3,543	0	257	38	3,248
April	3,059	0	259	5	2,795
May	3,572	0	220	0	3,352
June	3,570	0	148	0	3,422
July	3,869	0	253	2	3,615
August	4,398	0	238	38	4,121
September	3,184	0	191	35	2,958
October	3,280	0	248	33	2,999
November	2,584	0	234	28	2,321
December	3,211	0	264	39	2,908
<b>Year 2014</b>					
January	2,965	0	249	44	2,672
February	2,639	18	193	38	2,390
March	3,032	6	235	45	2,745
April	3,348	4	258	42	3,044
May	3,181	4	229	22	2,926
June	3,154	6	4	0	3,145
July	3,232	0	133	6	3,092
August	3,144	1	255	56	2,832
September	3,305	3	256	52	2,995
October	2,374	6	259	39	2,069
November	2,951	34	258	50	2,609
December	3,277	8	268	54	2,947

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.3.F. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	245,389	116,086	90,747	259	38,297
2005	256,441	115,727	111,098	260	29,356
2006	246,687	102,117	98,314	269	45,987
2007	208,198	77,941	81,845	348	48,064
2008	180,034	64,843	79,856	280	35,055
2009	166,449	77,919	52,428	245	35,856
2010	173,078	94,331	41,090	340	37,317
2011	176,349	99,257	40,167	173	36,752
2012	144,266	60,862	24,925	353	58,126
2013	179,621	97,626	24,821	343	56,831
2014	160,338	95,731	19,629	508	44,470
<b>Year 2012</b>					
January	17,254	8,575	2,937	45	5,697
February	13,542	6,655	2,519	38	4,331
March	9,615	3,067	2,051	36	4,461
April	8,581	3,455	1,332	2	3,791
May	9,975	4,327	1,779	0	3,869
June	11,064	4,967	1,688	0	4,409
July	12,280	5,293	2,028	34	4,925
August	13,543	4,939	2,777	40	5,787
September	12,395	5,209	2,020	39	5,127
October	11,425	4,491	2,081	41	4,811
November	12,457	5,008	1,825	37	5,587
December	12,134	4,876	1,888	40	5,330
<b>Year 2013</b>					
January	14,739	7,296	2,158	50	5,236
February	11,852	6,373	1,945	45	3,489
March	14,016	6,823	2,144	43	5,006
April	12,864	6,228	1,998	6	4,632
May	17,089	10,387	1,385	0	5,317
June	17,201	9,956	1,922	0	5,323
July	17,517	9,726	2,305	3	5,483
August	18,561	9,616	2,892	44	6,010
September	15,907	9,379	1,899	39	4,589
October	14,628	8,075	2,061	38	4,454
November	11,444	6,258	1,918	32	3,236
December	13,804	7,508	2,195	44	4,057
<b>Year 2014</b>					
January	15,257	9,793	1,785	49	3,629
February	12,754	7,702	1,743	43	3,265
March	14,901	9,318	1,830	51	3,703
April	11,670	5,679	1,825	48	4,118
May	14,117	8,646	1,614	24	3,832
June	14,837	9,411	1,311	0	4,115
July	14,017	8,297	1,666	7	4,047
August	13,861	8,303	1,708	64	3,787
September	13,900	7,990	2,018	58	3,834
October	8,803	4,908	933	45	2,917
November	11,024	6,325	1,206	57	3,437
December	15,198	9,359	1,991	61	3,787

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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See the Technical Notes for fuel conversion factors.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.A. Natural Gas: Consumption for Electricity Generation,  
by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	5,674,580	1,809,443	3,265,896	32,839	566,401
2005	6,036,370	2,134,859	3,349,921	33,785	517,805
2006	6,461,615	2,478,396	3,412,826	34,623	535,770
2007	7,089,342	2,736,418	3,765,194	34,087	553,643
2008	6,895,843	2,730,134	3,612,197	33,403	520,109
2009	7,121,069	2,911,279	3,655,712	34,279	519,799
2010	7,680,185	3,290,993	3,794,423	39,462	555,307
2011	7,883,865	3,446,087	3,819,107	47,170	571,501
2012	9,484,710	4,101,927	4,686,260	63,116	633,407
2013	8,596,299	3,970,447	3,917,131	66,570	642,152
2014	8,544,387	3,895,008	3,954,032	71,957	623,390
<b>Year 2012</b>					
January	677,117	285,194	335,785	5,065	51,072
February	672,278	274,977	343,616	4,955	48,730
March	703,533	295,548	354,510	5,129	48,345
April	741,560	321,202	367,445	5,044	47,869
May	843,383	376,968	407,974	5,263	53,180
June	912,469	403,071	448,815	5,838	54,745
July	1,118,369	492,043	559,652	7,312	59,363
August	1,038,691	447,137	526,648	5,924	58,982
September	835,109	358,829	417,952	5,014	53,314
October	700,348	304,811	339,272	4,621	51,645
November	611,680	265,122	290,769	4,472	51,317
December	630,173	277,026	293,821	4,479	54,847
<b>Year 2013</b>					
January	666,650	310,174	296,071	5,247	55,159
February	599,100	278,139	266,731	4,807	49,424
March	637,349	293,545	285,259	5,365	53,180
April	595,667	268,467	272,544	5,095	49,562
May	646,296	295,973	294,795	5,160	50,369
June	771,868	363,204	349,597	5,582	53,485
July	949,141	432,493	451,078	7,169	58,401
August	937,197	442,939	430,139	6,449	57,671
September	784,619	365,005	361,481	6,005	52,128
October	669,764	312,216	300,858	4,993	51,697
November	633,885	284,526	291,241	4,881	53,237
December	704,762	323,768	317,338	5,817	57,840
<b>Year 2014</b>					
January	694,661	324,657	309,522	6,411	54,071
February	579,819	265,645	261,103	5,180	47,892
March	591,101	271,638	263,442	5,292	50,729
April	579,336	270,132	256,256	4,967	47,981
May	680,193	323,448	300,470	5,761	50,513
June	754,126	348,327	349,049	6,119	50,630
July	880,805	393,011	425,395	6,966	55,433
August	935,170	426,346	445,556	7,430	55,839
September	805,960	355,962	391,332	6,396	52,270
October	736,039	323,456	356,020	5,939	50,625
November	633,279	288,760	287,096	5,496	51,927
December	673,898	303,627	308,792	5,999	55,480

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.B. Natural Gas: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,052,100	0	388,424	39,233	624,443
2005	984,340	0	384,365	34,172	565,803
2006	942,817	0	330,878	33,112	578,828
2007	872,579	0	339,796	35,987	496,796
2008	793,537	0	326,048	32,813	434,676
2009	816,787	0	305,542	41,275	469,970
2010	821,775	0	301,769	46,324	473,683
2011	839,681	0	308,669	39,856	491,155
2012	886,103	0	322,607	47,883	515,613
2013	882,385	0	303,177	51,057	528,151
2014	865,146	4,926	292,016	46,635	521,569
<b>Year 2012</b>					
January	75,174	0	27,843	4,072	43,259
February	69,960	0	25,937	3,869	40,154
March	70,324	0	24,040	3,743	42,542
April	71,587	0	25,691	3,484	42,412
May	72,877	0	27,525	3,543	41,808
June	74,822	0	27,995	3,799	43,028
July	82,618	0	29,994	4,798	47,827
August	80,621	0	30,153	4,661	45,807
September	72,357	0	25,807	4,292	42,258
October	70,985	0	25,112	4,005	41,867
November	69,240	0	23,855	3,809	41,577
December	75,537	0	28,655	3,809	43,073
<b>Year 2013</b>					
January	74,638	0	25,440	4,277	44,920
February	67,391	0	23,519	3,883	39,989
March	73,151	0	25,107	4,051	43,993
April	70,245	0	23,817	3,571	42,857
May	70,784	0	24,040	3,703	43,041
June	70,610	0	24,349	4,045	42,216
July	78,649	0	27,553	4,968	46,128
August	78,207	0	27,452	4,811	45,943
September	72,884	0	24,996	4,358	43,529
October	72,095	0	23,964	4,137	43,993
November	73,889	0	25,253	4,336	44,300
December	79,843	0	27,687	4,915	47,241
<b>Year 2014</b>					
January	87,362	527	28,175	7,205	51,455
February	68,875	539	23,822	3,527	40,988
March	72,690	476	25,252	3,245	43,717
April	67,023	286	22,224	3,085	41,428
May	67,861	224	22,787	3,272	41,578
June	67,490	274	23,101	3,460	40,656
July	72,370	267	24,630	3,749	43,724
August	74,882	441	25,464	4,031	44,946
September	69,772	367	23,285	3,731	42,390
October	71,722	431	23,484	3,776	44,032
November	70,483	534	24,002	3,672	42,274
December	74,615	561	25,790	3,883	44,381

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	6,726,679	1,809,443	3,654,320	72,072	1,190,844
2005	7,020,709	2,134,859	3,734,286	67,957	1,083,607
2006	7,404,432	2,478,396	3,743,704	67,735	1,114,597
2007	7,961,922	2,736,418	4,104,991	70,074	1,050,439
2008	7,689,380	2,730,134	3,938,245	66,216	954,785
2009	7,937,856	2,911,279	3,961,254	75,555	989,769
2010	8,501,960	3,290,993	4,096,192	85,786	1,028,990
2011	8,723,546	3,446,087	4,127,777	87,026	1,062,657
2012	10,370,812	4,101,927	5,008,867	110,999	1,149,020
2013	9,478,685	3,970,447	4,220,309	117,626	1,170,303
2014	9,409,532	3,899,934	4,246,048	118,591	1,144,959
<b>Year 2012</b>					
January	752,291	285,194	363,628	9,137	94,331
February	742,237	274,977	369,553	8,824	88,883
March	773,857	295,548	378,550	8,872	90,887
April	813,147	321,202	393,136	8,528	90,281
May	916,260	376,968	435,499	8,806	94,988
June	987,291	403,071	476,810	9,637	97,774
July	1,200,988	492,043	589,645	12,110	107,190
August	1,119,312	447,137	556,802	10,585	104,789
September	907,466	358,829	443,759	9,306	95,572
October	771,333	304,811	364,384	8,626	93,512
November	680,920	265,122	314,624	8,281	92,894
December	705,710	277,026	322,476	8,288	97,920
<b>Year 2013</b>					
January	741,288	310,174	321,512	9,524	100,079
February	666,492	278,139	290,249	8,690	89,413
March	710,500	293,545	310,365	9,417	97,174
April	665,912	268,467	296,361	8,666	92,419
May	717,080	295,973	318,835	8,863	93,410
June	842,478	363,204	373,946	9,627	95,701
July	1,027,790	432,493	478,631	12,137	104,529
August	1,015,404	442,939	457,592	11,260	103,614
September	857,503	365,005	386,477	10,363	95,657
October	741,859	312,216	324,822	9,130	95,691
November	707,774	284,526	316,494	9,218	97,537
December	784,605	323,768	345,024	10,732	105,081
<b>Year 2014</b>					
January	782,023	325,184	337,697	13,616	105,526
February	648,695	266,184	284,925	8,706	88,880
March	663,791	272,114	288,694	8,537	94,446
April	646,360	270,418	278,481	8,052	89,409
May	748,053	323,672	323,257	9,033	92,091
June	821,616	348,601	372,150	9,580	91,286
July	953,174	393,278	450,025	10,715	99,157
August	1,010,052	426,786	471,019	11,461	100,785
September	875,732	356,329	414,618	10,126	94,659
October	807,761	323,887	379,503	9,715	94,657
November	703,762	289,294	311,098	9,169	94,202
December	748,513	304,188	334,581	9,883	99,861

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.D. Natural Gas: Consumption for Electricity Generation,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	5,827,470	1,857,247	3,351,469	33,623	585,132
2005	6,212,116	2,198,098	3,444,875	34,645	534,498
2006	6,643,926	2,546,169	3,508,597	35,473	553,687
2007	7,287,714	2,808,500	3,872,646	34,872	571,697
2008	7,087,191	2,803,283	3,712,872	34,138	536,899
2009	7,301,522	2,981,285	3,750,080	35,046	535,111
2010	7,852,665	3,359,035	3,882,995	40,356	570,279
2011	8,052,309	3,511,732	3,906,484	48,509	585,584
2012	9,696,575	4,179,725	4,802,741	64,987	649,122
2013	8,813,288	4,059,838	4,026,793	67,918	658,740
2014	8,795,303	4,001,826	4,076,787	74,194	642,495
<b>Year 2012</b>					
January	691,050	289,886	343,654	5,205	52,306
February	686,769	279,714	352,021	5,096	49,939
March	718,581	300,651	363,088	5,277	49,565
April	757,509	327,112	376,092	5,194	49,111
May	861,735	383,976	417,780	5,406	54,573
June	933,301	411,234	459,926	6,014	56,127
July	1,143,646	502,138	573,074	7,541	60,893
August	1,062,885	456,248	540,239	6,106	60,293
September	854,055	365,700	428,593	5,167	54,595
October	716,356	310,484	348,176	4,757	52,940
November	625,552	270,068	298,319	4,610	52,555
December	645,135	282,515	301,780	4,616	56,225
<b>Year 2013</b>					
January	682,789	316,593	304,155	5,369	56,671
February	612,994	283,589	273,760	4,918	50,727
March	652,614	299,857	292,673	5,473	54,610
April	610,112	274,005	280,148	5,191	50,768
May	662,458	302,275	303,396	5,254	51,533
June	791,607	371,403	359,645	5,694	54,865
July	974,371	442,779	464,389	7,319	59,884
August	961,152	453,529	441,994	6,577	59,051
September	805,110	373,801	371,746	6,124	53,439
October	686,941	319,387	309,370	5,088	53,096
November	649,915	291,076	299,155	4,978	54,707
December	723,226	331,545	326,361	5,932	59,389
<b>Year 2014</b>					
January	712,739	332,236	318,202	6,617	55,685
February	595,093	272,135	268,359	5,324	49,275
March	606,450	277,717	271,095	5,444	52,194
April	594,458	276,418	263,616	5,108	49,315
May	699,321	331,772	309,525	5,951	52,074
June	775,917	357,324	360,122	6,313	52,157
July	907,414	404,309	438,809	7,174	57,122
August	964,381	438,925	460,152	7,674	57,630
September	831,074	366,740	403,853	6,591	53,890
October	758,982	333,256	367,397	6,129	52,199
November	653,369	297,748	296,324	5,676	53,621
December	696,105	313,245	319,334	6,193	57,333

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.E. Natural Gas: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,085,191	0	398,476	40,122	646,593
2005	1,008,404	0	392,842	35,037	580,525
2006	968,574	0	339,047	33,928	595,599
2007	894,272	0	347,181	36,689	510,402
2008	813,794	0	333,197	33,434	447,163
2009	836,863	0	312,553	42,032	482,279
2010	841,521	0	308,246	47,001	486,274
2011	861,006	0	315,411	40,976	504,619
2012	909,087	0	330,354	48,944	529,788
2013	905,583	0	311,058	51,939	542,587
2014	891,994	5,033	300,870	47,579	538,514
<b>Year 2012</b>					
January	77,111	0	28,515	4,162	44,434
February	71,774	0	26,572	3,955	41,247
March	72,137	0	24,594	3,827	43,717
April	73,470	0	26,290	3,562	43,618
May	74,851	0	28,159	3,622	43,070
June	76,791	0	28,666	3,882	44,244
July	84,854	0	30,691	4,900	49,264
August	82,540	0	30,883	4,761	46,896
September	74,228	0	26,494	4,385	43,349
October	72,830	0	25,759	4,098	42,973
November	71,018	0	24,394	3,894	42,730
December	77,481	0	29,336	3,897	44,247
<b>Year 2013</b>					
January	76,717	0	26,089	4,346	46,281
February	69,168	0	24,128	3,948	41,091
March	75,220	0	25,767	4,123	45,330
April	72,174	0	24,507	3,631	44,036
May	72,623	0	24,741	3,765	44,118
June	72,557	0	25,054	4,118	43,386
July	80,666	0	28,262	5,057	47,347
August	80,163	0	28,121	4,898	47,145
September	74,769	0	25,637	4,436	44,696
October	73,891	0	24,514	4,207	45,171
November	75,752	0	25,861	4,411	45,480
December	81,882	0	28,379	4,998	48,505
<b>Year 2014</b>					
January	89,681	541	28,928	7,283	52,929
February	70,790	552	24,446	3,600	42,192
March	74,801	467	25,959	3,309	45,066
April	68,948	292	22,805	3,150	42,701
May	70,016	228	23,476	3,344	42,968
June	69,612	280	23,804	3,531	41,997
July	74,748	276	25,408	3,830	45,233
August	77,399	455	26,291	4,125	46,528
September	72,014	379	24,029	3,815	43,791
October	74,034	441	24,258	3,863	45,472
November	72,787	548	24,809	3,756	43,674
December	77,162	572	26,657	3,971	45,961

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.4.F. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btu)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	6,912,661	1,857,247	3,749,945	73,744	1,231,725
2005	7,220,520	2,198,098	3,837,717	69,682	1,115,023
2006	7,612,500	2,546,169	3,847,644	69,401	1,149,286
2007	8,181,986	2,808,500	4,219,827	71,560	1,082,099
2008	7,900,986	2,803,283	4,046,069	67,571	984,062
2009	8,138,385	2,981,285	4,062,633	77,077	1,017,390
2010	8,694,186	3,359,035	4,191,241	87,357	1,056,553
2011	8,913,315	3,511,732	4,221,895	89,485	1,090,203
2012	10,605,661	4,179,725	5,133,095	113,932	1,178,910
2013	9,718,871	4,059,838	4,337,851	119,857	1,201,326
2014	9,687,297	4,006,859	4,377,657	121,773	1,181,009
<b>Year 2012</b>					
January	768,162	289,886	372,169	9,367	96,740
February	758,544	279,714	378,593	9,050	91,186
March	790,718	300,651	387,681	9,103	93,282
April	830,979	327,112	402,382	8,756	92,729
May	936,586	383,976	445,939	9,028	97,643
June	1,010,092	411,234	488,592	9,896	100,371
July	1,228,500	502,138	603,765	12,440	110,157
August	1,145,425	456,248	571,122	10,867	107,189
September	928,283	365,700	455,087	9,552	97,943
October	789,186	310,484	373,935	8,854	95,913
November	696,571	270,068	322,713	8,505	95,285
December	722,616	282,515	331,117	8,512	100,472
<b>Year 2013</b>					
January	759,506	316,593	330,244	9,716	102,952
February	682,162	283,589	297,888	8,866	91,818
March	727,834	299,857	318,440	9,596	99,941
April	682,286	274,005	304,655	8,822	94,804
May	735,081	302,275	328,137	9,019	95,651
June	864,164	371,403	384,699	9,812	98,250
July	1,055,037	442,779	492,650	12,376	107,231
August	1,041,315	453,529	470,115	11,475	106,196
September	879,879	373,801	397,383	10,561	98,135
October	760,832	319,387	333,884	9,295	98,267
November	725,667	291,076	325,016	9,389	100,187
December	805,108	331,545	354,739	10,931	107,893
<b>Year 2014</b>					
January	802,421	332,777	347,130	13,900	108,614
February	665,884	272,687	292,806	8,924	91,468
March	681,251	278,184	297,053	8,753	97,260
April	663,406	276,710	286,421	8,258	92,017
May	769,337	332,000	333,000	9,294	95,042
June	845,529	357,604	383,926	9,845	94,154
July	982,162	404,585	464,217	11,004	102,356
August	1,041,780	439,380	486,443	11,799	104,158
September	903,089	367,120	427,881	10,407	97,681
October	833,016	333,697	391,655	9,992	97,671
November	726,156	298,296	321,133	9,432	97,295
December	773,267	313,817	345,991	10,165	103,294

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.5.D. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	344,134	19,973	130,248	168	193,745
2005	355,250	27,373	138,407	207	189,263
2006	350,074	27,455	135,546	269	186,803
2007	353,025	31,568	132,953	284	188,220
2008	338,786	29,150	130,122	287	179,227
2009	320,444	29,565	130,894	274	159,712
2010	349,530	40,167	137,072	274	172,016
2011	347,623	35,474	130,108	482	181,559
2012	390,342	32,723	138,217	478	218,924
2013	397,929	43,363	143,721	536	210,308
2014	431,285	45,643	174,513	961	210,167
<b>Year 2012</b>					
January	34,582	3,060	12,146	42	19,335
February	32,667	2,920	11,556	40	18,152
March	31,023	2,446	11,529	36	17,012
April	28,062	1,735	9,538	35	16,753
May	30,164	2,751	9,882	33	17,498
June	32,221	2,410	12,170	39	17,601
July	34,692	2,874	13,217	47	18,554
August	35,328	3,246	12,839	49	19,194
September	33,051	2,732	12,158	32	18,129
October	31,734	2,305	11,054	25	18,350
November	32,205	3,013	10,566	48	18,578
December	34,612	3,232	11,560	52	19,769
<b>Year 2013</b>					
January	33,353	3,294	12,101	46	17,912
February	29,984	3,036	10,623	43	16,282
March	32,674	3,280	11,999	51	17,344
April	27,741	1,964	9,730	21	16,027
May	31,241	3,025	10,837	35	17,344
June	33,044	3,409	11,757	44	17,833
July	35,341	4,027	12,669	43	18,601
August	36,477	4,116	13,924	47	18,389
September	33,383	4,025	12,350	33	16,974
October	33,694	4,329	11,681	52	17,632
November	34,163	4,364	12,503	58	17,238
December	36,834	4,493	13,547	64	18,730
<b>Year 2014</b>					
January	37,135	4,268	14,488	150	18,228
February	33,670	3,805	13,442	125	16,298
March	36,751	4,396	14,837	87	17,430
April	31,558	2,624	12,884	43	16,007
May	32,416	2,959	12,100	67	17,290
June	37,105	3,977	15,346	124	17,658
July	39,028	4,052	16,069	81	18,827
August	38,477	4,275	15,672	69	18,461
September	35,553	3,720	14,839	54	16,940
October	35,086	3,777	13,871	64	17,375
November	36,209	3,715	15,424	46	17,025
December	38,296	4,075	15,542	51	18,628

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.5.E. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,016,124	0	14,968	1,493	999,663
2005	997,331	0	19,193	1,028	977,111
2006	1,049,161	0	18,814	1,045	1,029,303
2007	982,486	0	21,435	1,756	959,296
2008	923,889	0	18,075	1,123	904,690
2009	816,285	0	19,587	1,135	795,563
2010	876,041	0	18,357	1,064	856,620
2011	893,314	0	16,577	1,022	875,716
2012	883,158	0	19,251	949	862,958
2013	919,631	0	20,342	950	898,339
2014	946,344	8,835	22,262	3,766	911,481
<b>Year 2012</b>					
January	75,884	0	1,631	78	74,175
February	71,356	0	1,551	77	69,729
March	72,102	0	1,631	68	70,403
April	68,208	0	1,434	81	66,693
May	72,744	0	1,385	67	71,293
June	72,221	0	1,797	89	70,335
July	74,756	0	1,645	92	73,019
August	75,527	0	1,845	88	73,594
September	74,208	0	1,600	77	72,531
October	74,164	0	1,747	76	72,342
November	74,571	0	1,440	81	73,050
December	77,417	0	1,547	77	75,794
<b>Year 2013</b>					
January	79,616	0	1,730	77	77,810
February	71,246	0	1,642	74	69,530
March	76,554	0	1,698	81	74,775
April	73,726	0	1,956	21	71,749
May	75,190	0	1,475	48	73,667
June	76,058	0	1,618	75	74,365
July	82,751	0	1,751	82	80,918
August	79,205	0	1,868	84	77,253
September	73,225	0	1,660	45	71,520
October	74,777	0	1,512	106	73,159
November	77,020	0	1,662	114	75,244
December	80,263	0	1,771	143	78,350
<b>Year 2014</b>					
January	80,405	649	1,975	311	77,469
February	73,581	733	1,988	271	70,589
March	80,081	875	2,027	342	76,837
April	77,233	678	1,914	246	74,395
May	76,839	773	1,454	338	74,274
June	79,101	683	1,848	400	76,170
July	80,733	767	1,876	351	77,739
August	82,539	722	1,908	346	79,564
September	76,170	573	1,706	296	73,596
October	78,477	737	1,894	285	75,561
November	78,316	728	1,738	271	75,578
December	82,869	916	1,935	309	79,709

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.5.F. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,360,258	19,973	145,216	1,661	1,193,408
2005	1,352,582	27,373	157,600	1,235	1,166,373
2006	1,399,235	27,455	154,360	1,314	1,216,106
2007	1,335,511	31,568	154,388	2,040	1,147,516
2008	1,262,675	29,150	148,198	1,410	1,083,917
2009	1,136,729	29,565	150,481	1,408	955,276
2010	1,225,571	40,167	155,429	1,338	1,028,637
2011	1,240,937	35,474	146,684	1,504	1,057,275
2012	1,273,500	32,723	157,468	1,427	1,081,882
2013	1,317,560	43,363	164,063	1,486	1,108,647
2014	1,377,629	54,478	196,775	4,727	1,121,648
<b>Year 2012</b>					
January	110,466	3,060	13,777	120	93,509
February	104,023	2,920	13,106	117	87,880
March	103,126	2,446	13,161	103	87,415
April	96,270	1,735	10,972	116	83,446
May	102,908	2,751	11,267	100	88,791
June	104,442	2,410	13,967	128	87,936
July	109,448	2,874	14,862	139	91,573
August	110,856	3,246	14,685	138	92,788
September	107,259	2,732	13,758	109	90,660
October	105,898	2,305	12,801	101	90,691
November	106,776	3,013	12,006	129	91,628
December	112,030	3,232	13,106	129	95,563
<b>Year 2013</b>					
January	112,969	3,294	13,831	123	95,721
February	101,230	3,036	12,265	117	85,813
March	109,229	3,280	13,697	132	92,120
April	101,468	1,964	11,685	42	87,776
May	106,431	3,025	12,312	83	91,011
June	109,102	3,409	13,375	119	92,198
July	118,092	4,027	14,421	125	99,519
August	115,682	4,116	15,792	131	95,642
September	106,608	4,025	14,011	78	88,494
October	108,471	4,329	13,193	158	90,791
November	111,183	4,364	14,165	172	92,482
December	117,097	4,493	15,317	207	97,080
<b>Year 2014</b>					
January	117,540	4,918	16,463	461	95,698
February	107,251	4,538	15,430	395	86,888
March	116,832	5,272	16,864	430	94,267
April	108,791	3,302	14,798	290	90,402
May	109,255	3,732	13,554	405	91,564
June	116,206	4,661	17,194	524	93,828
July	119,761	4,818	17,945	432	96,566
August	121,016	4,997	17,579	415	98,025
September	111,723	4,292	16,545	350	90,537
October	113,563	4,514	15,765	348	92,936
November	114,524	4,443	17,162	317	92,603
December	121,165	4,991	17,477	360	98,337

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.A. Landfill Gas: Consumption for Electricity Generation,  
by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	143,844	11,250	125,848	4,081	2,665
2005	141,899	11,490	123,064	4,797	2,548
2006	160,033	16,617	136,108	6,644	664
2007	166,774	17,442	144,104	4,598	630
2008	195,777	20,465	169,547	5,235	530
2009	206,792	19,583	180,689	5,931	589
2010	218,331	19,975	192,428	5,535	393
2011	232,795	22,086	180,856	29,469	384
2012	256,376	25,193	201,965	26,672	2,545
2013	271,967	27,259	211,942	28,143	4,623
2014	285,982	25,819	228,447	27,038	4,678
<b>Year 2012</b>					
January	21,454	1,889	16,999	2,352	214
February	19,337	1,833	15,100	2,200	205
March	20,905	1,976	16,543	2,177	208
April	20,015	2,064	15,557	2,184	210
May	21,031	2,214	16,427	2,177	213
June	20,722	2,082	16,315	2,120	206
July	22,294	2,282	17,649	2,141	221
August	22,490	2,316	17,672	2,293	210
September	21,151	2,055	16,702	2,208	185
October	22,392	2,264	17,625	2,292	211
November	21,528	2,102	16,887	2,317	223
December	23,056	2,115	18,488	2,213	240
<b>Year 2013</b>					
January	22,446	2,169	17,413	2,494	371
February	20,061	1,962	15,670	2,098	331
March	23,296	2,302	18,243	2,384	366
April	21,467	2,261	16,911	1,942	353
May	23,275	2,317	18,229	2,343	387
June	22,614	2,168	17,652	2,407	387
July	23,199	2,109	18,232	2,469	389
August	24,445	2,964	18,590	2,515	377
September	22,680	2,272	17,654	2,366	388
October	22,199	2,286	17,082	2,432	400
November	22,709	2,210	17,825	2,252	422
December	23,576	2,241	18,441	2,441	453
<b>Year 2014</b>					
January	24,810	2,187	19,717	2,506	401
February	23,764	1,997	19,121	2,289	357
March	24,623	2,107	19,714	2,388	414
April	24,489	2,133	19,679	2,260	416
May	24,111	2,136	19,380	2,190	404
June	24,096	2,173	19,233	2,294	396
July	26,390	2,372	21,117	2,498	404
August	25,163	2,332	20,037	2,403	391
September	23,690	2,143	18,898	2,290	359
October	21,697	2,148	17,099	2,092	358
November	20,698	2,030	16,561	1,723	385
December	22,451	2,062	17,892	2,105	393

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.B. Landfill Gas: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	2,174	0	735	10	1,429
2005	1,923	0	965	435	522
2006	2,051	0	525	1,094	433
2007	1,988	0	386	1,102	501
2008	1,025	0	454	433	138
2009	793	0	545	176	72
2010	1,623	0	1,195	370	58
2011	3,195	0	2,753	351	91
2012	3,189	0	2,788	340	61
2013	831	0	261	423	147
2014	1,710	176	525	674	335
<b>Year 2012</b>					
January	307	0	272	31	4
February	292	0	258	29	4
March	243	0	209	30	5
April	254	0	221	28	5
May	265	0	230	29	5
June	212	0	179	28	5
July	295	0	260	29	6
August	260	0	229	25	6
September	285	0	256	24	5
October	299	0	265	28	6
November	186	0	149	32	5
December	291	0	260	27	5
<b>Year 2013</b>					
January	64	0	18	33	12
February	64	0	22	30	11
March	60	0	23	24	13
April	76	0	28	37	11
May	86	0	35	40	11
June	79	0	30	37	12
July	87	0	35	39	13
August	77	0	27	37	13
September	65	0	17	35	12
October	62	0	15	35	12
November	54	0	4	38	12
December	59	0	8	38	13
<b>Year 2014</b>					
January	169	20	62	61	25
February	148	18	64	44	23
March	132	19	41	44	27
April	137	19	28	60	30
May	144	19	33	64	29
June	154	17	54	54	29
July	179	14	70	64	30
August	161	15	62	55	30
September	140	14	47	51	28
October	101	2	21	53	25
November	112	3	17	64	29
December	132	15	26	61	30

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Million Cubic Feet)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	146,018	11,250	126,584	4,091	4,093
2005	143,822	11,490	124,030	5,232	3,070
2006	162,084	16,617	136,632	7,738	1,096
2007	168,762	17,442	144,490	5,699	1,131
2008	196,802	20,465	170,001	5,668	668
2009	207,585	19,583	181,234	6,106	661
2010	219,954	19,975	193,623	5,905	451
2011	235,990	22,086	183,609	29,820	474
2012	259,564	25,193	204,753	27,012	2,606
2013	272,798	27,259	212,203	28,566	4,770
2014	287,692	25,995	228,971	27,713	5,013
<b>Year 2012</b>					
January	21,761	1,889	17,271	2,382	218
February	19,629	1,833	15,358	2,229	209
March	21,149	1,976	16,752	2,207	213
April	20,269	2,064	15,777	2,212	216
May	21,295	2,214	16,658	2,206	218
June	20,934	2,082	16,494	2,147	211
July	22,588	2,282	17,909	2,170	227
August	22,750	2,316	17,901	2,317	216
September	21,436	2,055	16,958	2,232	190
October	22,691	2,264	17,890	2,320	217
November	21,714	2,102	17,036	2,349	227
December	23,347	2,115	18,747	2,240	245
<b>Year 2013</b>					
January	22,510	2,169	17,431	2,527	383
February	20,125	1,962	15,692	2,128	342
March	23,355	2,302	18,267	2,408	378
April	21,542	2,261	16,939	1,979	364
May	23,361	2,317	18,263	2,383	398
June	22,693	2,168	17,682	2,443	400
July	23,286	2,109	18,267	2,508	402
August	24,522	2,964	18,617	2,552	390
September	22,744	2,272	17,671	2,402	400
October	22,261	2,286	17,096	2,467	413
November	22,764	2,210	17,829	2,290	434
December	23,635	2,241	18,448	2,479	466
<b>Year 2014</b>					
January	24,980	2,207	19,779	2,567	426
February	23,912	2,014	19,185	2,334	379
March	24,755	2,126	19,755	2,432	442
April	24,625	2,152	19,708	2,320	446
May	24,255	2,155	19,413	2,254	433
June	24,250	2,190	19,287	2,348	425
July	26,569	2,386	21,187	2,561	434
August	25,324	2,347	20,099	2,458	421
September	23,830	2,158	18,944	2,341	387
October	21,798	2,150	17,119	2,145	383
November	20,811	2,033	16,578	1,786	414
December	22,584	2,077	17,918	2,166	423

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.D. Landfill Gas: Consumption for Electricity Generation,  
by Sector, 2004 - 2014 (Billion Btu)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	69,331	5,373	60,514	2,093	1,351
2005	67,902	5,650	58,624	2,360	1,269
2006	75,970	8,287	63,950	3,388	345
2007	79,712	8,620	68,432	2,344	316
2008	94,215	10,242	81,029	2,668	276
2009	99,821	9,748	86,773	2,999	301
2010	105,835	10,029	92,763	2,837	205
2011	112,538	11,146	89,857	11,332	203
2012	124,297	12,721	99,938	10,356	1,282
2013	132,766	13,819	105,330	11,290	2,327
2014	140,779	13,132	114,333	10,937	2,377
<b>Year 2012</b>					
January	10,348	952	8,394	895	108
February	9,312	929	7,443	837	103
March	10,118	992	8,185	836	105
April	9,693	1,052	7,694	840	106
May	10,200	1,117	8,135	840	107
June	10,069	1,051	8,092	823	104
July	10,872	1,160	8,757	843	111
August	10,929	1,163	8,757	904	106
September	10,264	1,043	8,269	858	93
October	10,871	1,145	8,729	890	106
November	10,412	1,052	8,344	904	112
December	11,208	1,065	9,138	885	121
<b>Year 2013</b>					
January	10,911	1,101	8,635	987	189
February	9,771	991	7,773	839	168
March	11,389	1,173	9,073	957	186
April	10,561	1,150	8,427	804	180
May	11,438	1,174	9,113	954	197
June	11,049	1,090	8,787	975	197
July	11,374	1,079	9,094	1,003	198
August	11,941	1,502	9,234	1,013	192
September	11,072	1,154	8,785	941	192
October	10,767	1,159	8,448	963	198
November	11,036	1,116	8,818	894	208
December	11,457	1,131	9,143	961	223
<b>Year 2014</b>					
January	12,152	1,109	9,831	1,008	204
February	11,686	1,014	9,561	930	181
March	12,101	1,072	9,862	956	211
April	12,040	1,085	9,843	902	211
May	11,900	1,097	9,725	872	206
June	11,873	1,101	9,633	937	201
July	13,072	1,217	10,609	1,041	206
August	12,414	1,186	10,047	982	199
September	11,663	1,091	9,452	936	183
October	10,659	1,091	8,549	837	182
November	10,192	1,028	8,267	703	194
December	11,028	1,042	8,954	832	200

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.E. Landfill Gas: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btu)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	1,158	0	415	5	738
2005	994	0	519	212	263
2006	1,034	0	267	549	218
2007	985	0	226	532	228
2008	552	0	271	211	70
2009	440	0	313	91	37
2010	847	0	643	174	30
2011	1,635	0	1,422	165	48
2012	1,630	0	1,441	156	32
2013	414	0	132	206	76
2014	852	88	266	326	173
<b>Year 2012</b>					
January	157	0	141	14	2
February	149	0	133	14	2
March	124	0	108	14	2
April	130	0	114	13	3
May	136	0	119	13	3
June	108	0	92	13	3
July	151	0	134	13	3
August	133	0	118	11	3
September	146	0	132	11	3
October	153	0	137	13	3
November	94	0	77	15	2
December	149	0	134	12	3
<b>Year 2013</b>					
January	32	0	9	17	6
February	32	0	11	15	6
March	30	0	12	12	7
April	38	0	14	18	6
May	43	0	17	19	6
June	39	0	15	18	7
July	43	0	17	19	7
August	38	0	13	18	7
September	32	0	9	17	6
October	31	0	8	17	6
November	27	0	2	18	6
December	29	0	4	18	7
<b>Year 2014</b>					
January	85	10	32	30	13
February	75	9	32	23	12
March	67	10	21	23	14
April	68	9	14	29	15
May	72	10	17	30	15
June	77	9	28	26	15
July	88	7	36	30	16
August	80	8	31	26	15
September	69	7	24	24	15
October	50	1	11	25	13
November	56	1	9	31	15
December	66	8	13	29	16

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.6.F. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btu)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	70,489	5,373	60,929	2,098	2,089
2005	68,897	5,650	59,144	2,571	1,532
2006	77,004	8,287	64,217	3,937	563
2007	80,697	8,620	68,657	2,875	544
2008	94,768	10,242	81,300	2,879	346
2009	100,261	9,748	87,086	3,089	337
2010	106,681	10,029	93,405	3,011	236
2011	114,173	11,146	91,279	11,497	251
2012	125,927	12,721	101,379	10,512	1,315
2013	133,180	13,819	105,462	11,497	2,403
2014	141,632	13,220	114,599	11,263	2,550
<b>Year 2012</b>					
January	10,505	952	8,535	909	110
February	9,461	929	7,577	851	105
March	10,243	992	8,293	850	107
April	9,823	1,052	7,809	853	109
May	10,335	1,117	8,255	854	110
June	10,177	1,051	8,184	836	106
July	11,022	1,160	8,892	856	115
August	11,062	1,163	8,875	915	109
September	10,410	1,043	8,401	869	96
October	11,024	1,145	8,866	903	109
November	10,507	1,052	8,421	919	114
December	11,357	1,065	9,272	897	123
<b>Year 2013</b>					
January	10,943	1,101	8,644	1,004	195
February	9,803	991	7,784	853	174
March	11,420	1,173	9,084	969	193
April	10,598	1,150	8,441	822	185
May	11,480	1,174	9,130	974	202
June	11,088	1,090	8,802	992	204
July	11,418	1,079	9,112	1,022	205
August	11,979	1,502	9,247	1,031	199
September	11,104	1,154	8,794	958	199
October	10,798	1,159	8,455	980	204
November	11,063	1,116	8,821	913	214
December	11,486	1,131	9,147	979	230
<b>Year 2014</b>					
January	12,237	1,119	9,863	1,038	217
February	11,761	1,023	9,593	953	192
March	12,168	1,082	9,883	979	225
April	12,109	1,094	9,857	931	227
May	11,972	1,107	9,742	902	221
June	11,950	1,110	9,661	962	216
July	13,160	1,224	10,644	1,071	221
August	12,495	1,193	10,078	1,008	215
September	11,732	1,098	9,476	960	198
October	10,709	1,092	8,560	863	195
November	10,247	1,029	8,275	734	209
December	11,093	1,050	8,967	861	215

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	19,587	444	17,308	1,811	24
2005	19,370	560	17,033	1,753	25
2006	19,629	500	17,343	1,761	25
2007	19,576	553	17,116	1,785	122
2008	19,805	509	17,487	1,809	0
2009	19,669	465	17,048	2,155	0
2010	19,437	402	16,802	2,233	0
2011	16,972	388	14,625	1,955	4
2012	16,968	418	14,235	2,304	12
2013	17,007	456	14,057	2,485	8
2014	16,706	444	13,809	2,447	6
<b>Year 2012</b>					
January	1,361	30	1,147	183	1
February	1,274	27	1,067	179	1
March	1,380	36	1,151	192	0
April	1,362	38	1,134	189	1
May	1,485	41	1,235	207	1
June	1,473	37	1,238	196	1
July	1,519	35	1,284	199	1
August	1,468	40	1,232	195	1
September	1,389	30	1,161	197	1
October	1,407	38	1,174	194	1
November	1,398	34	1,180	182	1
December	1,454	31	1,231	190	1
<b>Year 2013</b>					
January	1,328	32	1,115	181	0
February	1,199	30	1,000	169	0
March	1,411	31	1,175	205	1
April	1,371	43	1,121	206	1
May	1,480	43	1,218	218	1
June	1,503	40	1,242	220	1
July	1,549	44	1,278	226	1
August	1,478	40	1,213	224	1
September	1,408	38	1,154	216	1
October	1,403	41	1,155	206	0
November	1,350	40	1,107	203	0
December	1,528	35	1,280	213	1
<b>Year 2014</b>					
January	1,381	28	1,131	221	0
February	1,205	24	1,014	166	0
March	1,390	38	1,165	187	0
April	1,371	44	1,127	200	0
May	1,455	42	1,200	214	1
June	1,418	40	1,170	207	1
July	1,489	44	1,224	220	1
August	1,469	38	1,210	220	1
September	1,384	38	1,141	205	1
October	1,374	40	1,133	200	0
November	1,373	32	1,139	201	0
December	1,397	36	1,155	205	1

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	2,743	0	651	1,628	464
2005	2,719	0	623	1,536	560
2006	2,840	0	725	1,595	520
2007	2,219	0	768	1,136	315
2008	2,328	0	806	1,514	8
2009	2,426	0	823	1,466	137
2010	2,287	0	819	1,316	152
2011	2,044	0	742	1,148	154
2012	1,986	0	522	1,273	190
2013	1,865	0	517	1,160	187
2014	1,955	0	650	1,104	200
<b>Year 2012</b>					
January	162	0	42	105	15
February	154	0	40	98	15
March	176	0	61	100	15
April	163	0	43	104	17
May	163	0	39	106	18
June	158	0	39	102	16
July	168	0	40	113	15
August	173	0	42	115	16
September	166	0	46	104	16
October	177	0	46	114	17
November	156	0	44	98	14
December	170	0	41	114	15
<b>Year 2013</b>					
January	156	0	42	98	17
February	143	0	40	91	12
March	167	0	47	104	16
April	164	0	40	109	15
May	153	0	32	105	16
June	167	0	47	103	17
July	158	0	45	95	18
August	155	0	44	93	17
September	152	0	39	97	16
October	150	0	46	91	13
November	141	0	46	82	14
December	159	0	48	94	16
<b>Year 2014</b>					
January	203	0	59	126	17
February	140	0	49	76	15
March	154	0	52	86	15
April	155	0	58	82	15
May	166	0	57	92	18
June	163	0	57	90	16
July	164	0	54	93	17
August	161	0	47	92	22
September	157	0	48	92	18
October	165	0	56	93	17
November	158	0	55	88	15
December	169	0	59	93	17

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Thousand Tons)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	22,330	444	17,959	3,439	488
2005	22,089	560	17,655	3,289	584
2006	22,469	500	18,068	3,356	545
2007	21,796	553	17,885	2,921	437
2008	22,134	509	18,294	3,323	8
2009	22,095	465	17,872	3,622	137
2010	21,725	402	17,621	3,549	152
2011	19,016	388	15,367	3,103	158
2012	18,954	418	14,757	3,577	203
2013	18,871	456	14,574	3,646	195
2014	18,661	444	14,459	3,551	206
<b>Year 2012</b>					
January	1,523	30	1,189	288	16
February	1,427	27	1,106	278	16
March	1,557	36	1,212	293	15
April	1,525	38	1,177	293	18
May	1,648	41	1,274	313	20
June	1,631	37	1,277	299	18
July	1,688	35	1,325	311	16
August	1,641	40	1,274	310	17
September	1,555	30	1,207	301	18
October	1,583	38	1,220	308	18
November	1,554	34	1,224	280	15
December	1,623	31	1,272	304	16
<b>Year 2013</b>					
January	1,484	32	1,157	278	17
February	1,342	30	1,040	259	13
March	1,579	31	1,222	309	17
April	1,535	43	1,161	315	16
May	1,633	43	1,250	323	17
June	1,669	40	1,289	322	18
July	1,707	44	1,323	322	18
August	1,633	40	1,257	317	18
September	1,559	38	1,193	312	17
October	1,552	41	1,201	297	13
November	1,491	40	1,152	284	14
December	1,687	35	1,328	307	17
<b>Year 2014</b>					
January	1,584	28	1,190	347	18
February	1,345	24	1,063	242	15
March	1,544	38	1,217	273	16
April	1,526	44	1,184	283	15
May	1,622	42	1,256	306	18
June	1,581	40	1,227	297	17
July	1,653	44	1,279	313	18
August	1,629	38	1,257	312	22
September	1,541	38	1,188	297	18
October	1,540	40	1,189	293	17
November	1,531	32	1,194	289	15
December	1,566	36	1,214	299	17

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.D. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	141,577	3,705	124,815	12,909	146
2005	144,339	4,724	126,529	12,923	164
2006	146,987	4,078	129,779	12,964	165
2007	146,308	4,557	127,826	13,043	881
2008	148,452	4,476	130,041	13,934	0
2009	146,971	3,989	126,649	16,333	0
2010	144,934	3,322	124,437	17,176	0
2011	135,241	3,433	115,841	15,933	34
2012	135,735	3,910	113,418	18,307	100
2013	135,764	4,459	111,430	19,811	64
2014	134,408	4,429	110,569	19,366	45
<b>Year 2012</b>					
January	10,943	271	9,208	1,455	9
February	10,284	261	8,563	1,455	5
March	11,022	317	9,169	1,532	4
April	10,986	390	9,060	1,527	8
May	11,856	427	9,792	1,627	10
June	11,681	318	9,813	1,542	8
July	12,107	332	10,184	1,583	8
August	11,638	350	9,728	1,551	10
September	11,021	286	9,181	1,544	9
October	11,242	348	9,346	1,540	9
November	11,318	341	9,527	1,440	10
December	11,637	268	9,847	1,512	9
<b>Year 2013</b>					
January	10,655	297	8,917	1,437	4
February	9,619	307	7,962	1,347	3
March	11,276	313	9,313	1,643	7
April	10,910	433	8,814	1,658	5
May	11,803	452	9,593	1,752	6
June	11,852	360	9,756	1,730	7
July	12,190	435	9,962	1,786	7
August	11,705	405	9,521	1,771	8
September	11,270	377	9,174	1,712	7
October	11,292	367	9,256	1,665	4
November	10,950	381	8,930	1,637	3
December	12,242	334	10,229	1,674	5
<b>Year 2014</b>					
January	11,151	274	9,110	1,764	3
February	9,655	237	8,128	1,287	3
March	11,231	457	9,297	1,474	3
April	11,034	448	9,007	1,578	1
May	11,678	397	9,596	1,680	5
June	11,426	411	9,379	1,632	5
July	11,996	428	9,825	1,737	6
August	11,822	357	9,715	1,745	5
September	11,120	379	9,098	1,638	4
October	11,026	361	9,056	1,605	3
November	11,072	302	9,151	1,616	3
December	11,198	377	9,206	1,609	5

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.E. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	19,991	0	4,746	12,295	2,950
2005	20,296	0	4,551	11,991	3,754
2006	21,729	0	5,347	12,654	3,728
2007	16,174	0	5,683	8,350	2,141
2008	18,272	0	6,039	12,174	59
2009	18,785	0	6,229	11,535	1,021
2010	17,502	0	6,031	10,333	1,138
2011	16,766	0	5,807	9,731	1,227
2012	16,310	0	4,180	10,615	1,515
2013	15,168	0	4,145	9,530	1,493
2014	15,783	0	5,140	9,046	1,597
<b>Year 2012</b>					
January	1,350	0	338	893	118
February	1,273	0	321	829	123
March	1,450	0	494	837	120
April	1,341	0	341	867	132
May	1,331	0	307	877	146
June	1,288	0	312	845	131
July	1,373	0	323	930	120
August	1,415	0	337	949	130
September	1,351	0	364	856	131
October	1,453	0	365	955	134
November	1,275	0	350	815	110
December	1,410	0	328	963	119
<b>Year 2013</b>					
January	1,291	0	337	821	132
February	1,178	0	320	760	99
March	1,365	0	379	860	126
April	1,340	0	323	898	119
May	1,242	0	259	854	129
June	1,353	0	376	839	138
July	1,285	0	361	784	140
August	1,248	0	354	755	139
September	1,230	0	314	789	127
October	1,207	0	368	736	103
November	1,139	0	365	663	111
December	1,290	0	389	770	130
<b>Year 2014</b>					
January	1,632	0	474	1,019	139
February	1,128	0	387	624	117
March	1,247	0	409	716	122
April	1,250	0	461	670	119
May	1,339	0	445	754	140
June	1,315	0	450	738	127
July	1,320	0	430	754	136
August	1,299	0	371	756	172
September	1,264	0	372	752	140
October	1,332	0	440	759	133
November	1,280	0	432	729	120
December	1,376	0	469	773	134

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

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Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.7.F. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	161,567	3,705	129,562	25,204	3,096
2005	164,635	4,724	131,080	24,914	3,918
2006	168,716	4,078	135,127	25,618	3,893
2007	162,482	4,557	133,509	21,393	3,022
2008	166,723	4,476	136,080	26,108	59
2009	165,755	3,989	132,877	27,868	1,021
2010	162,436	3,322	130,467	27,509	1,138
2011	152,007	3,433	121,648	25,664	1,262
2012	152,045	3,910	117,598	28,923	1,614
2013	150,932	4,459	115,574	29,342	1,557
2014	150,191	4,429	115,709	28,411	1,643
<b>Year 2012</b>					
January	12,292	271	9,546	2,348	127
February	11,557	261	8,884	2,283	129
March	12,472	317	9,663	2,369	123
April	12,327	390	9,402	2,395	140
May	13,187	427	10,100	2,504	156
June	12,969	318	10,125	2,386	140
July	13,480	332	10,507	2,513	128
August	13,053	350	10,065	2,500	139
September	12,372	286	9,545	2,400	140
October	12,695	348	9,711	2,494	142
November	12,593	341	9,876	2,255	120
December	13,047	268	10,175	2,475	129
<b>Year 2013</b>					
January	11,945	297	9,254	2,258	136
February	10,797	307	8,282	2,106	102
March	12,641	313	9,693	2,503	132
April	12,250	433	9,137	2,556	124
May	13,046	452	9,852	2,606	134
June	13,206	360	10,132	2,569	146
July	13,475	435	10,323	2,570	147
August	12,953	405	9,875	2,526	147
September	12,500	377	9,488	2,502	134
October	12,500	367	9,625	2,402	106
November	12,089	381	9,295	2,300	114
December	13,531	334	10,618	2,444	135
<b>Year 2014</b>					
January	12,783	274	9,584	2,783	142
February	10,783	237	8,514	1,911	120
March	12,478	457	9,706	2,190	125
April	12,284	448	9,468	2,248	119
May	13,017	397	10,041	2,434	145
June	12,741	411	9,829	2,370	132
July	13,316	428	10,255	2,492	141
August	13,121	357	10,086	2,501	176
September	12,384	379	9,470	2,390	144
October	12,359	361	9,497	2,364	136
November	12,352	302	9,583	2,345	123
December	12,574	377	9,676	2,382	139

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.8.D. Other Waste Biomass: Consumption for Electricity Generation, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	19,215	2,014	9,240	4,308	3,654
2005	17,852	2,485	7,365	4,677	3,325
2006	17,727	2,611	7,788	4,436	2,893
2007	19,083	2,992	8,861	4,049	3,181
2008	24,288	3,409	12,745	3,684	4,450
2009	24,847	3,679	13,231	3,760	4,177
2010	29,996	3,668	14,449	3,790	8,090
2011	30,771	4,488	16,115	3,816	6,352
2012	30,342	4,191	15,740	4,016	6,395
2013	29,385	2,432	13,671	4,979	8,303
2014	38,361	2,360	21,628	5,745	8,627
<b>Year 2012</b>					
January	2,405	303	1,352	347	404
February	2,297	330	1,187	337	443
March	2,567	370	1,308	336	553
April	2,456	366	1,264	308	518
May	2,403	396	1,163	325	518
June	2,249	435	1,122	283	409
July	2,373	332	1,188	309	543
August	2,765	359	1,445	352	609
September	2,534	412	1,298	331	493
October	2,754	358	1,406	341	649
November	2,796	243	1,529	372	651
December	2,743	286	1,476	375	606
<b>Year 2013</b>					
January	2,362	233	1,103	405	621
February	2,082	151	1,021	357	553
March	2,415	162	1,225	412	617
April	2,485	205	1,148	394	738
May	2,367	231	1,059	414	663
June	2,174	173	945	401	655
July	2,423	211	1,062	428	722
August	2,462	203	1,063	456	740
September	2,320	209	1,044	373	694
October	2,491	212	1,130	410	739
November	2,851	197	1,435	452	767
December	2,953	246	1,436	477	795
<b>Year 2014</b>					
January	3,630	212	2,208	509	701
February	3,175	199	1,875	459	641
March	3,420	142	2,015	509	754
April	3,157	170	1,713	473	800
May	3,380	241	1,957	491	691
June	3,350	182	1,995	461	713
July	3,143	261	1,631	491	760
August	2,962	148	1,596	495	723
September	2,776	136	1,525	464	652
October	3,137	257	1,666	472	742
November	3,045	202	1,671	455	716
December	3,188	209	1,777	466	735

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.8.E. Other Waste Biomass: Consumption for Useful Thermal Output,  
by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	30,228	0	12,055	2,627	15,547
2005	38,010	0	10,275	2,086	25,649
2006	36,966	0	8,561	2,318	26,087
2007	41,757	0	10,294	2,643	28,820
2008	41,851	0	9,674	1,542	30,635
2009	41,810	0	10,355	1,638	29,817
2010	47,153	0	8,436	1,648	37,070
2011	43,483	0	6,460	1,566	35,458
2012	46,863	0	6,914	1,796	38,153
2013	62,445	0	6,768	1,259	54,418
2014	65,201	15	6,930	1,543	56,712
<b>Year 2012</b>					
January	3,756	0	748	173	2,836
February	4,183	0	723	150	3,310
March	5,158	0	864	142	4,153
April	3,494	0	226	114	3,154
May	2,835	0	348	134	2,353
June	2,478	0	306	125	2,048
July	2,993	0	257	139	2,597
August	2,957	0	284	173	2,500
September	2,814	0	254	163	2,397
October	4,855	0	651	160	4,045
November	5,642	0	1,079	164	4,399
December	5,698	0	1,175	160	4,362
<b>Year 2013</b>					
January	5,947	0	1,327	145	4,476
February	5,066	0	874	90	4,102
March	5,451	0	870	107	4,474
April	5,533	0	395	81	5,058
May	4,344	0	212	86	4,046
June	4,065	0	270	100	3,696
July	4,414	0	216	106	4,093
August	4,570	0	215	118	4,238
September	4,086	0	184	114	3,789
October	5,954	0	649	98	5,206
November	6,362	0	787	99	5,475
December	6,653	0	770	116	5,767
<b>Year 2014</b>					
January	6,040	2	701	138	5,199
February	5,865	2	723	134	5,006
March	6,232	2	797	123	5,311
April	6,446	2	388	104	5,952
May	4,525	2	305	138	4,081
June	4,469	2	323	142	4,002
July	5,141	1	380	149	4,611
August	4,143	1	403	151	3,588
September	3,841	1	304	122	3,413
October	6,029	0	692	101	5,235
November	6,000	0	960	113	4,927
December	6,469	1	955	130	5,383

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.8.F. Other Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2004 - 2014 (Billion Btus)**

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
<b>Annual Totals</b>					
2004	49,443	2,014	21,294	6,935	19,201
2005	55,862	2,485	17,640	6,763	28,974
2006	54,693	2,611	16,348	6,755	28,980
2007	60,840	2,992	19,155	6,692	32,001
2008	66,139	3,409	22,419	5,227	35,085
2009	66,658	3,679	23,586	5,398	33,994
2010	77,150	3,668	22,884	5,438	45,159
2011	74,255	4,488	22,574	5,382	41,810
2012	77,205	4,191	22,654	5,812	44,548
2013	91,830	2,432	20,439	6,238	62,721
2014	103,561	2,375	28,558	7,289	65,339
<b>Year 2012</b>					
January	6,162	303	2,100	520	3,239
February	6,480	330	1,910	487	3,753
March	7,725	370	2,172	478	4,705
April	5,950	366	1,490	422	3,672
May	5,237	396	1,511	459	2,871
June	4,727	435	1,428	407	2,457
July	5,365	332	1,445	448	3,140
August	5,723	359	1,729	525	3,110
September	5,348	412	1,552	494	2,890
October	7,609	358	2,057	501	4,693
November	8,438	243	2,608	536	5,050
December	8,441	286	2,652	535	4,968
<b>Year 2013</b>					
January	8,309	233	2,430	550	5,096
February	7,149	151	1,895	447	4,655
March	7,866	162	2,095	519	5,091
April	8,018	205	1,543	475	5,795
May	6,711	231	1,271	500	4,709
June	6,239	173	1,215	501	4,350
July	6,837	211	1,278	534	4,814
August	7,032	203	1,277	574	4,977
September	6,406	209	1,227	487	4,483
October	8,445	212	1,780	508	5,945
November	9,212	197	2,222	550	6,243
December	9,606	246	2,205	593	6,562
<b>Year 2014</b>					
January	9,669	214	2,909	647	5,900
February	9,039	201	2,598	593	5,648
March	9,652	144	2,812	632	6,065
April	9,603	172	2,101	577	6,752
May	7,905	243	2,262	628	4,772
June	7,819	183	2,317	603	4,715
July	8,285	262	2,010	640	5,371
August	7,105	150	1,998	645	4,312
September	6,616	137	1,829	586	4,065
October	9,166	257	2,358	573	5,977
November	9,045	203	2,631	568	5,643
December	9,657	210	2,732	596	6,119

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.

The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

**Table 5.9. Consumption of Coal for Electricity Generation by State by Sector, 2014 and 2013 (Thousand Tons)**

Census Division and State				Electric Power Sector							
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	2,310	2,773	-17.0%	544	616	1,753	2,144	0	0	13	13
Connecticut	499	419	19.0%	0	0	499	419	0	0	0	0
Maine	19	15	27.0%	0	0	10	7	0	0	9	8
Massachusetts	1,248	1,723	-28.0%	0	0	1,244	1,718	0	0	5	5
New Hampshire	544	616	-12.0%	544	616	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	41,408	44,603	-7.2%	0	1	41,140	44,361	5	6	263	236
New Jersey	1,061	854	24.0%	0	0	1,061	854	0	0	0	0
New York	2,221	2,294	-3.2%	0	1	2,154	2,224	0	0	67	69
Pennsylvania	38,127	41,456	-8.0%	0	0	37,925	41,284	5	6	196	167
East North Central	190,107	195,548	-2.8%	117,719	138,501	71,320	55,912	55	78	1,013	1,057
Illinois	52,198	52,610	-0.8%	5,765	6,261	45,798	45,735	18	19	617	595
Indiana	48,560	46,522	4.4%	45,734	43,742	2,804	2,742	17	32	5	5
Michigan	29,530	31,855	-7.3%	29,180	31,434	214	203	19	22	117	196
Ohio	38,486	40,688	-5.4%	15,913	33,390	22,504	7,233	1	4	67	62
Wisconsin	21,334	23,874	-11.0%	21,126	23,674	0	0	0	1	207	199
West North Central	138,064	138,338	-0.2%	136,287	136,497	19	16	71	69	1,687	1,756
Iowa	20,549	20,421	0.6%	19,703	19,517	0	0	36	39	810	864
Kansas	18,199	18,915	-3.8%	18,199	18,915	0	0	0	0	0	0
Minnesota	16,800	14,193	18.0%	16,397	13,765	0	0	10	1	393	426
Missouri	42,967	44,405	-3.2%	42,899	44,333	19	16	24	28	25	28
Nebraska	15,427	16,191	-4.7%	15,036	15,829	0	0	0	0	391	361
North Dakota	22,342	22,366	-0.1%	22,273	22,289	0	0	0	0	69	76
South Dakota	1,780	1,847	-3.6%	1,780	1,847	0	0	0	0	0	0
South Atlantic	125,890	117,662	7.0%	109,643	96,964	15,617	20,167	23	21	607	509
Delaware	397	708	-44.0%	0	0	397	708	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	22,835	20,689	10.0%	22,191	20,103	594	548	0	0	50	38
Georgia	22,760	20,737	9.8%	22,660	20,633	0	0	0	0	100	103
Maryland	7,451	6,816	9.3%	0	0	7,402	6,770	7	9	41	37
North Carolina	19,496	19,078	2.2%	19,086	18,318	345	695	6	9	59	55
South Carolina	11,752	10,035	17.0%	11,695	9,973	0	0	0	0	57	62
Virginia	9,281	9,555	-2.9%	8,606	9,049	576	399	10	3	89	103
West Virginia	31,918	30,044	6.2%	25,405	18,888	6,303	11,046	0	0	211	110
East South Central	87,424	86,724	0.8%	84,538	83,259	2,625	3,169	3	5	258	291
Alabama	23,913	24,448	-2.2%	23,880	24,400	0	0	0	0	33	48
Kentucky	39,214	39,475	-0.7%	39,214	39,475	0	0	0	0	0	0
Mississippi	6,550	5,867	12.0%	3,925	2,698	2,625	3,169	0	0	0	0
Tennessee	17,747	16,935	4.8%	17,519	16,886	0	0	3	5	225	243
West South Central	152,519	154,042	-1.0%	77,531	78,913	74,781	74,920	0	0	208	208
Arkansas	19,295	18,787	2.7%	17,226	16,454	2,055	2,312	0	0	14	22
Louisiana	12,632	13,787	-8.4%	5,845	6,769	6,787	7,018	0	0	0	0
Oklahoma	18,934	18,980	-0.2%	17,517	17,596	1,224	1,198	0	0	193	186
Texas	101,658	102,487	-0.8%	36,942	38,095	64,715	64,392	0	0	0	0
Mountain	108,050	112,695	-4.1%	95,891	101,207	11,675	10,990	0	0	484	498
Arizona	22,911	23,298	-1.7%	22,911	23,298	0	0	0	0	0	0
Colorado	17,769	18,695	-5.0%	17,740	18,661	24	29	0	0	5	5
Idaho	18	21	-14.0%	0	0	0	0	0	0	18	21
Montana	10,187	9,570	6.4%	285	292	9,895	9,270	0	0	7	8
Nevada	3,446	2,933	17.0%	2,667	2,188	779	745	0	0	0	0
New Mexico	11,913	14,270	-17.0%	11,913	14,270	0	0	0	0	0	0
Utah	15,312	15,796	-3.1%	14,611	15,099	452	430	0	0	250	268
Wyoming	26,493	28,112	-5.8%	25,764	27,400	524	516	0	0	204	196
Pacific Contiguous	6,630	6,914	-4.1%	1,853	2,183	4,702	4,649	0	0	75	83
California	290	293	-1.0%	0	0	227	220	0	0	63	73
Oregon	1,853	2,183	-15.0%	1,853	2,183	0	0	0	0	0	0
Washington	4,486	4,438	1.1%	0	0	4,475	4,429	0	0	12	10
Pacific Noncontiguous	1,231	1,430	-14.0%	230	185	936	890	44	334	20	21
Alaska	487	729	-33.0%	230	185	213	210	44	334	0	0
Hawaii	744	701	6.1%	0	0	724	680	0	0	20	21
U.S. Total	853,634	860,729	-0.8%	624,235	638,327	224,568	217,219	202	513	4,629	4,670

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 5.10. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, 2014 and 2013 (Thousand Barrels)**

Census Division and State	All Sectors			Electric Power Sector							
	Year 2014	Year 2013	Percentage Change	Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
				Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	3,673	2,017	82.0%	509	308	2,976	1,584	138	90	51	35
Connecticut	908	555	64.0%	17	11	871	535	15	6	6	2
Maine	526	461	14.0%	1	1	476	424	6	6	43	30
Massachusetts	1,646	713	131.0%	240	126	1,324	546	80	39	1	2
New Hampshire	454	187	143.0%	216	135	222	41	16	11	0	0
Rhode Island	113	75	50.0%	21	22	83	38	NM	14	0	0
Vermont	26	27	-3.3%	13	13	0	0	13	14	0	0
Middle Atlantic	5,484	2,559	114.0%	1,585	896	3,724	1,533	65	25	110	105
New Jersey	786	187	320.0%	7	1	777	180	1	1	1	4
New York	3,423	1,705	101.0%	1,576	894	1,712	721	58	19	77	72
Pennsylvania	1,275	667	91.0%	2	1	1,234	632	7	5	32	29
East North Central	1,478	1,190	24.0%	944	954	498	212	5	4	32	20
Illinois	168	136	24.0%	58	49	110	87	0	0	0	0
Indiana	298	257	16.0%	279	246	0	0	1	1	18	9
Michigan	285	259	9.7%	277	251	0	0	2	2	6	6
Ohio	598	466	28.0%	210	342	382	121	0	1	5	3
Wisconsin	129	72	79.0%	120	66	5	5	2	0	2	1
West North Central	787	684	15.0%	737	666	31	11	17	3	2	3
Iowa	128	184	-30.0%	126	181	2	3	0	0	0	0
Kansas	116	109	6.6%	116	109	0	0	0	0	0	0
Minnesota	143	75	89.0%	96	63	29	8	16	2	1	2
Missouri	224	136	65.0%	224	136	0	0	0	0	0	0
Nebraska	99	94	5.3%	99	94	0	0	0	0	0	0
North Dakota	54	65	-16.0%	53	64	0	0	0	0	0	1
South Dakota	23	21	10.0%	23	20	0	1	0	0	0	0
South Atlantic	6,627	3,046	118.0%	4,345	2,241	1,862	507	213	190	207	107
Delaware	300	43	604.0%	15	0	285	42	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	938	866	8.4%	908	836	11	13	0	0	19	17
Georgia	497	172	189.0%	240	127	112	3	3	3	141	39
Maryland	1,105	544	103.0%	25	41	872	317	206	185	1	1
North Carolina	895	401	123.0%	825	383	52	9	0	0	18	10
South Carolina	500	208	140.0%	446	180	33	8	0	0	21	20
Virginia	2,109	542	289.0%	1,651	409	447	111	3	1	8	21
West Virginia	284	270	5.2%	234	265	50	5	0	0	0	0
East South Central	832	650	28.0%	775	608	26	2	0	0	31	41
Alabama	206	143	44.0%	153	107	24	2	0	0	29	34
Kentucky	246	227	8.2%	246	227	0	0	0	0	0	0
Mississippi	31	25	22.0%	30	23	0	0	0	0	1	3
Tennessee	349	255	37.0%	345	251	2	0	0	0	2	4
West South Central	366	369	-1.0%	180	137	170	205	1	2	14	26
Arkansas	49	73	-33.0%	33	46	12	26	0	0	4	1
Louisiana	91	95	-4.2%	29	24	54	50	0	0	8	21
Oklahoma	22	19	16.0%	22	18	0	0	0	NM	1	1
Texas	203	182	12.0%	95	48	104	129	1	2	2	3
Mountain	474	406	17.0%	426	365	41	40	NM	0	7	1
Arizona	108	81	34.0%	108	81	0	0	0	0	0	0
Colorado	38	29	31.0%	38	29	0	0	NM	0	0	0
Idaho	0	0	-3.7%	0	0	0	0	0	0	0	0
Montana	55	33	68.0%	20	5	35	28	0	0	0	0
Nevada	29	35	-16.0%	25	28	4	6	0	0	0	0
New Mexico	124	110	12.0%	123	106	0	5	0	0	0	0
Utah	43	46	-6.6%	40	44	1	1	0	0	1	0
Wyoming	77	73	5.7%	71	72	0	0	0	0	6	0
Pacific Contiguous	161	159	1.2%	92	78	47	40	2	3	20	38
California	100	95	4.3%	63	59	30	23	1	2	5	12
Oregon	18	11	56.0%	18	10	0	0	0	1	0	0
Washington	44	52	-16.0%	11	8	17	17	0	1	14	27
Pacific Noncontiguous	11,650	12,151	-4.1%	10,061	10,574	1,314	1,360	9	11	265	206
Alaska	1,261	1,386	-9.0%	1,168	1,307	0	0	4	6	89	74
Hawaii	10,388	10,765	-3.5%	8,893	9,267	1,314	1,360	6	5	176	133
U.S. Total	31,531	23,231	36.0%	19,652	16,827	10,689	5,494	451	328	739	582

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 5.11. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, 2014 and 2013 (Thousand Tons)**

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Electric Utilities		Independent Power Producers					
				Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	55	54	2.0%	0	0	0	0	0	0	55	54
New Jersey	NM	6	NM	0	0	0	0	0	0	NM	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	50	48	4.8%	0	0	0	0	0	0	50	48
East North Central	1,269	1,085	17.0%	763	464	438	552	0	0	67	68
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	370	343	8.0%	370	343	0	0	0	0	0	0
Michigan	402	144	179.0%	350	91	22	32	0	0	31	22
Ohio	416	523	-21.0%	0	0	416	520	0	0	0	3
Wisconsin	80	74	7.5%	43	31	0	0	0	0	37	43
West North Central	34	30	16.0%	0	0	0	0	2	1	32	28
Iowa	34	30	16.0%	0	0	0	0	2	1	32	28
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	528	793	-33.0%	494	757	0	0	0	0	34	36
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	494	757	-35.0%	494	757	0	0	0	0	0	0
Georgia	34	36	-5.3%	0	0	0	0	0	0	34	36
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	401	499	-20.0%	401	499	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	401	499	-20.0%	401	499	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	1,964	2,211	-11.0%	1,781	1,689	0	47	0	0	183	476
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,842	1,796	2.6%	1,781	1,689	0	0	0	0	60	107
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	123	415	-70.0%	0	0	0	47	0	0	123	369
Mountain	153	172	-11.0%	0	0	153	172	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	153	172	-11.0%	0	0	153	172	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8	9	-9.6%	0	0	8	9	0	0	0	0
California	8	9	-9.6%	0	0	8	9	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	4,412	4,852	-9.1%	3,440	3,409	599	779	2	1	371	662

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 5.12. Consumption of Natural Gas for Electricity Generation by State, by Sector, 2014 and 2013 (Million Cubic Feet)**

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Electric Utilities		Independent Power Producers		Year 2014	Year 2013	Year 2014	Year 2013
				Year 2014	Year 2013	Year 2014	Year 2013				
New England	356,658	388,323	-8.2%	3,585	2,587	330,872	354,489	9,416	8,407	12,786	22,839
Connecticut	108,833	115,211	-5.5%	121	114	99,682	106,231	3,993	2,986	5,038	5,880
Maine	30,772	36,922	-17.0%	0	0	23,848	20,904	302	349	6,622	15,670
Massachusetts	140,167	159,436	-12.0%	3,005	2,074	131,658	151,703	4,518	4,503	987	1,156
New Hampshire	31,557	29,966	5.3%	423	355	30,816	29,289	178	188	139	134
Rhode Island	45,293	46,743	-3.1%	0	0	44,867	46,362	425	381	0	0
Vermont	36	44	-18.0%	36	44	0	0	0	0	0	0
Middle Atlantic	1,075,743	1,014,727	6.0%	113,124	127,285	940,884	866,210	9,824	9,634	11,911	11,598
New Jersey	241,591	209,799	15.0%	715	358	235,561	203,823	1,599	1,867	3,717	3,750
New York	445,419	448,127	-0.6%	112,335	126,900	324,672	312,882	6,767	6,542	1,644	1,802
Pennsylvania	388,733	356,802	8.9%	73	27	380,651	349,506	1,458	1,224	6,550	6,046
East North Central	470,661	462,070	1.9%	188,722	190,971	253,049	248,720	14,611	10,844	14,279	11,536
Illinois	49,883	55,230	-9.7%	3,458	5,279	34,713	42,757	8,839	4,690	2,872	2,504
Indiana	75,966	76,626	-0.9%	52,646	53,291	19,089	19,676	651	352	3,579	3,308
Michigan	110,299	106,990	3.1%	32,038	27,553	68,268	71,661	3,348	3,028	6,646	4,748
Ohio	174,659	161,863	7.9%	47,497	72,085	125,684	87,171	1,079	2,166	398	440
Wisconsin	59,855	61,361	-2.5%	53,083	32,762	5,294	27,454	695	608	783	536
West North Central	106,861	135,310	-21.0%	89,544	113,907	12,777	15,780	2,802	3,312	1,738	2,312
Iowa	11,523	13,239	-13.0%	10,496	12,070	0	0	468	426	558	743
Kansas	19,120	24,124	-21.0%	18,443	23,268	0	0	0	0	677	856
Minnesota	31,236	51,573	-39.0%	24,806	40,589	4,431	8,325	1,637	2,087	362	573
Missouri	34,937	37,283	-6.3%	25,859	28,968	8,347	7,455	696	799	36	61
Nebraska	4,197	4,605	-8.9%	4,189	4,604	0	0	2	1	6	0
North Dakota	1,984	414	379.0%	1,885	337	0	0	0	0	99	78
South Dakota	3,865	4,071	-5.1%	3,865	4,071	0	0	0	0	0	0
South Atlantic	1,874,308	1,871,068	0.2%	1,533,740	1,537,482	311,826	302,358	6,613	5,224	22,129	26,005
Delaware	53,793	51,434	4.6%	336	229	45,800	41,227	0	0	7,657	9,978
District of Columbia	769	900	-15.0%	0	0	0	0	769	900	0	0
Florida	1,043,127	1,040,363	0.3%	976,434	955,851	57,944	74,874	237	174	8,512	9,464
Georgia	293,080	283,295	3.5%	207,817	216,505	81,832	62,879	0	0	3,431	3,911
Maryland	24,338	27,549	-12.0%	0	0	18,569	23,236	5,492	4,020	277	292
North Carolina	206,348	202,035	2.1%	179,505	179,920	26,235	21,569	3	33	605	513
South Carolina	86,333	90,653	-4.8%	75,616	79,389	10,440	10,518	53	67	225	679
Virginia	159,810	172,002	-7.1%	91,990	105,103	66,340	65,701	59	30	1,421	1,167
West Virginia	6,709	2,838	136.0%	2,043	484	4,666	2,354	0	0	1	0
East South Central	666,562	645,019	3.3%	389,409	380,637	262,810	237,438	1,229	1,566	13,114	25,378
Alabama	352,980	341,316	3.4%	108,395	109,084	235,776	223,568	0	0	8,809	8,664
Kentucky	28,612	16,077	78.0%	25,190	12,350	1,602	2,186	0	0	1,819	1,541
Mississippi	238,193	249,151	-4.4%	210,866	222,590	25,368	11,684	100	108	1,859	14,769
Tennessee	46,777	38,475	22.0%	44,957	36,613	64	0	1,128	1,458	627	404
West South Central	2,277,553	2,333,083	-2.4%	723,156	789,831	1,083,179	1,083,107	7,661	8,154	463,558	451,991
Arkansas	68,129	88,619	-23.0%	16,411	34,000	49,907	52,902	24	11	1,787	1,707
Louisiana	465,683	458,282	1.6%	243,957	239,746	14,409	21,652	1,830	1,978	205,488	194,906
Oklahoma	208,331	247,998	-16.0%	142,665	188,711	64,889	58,749	0	64	797	475
Texas	1,535,410	1,538,184	-0.2%	320,124	327,374	953,993	949,804	5,807	6,101	255,486	254,905
Mountain	637,181	659,072	-3.3%	443,786	416,867	178,747	225,026	4,277	4,097	10,370	13,082
Arizona	207,007	224,151	-7.6%	104,505	91,603	101,104	131,088	1,398	1,460	0	0
Colorado	94,739	87,650	8.1%	71,161	63,200	23,287	24,182	52	52	239	217
Idaho	18,267	24,885	-27.0%	9,263	12,464	8,704	11,985	0	0	301	436
Montana	5,936	7,273	-18.0%	5,243	6,348	419	925	0	0	274	0
Nevada	167,794	180,669	-7.1%	146,908	153,922	18,132	23,886	646	695	2,108	2,166
New Mexico	75,836	73,209	3.6%	52,074	47,697	22,123	24,497	1,246	976	392	40
Utah	63,889	57,911	10.0%	54,313	41,294	4,466	8,267	935	916	4,175	7,434
Wyoming	3,712	3,324	12.0%	319	338	512	197	0	0	2,881	2,789
Pacific Contiguous	1,046,008	1,052,826	-0.6%	377,997	376,937	579,886	584,003	15,510	15,295	72,613	76,590
California	876,779	867,611	1.1%	273,216	267,749	516,997	509,639	14,608	14,400	71,958	75,823
Oregon	89,959	102,013	-12.0%	34,542	36,429	54,174	64,421	848	813	396	350
Washington	79,270	83,202	-4.7%	70,240	72,759	8,717	9,943	55	82	259	417
Pacific Noncontiguous	32,851	34,801	-5.6%	31,944	33,944	0	0	15	37	892	821
Alaska	32,851	34,801	-5.6%	31,944	33,944	0	0	15	37	892	821
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,544,387	8,596,299	-0.6%	3,895,008	3,970,447	3,954,032	3,917,131	71,957	66,570	623,390	642,152

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 5.13. Consumption of Landfill Gas for Electricity Generation by State, by Sector, 2014 and 2013 (Million Cubic Feet)**

Census Division and State				Electric Power Sector							
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	12,064	8,911	35.0%	0	0	11,388	8,201	676	711	0	0
Connecticut	531	549	-3.4%	0	0	531	549	0	0	0	0
Maine	860	829	3.8%	0	0	860	829	0	0	0	0
Massachusetts	4,233	4,087	3.6%	0	0	4,233	4,087	0	0	0	0
New Hampshire	1,871	1,839	1.7%	0	0	1,195	1,128	676	711	0	0
Rhode Island	3,980	956	316.0%	0	0	3,980	956	0	0	0	0
Vermont	589	652	-9.7%	0	0	589	652	0	0	0	0
Middle Atlantic	55,925	55,992	-0.1%	0	0	53,883	54,345	591	302	1,451	1,344
New Jersey	9,877	10,110	-2.3%	0	0	9,496	10,047	381	64	0	0
New York	17,295	16,851	2.6%	0	0	17,295	16,851	0	0	0	0
Pennsylvania	28,753	29,031	-1.0%	0	0	27,091	27,448	210	238	1,451	1,344
East North Central	66,101	66,326	-0.3%	6,946	7,415	58,114	58,169	323	433	718	309
Illinois	15,612	15,444	1.1%	0	0	15,612	15,444	0	0	0	0
Indiana	7,065	7,322	-3.5%	6,646	7,014	231	0	0	0	189	309
Michigan	20,560	20,603	-0.2%	0	0	20,560	20,603	0	0	0	0
Ohio	10,666	11,080	-3.7%	139	242	10,527	10,838	0	0	0	0
Wisconsin	12,197	11,877	2.7%	161	159	11,184	11,285	323	433	529	0
West North Central	10,407	9,945	4.6%	2,931	3,034	7,475	6,911	0	0	0	0
Iowa	2,421	1,989	22.0%	0	0	2,421	1,989	0	0	0	0
Kansas	1,451	1,636	-11.0%	0	0	1,451	1,636	0	0	0	0
Minnesota	3,643	3,605	1.1%	748	769	2,895	2,836	0	0	0	0
Missouri	1,683	1,519	11.0%	975	1,069	708	450	0	0	0	0
Nebraska	1,209	1,197	1.0%	1,209	1,197	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	48,852	42,409	15.0%	5,263	5,439	38,002	30,635	3,077	3,364	2,509	2,970
Delaware	1,722	1,288	34.0%	0	0	1,381	1,288	0	0	341	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	8,523	8,541	-0.2%	1,964	1,861	6,557	6,550	1	0	0	130
Georgia	4,276	3,494	22.0%	0	0	3,228	2,359	507	445	540	690
Maryland	3,004	3,676	-18.0%	0	0	1,885	1,960	1,119	1,716	0	0
North Carolina	12,005	8,118	48.0%	0	0	10,827	7,158	1,177	960	0	0
South Carolina	5,196	5,928	-12.0%	3,218	3,479	350	298	0	0	1,628	2,151
Virginia	14,004	11,275	24.0%	81	99	13,650	10,933	272	244	0	0
West Virginia	NM	89	NM	0	0	NM	89	0	0	0	0
East South Central	5,247	4,505	16.0%	2,171	2,460	3,076	2,045	0	0	0	0
Alabama	1,017	236	330.0%	0	0	1,017	236	0	0	0	0
Kentucky	2,293	2,460	-6.8%	2,171	2,460	122	0	0	0	0	0
Mississippi	226	214	5.9%	0	0	226	214	0	0	0	0
Tennessee	1,710	1,595	7.2%	0	0	1,710	1,595	0	0	0	0
West South Central	16,925	16,355	3.5%	0	0	16,424	15,716	502	639	0	0
Arkansas	1,552	1,422	9.2%	0	0	1,552	1,422	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	372	450	-17.0%	0	0	372	450	0	0	0	0
Texas	15,000	14,483	3.6%	0	0	14,499	13,844	502	639	0	0
Mountain	5,601	5,607	-0.1%	844	1,077	4,650	4,529	107	0	0	0
Arizona	1,574	1,651	-4.6%	643	843	931	808	0	0	0	0
Colorado	1,296	1,385	-6.5%	0	0	1,296	1,385	0	0	0	0
Idaho	786	724	8.5%	201	234	478	490	107	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	523	539	-3.0%	0	0	523	539	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1,423	1,308	8.8%	0	0	1,423	1,308	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	63,839	61,066	4.5%	7,664	7,833	35,434	31,390	20,742	21,843	0	0
California	53,545	52,551	1.9%	3,232	3,317	30,089	27,870	20,224	21,364	0	0
Oregon	5,956	4,806	24.0%	1,306	1,254	4,132	3,073	518	480	0	0
Washington	4,338	3,709	17.0%	3,126	3,262	1,213	447	0	0	0	0
Pacific Noncontiguous	1,021	851	20.0%	0	0	0	0	1,021	851	0	0
Alaska	1,021	851	20.0%	0	0	0	0	1,021	851	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	285,982	271,967	5.2%	25,819	27,259	228,447	211,942	27,038	28,143	4,678	4,623

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 5.14. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, 2014 and 2013 (Thousand Tons)**

Census Division and State	All Sectors			Electric Power Sector							
	Electric Utilities		Independent Power Producers	Commercial Sector		Industrial Sector					
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	3,947	3,913	0.9%	0	0	3,670	3,630	277	283	0	0
Connecticut	1,439	1,416	1.6%	0	0	1,362	1,330	77	86	0	0
Maine	312	312	0.1%	0	0	112	115	200	196	0	0
Massachusetts	2,071	2,029	2.1%	0	0	2,071	2,029	0	0	0	0
New Hampshire	125	156	-20.0%	0	0	125	156	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	5,319	5,438	-2.2%	0	0	4,194	4,261	1,125	1,178	0	0
New Jersey	1,407	1,403	0.3%	0	0	1,065	1,059	343	345	0	0
New York	2,006	2,034	-1.4%	0	0	1,492	1,469	514	565	0	0
Pennsylvania	1,906	2,001	-4.7%	0	0	1,637	1,733	269	268	0	0
East North Central	251	242	3.8%	33	34	0	0	218	208	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	12	12	-1.4%	0	0	0	0	12	12	0	0
Michigan	206	195	5.3%	0	0	0	0	206	195	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	33	34	-3.0%	33	34	0	0	0	0	0	0
West North Central	657	660	-0.5%	411	422	224	216	22	22	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	657	660	-0.5%	411	422	224	216	22	22	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	5,312	5,526	-3.9%	0	0	4,894	5,109	418	417	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3,438	3,710	-7.3%	0	0	3,438	3,710	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	803	768	4.6%	0	0	803	768	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	1,070	1,047	2.2%	0	0	653	631	418	417	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	6	8	-29.0%	0	0	0	0	0	0	6	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	6	8	-29.0%	0	0	0	0	0	0	6	8
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	2	3	-25.0%	0	0	2	3	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	2	3	-25.0%	0	0	2	3	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	824	838	-1.7%	0	0	824	838	0	0	0	0
California	539	551	-2.2%	0	0	539	551	0	0	0	0
Oregon	119	117	1.9%	0	0	119	117	0	0	0	0
Washington	166	170	-2.3%	0	0	166	170	0	0	0	0
Pacific Noncontiguous	388	379	2.5%	0	0	0	0	388	379	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	388	379	2.5%	0	0	0	0	388	379	0	0
U.S. Total	16,706	17,007	-1.8%	444	456	13,809	14,057	2,447	2,485	6	8

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

## Chapter 6

# Fossil Fuel Stocks for Electricity Generation

**Table 6.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2004 – 2014**

Period	Electric Power Sector			Electric Utilities			Independent Power Producers		
	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
<b>End of Year Stocks</b>									
2004	106,669	46,750	937	84,917	29,144	627	21,751	17,607	309
2005	101,137	47,414	530	77,457	29,532	374	23,680	17,882	156
2006	140,964	48,216	674	110,277	29,799	456	30,688	18,416	217
2007	151,221	44,433	554	120,504	28,032	253	30,717	16,401	301
2008	161,589	40,804	739	127,463	26,108	468	34,126	14,696	270
2009	189,467	39,210	1,394	154,815	25,811	1,194	34,652	13,399	201
2010	174,917	35,706	1,019	143,744	24,798	850	31,173	10,908	168
2011	172,387	34,847	508	142,103	25,648	404	30,284	9,198	104
2012	185,116	32,224	495	150,942	23,875	414	34,174	8,349	81
2013	147,884	31,673	390	120,792	22,494	303	27,092	9,179	86
2014	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142
<b>Year 2012, End of Month Stocks</b>									
January	180,091	34,660	409	144,615	25,518	324	35,476	9,142	85
February	186,866	34,431	374	150,246	25,311	293	36,620	9,119	81
March	195,380	34,552	453	157,444	25,463	351	37,935	9,089	102
April	202,265	34,375	457	161,926	25,356	332	40,339	9,019	125
May	203,137	33,973	406	162,992	25,046	270	40,146	8,926	136
June	197,924	33,747	458	158,366	24,964	287	39,558	8,783	171
July	183,958	33,502	406	148,517	24,947	216	35,442	8,555	190
August	178,537	32,619	336	144,975	24,297	198	33,562	8,322	139
September	182,020	32,316	353	147,916	24,175	267	34,104	8,141	86
October	186,396	32,182	406	151,418	24,078	339	34,978	8,104	67
November	188,291	32,045	416	152,864	23,982	346	35,428	8,062	70
December	185,116	32,224	495	150,942	23,875	414	34,174	8,349	81
<b>Year 2013, End of Month Stocks</b>									
January	178,859	31,314	442	145,550	23,442	358	33,309	7,872	84
February	175,565	31,205	442	144,081	23,182	362	31,484	8,023	81
March	171,736	32,199	407	141,891	23,917	323	29,845	8,281	84
April	173,014	31,569	456	143,082	23,399	387	29,933	8,169	69
May	177,174	31,494	443	144,824	23,305	348	32,350	8,189	96
June	171,124	31,313	408	139,705	23,148	303	31,418	8,165	105
July	160,019	30,804	394	131,967	22,770	279	28,053	8,034	115
August	154,567	31,436	260	127,153	23,070	183	27,414	8,366	77
September	152,694	31,428	309	125,579	22,618	191	27,115	8,811	118
October	154,194	31,771	291	125,616	22,696	214	28,578	9,075	77
November	156,249	32,620	338	126,611	22,827	250	29,638	9,793	88
December	147,884	31,673	390	120,792	22,494	303	27,092	9,179	86
<b>Year 2014, End of Month Stocks</b>									
January	133,705	27,553	298	108,249	20,649	216	25,456	6,904	83
February	119,904	29,158	277	97,363	20,964	202	22,541	8,195	74
March	118,260	29,197	350	96,029	21,341	282	22,231	7,855	67
April	128,925	29,568	515	103,431	21,583	451	25,494	7,985	64
May	136,921	29,376	458	108,064	21,446	374	28,856	7,930	84
June	133,479	29,738	397	103,948	21,568	343	29,531	8,170	54
July	125,870	29,120	381	97,829	20,967	300	28,041	8,152	81
August	121,369	29,346	388	93,552	21,205	289	27,817	8,141	99
September	124,546	29,789	389	96,266	21,336	297	28,280	8,451	92
October	136,964	30,883	510	105,094	21,741	394	31,870	9,142	117
November	142,595	32,829	633	110,221	22,103	502	32,374	10,726	131
December	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142

Notes: See Glossary for definitions. Values are final.

See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.

Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

**Table 6.2 Stocks of Coal, Petroleum Liquids, and Petroleum Coke:  
Electric Power Sector, by State, 2014 and 2013**

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	December 2014	December 2013	Percentage Change	December 2014	December 2013	Percentage Change	December 2014	December 2013	Percentage Change
New England	1,611	1,129	42.7%	4,989	3,613	38.1%	0	0	--
Connecticut	W	W	W	1,498	1,141	31.3%	0	0	--
Maine	0	0	--	W	W	W	0	0	--
Massachusetts	W	582	W	1,965	1,496	31.3%	0	0	--
New Hampshire	W	W	W	W	W	W	0	0	--
Rhode Island	W	0	W	W	W	W	0	0	--
Vermont	0	0	--	57	NM	NM	0	0	--
Middle Atlantic	8,079	5,973	35.3%	5,724	4,943	15.8%	W	W	W
New Jersey	893	1,045	-14.5%	771	803	-4.0%	0	0	--
New York	894	429	108.2%	3,562	3,409	4.5%	0	0	--
Pennsylvania	6,292	4,499	39.9%	1,390	731	90.2%	W	W	W
East North Central	33,839	28,279	19.7%	1,162	1,158	0.3%	216	86	152.2%
Illinois	7,461	6,273	18.9%	96	118	-18.6%	0	0	--
Indiana	8,985	8,034	11.8%	138	117	17.8%	W	0	W
Michigan	6,982	6,032	15.7%	344	382	-9.9%	W	W	W
Ohio	6,566	4,536	44.7%	332	318	4.4%	W	W	W
Wisconsin	3,846	3,403	13.0%	252	223	13.1%	W	W	W
West North Central	20,648	22,930	-10.0%	1,791	1,127	59.0%	0	0	--
Iowa	3,856	6,734	-42.7%	179	161	11.3%	0	0	--
Kansas	2,990	3,155	-5.2%	662	134	392.9%	0	0	--
Minnesota	2,337	1,971	18.6%	156	154	1.2%	0	0	--
Missouri	6,497	7,195	-9.7%	435	285	52.6%	0	0	--
Nebraska	2,970	2,522	17.8%	244	271	-10.0%	0	0	--
North Dakota	W	W	W	43	44	-3.7%	0	0	--
South Dakota	W	W	W	72	77	-6.4%	0	0	--
South Atlantic	29,371	32,373	-9.3%	12,542	12,640	-0.8%	W	W	W
Delaware	W	W	W	304	365	-16.7%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	5,245	W	W	5,985	6,382	-6.2%	W	W	W
Georgia	5,605	7,992	-29.9%	934	900	3.8%	0	0	--
Maryland	1,856	1,327	39.9%	857	732	17.2%	0	0	--
North Carolina	6,125	5,541	10.5%	1,254	1,134	10.6%	0	0	--
South Carolina	4,102	5,107	-19.7%	698	620	12.5%	0	0	--
Virginia	1,603	1,428	12.2%	2,335	2,335	0.0%	0	0	--
West Virginia	W	5,402	W	175	172	1.8%	W	W	W
East South Central	17,780	16,840	5.6%	1,953	1,972	-1.0%	W	W	W
Alabama	4,131	4,285	-3.6%	257	301	-14.6%	0	0	--
Kentucky	8,396	7,925	5.9%	259	260	-0.6%	W	W	W
Mississippi	1,818	1,427	27.4%	586	589	-0.5%	0	0	--
Tennessee	3,436	3,203	7.3%	851	822	3.6%	0	0	--
West South Central	22,419	23,375	-4.1%	2,033	2,273	-10.6%	W	W	W
Arkansas	3,023	3,253	-7.1%	W	W	W	0	0	--
Louisiana	3,361	3,790	-11.3%	498	639	-22.0%	W	W	W
Oklahoma	2,940	3,072	-4.3%	W	W	W	0	0	--
Texas	13,095	13,261	-1.2%	1,241	1,310	-5.3%	0	0	--
Mountain	16,387	15,732	4.2%	440	905	-51.4%	W	W	W
Arizona	2,688	2,645	1.6%	143	194	-26.1%	0	0	--
Colorado	4,595	3,701	24.2%	131	243	-46.1%	0	0	--
Idaho	0	0	--	W	W	W	0	0	--
Montana	W	W	W	20	20	-2.3%	W	W	W
Nevada	1,141	639	78.6%	W	179	W	0	0	--
New Mexico	W	W	W	54	W	W	0	0	--
Utah	3,082	4,099	-24.8%	43	W	W	0	0	--
Wyoming	2,999	2,742	9.4%	34	31	11.3%	0	0	--
Pacific Contiguous	W	W	W	342	417	-18.1%	0	W	W
California	0	W	W	155	235	-34.1%	0	W	W
Oregon	W	W	W	W	W	W	0	0	--
Washington	W	W	W	W	W	W	0	0	--
Pacific Noncontiguous	W	W	W	2,530	2,626	-3.6%	0	0	--
Alaska	W	W	W	283	290	-2.7%	0	0	--
Hawaii	W	W	W	2,248	2,336	-3.8%	0	0	--
U.S. Total	151,548	147,884	2.5%	33,505	31,673	5.8%	827	390	112.3%

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

NM = Not meaningful due to large relative standard error or excessive percentage change.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

**Table 6.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke:  
Electric Power Sector, by Census Division, 2014 and 2013**

Census Division	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2014	December 2013	Percentage Change	December 2014	December 2013	December 2014	December 2013
<b>Coal (Thousand Tons)</b>							
New England	1,611	1,129	42.7%	W	W	W	W
Middle Atlantic	8,079	5,973	35.3%	W	0	W	5,973
East North Central	33,839	28,279	19.7%	23,394	22,076	10,446	6,203
West North Central	20,648	22,930	-10.0%	W	W	W	W
South Atlantic	29,371	32,373	-9.3%	26,326	29,241	3,045	3,132
East South Central	17,780	16,840	5.6%	W	16,840	W	0
West South Central	22,419	23,375	-4.1%	12,257	13,676	10,162	9,700
Mountain	16,387	15,732	4.2%	W	W	W	W
Pacific Contiguous	W	W	W	W	W	W	W
Pacific Noncontiguous	W	W	W	W	W	W	W
<b>U.S. Total</b>	<b>151,548</b>	<b>147,884</b>	<b>2.5%</b>	<b>116,684</b>	<b>120,792</b>	<b>34,864</b>	<b>27,092</b>
<b>Petroleum Liquids (Thousand Barrels)</b>							
New England	4,989	3,613	38.1%	899	W	4,090	W
Middle Atlantic	5,724	4,943	15.8%	2,069	2,025	3,654	2,918
East North Central	1,162	1,158	0.3%	852	944	310	214
West North Central	1,791	1,127	59.0%	1,763	1,099	28	28
South Atlantic	12,542	12,640	-0.8%	10,339	10,476	2,203	2,163
East South Central	1,953	1,972	-1.0%	W	W	W	W
West South Central	2,033	2,273	-10.6%	1,479	W	554	W
Mountain	440	905	-51.4%	W	863	W	42
Pacific Contiguous	342	417	-18.1%	250	324	91	93
Pacific Noncontiguous	2,530	2,626	-3.6%	W	W	W	W
<b>U.S. Total</b>	<b>33,505</b>	<b>31,673</b>	<b>5.8%</b>	<b>22,487</b>	<b>22,494</b>	<b>11,018</b>	<b>9,179</b>
<b>Petroleum Coke (Thousand Tons)</b>							
New England	0	0	--	0	0	0	0
Middle Atlantic	W	W	W	0	0	W	W
East North Central	216	86	152.2%	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	W	W	W	W
East South Central	W	W	W	W	W	0	0
West South Central	W	W	W	W	W	0	0
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	0	W	W	0	0	0	W
Pacific Noncontiguous	0	0	--	0	0	0	0
<b>U.S. Total</b>	<b>827</b>	<b>390</b>	<b>112.3%</b>	<b>W</b>	<b>303</b>	<b>W</b>	<b>86</b>

W = Withheld to avoid disclosure of individual company data.

Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form-923. Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form-923, 'Power Plant Operations Report.'

**Table 6.4. Stocks of Coal by Coal Rank: Electric Power Sector, 2004 - 2014**

Period	Electric Power Sector				Total
	Bituminous Coal	Subbituminous Coal	Lignite Coal		
<b>End of Year Stocks</b>					
2004	49,022	53,618	4,029		106,669
2005	52,923	44,377	3,836		101,137
2006	67,760	68,408	4,797		140,964
2007	63,964	82,692	4,565		151,221
2008	65,818	91,214	4,556		161,589
2009	91,922	92,448	5,097		189,467
2010	81,108	86,915	6,894		174,917
2011	82,056	85,151	5,179		172,387
2012	86,437	93,833	4,846		185,116
2013	73,113	69,720	5,051		147,884
2014	72,771	72,552	6,225		151,548
<b>Year 2012, End of Month Stocks</b>					
January	83,807	91,263	5,021		180,091
February	87,674	94,462	4,729		186,866
March	90,520	100,126	4,734		195,380
April	93,508	103,798	4,960		202,265
May	94,058	103,893	5,187		203,137
June	92,348	100,431	5,146		197,924
July	83,754	95,299	4,906		183,958
August	80,888	92,705	4,944		178,537
September	82,766	94,464	4,789		182,020
October	86,510	95,156	4,730		186,396
November	87,622	95,917	4,752		188,291
December	86,437	93,833	4,846		185,116
<b>Year 2013, End of Month Stocks</b>					
January	83,501	90,693	4,664		178,859
February	81,835	89,227	4,504		175,565
March	80,528	86,416	4,792		171,736
April	82,756	85,182	5,076		173,014
May	84,487	86,439	6,248		177,174
June	82,016	82,922	6,186		171,124
July	75,887	78,372	5,760		160,019
August	73,002	75,970	5,595		154,567
September	72,121	75,001	5,571		152,694
October	74,079	74,620	5,496		154,194
November	75,232	75,683	5,334		156,249
December	73,113	69,720	5,051		147,884
<b>Year 2014, End of Month Stocks</b>					
January	63,618	64,709	5,378		133,705
February	56,041	58,418	5,445		119,904
March	55,150	57,657	5,453		118,260
April	60,602	62,266	6,056		128,925
May	63,782	66,827	6,311		136,921
June	62,679	64,378	6,423		133,479
July	60,134	59,514	6,222		125,870
August	60,128	54,787	6,453		121,369
September	63,031	55,432	6,082		124,546
October	69,246	61,368	6,350		136,964
November	70,666	66,105	5,824		142,595
December	72,771	72,552	6,225		151,548

Notes: See Glossary for definitions.

Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

and predecessor forms. Totals may not equal sum of components because of independent rounding.

Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms. Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following:

Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

## Chapter 7

# Receipts, Cost, and Quality of Fossil Fuels

**Table 7.1. Receipts, Average Cost, and Quality of Fossil Fuels for the Electric Power Industry, 2004 through 2014**

Period	Coal				Petroleum				Natural Gas		All Fossil Fuels
			Average Cost				Average Cost			Average Cost	Average Cost
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	(Dollars per MMBtu)	(Dollars per Ton)	Receipts (Thousand Barrels)	Average Sulfur Percent by Weight	(Dollars per MMBtu)	(Dollars per Barrel)	Receipts (Thousand Mcf)	(Dollars per MMBtu)	(Dollars per MMBtu)
2004	1,002,032	0.97	1.36	27.42	186,655	1.66	4.29	26.56	5,734,054	5.96	2.48
2005	1,021,437	0.98	1.54	31.20	194,733	1.61	6.44	39.65	6,181,717	8.21	3.25
2006	1,079,943	0.97	1.69	34.09	100,965	2.31	6.23	37.66	6,675,246	6.94	3.02
2007	1,054,664	0.96	1.77	35.48	88,347	2.10	7.17	43.50	7,200,316	7.11	3.23
2008	1,069,709	0.97	2.07	41.14	96,341	2.21	10.87	64.89	7,879,046	9.02	4.11
2009	981,477	1.01	2.21	43.74	88,951	2.14	7.02	41.64	8,118,550	4.74	3.04
2010	979,918	1.16	2.27	44.64	75,285	2.14	9.54	56.35	8,673,070	5.09	3.26
2011	956,538	1.19	2.39	46.65	66,058	2.49	12.48	73.29	9,056,164	4.72	3.29
2012	841,183	1.25	2.38	46.09	40,364	3.61	12.48	73.30	9,531,389	3.42	2.83
2013	823,222	1.29	2.34	45.33	43,714	3.54	11.57	68.09	8,503,424	4.33	3.09
2014	854,560	1.32	2.37	45.96	54,488	3.56	11.60	68.12	8,431,423	5.00	3.31

\* = Value is less than half of the smallest unit of measure. (e.g., for values with no decimals, the smallest unit is 1 then values under 0.5 are shown as \*.)

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM - includes petroleum liquids (distillate fuel oil and residual fuel oil) and petroleum coke which includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- All values are final.

- See Glossary for definitions.

- Starting in January 2013, there may have been a shift in the continuity of Chapter 7 tables due to changes in the sample design of Form EIA-923 and the imputation process.

- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.2. Receipts and Quality of Coal Delivered for the Electric Power Industry, 2004 through 2014**

Period	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
2004	470,619	1.52	10.4	445,603	0.36	6.0	78,268	1.05	14.2
2005	480,179	1.56	10.5	456,856	0.36	6.2	77,677	1.02	14.0
2006	489,550	1.59	10.5	504,947	0.35	6.1	75,742	0.95	14.4
2007	467,817	1.62	10.3	505,155	0.34	6.0	71,930	0.90	14.0
2008	464,362	1.68	10.6	522,228	0.34	5.8	68,945	0.86	13.8
2009	418,688	1.77	10.5	484,007	0.34	5.8	64,966	0.95	14.0
2010	403,619	1.90	10.4	491,425	0.33	5.8	71,416	0.90	14.1
2011	380,184	2.01	10.5	488,366	0.33	5.8	75,675	0.90	14.4
2012	317,398	2.23	10.6	442,674	0.32	5.8	71,848	0.93	14.6
2013	312,821	2.33	10.5	429,283	0.32	5.8	71,191	0.92	14.3
2014	334,082	2.34	10.3	440,013	0.31	5.8	71,534	0.90	14.1

\* = Value is less than half of the smallest unit of measure. (e.g., for values with no decimals, the smallest unit is 1 then values under 0.5 are shown as \*.)

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W = Withheld to avoid disclosure of individual company data.

Notes:

Bituminous coal includes anthracite and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

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- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.3. Average Quality of Fossil Fuel Receipts for the Electric Power Industry, 2004 through 2014**

Period	Coal			Petroleum			Natural Gas
	Average Btu per Pound	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Average Btu per Gallon	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Average Btu per Cubic Foot
2004	10,074	0.97	9.0	147,286	1.66	0.2	1,027
2005	10,107	0.98	9.0	146,481	1.61	0.2	1,028
2006	10,063	0.97	9.0	143,883	2.31	0.2	1,027
2007	10,028	0.96	8.8	144,546	2.10	0.1	1,027
2008	9,947	0.97	9.0	142,205	2.21	0.3	1,027
2009	9,902	1.01	8.9	141,321	2.14	0.2	1,025
2010	9,842	1.16	8.8	140,598	2.14	0.2	1,022
2011	9,762	1.19	8.8	139,795	2.49	0.4	1,021
2012	9,668	1.25	8.8	139,567	3.61	0.5	1,023
2013	9,661	1.29	8.7	139,671	3.54	0.5	1,026
2014	9,710	1.32	8.6	139,713	3.56	0.5	1,029

= Value is less than half of the smallest unit of measure. (e.g., for values with no decimals, the smallest unit is then values under 0.5 are shown as \*.)

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM - includes petroleum liquids (distillate fuel oil and residual fuel oil) and petroleum coke which includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

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- See Glossary for definitions.
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- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.4. Weighted Average Cost of Fossil Fuels for the Electric Power Industry, 2004 through 2014**

	Coal								Petroleum		Natural Gas		Total Fossil	
	Bituminous		Subbituminous		Lignite		All Coal Ranks							
Period	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)												
2004	11,260	1.55	7,817	1.12	1,012	1.06	20,189	1.36	1,155	4.29	5,891	5.96	27,234	2.48
2005	11,546	1.83	8,004	1.19	1,008	1.07	20,647	1.54	1,198	6.44	6,357	8.21	28,202	3.25
2006	11,789	2.03	8,842	1.31	982	1.15	21,735	1.69	610	6.23	6,856	6.94	29,201	3.02
2007	11,279	2.07	8,826	1.45	925	1.28	21,152	1.77	536	7.17	7,396	7.11	29,085	3.23
2008	11,119	2.50	9,087	1.62	896	1.41	21,280	2.07	575	10.87	8,089	9.02	29,945	4.11
2009	10,010	2.75	8,421	1.64	835	1.58	19,438	2.21	528	7.02	8,319	4.74	28,285	3.04
2010	9,652	2.81	8,545	1.73	925	1.62	19,290	2.27	445	9.54	8,867	5.09	28,602	3.26
2011	9,040	2.94	8,498	1.91	986	1.62	18,676	2.39	388	12.48	9,251	4.72	28,314	3.29
2012	7,502	2.89	7,722	1.97	931	1.80	16,266	2.38	237	12.48	9,747	3.42	26,249	2.83
2013	7,351	2.77	7,511	2.00	927	1.78	15,907	2.34	256	11.57	8,721	4.33	24,884	3.09
2014	7,883	2.74	7,681	2.06	934	1.77	16,595	2.37	320	11.60	8,679	5.00	25,594	3.31

\* = Value is less than half of the smallest unit of measure. (e.g., for values with no decimals, the smallest unit is 1 then values under 0.5 are shown as \*.)

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - All coal ranks subtotal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

Bituminous coal includes anthracite coal and beginning in 2011, coal-derived synthesis gas.

PETROLEUM - includes petroleum liquids (distillate fuel oil and residual fuel oil) and petroleum coke which includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- All values are final.

- See Glossary for definitions.

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- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.5. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2004 - 2014**

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
<b>Annual Totals</b>												
2004	15,440,681	758,557	1.34	27.30	0.91	98.2	592,478	93,034	4.80	30.57	1.01	89.6
2005	15,836,924	775,890	1.53	31.22	0.94	101.9	566,320	89,303	7.17	45.46	0.89	90.9
2006	16,197,852	797,361	1.69	34.26	0.92	105.8	269,033	42,415	8.33	52.80	0.82	79.2
2007	15,561,395	767,377	1.78	36.06	0.92	100.3	216,349	34,026	9.24	58.73	0.77	59.8
2008	15,347,396	764,399	2.06	41.32	0.93	100.5	240,937	38,891	15.83	98.09	0.60	99.7
2009	14,402,019	719,253	2.22	44.47	0.99	103.4	202,598	32,959	10.44	64.18	0.51	103.5
2010	14,226,995	713,094	2.27	45.33	1.14	98.8	189,790	31,099	13.94	85.07	0.48	101.0
2011	13,871,559	699,353	2.40	47.67	1.16	101.5	144,255	23,859	20.30	122.72	0.53	114.5
2012	11,939,543	609,445	2.43	47.51	1.18	99.0	86,030	14,252	22.11	133.44	0.41	81.3
2013	11,595,328	592,772	2.38	46.51	1.23	92.9	78,101	12,814	21.09	128.57	0.43	76.2
2014	12,064,810	614,728	2.39	46.95	1.21	98.3	98,357	16,161	19.90	121.14	0.44	82.0
<b>Year 2012</b>												
January	1,065,584	54,942	2.39	46.44	1.14	105.0	8,221	1,366	21.73	130.71	0.42	91.4
February	977,965	50,084	2.41	47.06	1.22	106.8	5,975	995	22.16	133.14	0.38	79.9
March	948,751	48,359	2.44	47.94	1.21	111.4	7,907	1,294	22.94	140.22	0.42	95.1
April	873,863	43,906	2.49	49.64	1.27	110.0	6,007	1,002	23.78	142.55	0.48	74.8
May	929,247	47,009	2.47	48.73	1.25	100.2	6,122	1,029	23.35	138.90	0.46	71.4
June	952,000	48,574	2.42	47.38	1.20	90.4	9,006	1,481	22.42	136.33	0.47	85.5
July	1,051,379	53,700	2.44	47.70	1.15	83.3	9,357	1,538	20.71	126.01	0.40	75.7
August	1,118,779	56,932	2.43	47.75	1.16	92.6	7,640	1,266	21.17	127.71	0.40	79.3
September	1,011,975	51,891	2.43	47.40	1.12	100.7	6,246	1,026	21.88	133.24	0.37	80.2
October	1,013,074	51,751	2.40	47.07	1.16	105.5	6,497	1,074	22.21	134.37	0.29	78.3
November	999,479	51,032	2.40	46.93	1.17	99.5	5,800	970	22.46	134.34	0.34	75.6
December	997,447	51,264	2.39	46.58	1.19	94.0	7,253	1,212	21.36	127.87	0.42	90.1
<b>Year 2013</b>												
January	966,431	49,719	2.37	46.15	1.18	89.3	7,473	1,239	21.08	127.15	0.41	68.5
February	899,054	45,989	2.38	46.62	1.26	93.8	6,220	1,009	21.34	131.57	0.40	78.9
March	948,352	48,339	2.37	46.58	1.27	92.9	9,929	1,608	20.43	126.13	0.45	120.6
April	904,409	45,784	2.41	47.65	1.28	100.5	3,831	638	21.99	131.94	0.45	47.8
May	958,782	48,775	2.40	47.27	1.23	100.9	6,010	987	20.90	127.33	0.47	69.5
June	965,951	49,292	2.39	46.90	1.21	88.0	4,713	786	21.31	127.71	0.43	59.5
July	1,031,429	53,206	2.34	45.37	1.16	86.7	7,153	1,184	20.82	125.77	0.44	68.4
August	1,071,201	54,959	2.37	46.16	1.21	89.5	8,382	1,353	19.78	122.55	0.45	96.5
September	974,613	49,808	2.38	46.62	1.22	93.8	4,882	795	21.67	132.98	0.34	68.0
October	956,973	48,754	2.37	46.45	1.27	98.7	6,139	1,011	21.98	133.43	0.40	81.1
November	958,575	49,043	2.36	46.21	1.22	98.8	6,313	1,037	21.61	131.57	0.41	79.5
December	959,557	49,103	2.37	46.32	1.23	86.5	7,055	1,166	21.58	130.56	0.43	79.2
<b>Year 2014</b>												
January	939,850	48,843	2.30	44.18	1.13	79.8	12,001	2,011	21.72	129.64	0.32	44.6
February	870,977	44,490	2.31	45.27	1.23	80.6	12,180	2,005	21.72	131.94	0.49	106.4
March	991,708	50,353	2.37	46.61	1.23	97.5	8,992	1,474	21.53	131.41	0.39	76.6
April	948,645	47,838	2.41	47.72	1.23	116.0	6,691	1,099	21.74	132.35	0.36	85.6
May	1,003,354	50,694	2.42	47.83	1.27	107.4	5,313	885	21.88	131.42	0.34	68.2
June	998,236	50,508	2.40	47.48	1.25	90.8	6,271	1,037	21.65	130.91	0.34	87.9
July	1,059,989	53,961	2.41	47.22	1.19	89.5	5,979	985	21.28	129.22	0.47	75.2
August	1,096,270	55,759	2.40	47.18	1.22	92.5	6,800	1,108	20.61	126.44	0.50	84.5
September	1,037,230	52,716	2.41	47.40	1.21	103.8	6,921	1,137	19.90	121.13	0.48	87.7
October	1,047,018	53,419	2.34	45.74	1.20	118.6	6,939	1,148	19.33	117.03	0.48	94.2
November	1,010,559	51,705	2.33	45.51	1.20	110.9	7,512	1,237	17.71	107.56	0.50	100.6
December	1,060,973	54,441	2.60	50.75	1.20	108.8	12,760	2,035	13.22	82.91	0.46	160.4

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

- Values are final.

- See Glossary for definitions.

- Starting in January 2013, there may have been a shift in the continuity of Chapter 7 tables due to changes in the sample design of Form EIA-923 and the imputation process.

- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 7.6. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2004 - 2014 (continued)

Period	Petroleum Coke						Natural Gas						All Fossil Fuels	
	Receipts		Average Cost				Receipts		Average Cost				Average Cost	
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)		
<b>Annual Totals</b>														
2004	107,985	3,817	0.89	25.15	5.10	92.0	1,542,746	1,499,933	6.15	6.33	82.9	1.87		
2005	102,450	3,632	1.29	36.31	5.16	87.9	1,835,221	1,780,721	8.32	8.57	83.4	2.38		
2006	99,471	3,516	1.49	42.21	5.11	97.2	2,222,289	2,163,113	7.36	7.56	87.3	2.45		
2007	84,812	2,964	1.73	49.57	5.09	105.6	2,378,104	2,315,637	7.47	7.67	84.6	2.61		
2008	80,987	2,843	2.13	60.51	5.36	123.8	2,856,354	2,784,642	9.15	9.39	102.0	3.33		
2009	109,126	3,833	1.68	47.84	5.02	138.8	3,033,133	2,962,640	5.50	5.63	101.8	2.87		
2010	103,152	3,628	2.38	67.65	5.03	109.1	3,395,962	3,327,919	5.43	5.54	101.1	2.99		
2011	99,208	3,445	3.08	88.73	5.17	99.9	3,571,348	3,507,613	5.00	5.09	101.8	3.08		
2012	72,782	2,521	2.30	66.40	5.46	119.8	4,083,579	4,003,457	3.74	3.81	97.6	2.86		
2013	99,088	3,463	2.11	60.30	5.34	101.6	3,939,408	3,851,241	4.49	4.59	97.0	2.99		
2014	123,793	4,349	1.89	53.77	5.56	126.3	3,876,549	3,772,596	5.17	5.31	96.7	3.16		
<b>Year 2012</b>														
January	7,379	255	2.45	71.02	4.81	85.9	279,420	274,897	4.05	4.12	96.4	2.85		
February	6,359	217	2.46	71.86	5.19	94.5	273,306	268,688	3.72	3.79	97.7	2.78		
March	5,557	194	1.93	55.37	5.76	181.7	293,402	288,321	3.39	3.45	97.6	2.79		
April	4,870	169	1.98	57.09	5.08	140.6	323,371	315,071	3.12	3.21	98.1	2.76		
May	4,136	143	2.75	79.88	5.42	95.2	376,312	368,744	3.27	3.33	97.8	2.79		
June	5,504	188	2.40	70.40	5.87	110.8	400,778	392,707	3.42	3.49	97.4	2.84		
July	3,695	127	2.64	76.56	5.84	70.0	491,080	480,504	3.64	3.72	97.7	2.92		
August	5,434	188	2.62	75.86	5.63	110.5	444,330	435,215	3.80	3.88	97.3	2.91		
September	8,450	294	2.50	71.95	5.53	162.9	356,511	349,654	3.74	3.82	97.4	2.85		
October	7,203	251	2.07	59.25	5.53	161.4	304,602	298,960	4.18	4.26	98.1	2.90		
November	6,304	221	2.00	57.04	5.51	126.3	262,811	257,894	4.49	4.58	97.3	2.91		
December	7,891	276	2.05	58.55	5.55	162.2	277,655	272,801	4.47	4.55	98.5	2.94		
<b>Year 2013</b>														
January	6,816	237	1.97	56.67	5.52	93.7	308,726	302,282	4.35	4.44	97.5	2.95		
February	7,272	254	2.05	58.54	5.32	115.4	276,355	270,729	4.29	4.38	97.3	2.92		
March	5,449	190	2.00	57.27	5.37	80.5	292,291	285,901	4.44	4.54	97.4	2.99		
April	8,309	291	2.23	63.79	5.23	133.8	267,830	262,122	4.88	4.99	97.6	3.03		
May	8,610	301	2.28	65.22	5.28	83.5	298,278	291,130	4.84	4.96	98.4	3.06		
June	8,302	291	2.36	67.19	4.88	83.7	360,943	352,719	4.65	4.73	97.1	3.06		
July	9,006	314	2.25	64.47	5.35	93.2	427,831	417,585	4.38	4.48	96.6	3.01		
August	7,910	274	2.15	62.01	5.24	82.6	436,060	426,576	4.15	4.24	96.3	2.97		
September	10,687	373	2.09	59.92	5.32	114.6	360,603	352,812	4.35	4.44	96.7	2.97		
October	9,457	333	2.06	58.58	5.37	114.9	309,544	302,556	4.40	4.50	96.9	2.95		
November	7,486	262	1.87	53.23	5.41	120.6	281,343	274,910	4.44	4.55	96.6	2.92		
December	9,784	343	1.93	54.95	5.75	125.9	319,604	311,919	4.93	5.05	96.3	3.10		
<b>Year 2014</b>														
January	8,753	309	1.79	50.66	5.22	88.7	322,118	314,783	6.23	6.37	96.8	3.45		
February	8,883	312	2.01	57.15	5.47	113.1	261,721	255,665	7.00	7.16	96.1	3.56		
March	11,235	396	1.94	54.97	5.85	119.1	269,374	263,288	5.93	6.06	96.8	3.24		
April	11,184	394	2.07	58.69	5.98	186.0	270,455	264,009	5.34	5.47	97.6	3.14		
May	10,813	383	2.13	60.11	5.57	121.8	324,319	316,054	5.26	5.40	97.7	3.18		
June	9,321	325	1.97	56.35	5.85	95.9	346,749	337,837	5.17	5.31	96.9	3.19		
July	9,697	339	1.79	51.25	5.70	113.6	390,076	379,146	4.84	4.98	96.4	3.12		
August	10,451	365	1.85	52.89	5.51	122.5	424,307	412,297	4.47	4.60	96.6	3.05		
September	9,844	345	1.81	51.54	5.40	122.6	353,112	342,647	4.63	4.77	96.2	3.05		
October	9,240	326	1.65	46.75	5.25	182.8	323,101	313,490	4.55	4.69	96.8	2.93		
November	10,079	354	1.70	48.51	5.43	154.6	288,185	279,556	4.75	4.90	96.6	2.94		
December	14,294	499	1.90	54.38	5.40	149.0	303,034	293,825	4.61	4.76	96.6	3.13		

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

PETROLEUM COKE - includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values are final.

- See Glossary for definitions.

- Starting in January 2013, there may have been a shift in the continuity of Chapter 7 tables due to changes in the sample design of Form EIA-923 and the imputation process.

- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.7 Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2004 - 2014**

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
<b>Annual Totals</b>												
2004	4,410,775	227,700	1.41	27.27	1.13	93.3	337,011	54,152	5.35	33.31	0.61	93.6
2005	4,459,333	229,071	1.56	30.39	1.10	83.0	381,871	61,753	8.30	51.34	0.54	97.2
2006	5,204,402	266,856	1.69	33.04	1.09	97.7	117,524	19,236	9.65	58.98	0.45	104.9
2007	5,275,454	273,216	1.71	33.11	1.06	97.5	125,025	20,486	10.49	64.01	0.45	85.0
2008	5,395,142	281,258	2.03	38.98	1.04	100.4	82,124	13,657	16.30	98.03	0.41	94.4
2009	4,563,080	240,687	2.11	39.94	1.06	101.1	68,030	11,408	10.02	59.76	0.37	102.0
2010	4,555,898	243,585	2.20	41.15	1.21	96.0	49,598	8,420	14.80	87.19	0.35	89.9
2011	4,292,284	233,295	2.28	41.95	1.25	95.9	41,599	7,096	20.30	119.01	0.50	106.9
2012	4,036,436	218,341	2.21	40.92	1.42	104.9	23,922	4,073	22.34	131.28	0.44	79.8
2013	4,032,431	217,572	2.20	40.95	1.48	99.1	43,432	7,205	19.71	118.88	0.45	110.1
2014	4,243,949	226,600	2.25	42.20	1.61	100.1	71,774	11,980	19.90	119.36	0.45	101.0
<b>Year 2012</b>												
January	388,350	21,060	2.26	41.77	1.31	115.4	2,714	456	22.60	134.74	0.30	105.3
February	337,872	18,053	2.27	42.45	1.46	113.6	1,746	295	23.54	139.55	0.43	98.9
March	301,945	16,043	2.19	41.20	1.38	115.8	893	151	24.81	146.34	0.43	63.0
April	279,069	14,935	2.14	39.96	1.36	128.0	1,229	210	25.16	147.95	0.44	77.7
May	301,903	16,397	2.21	40.78	1.39	104.1	1,913	324	23.65	139.61	0.42	75.9
June	319,532	17,466	2.14	39.18	1.56	98.3	2,573	433	21.63	128.42	0.44	71.3
July	327,180	17,996	2.24	40.71	1.31	82.4	2,341	397	20.68	121.95	0.56	61.1
August	359,430	19,491	2.25	41.57	1.42	92.8	1,813	310	21.95	128.49	0.44	73.6
September	347,329	18,971	2.17	39.83	1.41	106.6	1,531	262	W	W	0.48	81.4
October	360,456	19,549	2.19	40.38	1.41	113.1	1,785	306	23.25	135.64	0.43	87.1
November	365,210	19,708	2.22	41.11	1.46	106.7	2,446	410	22.75	135.68	0.40	108.5
December	348,160	18,669	2.24	41.72	1.50	101.0	2,937	518	19.60	110.92	0.51	73.8
<b>Year 2013</b>												
January	352,557	18,976	2.21	41.20	1.51	99.1	2,963	495	21.11	126.80	0.54	45.0
February	308,971	16,694	2.18	40.44	1.56	93.3	3,435	712	20.68	126.61	0.51	117.8
March	319,485	17,108	2.24	41.93	1.57	94.1	4,016	661	19.63	119.32	0.41	206.0
April	303,157	16,041	2.21	41.98	1.60	106.6	2,074	350	W	W	0.44	94.2
May	345,413	18,316	2.23	42.25	1.53	113.7	2,404	402	20.48	122.55	0.43	104.1
June	331,183	17,955	2.22	40.98	1.41	95.5	2,048	344	20.51	122.17	0.43	84.9
July	336,772	18,662	2.18	39.50	1.28	86.5	3,386	564	20.03	120.23	0.46	68.0
August	369,852	20,185	2.16	39.71	1.41	99.2	3,449	582	19.54	115.78	0.39	147.1
September	361,593	19,609	2.20	40.72	1.48	101.2	4,942	821	18.64	112.29	0.40	180.6
October	338,484	18,086	2.22	41.67	1.47	108.4	3,904	647	19.14	115.55	0.47	175.5
November	328,769	17,596	2.18	40.82	1.50	109.0	6,401	1,051	18.52	113.07	0.49	284.8
December	336,195	18,343	2.20	40.48	1.44	90.2	3,498	576	19.73	119.40	0.43	61.3
<b>Year 2014</b>												
January	356,260	19,360	2.25	41.46	1.56	86.8	14,823	2,481	22.05	132.09	0.46	43.7
February	324,520	17,309	2.31	43.39	1.62	83.0	13,652	2,247	21.53	131.09	0.39	189.3
March	383,238	19,906	2.32	44.67	1.66	97.8	6,096	1,023	22.59	134.69	0.52	66.2
April	368,214	19,193	2.29	44.00	1.60	114.9	2,150	365	21.88	129.00	0.48	127.7
May	358,005	18,880	2.30	43.62	1.65	113.3	3,198	529	20.19	121.99	0.52	145.8
June	346,608	18,528	2.29	42.89	1.64	100.1	2,867	477	21.11	126.96	0.51	141.6
July	346,695	18,879	2.24	41.19	1.53	90.0	2,327	391	21.59	128.64	0.50	96.7
August	366,331	19,740	2.22	41.23	1.63	96.0	2,265	382	W	W	0.49	79.5
September	342,392	18,355	2.21	41.35	1.70	101.3	3,161	526	19.20	115.97	0.50	156.6
October	345,463	18,416	2.18	40.98	1.57	115.9	5,762	961	17.58	105.43	0.44	279.8
November	338,083	18,186	2.19	40.72	1.58	101.8	10,107	1,695	15.62	93.26	0.38	374.5
December	368,141	19,847	2.20	40.90	1.54	112.9	5,366	904	15.41	91.46	0.53	201.5

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

- Values are final.

- See Glossary for definitions.

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- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

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**Table 7.8. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2004 - 2014 (continued)**

Period	Petroleum Coke						Natural Gas						All Fossil Fuels	
	Receipts		Average Cost				Receipts		Average Cost				Average Cost	
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)		
<b>Annual Totals</b>														
2004	73,745	2,609	0.72	20.30	4.95	81.0	3,491,942	3,403,474	5.86	6.01	93.1	3.43		
2005	92,706	3,277	0.90	25.42	5.09	82.9	3,675,165	3,578,722	8.20	8.42	95.8	4.69		
2006	85,924	3,031	1.07	30.34	5.13	87.1	3,742,865	3,647,102	6.66	6.84	97.4	3.82		
2007	56,580	1,994	1.02	28.95	4.88	69.3	4,097,825	3,990,546	6.92	7.11	97.2	4.06		
2008	79,122	2,788	1.47	41.85	4.63	98.8	4,061,830	3,956,155	8.93	9.17	100.5	5.07		
2009	49,619	1,732	1.31	37.63	3.87	93.6	4,087,573	3,987,721	4.30	4.41	100.7	3.18		
2010	30,079	1,050	1.74	49.80	3.84	72.3	4,212,611	4,119,103	4.94	5.05	100.6	3.57		
2011	33,643	1,175	2.54	72.85	4.55	84.6	4,252,040	4,158,617	4.62	4.72	100.8	3.52		
2012	23,024	801	0.82	23.98	5.49	92.1	4,810,553	4,696,637	3.17	3.25	93.8	2.74		
2013	16,150	575	W	W	5.39	65.6	4,025,263	3,917,898	4.25	4.36	92.8	W		
2014	13,781	488	2.48	70.31	5.33	70.9	4,054,540	3,934,672	4.90	5.05	92.7	W		
<b>Year 2012</b>														
January	2,378	84	0.75	21.66	5.78	81.3	349,484	341,570	3.44	3.52	93.9	2.83		
February	2,027	71	W	W	5.74	80.6	354,095	345,712	3.08	3.15	93.6	W		
March	2,331	81	W	W	5.72	113.6	361,777	353,324	2.65	2.72	93.3	W		
April	1,925	67	W	W	5.46	145.3	381,808	373,193	2.34	2.40	94.9	W		
May	1,868	65	W	W	5.66	105.2	421,157	411,534	2.68	2.74	94.5	W		
June	2,609	90	1.52	44.78	5.17	153.1	460,670	449,871	2.85	2.92	94.4	2.59		
July	2,447	86	1.37	40.26	5.40	119.6	568,098	555,197	3.28	3.35	94.2	2.89		
August	1,096	38	1.02	29.88	5.35	39.1	533,502	520,978	3.25	3.32	93.6	2.84		
September	832	29	W	W	5.05	40.7	431,134	420,686	3.17	3.25	94.8	W		
October	951	33	W	W	5.25	45.2	351,334	342,548	3.63	3.72	94.0	W		
November	2,194	76	W	W	5.33	120.2	296,103	288,823	4.16	4.26	91.8	W		
December	2,364	82	W	W	5.58	125.5	301,391	293,201	4.03	4.14	90.9	W		
<b>Year 2013</b>														
January	1,444	52	0.00	0.00	5.37	67.8	305,859	297,827	4.59	4.72	92.6	3.29		
February	1,424	51	0.00	0.00	5.39	74.3	271,071	264,155	4.73	4.85	91.0	3.39		
March	1,474	53	0.00	0.00	5.36	69.9	293,315	285,996	4.36	4.47	92.2	3.27		
April	1,507	54	W	W	5.44	76.0	282,900	275,394	4.56	4.68	92.9	W		
May	1,628	57	W	W	5.43	118.1	304,542	296,100	4.45	4.58	92.9	W		
June	1,541	54	W	W	5.43	80.3	357,118	347,375	4.20	4.32	92.9	W		
July	1,543	54	W	W	5.37	67.4	457,359	444,633	4.06	4.17	92.9	W		
August	951	34	W	W	5.36	33.2	439,538	428,028	3.67	3.77	93.5	W		
September	118	4	W	W	5.22	6.1	372,893	362,795	3.83	3.94	93.9	W		
October	1,492	53	W	W	5.33	73.4	311,285	302,936	3.86	3.96	93.3	W		
November	1,490	52	0.00	0.00	5.43	77.3	301,695	293,861	4.03	4.14	92.9	3.11		
December	1,538	55	W	W	5.42	70.9	327,686	318,797	5.05	5.19	92.4	W		
<b>Year 2014</b>														
January	922	33	W	W	5.35	52.4	320,157	311,751	8.58	8.81	92.3	W		
February	1,039	38	0.00	0.00	5.27	60.8	267,558	260,190	8.33	8.57	91.3	5.10		
March	1,127	41	W	W	5.47	62.5	271,937	264,409	6.38	6.56	91.6	W		
April	1,047	37	W	W	5.53	57.9	264,781	257,569	4.83	4.96	92.5	W		
May	1,419	50	W	W	5.35	88.8	305,484	296,701	4.51	4.65	91.8	W		
June	1,349	47	W	W	5.24	102.9	352,539	342,158	4.45	4.58	91.9	W		
July	1,124	39	W	W	5.55	67.8	432,673	419,753	3.98	4.10	93.3	W		
August	1,401	49	W	W	5.39	83.2	455,652	441,523	3.71	3.83	93.7	W		
September	946	33	W	W	5.29	47.3	400,187	387,887	3.72	3.84	93.6	W		
October	821	29	W	W	5.26	91.2	363,367	352,206	3.58	3.69	92.8	W		
November	1,066	36	W	W	5.29	87.9	298,147	289,008	4.27	4.41	92.9	W		
December	1,520	53	W	W	5.10	76.9	322,057	311,517	4.04	4.18	93.1	W		

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**Notes:**

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

PETROLEUM COKE - includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

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- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 7.9. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2004 - 2014

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
<b>Annual Totals</b>												
2004	10,682	451	2.08	49.32	2.48	23.5	3,066	527	6.19	35.96	0.20	26.9
2005	11,081	464	2.57	61.21	2.43	24.2	1,684	289	8.28	48.22	0.17	18.3
2006	12,207	518	2.63	61.95	2.51	27.5	798	137	13.50	78.70	0.17	15.5
2007	12,419	531	2.67	62.46	2.58	27.6	249	43	14.04	81.93	0.17	6.2
2008	43,997	2,009	2.65	58.12	1.73	99.4	3,800	633	17.84	107.10	0.37	102.0
2009	41,182	1,876	2.90	63.68	1.67	104.3	3,517	583	10.82	65.26	0.45	122.1
2010	37,778	1,747	2.82	61.06	1.77	101.6	2,395	400	15.24	91.25	0.38	106.3
2011	35,892	1,686	2.92	62.24	1.78	101.1	1,959	325	19.67	118.66	0.55	108.0
2012	4,427	192	3.41	78.71	2.75	13.2	247	43	W	W	0.00	11.0
2013	3,507	151	W	W	3.05	11.2	0	0	--	--	--	0.0
2014	4,096	182	W	W	2.50	17.1	0	0	--	--	--	0.0
<b>Year 2012</b>												
January	399	17	W	W	2.86	11.3	10	2	23.14	133.20	0.00	2.2
February	394	17	3.62	83.49	2.90	12.7	2	0	W	W	0.00	1.7
March	416	18	3.50	81.68	2.65	14.0	2	0	W	W	0.00	1.5
April	523	22	W	W	1.62	21.2	14	3	W	W	0.00	13.8
May	409	18	3.71	85.51	2.70	16.4	5	1	W	W	0.00	3.3
June	291	13	W	W	2.57	11.7	48	8	W	W	0.00	30.3
July	239	10	W	W	2.87	8.6	21	4	W	W	0.00	6.5
August	464	21	W	W	2.69	17.1	47	8	W	W	0.00	24.8
September	241	11	W	W	3.13	9.9	19	3	W	W	0.00	16.5
October	159	7	W	W	3.53	6.9	42	7	W	W	0.00	31.5
November	380	17	W	W	3.19	13.5	18	3	W	W	0.00	10.1
December	511	22	2.94	67.86	3.21	15.7	18	3	W	W	0.00	10.3
<b>Year 2013</b>												
January	390	17	W	W	2.99	11.2	0	0	--	--	--	0.0
February	394	17	W	W	3.07	12.2	0	0	--	--	--	0.0
March	489	21	W	W	2.74	16.0	0	0	--	--	--	0.0
April	241	10	W	W	3.04	10.4	0	0	--	--	--	0.0
May	383	17	W	W	2.96	15.8	0	0	--	--	--	0.0
June	355	16	W	W	2.91	15.2	0	0	--	--	--	0.0
July	209	9	W	W	3.41	8.9	0	0	--	--	--	0.0
August	386	17	W	W	2.82	16.3	0	0	--	--	--	0.0
September	143	6	W	W	3.37	6.4	0	0	--	--	--	0.0
October	61	3	W	W	3.34	2.9	0	0	--	--	--	0.0
November	202	9	W	W	3.52	7.9	0	0	--	--	--	0.0
December	254	11	W	W	3.45	8.6	0	0	--	--	--	0.0
<b>Year 2014</b>												
January	400	18	W	W	3.06	13.3	0	0	--	--	--	0.0
February	407	18	W	W	2.91	13.7	0	0	--	--	--	0.0
March	526	24	2.98	66.22	2.39	20.1	0	0	--	--	--	0.0
April	640	30	2.70	58.40	1.24	36.2	0	0	--	--	--	0.0
May	475	21	W	W	2.54	29.1	0	0	--	--	--	0.0
June	116	5	W	W	2.88	6.3	0	0	--	--	--	0.0
July	261	11	W	W	2.52	13.2	0	0	--	--	--	0.0
August	159	7	W	W	2.96	9.4	0	0	--	--	--	0.0
September	306	13	W	W	2.56	21.1	0	0	--	--	--	0.0
October	313	14	W	W	2.72	23.9	0	0	--	--	--	0.0
November	229	10	W	W	3.00	12.3	0	0	--	--	--	0.0
December	264	12	W	W	2.96	13.0	0	0	--	--	--	0.0

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## Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

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- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.10. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2004 - 2014 (continued)**

Period	Petroleum Coke						Natural Gas						All Fossil Fuels	
	Receipts		Average Cost				Receipts		Average Cost					
	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMbtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)		
<b>Annual Totals</b>														
2004	0	0	--	--	--	0.0	16,176	15,804	5.93	6.07	21.9	4.58		
2005	0	0	--	--	--	0.0	17,600	17,142	8.38	8.60	25.2	6.25		
2006	0	0	--	--	--	0.0	21,369	20,819	8.33	8.55	30.7	6.42		
2007	0	0	--	--	--	0.0	23,502	22,955	7.99	8.18	32.8	6.20		
2008	370	14	2.14	58.36	5.53	135.3	71,670	69,877	9.01	9.24	105.5	6.94		
2009	252	9	1.65	46.54	5.11	102.8	81,134	79,308	5.18	5.30	105.0	4.58		
2010	410	15	2.19	60.59	5.67	122.5	92,055	90,130	5.39	5.51	105.1	4.83		
2011	268	9	W	W	5.46	147.4	95,287	93,306	5.20	5.31	107.2	W		
2012	0	0	--	--	--	0.0	18,315	18,008	5.88	5.98	16.2	W		
2013	0	0	--	--	--	0.0	5,497	5,450	W	W	4.6	W		
2014	0	0	--	--	--	0.0	5,849	5,795	W	W	4.9	W		
<b>Year 2012</b>														
January	0	0	--	--	--	0.0	1,688	1,657	6.82	6.95	18.1	W		
February	0	0	--	--	--	0.0	1,758	1,727	6.32	6.43	19.6	W		
March	0	0	--	--	--	0.0	1,587	1,560	6.24	6.35	17.6	W		
April	0	0	--	--	--	0.0	1,465	1,438	5.45	5.55	16.9	W		
May	0	0	--	--	--	0.0	1,230	1,208	5.51	5.61	13.7	W		
June	0	0	--	--	--	0.0	1,265	1,244	5.49	5.58	12.9	W		
July	0	0	--	--	--	0.0	1,530	1,507	5.30	5.39	12.4	W		
August	0	0	--	--	--	0.0	1,273	1,255	5.79	5.88	11.9	W		
September	0	0	--	--	--	0.0	1,495	1,477	5.25	5.32	15.9	W		
October	0	0	--	--	--	0.0	1,733	1,705	5.47	5.56	19.8	W		
November	0	0	--	--	--	0.0	1,593	1,565	6.41	6.52	18.9	W		
December	0	0	--	--	--	0.0	1,698	1,666	6.17	6.29	20.1	W		
<b>Year 2013</b>														
January	0	0	--	--	--	0.0	330	327	W	W	3.4	W		
February	0	0	--	--	--	0.0	361	357	W	W	4.1	W		
March	0	0	--	--	--	0.0	382	378	W	W	4.0	W		
April	0	0	--	--	--	0.0	375	371	W	W	4.3	W		
May	0	0	--	--	--	0.0	467	464	W	W	5.2	W		
June	0	0	--	--	--	0.0	404	401	W	W	4.2	W		
July	0	0	--	--	--	0.0	445	440	W	W	3.6	W		
August	0	0	--	--	--	0.0	414	411	W	W	3.7	W		
September	0	0	--	--	--	0.0	560	554	W	W	5.4	W		
October	0	0	--	--	--	0.0	633	629	W	W	6.9	W		
November	0	0	--	--	--	0.0	529	524	W	W	5.7	W		
December	0	0	--	--	--	0.0	599	592	W	W	5.5	W		
<b>Year 2014</b>														
January	0	0	--	--	--	0.0	423	418	W	W	3.1	W		
February	0	0	--	--	--	0.0	314	310	W	W	3.6	W		
March	0	0	--	--	--	0.0	359	355	W	W	4.2	W		
April	0	0	--	--	--	0.0	439	435	W	W	5.4	W		
May	0	0	--	--	--	0.0	491	486	W	W	5.4	W		
June	0	0	--	--	--	0.0	440	437	W	W	4.6	W		
July	0	0	--	--	--	0.0	476	472	W	W	4.4	W		
August	0	0	--	--	--	0.0	625	619	W	W	5.4	W		
September	0	0	--	--	--	0.0	555	551	W	W	5.4	W		
October	0	0	--	--	--	0.0	580	575	W	W	5.9	W		
November	0	0	--	--	--	0.0	476	472	W	W	5.1	W		
December	0	0	--	--	--	0.0	672	666	W	W	6.7	W		

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Table 7.11. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2004 - 2014

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
<b>Annual Totals</b>												
2004	326,495	15,324	1.63	34.79	1.43	57.6	25,491	4,107	4.98	30.93	1.38	18.5
2005	339,968	16,011	1.94	41.17	1.42	61.9	36,383	5,876	6.64	41.13	1.36	26.4
2006	320,640	15,208	2.03	42.76	1.47	60.2	19,514	3,214	7.57	45.95	1.30	21.2
2007	303,091	13,540	2.20	49.16	1.36	60.1	33,637	5,514	8.53	52.06	1.33	38.8
2008	493,724	22,044	2.72	60.96	1.28	100.7	48,822	7,958	12.50	76.69	1.01	109.0
2009	431,686	19,661	2.81	61.68	1.22	99.5	55,899	9,232	9.83	59.52	0.83	112.8
2010	468,991	21,492	2.75	60.08	1.26	87.2	33,276	5,554	13.21	79.15	0.93	125.6
2011	476,108	22,204	2.93	62.86	1.33	99.5	28,939	4,878	17.67	104.83	1.08	144.8
2012	285,172	13,206	3.02	65.24	1.33	65.8	6,739	1,095	W	W	1.52	40.8
2013	275,543	12,727	W	W	1.32	64.4	2,431	394	18.20	112.29	1.43	15.8
2014	281,867	13,050	W	W	1.33	68.4	2,290	373	17.91	109.99	1.43	15.6
<b>Year 2012</b>												
January	26,254	1,221	W	W	1.35	60.6	700	113	17.49	108.36	1.64	23.6
February	22,263	1,040	2.99	63.96	1.36	56.8	503	82	W	W	1.46	37.0
March	22,967	1,071	3.06	65.58	1.23	63.6	879	147	W	W	1.15	54.3
April	22,649	1,044	W	W	1.37	70.5	538	87	W	W	1.47	44.5
May	22,811	1,053	3.07	66.43	1.42	67.4	556	91	W	W	1.40	45.8
June	22,523	1,037	W	W	1.45	66.8	515	84	W	W	1.52	50.8
July	24,473	1,143	W	W	1.30	66.8	776	125	W	W	1.63	74.9
August	26,133	1,208	W	W	1.36	70.9	540	88	W	W	1.62	47.6
September	23,802	1,098	W	W	1.24	71.5	413	66	W	W	1.71	40.5
October	24,214	1,117	W	W	1.28	70.4	394	64	W	W	1.58	25.8
November	23,495	1,089	W	W	1.32	66.0	359	58	W	W	1.54	31.5
December	23,589	1,085	3.02	65.67	1.30	61.9	565	91	W	W	1.67	43.2
<b>Year 2013</b>												
January	22,923	1,071	W	W	1.23	60.6	330	53	18.32	113.35	1.58	20.1
February	20,789	962	W	W	1.31	60.2	214	35	18.09	110.29	1.33	15.3
March	23,120	1,078	W	W	1.24	61.7	318	52	18.11	111.18	1.25	26.9
April	21,566	986	W	W	1.35	63.0	226	36	W	W	1.63	18.6
May	23,533	1,082	W	W	1.31	66.8	244	39	17.85	110.67	1.41	19.2
June	22,312	1,032	W	W	1.18	66.0	246	40	18.19	112.54	1.69	22.2
July	24,077	1,120	W	W	1.29	67.0	208	33	17.37	108.22	1.66	20.8
August	24,220	1,116	W	W	1.30	68.6	161	26	18.55	113.24	1.38	17.0
September	23,042	1,066	W	W	1.37	69.7	80	13	18.61	114.88	1.32	8.8
October	22,581	1,031	W	W	1.38	63.7	102	17	19.09	118.20	0.80	10.1
November	23,845	1,092	W	W	1.42	64.9	104	17	19.02	115.77	1.00	9.5
December	23,534	1,091	W	W	1.40	61.8	198	32	18.35	113.33	1.25	7.7
<b>Year 2014</b>												
January	23,384	1,093	W	W	1.29	61.0	385	62	18.67	115.30	1.30	15.0
February	21,991	1,020	W	W	1.33	62.5	332	53	20.18	125.46	1.04	19.1
March	25,143	1,161	2.92	63.25	1.41	67.2	135	22	20.74	127.74	1.16	9.3
April	22,469	1,042	3.09	66.66	1.31	70.8	142	23	17.86	110.18	1.60	14.8
May	22,090	1,028	W	W	1.27	66.3	144	23	17.67	109.00	1.70	13.6
June	21,987	1,014	W	W	1.40	65.9	197	32	18.15	111.64	1.79	19.5
July	24,237	1,122	W	W	1.29	70.6	149	24	16.89	103.81	1.54	16.2
August	25,258	1,165	W	W	1.35	73.2	117	19	W	W	1.59	14.2
September	23,305	1,073	W	W	1.28	71.5	140	23	17.75	108.43	1.86	14.5
October	23,967	1,110	W	W	1.35	74.9	150	25	16.21	98.83	1.56	14.8
November	23,701	1,098	W	W	1.37	70.7	169	28	17.46	105.26	1.42	15.1
December	24,334	1,125	W	W	1.30	68.4	230	38	14.15	85.81	1.33	22.4

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

## Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, propane, and waste oil, and, beginning in 2011, propane was included in the category of Other Gases.

- Values are final.

- See Glossary for definitions.

- Starting in January 2013, there may have been a shift in the continuity of Chapter 7 tables due to changes in the sample design of Form EIA-923 and the imputation process.

- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 7.12. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2004 - 2014 (continued)

Period	Petroleum Coke						Natural Gas						All Fossil Fuels	
	Receipts		Average Cost				Receipts		Average Cost				Average Cost	
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)		
<b>Annual Totals</b>														
2004	14,876	540	0.98	27.01	5.59	40.4	839,886	814,843	6.04	6.22	68.4	4.76		
2005	16,620	594	1.21	33.75	5.44	58.2	828,882	805,132	8.00	8.24	74.3	6.18		
2006	17,875	646	1.63	45.05	5.43	42.7	869,157	844,211	7.02	7.22	75.7	5.64		
2007	19,700	698	1.96	55.42	5.52	43.6	896,803	871,178	6.97	7.18	82.9	5.78		
2008	39,246	1,396	3.34	93.84	4.92	117.9	1,099,613	1,068,372	8.95	9.22	111.9	7.10		
2009	38,924	1,381	1.80	50.82	4.51	114.2	1,117,489	1,088,880	4.27	4.38	110.0	4.02		
2010	35,866	1,269	2.46	69.38	4.90	100.5	1,166,768	1,135,917	4.64	4.77	110.4	4.24		
2011	37,981	1,351	W	W	5.03	108.3	1,331,977	1,296,628	4.28	4.40	122.0	W		
2012	23,861	858	2.62	72.96	5.86	42.2	834,245	813,288	2.97	3.05	70.8	W		
2013	17,236	623	W	W	5.82	30.5	750,946	728,835	W	W	62.3	W		
2014	9,736	358	W	W	5.83	23.2	742,347	718,360	W	W	62.7	W		
<b>Year 2012</b>														
January	1,461	54	3.34	91.14	5.57	26.5	71,420	69,608	3.21	3.30	73.8	W		
February	428	16	W	W	5.31	10.5	65,859	64,147	2.85	2.93	72.2	W		
March	1,900	68	W	W	5.33	44.1	67,637	65,868	2.58	2.66	72.5	W		
April	2,282	82	W	W	5.64	61.4	67,492	65,641	2.34	2.41	72.7	W		
May	2,579	93	W	W	5.53	69.1	68,198	66,297	2.38	2.46	69.8	W		
June	2,062	73	2.59	72.74	5.79	48.2	70,695	68,812	2.65	2.73	70.4	W		
July	1,419	51	2.58	71.62	6.07	29.9	73,402	71,204	2.94	3.04	66.4	W		
August	2,088	75	2.60	72.32	6.13	37.0	71,324	70,263	3.12	3.17	67.1	W		
September	2,643	95	W	W	6.16	53.0	66,883	65,236	2.83	2.91	68.3	W		
October	1,760	63	W	W	6.27	38.0	68,718	67,113	3.20	3.28	71.8	W		
November	2,466	88	W	W	6.01	44.7	68,292	66,625	3.61	3.71	71.7	W		
December	2,773	100	W	W	6.05	52.9	74,324	72,475	3.81	3.91	74.0	W		
<b>Year 2013</b>														
January	1,844	67	2.30	63.72	6.13	34.8	61,781	60,209	W	W	60.2	W		
February	1,058	38	2.38	65.94	6.03	30.4	59,307	57,544	W	W	64.4	W		
March	1,317	47	2.40	67.24	6.03	26.2	63,464	61,243	W	W	63.0	W		
April	1,424	51	W	W	5.96	30.6	58,374	56,733	W	W	61.4	W		
May	1,520	54	W	W	5.82	28.5	62,146	60,458	W	W	64.7	W		
June	1,686	61	W	W	5.70	32.1	64,256	62,350	W	W	65.2	W		
July	1,666	59	W	W	5.99	30.2	63,859	61,986	W	W	59.3	W		
August	2,041	72	W	W	5.94	33.2	64,617	62,815	W	W	60.6	W		
September	1,565	56	W	W	5.68	34.3	60,028	58,253	W	W	60.9	W		
October	1,252	46	W	W	5.36	29.1	62,118	60,239	W	W	63.0	W		
November	677	25	2.36	65.25	5.58	21.5	64,376	62,456	W	W	64.0	W		
December	1,189	45	W	W	5.28	31.4	66,621	64,548	W	W	61.4	W		
<b>Year 2014</b>														
January	398	15	W	W	5.87	11.7	66,078	64,072	W	W	60.7	W		
February	339	13	W	W	5.95	11.2	59,291	57,453	W	W	64.6	W		
March	834	31	W	W	5.76	24.3	65,433	63,434	W	W	67.2	W		
April	755	28	W	W	5.88	19.7	58,439	56,714	W	W	63.4	W		
May	408	15	W	W	5.78	11.7	60,012	58,094	W	W	63.1	W		
June	990	36	W	W	5.66	25.6	60,327	58,411	W	W	64.0	W		
July	794	29	W	W	5.79	20.2	64,393	62,325	W	W	62.9	W		
August	912	34	W	W	5.80	25.1	64,667	62,493	W	W	62.0	W		
September	997	36	W	W	5.92	27.6	59,277	57,273	W	W	60.5	W		
October	950	34	W	W	5.92	33.0	58,228	56,273	W	W	59.5	W		
November	1,071	40	W	W	5.83	33.3	61,753	59,657	W	W	63.3	W		
December	1,286	47	W	W	5.86	36.1	64,449	62,162	W	W	62.3	W		

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## Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

PETROLEUM COKE - includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values are final.

- See Glossary for definitions.

- Starting in January 2013, there may have been a shift in the continuity of Chapter 7 tables due to changes in the sample design of Form EIA-923 and the imputation process.

- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 7.13. Receipts of Coal Delivered for Electricity Generation by State, 2014 and 2013  
(Thousand Tons)**

Census Division and State				Electric Power Sector							
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	2,577	2,917	-12.0%	526	726	2,019	2,163	0	0	32	28
Connecticut	487	320	52.0%	0	0	487	320	0	0	0	0
Maine	85	66	30.0%	0	0	53	38	0	0	32	28
Massachusetts	1,225	1,805	-32.0%	0	0	1,225	1,805	0	0	0	0
New Hampshire	526	726	-28.0%	526	726	0	0	0	0	0	0
Rhode Island	254	0	--	0	0	254	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	42,038	42,558	-1.2%	166	0	40,974	41,664	0	0	898	893
New Jersey	1,091	1,105	-1.2%	0	0	1,091	1,105	0	0	0	0
New York	2,903	2,467	18.0%	0	0	2,588	2,127	0	0	315	341
Pennsylvania	38,044	38,986	-2.4%	166	0	37,295	38,433	0	0	583	552
East North Central	196,078	185,713	5.6%	120,272	122,129	72,437	60,337	70	58	3,300	3,189
Illinois	62,810	59,536	5.5%	14,063	6,391	46,437	50,924	0	0	2,310	2,221
Indiana	40,628	36,386	12.0%	37,770	33,802	2,858	2,585	0	0	0	0
Michigan	30,834	29,349	5.1%	30,412	29,010	249	172	70	58	104	110
Ohio	39,646	37,839	4.8%	16,476	30,933	22,893	6,657	0	0	278	250
Wisconsin	22,159	22,602	-2.0%	21,551	21,994	0	0	0	0	608	608
West North Central	137,428	133,327	3.1%	133,816	129,798	0	0	112	94	3,500	3,435
Iowa	19,375	20,286	-4.5%	17,086	17,979	0	0	0	0	2,288	2,308
Kansas	18,068	18,424	-1.9%	18,068	18,424	0	0	0	0	0	0
Minnesota	16,913	13,266	27.0%	16,484	12,908	0	0	19	0	410	358
Missouri	41,473	41,138	0.8%	41,380	41,044	0	0	93	94	0	0
Nebraska	16,153	15,761	2.5%	15,351	14,991	0	0	0	0	801	769
North Dakota	23,671	22,665	4.4%	23,671	22,665	0	0	0	0	0	0
South Dakota	1,776	1,788	-0.6%	1,776	1,788	0	0	0	0	0	0
South Atlantic	123,112	111,898	10.0%	103,554	87,605	17,158	22,058	0	0	2,400	2,235
Delaware	534	614	-13.0%	0	0	534	614	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	22,159	19,754	12.0%	21,090	18,766	817	756	0	0	251	232
Georgia	20,524	19,015	7.9%	20,097	18,651	0	0	0	0	427	364
Maryland	8,262	6,828	21.0%	0	0	7,901	6,490	0	0	361	337
North Carolina	17,580	16,296	7.9%	16,658	15,038	545	877	0	0	377	381
South Carolina	10,947	9,130	20.0%	10,752	8,981	0	0	0	0	195	149
Virginia	10,260	9,640	6.4%	8,847	8,426	1,051	760	0	0	362	454
West Virginia	32,845	30,621	7.3%	26,109	17,742	6,308	12,561	0	0	428	318
East South Central	87,900	85,706	2.6%	83,767	80,432	2,625	3,685	0	0	1,507	1,589
Alabama	23,312	22,582	3.2%	23,312	22,582	0	0	0	0	0	0
Kentucky	38,741	39,161	-1.1%	38,741	39,161	0	0	0	0	0	0
Mississippi	6,195	5,783	7.1%	3,570	2,098	2,625	3,685	0	0	0	0
Tennessee	19,652	18,181	8.1%	18,145	16,591	0	0	0	0	1,507	1,589
West South Central	150,653	147,020	2.5%	75,723	74,409	74,380	72,129	0	0	550	482
Arkansas	18,630	17,641	5.6%	16,594	15,558	1,980	2,083	0	0	56	0
Louisiana	12,017	13,990	-14.0%	5,574	7,094	6,443	6,896	0	0	0	0
Oklahoma	19,018	17,472	8.8%	17,324	15,889	1,200	1,101	0	0	494	482
Texas	100,988	97,917	3.1%	36,230	35,868	64,757	62,049	0	0	0	0
Mountain	106,386	107,007	-0.6%	94,745	96,075	11,367	10,702	0	0	273	230
Arizona	22,591	21,589	4.6%	22,591	21,589	0	0	0	0	0	0
Colorado	17,184	18,056	-4.8%	17,184	18,056	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	9,905	9,262	6.9%	285	292	9,621	8,970	0	0	0	0
Nevada	3,924	2,268	73.0%	3,154	1,482	770	786	0	0	0	0
New Mexico	11,867	14,153	-16.0%	11,867	14,153	0	0	0	0	0	0
Utah	14,458	15,043	-3.9%	13,732	14,383	452	430	0	0	273	230
Wyoming	26,457	26,637	-0.7%	25,933	26,121	524	516	0	0	0	0
Pacific Contiguous	7,602	6,348	20.0%	2,159	1,597	4,854	4,105	0	0	588	646
California	771	793	-2.8%	0	0	183	148	0	0	588	646
Oregon	2,159	1,597	35.0%	2,159	1,597	0	0	0	0	0	0
Washington	4,671	3,957	18.0%	0	0	4,671	3,957	0	0	0	0
Pacific Noncontiguous	786	728	8.0%	0	0	786	728	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	786	728	8.0%	0	0	786	728	0	0	0	0
U.S. Total	854,560	823,222	3.8%	614,728	592,772	226,600	217,572	182	151	13,050	12,727

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Notes:

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.14. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, 2014 and 2013  
(Thousand Barrels)**

Census Division and State				Electric Power Sector							
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	4,554	3,177	43.0%	755	421	3,748	2,730	0	0	50	25
Connecticut	1,092	594	84.0%	0	0	1,092	594	0	0	0	0
Maine	637	898	-29.0%	0	0	587	873	0	0	50	25
Massachusetts	1,867	1,300	44.0%	301	154	1,566	1,146	0	0	0	0
New Hampshire	741	354	110.0%	455	268	287	86	0	0	0	0
Rhode Island	217	31	594.0%	0	0	217	31	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	5,410	2,088	159.0%	1,421	451	3,963	1,607	0	0	26	31
New Jersey	283	52	443.0%	0	0	283	52	0	0	0	0
New York	3,545	1,548	129.0%	1,421	451	2,109	1,077	0	0	15	21
Pennsylvania	1,583	488	224.0%	0	0	1,571	478	0	0	12	10
East North Central	1,524	1,177	30.0%	914	929	570	216	0	0	41	31
Illinois	179	129	38.0%	45	40	133	89	0	0	0	0
Indiana	359	252	42.0%	359	252	0	0	0	0	0	0
Michigan	227	230	-1.5%	215	216	0	0	0	0	12	14
Ohio	644	466	38.0%	186	327	432	124	0	0	25	15
Wisconsin	115	99	17.0%	108	94	4	3	0	0	3	2
West North Central	612	500	23.0%	609	499	3	0	0	0	0	0
Iowa	99	127	-22.0%	99	127	0	0	0	0	0	0
Kansas	89	103	-13.0%	89	103	0	0	0	0	0	0
Minnesota	93	45	106.0%	89	45	3	0	0	0	0	0
Missouri	232	101	130.0%	232	101	0	0	0	0	0	0
Nebraska	36	35	2.8%	36	35	0	0	0	0	0	0
North Dakota	58	78	-26.0%	58	78	0	0	0	0	0	0
South Dakota	6	10	-41.0%	6	10	0	0	0	0	0	0
South Atlantic	5,656	2,675	111.0%	3,893	1,979	1,511	391	0	0	252	305
Delaware	26	22	17.0%	0	0	26	22	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	567	865	-34.0%	531	826	11	8	0	0	25	30
Georgia	399	222	80.0%	262	145	60	4	0	0	76	73
Maryland	919	193	375.0%	0	0	919	193	0	0	0	0
North Carolina	775	394	96.0%	732	296	21	54	0	0	22	45
South Carolina	574	246	133.0%	483	120	0	0	0	0	91	126
Virginia	2,107	436	383.0%	1,650	296	419	109	0	0	38	31
West Virginia	290	296	-2.2%	235	296	55	0	0	0	0	0
East South Central	658	632	4.2%	631	629	23	1	0	0	4	2
Alabama	133	131	2.0%	110	130	23	1	0	0	0	0
Kentucky	225	195	15.0%	225	195	0	0	0	0	0	0
Mississippi	24	41	-41.0%	24	39	0	0	0	0	0	2
Tennessee	276	265	4.1%	272	265	0	0	0	0	4	0
West South Central	471	284	66.0%	274	106	198	177	0	0	0	0
Arkansas	33	63	-48.0%	15	33	18	30	0	0	0	0
Louisiana	211	64	232.0%	157	14	54	50	0	0	0	0
Oklahoma	27	13	111.0%	27	13	0	0	0	0	0	0
Texas	200	144	39.0%	75	46	126	98	0	0	0	0
Mountain	354	368	-3.8%	323	345	31	22	0	0	0	0
Arizona	84	97	-13.0%	84	97	0	0	0	0	0	0
Colorado	9	4	103.0%	9	4	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	26	15	75.0%	0	0	26	15	0	0	0	0
Nevada	27	34	-20.0%	23	28	4	6	0	0	0	0
New Mexico	104	96	7.9%	104	96	0	0	0	0	0	0
Utah	34	51	-34.0%	32	50	1	1	0	0	0	0
Wyoming	70	70	0.2%	70	70	0	0	0	0	0	0
Pacific Contiguous	35	40	-11.0%	21	25	14	14	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	15	6	146.0%	15	6	0	0	0	0	0	0
Washington	20	34	-40.0%	6	19	14	14	0	0	0	0
Pacific Noncontiguous	9,238	9,474	-2.5%	7,320	7,429	1,918	2,045	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	9,238	9,474	-2.5%	7,320	7,429	1,918	2,045	0	0	0	0
U.S. Total	28,514	20,413	40.0%	16,161	12,814	11,980	7,205	0	0	373	394

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Notes:

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Petroleum Liquids includes distillate and residual fuel oils.

See the Technical Notes for fuel conversion factors.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.15. Receipts of Petroleum Coke Delivered for Electricity Generation by State, 2014 and 2013  
(Thousand Tons)**

Census Division and State				Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	111	105	5.4%	0	0	0	0	0	0	111	105
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	111	105	5.4%	0	0	0	0	0	0	111	105
East North Central	1,489	860	73.0%	886	143	488	575	0	0	115	143
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	424	0	--	424	0	0	0	0	0	0	0
Michigan	427	151	183.0%	406	122	21	29	0	0	0	0
Ohio	467	546	-14.0%	0	0	467	546	0	0	0	0
Wisconsin	171	163	4.8%	56	20	0	0	0	0	115	143
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,076	1,235	-13.0%	944	1,103	0	0	0	0	132	132
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	944	1,103	-14.0%	944	1,103	0	0	0	0	0	0
Georgia	132	132	0.4%	0	0	0	0	0	0	132	132
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	571	535	6.6%	571	535	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	571	535	6.6%	571	535	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	1,949	1,926	1.2%	1,949	1,683	0	0	0	0	0	243
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,949	1,683	16.0%	1,949	1,683	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	243	-100.0%	0	0	0	0	0	0	0	243
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	5,195	4,660	11.0%	4,349	3,463	488	575	0	0	358	623

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923. Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding. Petroleum Coke includes petroleum coke-derived synthesis gas.

See the Technical Notes for fuel conversion factors.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.16. Receipts of Natural Gas Delivered for Electricity Generation by State, 2014 and 2013 (Million Cubic Feet)**

Census Division and State				Electric Power Sector							
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	329,008	364,201	-9.7%	1,968	1,600	321,630	348,352	0	0	5,409	14,249
Connecticut	96,817	104,666	-7.5%	0	0	96,817	104,666	0	0	0	0
Maine	29,233	35,119	-17.0%	0	0	23,824	20,871	0	0	5,409	14,249
Massachusetts	126,810	148,736	-15.0%	1,544	1,245	125,265	147,491	0	0	0	0
New Hampshire	31,309	29,644	5.6%	424	355	30,885	29,289	0	0	0	0
Rhode Island	44,839	46,035	-2.6%	0	0	44,839	46,035	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	987,872	943,046	4.8%	96,010	107,551	889,655	833,669	0	0	2,207	1,826
New Jersey	220,363	197,576	12.0%	0	0	220,363	197,576	0	0	0	0
New York	400,776	403,332	-0.6%	96,010	107,551	303,819	295,077	0	0	947	704
Pennsylvania	366,733	342,138	7.2%	0	0	365,473	341,016	0	0	1,260	1,122
East North Central	440,348	432,952	1.7%	179,794	181,367	252,118	243,978	4,996	4,573	3,441	3,034
Illinois	33,334	40,427	-18.0%	3,176	4,962	30,108	35,407	0	0	49	59
Indiana	75,417	74,303	1.5%	53,125	51,670	22,291	22,632	0	0	0	0
Michigan	99,894	101,525	-1.6%	25,188	23,973	68,361	72,016	4,996	4,573	1,349	964
Ohio	173,203	158,008	9.6%	47,857	72,165	124,547	85,178	0	0	798	666
Wisconsin	58,501	58,688	-0.3%	50,447	28,597	6,810	28,745	0	0	1,244	1,346
West North Central	96,722	121,439	-20.0%	81,414	103,987	14,296	16,444	800	878	212	131
Iowa	16,383	17,012	-3.7%	16,341	16,978	0	0	0	0	42	33
Kansas	13,175	15,620	-16.0%	13,175	15,620	0	0	0	0	0	0
Minnesota	29,157	47,289	-38.0%	23,023	37,701	5,894	9,491	84	0	156	96
Missouri	31,555	34,013	-7.2%	22,437	26,182	8,402	6,953	716	878	0	0
Nebraska	3,383	3,764	-10.0%	3,370	3,762	0	0	0	0	14	1
North Dakota	48	1	NM	48	1	0	0	0	0	0	0
South Dakota	3,020	3,742	-19.0%	3,020	3,742	0	0	0	0	0	0
South Atlantic	1,848,980	1,846,076	0.2%	1,533,263	1,539,907	290,636	273,806	0	0	25,080	32,363
Delaware	53,844	55,626	-3.2%	0	0	43,273	39,547	0	0	10,571	16,079
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,015,834	1,008,097	0.8%	973,100	957,981	42,314	48,599	0	0	420	1,518
Georgia	297,620	289,741	2.7%	208,634	217,464	81,063	62,748	0	0	7,924	9,529
Maryland	17,912	22,368	-20.0%	0	0	17,675	21,759	0	0	237	609
North Carolina	205,537	201,751	1.9%	179,177	179,194	26,235	21,569	0	0	125	989
South Carolina	85,032	88,597	-4.0%	75,763	78,337	8,903	9,897	0	0	366	364
Virginia	166,359	177,042	-6.0%	94,502	106,493	66,418	67,272	0	0	5,438	3,277
West Virginia	6,841	2,854	140.0%	2,087	439	4,754	2,415	0	0	0	0
East South Central	650,914	624,917	4.2%	387,877	385,062	258,926	236,708	0	0	4,110	3,147
Alabama	327,708	319,071	2.7%	95,991	96,430	231,717	222,641	0	0	0	0
Kentucky	27,678	14,610	89.0%	26,076	12,424	1,602	2,186	0	0	0	0
Mississippi	245,694	250,869	-2.1%	220,087	238,989	25,607	11,881	0	0	0	0
Tennessee	49,834	40,366	23.0%	45,724	37,219	0	0	0	0	4,110	3,147
West South Central	2,569,357	2,638,753	-2.6%	708,715	775,126	1,227,392	1,234,714	0	0	633,251	628,913
Arkansas	72,786	90,794	-20.0%	14,652	31,144	55,711	59,650	0	0	2,423	0
Louisiana	480,607	470,733	2.1%	241,778	237,312	20,660	27,891	0	0	218,169	205,530
Oklahoma	207,476	246,794	-16.0%	142,416	188,773	64,801	57,723	0	0	259	298
Texas	1,808,489	1,830,431	-1.2%	309,868	317,897	1,086,221	1,089,449	0	0	412,400	423,085
Mountain	582,191	597,406	-2.5%	429,597	401,118	152,074	195,743	0	0	520	545
Arizona	204,092	219,444	-7.0%	103,879	90,467	100,213	128,976	0	0	0	0
Colorado	91,190	81,620	12.0%	70,783	60,785	20,407	20,836	0	0	0	0
Idaho	16,111	22,741	-29.0%	7,888	11,262	8,223	11,479	0	0	0	0
Montana	51	49	4.2%	17	7	34	42	0	0	0	0
Nevada	149,459	163,416	-8.5%	147,804	155,915	1,655	7,500	0	0	0	0
New Mexico	66,088	64,705	2.1%	46,131	42,839	19,957	21,866	0	0	0	0
Utah	54,460	45,088	21.0%	52,797	39,513	1,143	5,029	0	0	520	545
Wyoming	738	344	115.0%	298	329	441	14	0	0	0	0
Pacific Contiguous	904,961	909,950	-0.5%	332,887	330,839	527,944	534,484	0	0	44,129	44,626
California	746,402	739,610	0.9%	233,296	230,231	468,976	464,752	0	0	44,129	44,626
Oregon	89,256	100,738	-11.0%	35,055	36,742	54,201	63,995	0	0	0	0
Washington	69,303	69,603	-0.4%	64,537	63,866	4,766	5,737	0	0	0	0
Pacific Noncontiguous	21,071	24,685	-15.0%	21,071	24,685	0	0	0	0	0	0
Alaska	21,071	24,685	-15.0%	21,071	24,685	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,431,423	8,503,424	-0.8%	3,772,596	3,851,241	3,934,672	3,917,898	5,795	5,450	718,360	728,835

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.17. Average Cost of Coal Delivered for Electricity Generation by State, 2014 and 2013  
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013
New England	W	W	W	4.27	4.21	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.27	4.21	1.4%	4.27	4.21	--	--
Rhode Island	W	--	W	--	--	W	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.58	2.54	1.6%	3.50	--	2.58	2.54
New Jersey	3.95	3.87	2.1%	--	--	3.95	3.87
New York	3.03	3.02	0.3%	--	--	3.03	3.02
Pennsylvania	2.51	2.47	1.6%	3.50	--	2.50	2.47
East North Central	2.32	2.28	1.8%	2.41	2.42	2.16	1.95
Illinois	1.99	1.88	5.9%	2.04	2.06	1.97	1.86
Indiana	W	W	W	2.56	2.53	W	W
Michigan	W	W	W	2.60	2.66	W	W
Ohio	W	W	W	2.16	2.25	W	W
Wisconsin	2.31	2.32	-0.4%	2.31	2.32	--	--
West North Central	1.78	1.76	1.1%	1.78	1.76	--	--
Iowa	1.67	1.67	0.0%	1.67	1.67	--	--
Kansas	1.79	1.77	1.1%	1.79	1.77	--	--
Minnesota	1.95	2.00	-2.5%	1.95	2.00	--	--
Missouri	2.00	1.90	5.3%	2.00	1.90	--	--
Nebraska	1.40	1.42	-1.4%	1.40	1.42	--	--
North Dakota	1.53	1.55	-1.3%	1.53	1.55	--	--
South Dakota	2.09	2.00	4.5%	2.09	2.00	--	--
South Atlantic	3.08	3.20	-3.7%	3.12	3.32	2.80	2.76
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.30	3.41	W	W
Georgia	3.10	3.17	-2.2%	3.10	3.17	--	--
Maryland	2.97	3.43	-13.0%	--	--	2.97	3.43
North Carolina	3.58	3.80	-5.8%	3.60	3.86	3.02	2.72
South Carolina	3.63	3.75	-3.2%	3.63	3.75	--	--
Virginia	3.28	3.32	-1.2%	3.20	3.26	3.87	3.98
West Virginia	2.40	2.48	-3.2%	2.46	2.68	2.09	2.19
East South Central	W	W	W	2.50	2.53	W	W
Alabama	2.69	2.80	-3.9%	2.69	2.80	--	--
Kentucky	2.34	2.36	-0.8%	2.34	2.36	--	--
Mississippi	W	W	W	3.27	3.95	W	W
Tennessee	2.45	2.39	2.5%	2.45	2.39	--	--
West South Central	2.08	2.09	-0.5%	2.19	2.24	1.96	1.90
Arkansas	W	W	W	2.40	2.40	W	W
Louisiana	W	W	W	2.95	2.90	W	W
Oklahoma	W	W	W	1.96	2.02	W	W
Texas	1.99	1.97	1.0%	2.08	2.15	1.95	1.86
Mountain	2.09	1.91	9.4%	2.15	1.94	1.47	1.60
Arizona	2.10	2.07	1.4%	2.10	2.07	--	--
Colorado	1.93	1.91	1.0%	1.93	1.91	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.82	1.83	W	W
Nevada	W	W	W	2.48	2.74	W	W
New Mexico	3.78	2.31	64.0%	3.78	2.31	--	--
Utah	2.10	2.04	2.9%	2.10	2.04	--	--
Wyoming	W	W	W	1.58	1.52	W	W
Pacific Contiguous	W	W	W	2.49	1.96	W	W
California	W	W	W	--	--	W	W
Oregon	2.49	1.96	27.0%	2.49	1.96	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	--	--	W	W
Alaska	--	--	--	--	--	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.36	2.33	1.3%	2.39	2.38	2.25	2.20

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Notes:

See Glossary for definitions. Values are final.

See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.18. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, 2014 and 2013  
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013
New England	17.53	W	W	16.96	18.60	17.64	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	18.09	18.16	-0.4%	19.94	21.91	17.75	17.68
New Hampshire	W	W	W	15.16	16.84	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	19.30	20.47	-5.7%	16.10	21.97	20.63	20.04
New Jersey	22.94	21.37	7.3%	--	--	22.94	21.37
New York	18.33	19.93	-8.0%	16.10	21.97	20.02	19.05
Pennsylvania	21.10	22.22	-5.0%	--	--	21.10	22.22
East North Central	W	22.90	W	22.02	22.84	W	23.11
Illinois	22.47	W	W	22.36	23.49	22.51	W
Indiana	21.78	22.96	-5.1%	21.78	22.96	--	--
Michigan	21.30	W	W	21.30	22.75	--	W
Ohio	W	22.93	W	23.55	22.88	W	23.09
Wisconsin	W	W	W	21.47	22.39	W	W
West North Central	W	22.63	W	21.13	22.63	W	--
Iowa	21.66	22.54	-3.9%	21.66	22.54	--	--
Kansas	20.71	22.41	-7.6%	20.71	22.41	--	--
Minnesota	W	23.13	W	22.14	23.13	W	--
Missouri	20.51	22.25	-7.8%	20.51	22.25	--	--
Nebraska	21.92	22.39	-2.1%	21.92	22.39	--	--
North Dakota	21.20	23.28	-8.9%	21.20	23.28	--	--
South Dakota	22.70	23.32	-2.7%	22.70	23.32	--	--
South Atlantic	21.31	W	W	21.27	20.71	21.40	W
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	18.81	19.38	W	W
Georgia	21.64	W	W	21.98	23.39	19.97	W
Maryland	21.17	21.81	-2.9%	--	--	21.17	21.81
North Carolina	22.02	W	W	22.10	22.55	19.61	W
South Carolina	22.60	23.10	-2.2%	22.60	23.10	--	--
Virginia	21.27	W	W	21.15	17.88	21.76	W
West Virginia	W	23.43	W	22.02	23.43	W	--
East South Central	W	W	W	19.78	22.49	W	W
Alabama	W	W	W	20.94	22.30	W	W
Kentucky	21.42	22.61	-5.3%	21.42	22.61	--	--
Mississippi	20.43	21.57	-5.3%	20.43	21.57	--	--
Tennessee	17.89	22.64	-21.0%	17.89	22.64	--	--
West South Central	20.18	22.24	-9.3%	19.97	22.25	20.48	22.24
Arkansas	W	W	W	21.41	22.06	W	W
Louisiana	W	W	W	19.94	21.99	W	W
Oklahoma	21.15	22.33	-5.3%	21.15	22.33	--	--
Texas	W	W	W	19.31	22.44	W	W
Mountain	W	23.80	W	22.73	23.85	W	23.12
Arizona	22.60	24.29	-7.0%	22.60	24.29	--	--
Colorado	19.70	23.60	-17.0%	19.70	23.60	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	23.43	24.32	W	W
New Mexico	23.84	24.42	-2.4%	23.84	24.42	--	--
Utah	W	W	W	20.61	22.43	W	W
Wyoming	22.43	23.33	-3.9%	22.43	23.33	--	--
Pacific Contiguous	W	W	W	19.63	23.23	W	W
California	--	--	--	--	--	--	--
Oregon	20.84	22.05	-5.5%	20.84	22.05	--	--
Washington	W	W	W	16.63	23.60	W	W
Pacific Noncontiguous	W	W	W	19.84	20.74	W	W
Alaska	--	--	--	--	--	--	--
Hawaii	W	W	W	19.84	20.74	W	W
U.S. Total	19.90	20.61	-3.4%	19.90	21.09	19.90	19.71

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

See Glossary for definitions. Values are final.

See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Petroleum Liquids includes distillate and residual fuel oils.

See the Technical Notes for fuel conversion factors.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.19. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, 2014 and 2013  
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	W	W	W	1.22	1.48	W	W
Illinois	--	--	--	--	--	--	--
Indiana	0.94	--	--	0.94	--	--	--
Michigan	W	W	W	1.45	1.43	W	W
Ohio	W	--	W	--	--	W	--
Wisconsin	1.84	1.75	5.1%	1.84	1.75	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.42	2.58	-6.2%	2.42	2.58	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.42	2.58	-6.2%	2.42	2.58	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.77	1.81	-2.2%	1.77	1.81	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.77	1.81	-2.2%	1.77	1.81	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	1.96	1.95	0.5%	1.96	1.95	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	1.96	1.95	0.5%	1.96	1.95	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	1.94	W	W	1.89	2.11	2.48	W

Displayed values of zero may represent small values that round to zero.

NM = Not meaningful due to large relative standard error or excessive percentage change.

W = Withheld to avoid disclosure of individual company data.

Notes:

See Glossary for definitions. Values are final.

See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Petroleum Coke includes petroleum coke-derived synthesis gas.

See the Technical Notes for fuel conversion factors.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.20. Average Cost of Natural Gas Delivered for Electricity Generation by State, 2014 and 2013  
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2014	Year 2013	Percentage Change	Year 2014	Year 2013	Year 2014	Year 2013
New England	6.49	5.89	10.0%	5.65	7.29	6.50	5.88
Connecticut	6.65	6.06	9.7%	--	--	6.65	6.06
Maine	W	W	W	--	--	W	W
Massachusetts	6.46	5.75	12.0%	5.54	6.84	6.47	5.74
New Hampshire	W	W	W	6.05	8.85	W	W
Rhode Island	W	5.67	W	--	--	W	5.67
Vermont	--	--	--	--	--	--	--
Middle Atlantic	5.00	4.53	10.0%	5.48	5.03	4.94	4.46
New Jersey	4.69	4.18	12.0%	--	--	4.69	4.18
New York	5.28	5.11	3.3%	5.48	5.03	5.20	5.15
Pennsylvania	4.86	4.02	21.0%	--	--	4.86	4.02
East North Central	5.13	4.12	25.0%	5.19	4.11	5.10	4.13
Illinois	W	W	W	6.02	4.82	W	W
Indiana	W	W	W	5.11	4.04	W	W
Michigan	6.56	4.49	46.0%	6.74	4.44	6.49	4.51
Ohio	4.14	3.82	8.4%	4.33	3.85	4.07	3.79
Wisconsin	W	4.37	W	5.26	4.51	W	4.22
West North Central	5.54	4.54	22.0%	5.58	4.55	5.26	4.45
Iowa	5.87	4.59	28.0%	5.87	4.59	--	--
Kansas	5.51	4.45	24.0%	5.51	4.45	--	--
Minnesota	W	W	W	5.82	4.66	W	W
Missouri	W	W	W	5.27	4.45	W	W
Nebraska	5.60	4.82	16.0%	5.60	4.82	--	--
North Dakota	4.12	5.23	-21.0%	4.12	5.23	--	--
South Dakota	4.79	4.21	14.0%	4.79	4.21	--	--
South Atlantic	5.42	4.78	13.0%	5.48	4.87	4.89	4.07
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	5.46	5.00	9.2%	5.48	5.06	4.38	3.22
Georgia	4.86	4.38	11.0%	4.87	4.34	4.81	4.52
Maryland	5.10	4.88	4.5%	--	--	5.10	4.88
North Carolina	W	W	W	6.06	4.99	W	W
South Carolina	W	W	W	4.91	4.58	W	W
Virginia	5.88	4.13	42.0%	6.26	4.30	5.20	3.85
West Virginia	W	W	W	5.93	3.81	W	W
East South Central	4.67	4.01	16.0%	4.68	3.97	4.64	4.08
Alabama	W	W	W	4.57	4.02	W	W
Kentucky	W	W	W	6.02	5.74	W	W
Mississippi	W	W	W	4.58	3.88	W	W
Tennessee	4.62	3.78	22.0%	4.62	3.78	--	--
West South Central	4.59	3.89	18.0%	4.74	3.98	4.48	3.83
Arkansas	W	W	W	6.46	4.83	W	W
Louisiana	W	W	W	4.62	3.87	W	W
Oklahoma	W	3.99	W	4.99	4.02	W	3.89
Texas	4.50	3.85	17.0%	4.63	3.95	4.46	3.82
Mountain	5.05	4.36	16.0%	5.10	4.45	4.76	4.07
Arizona	5.15	4.48	15.0%	5.39	4.93	4.59	4.03
Colorado	5.21	W	W	5.22	4.70	5.18	W
Idaho	W	W	W	5.29	4.35	W	W
Montana	W	W	W	6.25	5.21	W	W
Nevada	W	W	W	5.10	4.27	W	W
New Mexico	4.74	4.21	13.0%	4.74	4.21	--	--
Utah	W	3.95	W	4.62	3.95	W	--
Wyoming	W	W	W	6.96	6.93	W	W
Pacific Contiguous	4.96	4.32	15.0%	5.09	4.57	4.84	4.10
California	5.07	4.40	15.0%	5.30	4.75	4.90	4.17
Oregon	W	W	W	4.27	3.81	W	W
Washington	W	W	W	4.92	4.50	W	W
Pacific Noncontiguous	5.04	4.70	7.2%	5.04	4.70	--	--
Alaska	5.04	4.70	7.2%	5.04	4.70	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	5.05	4.38	15.0%	5.17	4.49	4.90	4.25

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Notes:

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See Technical Notes for a discussion of the sample design for the Form EIA-923.

Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.21. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:  
Total (All Sectors) by State, 2014**

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	1,836	1.20	10.1	741	0.09	2.0	0	--	--
Connecticut	0	--	--	487	0.09	2.0	0	--	--
Maine	85	0.85	8.2	0	--	--	0	--	--
Massachusetts	1,225	0.72	11.3	0	--	--	0	--	--
New Hampshire	526	2.29	7.8	0	--	--	0	--	--
Rhode Island	0	--	--	254	0.09	2.0	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	33,254	2.91	10.7	1,218	0.26	5.3	0	--	--
New Jersey	1,091	1.60	8.9	0	--	--	0	--	--
New York	1,726	2.39	8.8	1,177	0.24	5.0	0	--	--
Pennsylvania	30,437	2.99	10.9	41	0.97	15.1	0	--	--
East North Central	91,228	2.93	9.8	104,850	0.24	4.9	0	--	--
Illinois	8,785	3.57	18.0	54,025	0.22	4.7	0	--	--
Indiana	37,015	2.75	9.0	3,613	0.27	4.9	0	--	--
Michigan	4,507	1.52	8.9	26,328	0.29	5.0	0	--	--
Ohio	38,541	3.20	9.3	1,105	0.27	5.2	0	--	--
Wisconsin	2,380	2.00	7.6	19,779	0.26	5.0	0	--	--
West North Central	1,348	3.33	9.1	113,252	0.28	5.2	22,828	0.82	10.0
Iowa	432	3.48	8.0	18,943	0.27	4.9	0	--	--
Kansas	348	3.34	12.9	17,719	0.32	5.1	0	--	--
Minnesota	0	--	--	16,913	0.36	6.1	0	--	--
Missouri	568	3.21	7.7	40,905	0.23	4.9	0	--	--
Nebraska	0	--	--	16,153	0.28	5.2	0	--	--
North Dakota	0	--	--	843	0.34	4.6	22,828	0.82	10.0
South Dakota	0	--	--	1,776	0.41	6.7	0	--	--
South Atlantic	109,654	2.13	10.3	12,553	0.30	4.7	0	--	--
Delaware	534	2.20	7.8	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	22,083	2.15	8.9	77	0.26	5.4	0	--	--
Georgia	8,491	1.80	9.1	12,033	0.30	4.7	0	--	--
Maryland	7,772	2.14	9.6	444	0.19	4.4	0	--	--
North Carolina	17,580	1.73	9.5	0	--	--	0	--	--
South Carolina	10,947	1.51	9.1	0	--	--	0	--	--
Virginia	10,260	1.12	14.3	0	--	--	0	--	--
West Virginia	31,986	2.95	11.5	0	--	--	0	--	--
East South Central	60,791	2.44	9.5	24,484	0.28	5.3	2,625	0.49	13.6
Alabama	11,695	1.63	9.6	11,616	0.26	5.3	0	--	--
Kentucky	35,653	2.87	9.7	3,088	0.33	5.7	0	--	--
Mississippi	2,601	1.86	9.2	968	0.25	5.3	2,625	0.49	13.6
Tennessee	10,841	2.08	8.7	8,811	0.29	5.2	0	--	--
West South Central	751	1.94	19.3	104,106	0.29	5.2	45,796	0.96	16.2
Arkansas	56	0.70	8.3	18,574	0.26	5.2	0	--	--
Louisiana	206	3.14	8.5	9,354	0.30	5.0	2,456	0.74	14.4
Oklahoma	489	1.55	25.8	18,530	0.25	4.9	0	--	--
Texas	0	--	--	57,648	0.30	5.3	43,340	0.97	16.3
Mountain	33,664	0.60	13.0	71,985	0.52	9.1	285	0.54	9.7
Arizona	8,231	0.59	10.6	14,360	0.66	10.4	0	--	--
Colorado	3,722	0.50	10.5	13,463	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	9,621	0.68	9.7	285	0.54	9.7
Nevada	2,068	0.42	7.7	1,857	0.38	7.4	0	--	--
New Mexico	6,193	0.82	26.0	5,674	0.73	21.8	0	--	--
Utah	13,450	0.59	11.1	555	0.96	9.0	0	--	--
Wyoming	0	--	--	26,457	0.45	7.4	0	--	--
Pacific Contiguous	771	0.64	10.3	6,624	0.34	7.6	0	--	--
California	771	0.64	10.3	0	--	--	0	--	--
Oregon	0	--	--	2,159	0.26	4.5	0	--	--
Washington	0	--	--	4,664	0.38	9.1	0	--	--
Pacific Noncontiguous	786	1.20	4.4	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	786	1.20	4.4	0	--	--	0	--	--
U.S. Total	334,082	2.34	10.3	440,013	0.31	5.8	71,534	0.90	14.1

Displayed values of zero may represent small values that round to zero.

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W = Withheld to avoid disclosure of individual company data.

Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.22. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:  
Electric Utilities by State, 2014**

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	526	2.29	7.8	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	526	2.29	7.8	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	166	3.28	8.6	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	166	3.28	8.6	0	--	--	0	--	--
East North Central	58,852	2.75	8.9	61,419	0.27	5.0	0	--	--
Illinois	2,091	3.50	10.7	11,971	0.23	4.8	0	--	--
Indiana	34,157	2.70	8.9	3,613	0.27	4.9	0	--	--
Michigan	4,095	1.56	9.0	26,317	0.29	5.0	0	--	--
Ohio	16,476	3.17	8.8	0	--	--	0	--	--
Wisconsin	2,034	2.00	7.4	19,517	0.26	5.0	0	--	--
West North Central	824	3.28	9.8	110,164	0.28	5.2	22,828	0.82	10.0
Iowa	1	1.30	10.8	17,085	0.28	5.0	0	--	--
Kansas	348	3.34	12.9	17,719	0.32	5.1	0	--	--
Minnesota	0	--	--	16,484	0.36	6.1	0	--	--
Missouri	475	3.24	7.5	40,905	0.23	4.9	0	--	--
Nebraska	0	--	--	15,351	0.28	5.2	0	--	--
North Dakota	0	--	--	843	0.34	4.6	22,828	0.82	10.0
South Dakota	0	--	--	1,776	0.41	6.7	0	--	--
South Atlantic	91,444	2.10	10.3	12,110	0.30	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	21,014	2.22	8.8	77	0.26	5.4	0	--	--
Georgia	8,064	1.84	9.0	12,033	0.30	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	16,658	1.78	9.6	0	--	--	0	--	--
South Carolina	10,752	1.53	9.1	0	--	--	0	--	--
Virginia	8,847	1.12	15.2	0	--	--	0	--	--
West Virginia	26,109	2.83	11.2	0	--	--	0	--	--
East South Central	59,283	2.49	9.5	24,484	0.28	5.3	0	--	--
Alabama	11,695	1.63	9.6	11,616	0.26	5.3	0	--	--
Kentucky	35,653	2.87	9.7	3,088	0.33	5.7	0	--	--
Mississippi	2,601	1.86	9.2	968	0.25	5.3	0	--	--
Tennessee	9,334	2.29	8.7	8,811	0.29	5.2	0	--	--
West South Central	206	3.14	8.5	66,475	0.26	5.1	9,042	1.04	17.7
Arkansas	0	--	--	16,594	0.26	5.2	0	--	--
Louisiana	206	3.14	8.5	2,911	0.29	5.4	2,456	0.74	14.4
Oklahoma	0	--	--	17,324	0.25	4.9	0	--	--
Texas	0	--	--	29,644	0.27	5.2	6,586	1.17	19.0
Mountain	33,391	0.61	13.1	61,070	0.50	9.1	285	0.54	9.7
Arizona	8,231	0.59	10.6	14,360	0.66	10.4	0	--	--
Colorado	3,722	0.50	10.5	13,463	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	285	0.54	9.7
Nevada	2,068	0.42	7.7	1,086	0.44	8.8	0	--	--
New Mexico	6,193	0.82	26.0	5,674	0.73	21.8	0	--	--
Utah	13,177	0.59	11.2	555	0.96	9.0	0	--	--
Wyoming	0	--	--	25,933	0.45	7.4	0	--	--
Pacific Contiguous	0	--	--	2,159	0.26	4.5	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	2,159	0.26	4.5	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	244,692	2.17	10.1	337,880	0.32	5.8	32,155	0.88	12.1

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W = Withheld to avoid disclosure of individual company data.

Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.23. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:  
Independent Power Producers by State, 2014**

Census Division and State	Receipts (Thousand Tons)	Bituminous		Subbituminous			Lignite		
		Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	1,278	0.72	11.1	741	0.09	2.0	0	--	--
Connecticut	0	--	--	487	0.09	2.0	0	--	--
Maine	53	0.80	8.0	0	--	--	0	--	--
Massachusetts	1,225	0.72	11.3	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	254	0.09	2.0	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	32,382	2.93	10.8	1,218	0.26	5.3	0	--	--
New Jersey	1,091	1.60	8.9	0	--	--	0	--	--
New York	1,411	2.55	8.6	1,177	0.24	5.0	0	--	--
Pennsylvania	29,880	2.99	11.0	41	0.97	15.1	0	--	--
East North Central	29,861	3.27	11.8	42,575	0.21	4.7	0	--	--
Illinois	4,978	3.66	25.9	41,459	0.21	4.7	0	--	--
Indiana	2,858	3.29	10.5	0	--	--	0	--	--
Michigan	238	0.99	7.3	10	0.24	5.0	0	--	--
Ohio	21,787	3.23	9.7	1,105	0.27	5.2	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	0	--	--	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	15,809	2.47	10.3	444	0.19	4.4	0	--	--
Delaware	534	2.20	7.8	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	817	1.01	11.4	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	7,412	2.13	9.1	444	0.19	4.4	0	--	--
North Carolina	545	1.00	9.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	1,051	0.89	9.6	0	--	--	0	--	--
West Virginia	5,449	3.69	12.6	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	2,625	0.49	13.6
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	2,625	0.49	13.6
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	489	1.55	25.8	37,137	0.33	5.3	36,754	0.94	15.8
Arkansas	0	--	--	1,980	0.27	5.5	0	--	--
Louisiana	0	--	--	6,443	0.30	4.9	0	--	--
Oklahoma	489	1.55	25.8	711	0.22	4.6	0	--	--
Texas	0	--	--	28,003	0.34	5.4	36,754	0.94	15.8
Mountain	0	--	--	10,915	0.64	9.2	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	9,621	0.68	9.7	0	--	--
Nevada	0	--	--	770	0.30	5.4	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	524	0.50	6.6	0	--	--
Pacific Contiguous	183	1.14	9.4	4,664	0.38	9.1	0	--	--
California	183	1.14	9.4	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	4,664	0.38	9.1	0	--	--
Pacific Noncontiguous	786	1.20	4.4	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	786	1.20	4.4	0	--	--	0	--	--
U.S. Total	80,788	2.90	11.1	97,694	0.31	5.6	39,379	0.91	15.7

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Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.24. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:  
Commercial Sector by State, 2014**

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	70	2.21	8.8	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	70	2.21	8.8	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	93	3.07	8.8	19	0.35	4.3	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	19	0.35	4.3	0	--	--
Missouri	93	3.07	8.8	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	163	2.70	8.8	19	0.35	4.3	0	--	--

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W = Withheld to avoid disclosure of individual company data.

Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

**Table 7.25. Receipts and Quality of Coal by Rank Delivered for Electricity Generation:  
Industrial Sector by State, 2014**

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	32	0.94	8.4	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	32	0.94	8.4	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	706	1.97	9.3	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	315	1.65	9.4	0	--	--	0	--	--
Pennsylvania	391	2.23	9.3	0	--	--	0	--	--
East North Central	2,444	3.09	8.7	856	0.37	5.4	0	--	--
Illinois	1,716	3.44	8.3	594	0.41	5.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	104	0.62	8.2	0	--	--	0	--	--
Ohio	278	3.38	11.7	0	--	--	0	--	--
Wisconsin	346	2.02	8.3	262	0.28	5.3	0	--	--
West North Central	431	3.48	8.0	3,070	0.22	4.6	0	--	--
Iowa	431	3.48	8.0	1,858	0.22	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	410	0.21	5.4	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	801	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	2,400	1.24	10.5	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	251	0.75	6.6	0	--	--	0	--	--
Georgia	427	1.04	9.3	0	--	--	0	--	--
Maryland	361	2.25	21.6	0	--	--	0	--	--
North Carolina	377	0.89	7.1	0	--	--	0	--	--
South Carolina	195	0.77	7.8	0	--	--	0	--	--
Virginia	362	1.83	8.0	0	--	--	0	--	--
West Virginia	428	0.99	12.3	0	--	--	0	--	--
East South Central	1,507	0.89	8.4	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	1,507	0.89	8.4	0	--	--	0	--	--
West South Central	56	0.70	8.3	494	0.20	4.6	0	--	--
Arkansas	56	0.70	8.3	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	494	0.20	4.6	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	273	0.31	9.9	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	273	0.31	9.9	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	588	0.48	10.5	0	--	--	0	--	--
California	588	0.48	10.5	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	8,439	1.75	9.3	4,419	0.24	4.7	0	--	--

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Notes:

Bituminous coal includes anthracite coal and coal-derived synthesis gas.

See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

## Chapter 8

# Electric Power System Characteristics and Performance

**Table 8.1. Average Operating Heat Rate for Selected Energy Sources,  
2004 through 2014 (Btu per Kilowatthour)**

Year	Coal	Petroleum	Natural Gas	Nuclear
2004	10,331	10,571	8,647	10,428
2005	10,373	10,631	8,551	10,436
2006	10,351	10,809	8,471	10,435
2007	10,375	10,794	8,403	10,489
2008	10,378	11,015	8,305	10,452
2009	10,414	10,923	8,160	10,459
2010	10,415	10,984	8,185	10,452
2011	10,444	10,829	8,152	10,464
2012	10,498	10,991	8,039	10,479
2013	10,459	10,713	7,948	10,449
2014	10,428	10,814	7,907	10,459

Coal includes anthracite, bituminous, subbituminous and lignite coal. Waste coal and synthetic coal are included starting in 2002.

Petroleum includes distillate fuel oil (all diesel and No. 1 and No. 2 fuel oils), residual fuel oil (No. 5 and No. 6 fuel oils and bunker C fuel oil, jet fuel, kerosene, petroleum coke, and waste oil.

Notes:

Included in the calculation for coal, petroleum, and natural gas average operating heat rate are electric power plants in the utility and independent power producer sectors.

Combined heat and power plants, and all plants in the commercial and industrial sectors are excluded from the calculations.

The nuclear average heat rate is the weighted average tested heat rate for nuclear units as reported on the Form EIA-860.

Sources: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report," and predecessor form(s) including U.S. Energy Information Administration, Form EIA-906, "Power Plant Report;" and Form EIA-920, "Combined Heat and Power Plant Report;" Form EIA-860, "Annual Electric Generator Report."

**Table 8.2. Average Tested Heat Rates by Prime Mover and Energy Source, 2007 - 2014  
(Btu per Kilowatthour)**

Prime Mover	Coal	Petroleum	Natural Gas	Nuclear
2007				
Steam Generator	10,158	10,398	10,440	10,489
Gas Turbine	--	13,217	11,632	--
Internal Combustion	--	10,447	10,175	--
Combined Cycle	W	10,970	7,577	--
2008				
Steam Generator	10,138	10,356	10,377	10,452
Gas Turbine	--	13,311	11,576	--
Internal Combustion	--	10,427	9,975	--
Combined Cycle	W	10,985	7,642	--
2009				
Steam Generator	10,150	10,349	10,427	10,459
Gas Turbine	--	13,326	11,560	--
Internal Combustion	--	10,428	9,958	--
Combined Cycle	W	10,715	7,605	--
2010				
Steam Generator	10,142	10,249	10,416	10,452
Gas Turbine	--	13,386	11,590	--
Internal Combustion	--	10,429	9,917	--
Combined Cycle	W	10,474	7,619	--
2011				
Steam Generator	10,128	10,414	10,414	10,464
Gas Turbine	--	13,637	11,569	--
Internal Combustion	--	10,428	9,923	--
Combined Cycle	W	10,650	7,603	--
2012				
Steam Generator	10,107	10,359	10,385	10,479
Gas Turbine	--	13,622	11,499	--
Internal Combustion	--	10,416	9,991	--
Combined Cycle	W	10,195	7,615	--
2013				
Steam Generator	10,089	10,334	10,354	10,449
Gas Turbine	--	13,555	11,371	--
Internal Combustion	--	10,401	9,573	--
Combined Cycle	W	9,937	7,667	--
2014				
Steam Generator	10,080	10,156	10,408	10,459
Gas Turbine	--	13,457	11,378	--
Internal Combustion	--	10,403	9,375	--
Combined Cycle	W	9,924	7,658	--

Notes: W = Withheld to avoid disclosure of individual company data.

Heat rate is reported at full load conditions for electric utilities and independent power producers.

The average heat rates above are weighted by Net Summer Capacity.

Coal Combined Cycle represents integrated gasification units.

Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

**Table 8.3. Revenue and Expense Statistics for Major U.S. Investor-Owned Electric Utilities,  
2004 through 2014 (Million Dollars)**

Description	2004	2005	2006	2007	2008	2009
<b>Utility Operating Revenues</b>	<b>238,759</b>	<b>265,652</b>	<b>275,501</b>	<b>270,964</b>	<b>298,962</b>	<b>276,124</b>
.....Electric Utility	213,012	234,909	246,736	240,864	266,124	249,303
.....Other Utility	25,747	30,743	28,765	30,100	32,838	26,822
<b>Utility Operating Expenses</b>	<b>206,960</b>	<b>236,786</b>	<b>245,589</b>	<b>241,198</b>	<b>267,263</b>	<b>244,243</b>
.....Electric Utility	183,121	207,830	218,445	213,076	236,572	219,544
.....Operation	131,560	150,645	158,893	153,885	175,887	154,925
.....Production	103,871	120,586	127,494	121,700	140,974	118,816
.....Cost of Fuel	28,544	36,106	37,945	39,548	47,337	40,242
.....Purchased Power	67,126	77,902	79,205	74,112	84,724	67,630
.....Other	8,226	6,599	10,371	8,058	8,937	10,970
....Transmission	4,531	5,664	6,179	6,051	6,950	6,742
....Distribution	3,287	3,502	3,640	3,765	3,997	3,947
....Customer Accounts	4,077	4,229	4,409	4,652	5,286	5,203
....Customer Service	2,013	2,291	2,536	2,939	3,567	3,857
....Sales	237	219	240	239	225	178
....Administrative and General	13,537	14,130	14,580	14,346	14,718	15,991
....Maintenance	11,743	12,033	12,838	13,181	14,192	14,092
....Depreciation	16,322	17,123	17,373	17,936	19,049	20,095
....Taxes and Other	22,190	26,805	28,149	27,000	26,202	29,081
....Other Utility	23,839	28,956	27,143	28,122	30,692	24,698
<b>Net Utility Operating Income</b>	<b>31,799</b>	<b>28,866</b>	<b>29,912</b>	<b>29,766</b>	<b>31,699</b>	<b>31,881</b>

Description	2010	2011	2012	2013	2014
<b>Utility Operating Revenues</b>	<b>285,512</b>	<b>280,520</b>	<b>270,912</b>	<b>281,901</b>	<b>298,430</b>
.....Electric Utility	260,119	255,573	249,166	257,718	271,832
.....Other Utility	25,393	24,946	21,745	24,183	26,598
<b>Utility Operating Expenses</b>	<b>253,022</b>	<b>247,118</b>	<b>235,694</b>	<b>244,316</b>	<b>258,936</b>
.....Electric Utility	234,173	228,873	220,722	227,483	240,643
.....Operation	166,922	161,460	152,379	156,077	165,989
.....Production	128,831	122,520	111,714	115,046	123,366
.....Cost of Fuel	44,138	42,779	38,998	41,127	42,545
.....Purchased Power	67,284	61,447	54,570	55,529	62,066
.....Other	17,409	18,294	18,146	18,390	18,755
....Transmission	6,948	6,876	7,183	7,881	8,902
....Distribution	4,007	4,044	4,181	4,197	4,331
....Customer Accounts	5,091	5,180	5,086	5,107	5,255
....Customer Service	4,741	5,311	5,640	5,906	6,396
....Sales	185	185	221	203	208
....Administrative and General	17,120	17,343	18,353	17,738	17,532
....Maintenance	14,957	15,772	15,489	15,505	16,801
....Depreciation	20,951	22,555	23,677	24,723	25,919
....Taxes and Other	31,343	29,086	29,177	31,179	31,934
....Other Utility	18,849	18,245	14,972	16,833	18,293
<b>Net Utility Operating Income</b>	<b>32,490</b>	<b>33,402</b>	<b>35,218</b>	<b>37,585</b>	<b>39,494</b>

Notes: 2007 financial data does not include information on Entergy Gulf State Louisiana LLC and Entergy Texas Inc. as both were not reported on the FERC Form for that year.

Missing or erroneous respondent data may result in slight imbalances in some of the expense account subtotals.

Total may not equal sum of components due to independent rounding.

Sources: Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others via Ventyx Global Energy Velocity Suite.

**Table 8.4. Average Power Plant Operating Expenses for Major U.S. Investor-Owned**

**Electric Utilities, 2004 through 2014 (Mills per Kilowatthour)**

Year	Operation				Maintenance			
	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale
2004	8.97	3.13	3.83	4.27	5.38	2.96	2.76	2.14
2005	8.26	3.21	3.95	3.69	5.27	2.98	2.73	1.89
2006	9.03	3.57	3.76	3.51	5.69	3.19	2.70	2.16
2007	9.54	3.63	5.44	3.26	5.79	3.37	3.87	2.42
2008	9.89	3.72	5.78	3.77	6.20	3.59	3.89	2.72
2009	10.00	4.23	4.88	3.05	6.34	3.96	3.50	2.58
2010	10.50	4.04	5.33	2.79	6.80	3.99	3.81	2.73
2011	10.89	4.02	5.13	2.81	6.80	3.99	3.74	2.93
2012	12.49	4.38	6.71	2.46	7.32	4.48	4.63	2.76
2013	12.51	4.57	6.56	2.56	6.64	4.41	4.32	2.80
2014	12.41	4.55	7.30	2.63	6.67	5.11	4.59	2.90

Year	Fuel				Total			
	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale
2004	4.58	18.21	--	45.18	18.93	24.31	6.60	51.59
2005	4.63	21.69	--	55.52	18.15	27.88	6.68	61.10
2006	4.85	23.09	--	53.89	19.57	29.85	6.46	59.56
2007	4.99	23.88	--	58.75	20.32	30.88	9.32	64.43
2008	5.29	28.43	--	64.23	21.37	35.75	9.67	70.72
2009	5.35	32.30	--	51.93	21.69	40.48	8.38	57.55
2010	6.68	27.73	--	43.21	23.98	35.76	9.15	48.74
2011	7.01	27.08	--	38.80	24.70	35.09	8.88	44.54
2012	7.61	28.34	--	30.45	27.42	37.20	11.34	35.67
2013	8.14	28.94	--	32.56	27.29	37.92	10.88	37.92
2014	7.71	29.39	--	37.06	26.79	39.04	11.90	42.60

Hydroelectric category consists of both conventional hydroelectric and pumped storage.

Gas Turbine and Small Scale category consists of gas turbine, internal combustion, photovoltaic, and wind plants.

Notes: Expenses are average expenses weighted by net generation. A mill is a monetary cost and billing unit equal to 1/1000 of the U.S. dollar (equivalent to 1/10 of one cent).

Total may not equal sum of components due to independent rounding.

Sources: Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others via Ventyx Global Energy Velocity Suite.

## Chapter 9

### Environmental Data

**Table 9.1. Emissions from Energy Consumption at Conventional Power Plants and Combined-Heat-and-Power Plants 2004 through 2014 (Thousand Metric Tons)**

Year	Carbon Dioxide (CO <sub>2</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Nitrogen Oxides (NO <sub>x</sub> )
2004	2,486,982	10,309	4,143
2005	2,543,838	10,340	3,961
2006	2,488,918	9,524	3,799
2007	2,547,032	9,042	3,650
2008	2,484,012	7,830	3,330
2009	2,269,508	5,970	2,395
2010	2,388,596	5,400	2,491
2011	2,287,071	4,845	2,406
2012	2,156,875	3,704	2,148
2013	2,172,355	3,609	2,188
2014	2,166,603	3,485	2,178

Notes:

The emissions data presented include total emissions from both electricity generation and the production of useful thermal output.

See Appendix A, Technical Notes, for a description of the sources and methodology used to develop the emissions estimates.

Source: Calculations made by the Office of Electricity, Renewables, and Uranium Statistics, U.S. Energy Information Administration.

**Table 9.2. Quantity and Net Summer Capacity of Operable Environmental Equipment, 2004 - 2014**

Year	Flue Gas Desulfurization Systems		Electrostatic Precipitators		Baghouses		Select Catalytic and Non-Catalytic Reduction Systems		Activated Carbon Injection Systems		Direct Sorbent Injection Systems	
	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)
2004	535	112,874	1,555	324,712	527	57,745	980	215,955	123	4,435	47	5,820
2005	539	112,372	1,542	324,511	527	57,948	1,058	235,221	128	4,693	47	6,765
2006	538	115,698	1,494	317,408	538	60,556	1,141	254,455	139	6,859	55	7,333
2007	565	129,555	1,494	317,296	555	65,587	1,176	263,382	141	7,735	56	7,407
2008	612	149,575	1,469	316,356	575	68,357	1,227	274,510	169	17,391	59	7,506
2009	652	172,829	1,454	313,902	596	73,778	1,299	296,598	227	39,546	62	8,047
2010	691	199,107	1,408	310,031	609	83,322	1,337	312,208	262	54,183	63	8,527
2011	704	209,618	1,362	306,447	632	98,422	1,385	328,228	274	59,057	72	8,783
2012	699	217,024	1,284	297,817	628	101,508	1,427	341,785	287	63,709	80	10,424
2013	674	219,019	1,205	288,633	634	104,141	1,427	347,327	259	61,085	93	12,740
2014	669	223,305	1,159	283,391	617	105,580	1,440	354,277	277	68,697	98	15,918

Note:

'Associated Net Summer Capacity' is defined as the net summer capacity of the generators that are associated with the operation of this environmental equipment.

In some cases respondents have reported equipment late. Counts and capacity may have changed from prior publications of this table because of late reporting.

Data for 2005 and earlier are based primarily on Form EIA-767 data. In 2006, the Form EIA-767 was suspended. Data for 2007 and later are based primarily on Form EIA-860 data.

All data for 2006 are inferred based on submissions from subsequent years. Beginning in 2013 environmental data was collected at a more detailed level, which increases its accuracy and in some cases reduces the equipment counts.

Source: U.S. Energy Information Administration, Forms EIA-767, "Steam-Electric Plant Operation and Design Report" and Form EIA-860, "Annual Electric Generator Report."

**Table 9.3. Quantity and Net Summer Capacity of Operable Cooling Systems, by Energy Source and Cooling System Type, 2004 - 2014**

Energy Source	Once-Through Cooling Systems		Recirculating Cooling Systems		Cooling Ponds		Dry Cooling Systems		Hybrid Wet and Dry Cooling Systems		Other Cooling System Types	
	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)	Quantity	Associated Net Summer Capacity (MW)
<b>2004</b>												
Coal	479	134,761	352	154,144	103	50,067	--	--	--	--	14	5,911
Natural Gas	211	53,190	413	74,941	72	27,937	39	9,470	1	111	7	1,911
Petroleum	89	23,811	22	6,838	3	3,220	--	--	--	--	2	2,004
Other	15	1,029	25	2,027	--	--	2	100	--	--	4	424
<b>2005</b>												
Coal	473	134,241	350	153,791	103	50,113	--	--	--	--	14	6,002
Natural Gas	209	53,599	416	78,493	65	27,571	39	9,470	2	272	7	2,071
Petroleum	85	22,842	23	6,852	3	3,174	--	--	--	--	2	2,004
Other	15	1,029	21	1,981	--	--	2	100	--	--	4	424
<b>2006</b>												
Coal	463	132,567	351	154,164	101	49,609	--	--	--	--	13	5,828
Natural Gas	202	51,672	412	79,043	67	28,323	41	9,946	2	272	9	2,504
Petroleum	81	22,259	23	6,824	3	2,513	--	--	--	--	2	2,017
Other	16	1,072	28	2,462	--	--	2	100	--	--	4	424
<b>2007</b>												
Coal	458	131,692	353	155,518	101	49,609	--	--	--	--	13	5,828
Natural Gas	202	51,836	419	80,421	66	27,563	41	9,946	2	272	9	2,668
Petroleum	81	22,259	23	6,824	3	2,513	--	--	--	--	2	2,017
Other	16	1,072	28	2,522	--	--	2	100	--	--	4	424
<b>2008</b>												
Coal	453	131,909	358	157,602	100	48,787	--	--	--	--	8	3,912
Natural Gas	197	51,110	420	81,293	59	25,261	42	10,209	2	272	10	2,957
Petroleum	80	22,299	20	6,614	3	4,104	--	--	--	--	2	2,022
Other	16	1,162	25	2,251	--	--	2	100	--	--	4	424
<b>2009</b>												
Coal	445	129,350	366	160,545	100	47,960	1	335	--	--	6	2,582
Natural Gas	192	48,737	424	82,892	57	23,022	51	12,338	3	482	3	1,175
Petroleum	77	21,756	18	6,575	3	4,104	--	--	--	--	2	2,022
Other	16	1,160	25	2,316	2	344	4	356	--	--	1	33
<b>2010</b>												
Coal	437	129,554	366	161,769	101	48,929	2	435	1	766	7	2,632
Natural Gas	180	48,398	420	82,080	57	22,746	54	13,078	3	542	3	1,172
Nuclear	49	51,465	39	43,363	13	14,996	--	--	--	--	7	7,901
Petroleum	76	20,878	17	5,513	3	4,064	--	--	--	--	2	2,022
Other	17	1,190	26	2,546	2	344	4	356	--	--	2	63
<b>2011</b>												
Coal	415	127,412	364	164,775	104	50,476	3	840	1	766	7	2,636
Natural Gas	176	48,361	435	86,128	58	21,944	57	13,471	3	542	2	870
Nuclear	49	51,642	39	43,422	13	15,011	--	--	--	--	8	8,890
Petroleum	66	17,099	17	5,443	4	4,692	--	--	--	--	2	2,022
Other	18	1,318	20	1,641	--	--	1	26	--	--	2	63
<b>2012</b>												
Coal	372	124,589	361	165,731	88	39,933	4	1,412	1	766	13	6,463
Natural Gas	172	52,020	440	91,255	54	18,533	59	13,813	4	637	2	499
Nuclear	49	51,846	38	39,561	13	15,105	--	--	--	--	8	8,900
Petroleum	59	14,971	17	4,046	4	4,692	--	--	--	--	2	2,022
Other	15	1,258	27	2,167	--	--	1	53	--	--	2	63
<b>2013</b>												
Coal	345	120,340	352	163,642	77	39,482	4	1,422	1	750	9	4,342
Natural Gas	159	51,291	421	87,668	57	18,843	58	12,026	4	637	4	2,481
Nuclear	45	50,266	38	40,013	13	15,251	--	--	--	--	8	11,181
Petroleum	45	11,556	11	3,481	4	4,692	--	--	--	--	--	--
Solar Thermal	--	--	2	591	--	--	4	516	--	--	--	--
Other	15	1,301	31	2,561	1	66	--	--	--	--	1	128
<b>2014</b>												
Coal	328	115,930	335	159,351	74	38,906	4	1,422	1	750	20	7,868
Natural Gas	161	50,985	413	83,944	55	20,254	58	11,878	4	637	3	2,419
Nuclear	44	49,586	35	37,650	13	15,237	--	--	--	--	9	11,886
Petroleum	36	9,689	11	3,473	4	4,691	--	--	--	--	--	--
Solar Thermal	--	--	4	841	--	--	5	900	--	--	--	--
Other	16	1,332	31	2,756	1	66	1	72	--	--	1	128

Notes:

'Associated Net Summer Capacity' is defined as the net summer capacity of the generators that are associated with the operation of this environmental equipment.

In some cases respondents have reported equipment late. Counts and capacity may have changed from prior publications of this table because of late reporting.

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; coal synfuel and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.

Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.

Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.

EIA did not collect cooling system data for nuclear units before 2010.

Other Energy Sources consists of wood and wood waste products, biomass, blast furnace gas and other gases.

Data for 2005 and earlier are based primarily on Form EIA-767 data. In 2006, the Form EIA-767 was suspended. Data for 2007 and later are based primarily on Form EIA-860 data. All data for 2006 are inferred based on submissions from subsequent years.

Source: U.S. Energy Information Administration, Forms EIA-767, "Steam-Electric Plant Operation and Design Report" and Form EIA-860, "Annual Electric Generator Report."

**Table 9.4. Average Costs of Existing Flue Gas Desulfurization Units**

**Operating in Electric Power Sector, 2004 - 2014**

Year	Average Operation and Maintenance Costs (Dollars per Megawatthour)	Average Installed Capital Costs (Dollars per Kilowatt)
2004	1.25	43.25
2005	1.37	142.67
2006	--	149.62
2007	1.26	240.68
2008	1.44	265.83
2009	1.44	357.46
2010	1.52	360.69
2011	1.79	410.62
2012	1.87	275.49
2013	1.74	235.42
2014	1.84	227.29

Notes: Average Installed Capital Costs reflect units which began operating in the specified year. Prior publications of this table reported the average installation cost of all units that were operating during each year; the new metric is intended to portray a more accurate understanding of how installation costs have changed over time.

Years in which Operation and Maintenance Costs were not collected display a '--' to indicate data was not collected.

Commercial and industrial facilities had significantly different costs than units used in the electric power sector. In order to give a more accurate reflection of the electric power sector, commercial and industrial facilities have been excluded from this publication table; prior publications of this table included commercial and industrial facilities when calculating average costs.

Sources:

U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report'

U.S. Energy Information Administration, Form EIA-923, 'Power Plant Operations Report'

U.S. Energy Information Administration, Form EIA-767, 'Steam-Electric Plant Operations and Design Report'

**Table 9.5. Emissions from Energy Consumption at Conventional Power Plants and Combined-Heat-and-Power Plants, by State, 2013 and 2014 (Thousand Metric Tons)**

Census Division and State	Carbon Dioxide (CO <sub>2</sub> )		Sulfur Dioxide (SO <sub>2</sub> )		Nitrogen Oxides (NO <sub>x</sub> )	
	Year 2014	Year 2013	Year 2014	Year 2013	Year 2014	Year 2013
New England	30,810	33,437	21	31	34	37
Connecticut	8,452	8,726	2	3	8	9
Maine	3,403	3,675	10	12	8	9
Massachusetts	12,917	14,735	6	11	13	14
New Hampshire	3,458	3,447	3	3	4	5
Rhode Island	2,566	2,838	0	1	1	1
Vermont	14	15	0	0	1	1
Middle Atlantic	154,457	157,974	302	282	185	192
New Jersey	18,364	15,789	3	3	14	14
New York	34,072	33,456	29	28	43	41
Pennsylvania	102,022	108,729	270	251	128	137
East North Central	406,814	414,052	1,025	1,061	376	379
Illinois	96,624	97,812	170	185	53	57
Indiana	103,516	98,895	302	248	121	110
Michigan	64,264	67,193	157	215	71	78
Ohio	98,650	102,466	322	315	96	93
Wisconsin	43,760	47,686	74	98	36	40
West North Central	239,379	241,445	386	426	248	256
Iowa	39,312	39,175	68	97	38	41
Kansas	31,794	33,125	29	27	26	28
Minnesota	32,677	29,255	36	32	35	34
Missouri	75,735	78,344	136	143	71	71
Nebraska	26,348	28,043	58	61	25	29
North Dakota	30,420	30,274	48	52	44	44
South Dakota	3,093	3,228	13	14	10	10
South Atlantic	399,238	378,260	502	514	341	317
Delaware	4,276	4,722	1	2	3	2
District of Columbia	48	49	0	0	0	0
Florida	112,696	108,431	115	107	83	80
Georgia	62,516	56,812	96	112	53	50
Maryland	20,701	18,950	38	38	19	20
North Carolina	58,578	56,940	58	65	61	57
South Carolina	33,083	28,809	40	43	20	17
Virginia	33,734	34,686	62	62	37	36
West Virginia	73,606	68,862	93	85	66	55
East South Central	218,872	213,041	497	462	181	174
Alabama	67,635	66,986	138	131	56	52
Kentucky	85,795	85,304	186	173	81	79
Mississippi	24,037	22,633	92	80	22	22
Tennessee	41,405	38,118	81	78	22	21
West South Central	392,975	399,352	557	613	367	375
Arkansas	37,289	37,346	81	81	43	42
Louisiana	57,137	58,274	87	111	75	75
Oklahoma	44,063	46,268	71	73	41	52
Texas	254,488	257,465	317	348	208	207
Mountain	234,802	244,232	148	168	285	301
Arizona	53,684	55,342	21	22	51	54
Colorado	38,474	39,387	26	36	40	45
Idaho	1,492	1,942	5	6	18	7
Montana	17,678	16,951	13	15	19	20
Nevada	16,222	15,690	9	7	17	15
New Mexico	24,712	28,535	11	16	42	54
Utah	35,204	35,699	21	21	53	57
Wyoming	47,337	50,687	41	45	45	50
Pacific Contiguous	78,249	79,366	25	30	119	117
California	57,395	57,323	3	2	89	88
Oregon	8,370	9,500	10	16	13	13
Washington	12,484	12,543	12	12	17	16
Pacific Noncontiguous	11,006	11,196	23	23	42	39
Alaska	3,558	3,768	4	4	17	16
Hawaii	7,448	7,428	20	19	24	23
U.S. Total	2,166,603	2,172,355	3,485	3,609	2,178	2,188

Notes:

The emissions data presented include total emissions from both electricity generation and the production of useful thermal output.

See Appendix A, Technical Notes, for a description of the sources and methodology used to develop the emissions estimates.

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.

Source: Calculations made by the Office of Electricity, Renewables, and Uranium Statistics, U.S. Energy Information Administration.

## Chapter 10

# Demand-Side Management and Advanced Metering

**Table 10.1. Demand-Side Management Program Annual Effects by Program Category, 2004 through 2012 (Table Discontinued)**

Year	Energy Efficiency		Load Management			Total	
	Energy Savings (Thousand MWh)	Actual Peak Load Reduction (MW)	Energy Savings (Thousand MWh)	Potential Peak Load Reduction (MW)	Actual Peak Load Reduction (MW)	Energy Savings (Thousand MWh)	Actual Peak Load Reduction (MW)
2004	52,663	14,272	1,966	20,997	9,263	54,629	23,535
2005	59,000	15,394	930	21,259	10,341	59,930	25,735
2006	63,076	16,006	790	21,254	11,268	63,866	27,274
2007	67,278	17,773	1,859	23,091	12,545	69,137	30,318
2008	74,871	19,708	1,822	26,318	12,064	76,693	31,772
2009	76,912	19,761	1,027	26,310	11,972	77,939	31,732
2010	86,914	20,828	447	26,100	12,536	87,361	33,364
2011	120,659	26,314	556	26,596	12,126	121,214	38,439
2012	138,525	28,924	712	28,503	13,200	139,237	42,124

2012 was the last year this data was collected.

Previously, annual effects were reported for large respondents only. Now the annual effects include large and small respondents, combined.

Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.2. Demand-Side Management Program Annual Effects by Program**

**Category, by Sector, 2004 through 2012 (Table Discontinued)**

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2004	17,185	24,290	11,137	50	52,663
2005	18,894	28,073	11,986	47	59,000
2006	21,150	28,720	13,155	50	63,076
2007	22,772	30,359	14,038	108	67,278
2008	25,396	34,634	14,766	75	74,871
2009	27,395	34,831	14,610	76	76,912
2010	32,150	37,416	17,259	89	86,914
2011	46,790	50,732	23,061	76	120,659
2012	54,516	58,894	25,023	92	138,525
Energy Efficiency - Actual Peak Load Reduction (MW)					
2004	5,868	5,541	2,858	5	14,272
2005	6,057	6,395	2,935	7	15,394
2006	6,900	6,067	3,032	7	16,006
2007	8,275	6,241	3,250	7	17,773
2008	8,764	7,838	2,991	114	19,708
2009	8,724	7,954	3,074	9	19,761
2010	9,404	8,046	3,368	10	20,828
2011	11,391	10,422	4,490	11	26,314
2012	12,821	11,743	4,348	12	28,924
Load Management - Energy Savings (Thousand MWh)					
2004	578	334	1,055	--	1,966
2005	408	383	138	--	930
2006	321	331	138	1	790
2007	953	463	442	--	1,859
2008	1,151	239	431	--	1,822
2009	436	197	394	--	1,027
2010	215	113	118	--	447
2011	237	194	125	--	556
2012	257	368	87	--	712
Load Management - Potential Peak Load Reduction (MW)					
2004	6,112	4,082	10,794	9	20,997
2005	6,075	3,832	11,297	55	21,259
2006	6,176	3,957	11,064	57	21,254
2007	7,022	3,984	12,030	55	23,091
2008	8,097	6,029	12,137	55	26,318
2009	7,308	6,460	12,462	81	26,310
2010	7,998	6,080	11,750	272	26,100
2011	7,882	6,023	12,380	311	26,596
2012	8,600	6,462	13,261	180	28,503
Load Management - Actual Peak Load Reduction (MW)					
2004	3,014	1,652	4,588	9	9,263
2005	3,407	1,544	5,388	2	10,341
2006	3,863	1,730	5,643	32	11,268
2007	4,949	1,837	5,749	10	12,545
2008	4,158	3,270	4,625	12	12,064
2009	3,899	3,464	4,606	3	11,972
2010	4,726	2,854	4,819	137	12,536
2011	4,105	2,808	5,108	105	12,126
2012	4,152	3,208	5,732	108	13,200

2012 was the last year this data was collected.

Transportation data is not available before 2003.

Previously, annual data included only large respondents. Now it includes large and small respondents, combined.

Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.3. Demand-Side Management Program Incremental Effects by Program Category, 2004 through 2012 (Table Discontinued)**

Year	Energy Efficiency		Load Management			Total	
	Energy Savings (Thousand MWh)	Actual Peak Load Reduction (MW)	Energy Savings (Thousand MWh)	Potential Peak Load Reduction (MW)	Actual Peak Load Reduction (MW)	Energy Savings (Thousand MWh)	Actual Peak Load Reduction (MW)
2004	4,532	1,727	36	3,064	1,163	4,569	2,890
2005	5,879	1,705	137	2,223	1,162	6,016	2,867
2006	5,394	1,268	99	2,817	1,690	5,492	2,958
2007	7,680	1,998	137	4,765	2,392	7,817	4,390
2008	10,428	6,327	168	7,253	3,292	10,596	9,619
2009	12,907	3,721	65	6,042	2,224	12,972	5,945
2010	13,592	3,215	46	5,234	2,709	13,639	5,923
2011	21,421	3,974	135	4,043	2,062	21,556	6,036
2012	21,478	3,764	41	5,357	2,671	21,520	6,435

2012 was the last year this data was collected.

Previously, large and small respondents were published separately, now they are combined.

Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.4. Demand-Side Management Program Incremental Effects by Program**

**Category, by Sector, 2004 through 2012 (Table Discontinued)**

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2004	1,827	1,812	894	--	4,532
2005	2,249	2,559	1,071	--	5,879
2006	2,127	2,281	986	--	5,394
2007	3,659	2,830	1,178	13	7,680
2008	4,568	4,383	1,477	1	10,428
2009	5,030	4,959	2,918	1	12,907
2010	6,492	5,325	1,771	5	13,592
2011	9,989	8,166	3,261	6	21,421
2012	9,531	8,924	3,019	4	21,478
Energy Efficiency - Actual Peak Load Reduction (MW)					
2004	1,138	393	196	--	1,727
2005	913	562	230	--	1,705
2006	665	433	170	--	1,268
2007	994	763	240	1	1,998
2008	4,543	1,168	614	1	6,327
2009	1,849	1,044	827	1	3,721
2010	1,378	1,053	783	1	3,215
2011	1,628	1,545	800	1	3,974
2012	1,775	1,562	426	1	3,764
Load Management - Energy Savings (Thousand MWh)					
2004	21	10	5	--	36
2005	34	84	19	--	137
2006	23	62	14	--	99
2007	13	98	26	--	137
2008	32	62	74	--	168
2009	34	21	10	--	65
2010	13	21	12	--	46
2011	29	86	21	--	135
2012	20	14	7	--	41
Load Management - Potential Peak Load Reduction (MW)					
2004	945	664	1,455	--	3,064
2005	765	636	822	--	2,223
2006	905	776	1,136	--	2,817
2007	2,342	1,324	1,045	54	4,765
2008	3,013	2,156	2,083	1	7,253
2009	1,922	1,971	2,127	22	6,042
2010	1,976	1,171	2,087	--	5,234
2011	1,324	1,327	1,392	--	4,043
2012	1,369	1,155	2,833	1	5,357
Load Management - Actual Peak Load Reduction (MW)					
2004	509	300	354	--	1,163
2005	378	224	560	--	1,162
2006	478	389	823	--	1,690
2007	1,221	562	567	42	2,392
2008	1,179	1,445	667	1	3,292
2009	793	781	648	3	2,224
2010	666	948	1,095	--	2,709
2011	817	619	625	--	2,062
2012	686	737	1,248	*	2,671

2012 was the last year this data was collected.

Transportation data is not available before 2003.

Previously, large and small respondents were published separately, now they are combined.

Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.5. Demand-Side Management Program Direct and Indirect Costs,****2004 through 2012 (Thousand Dollars) (Table Discontinued)**

Year	Energy Efficiency	Load Management	Direct Cost	Indirect Cost	Total Cost
2004	910,816	510,281	1,421,097	132,295	1,560,578
2005	1,180,576	622,287	1,802,863	127,925	1,939,115
2006	1,270,602	663,980	1,934,582	128,886	2,072,962
2007	1,677,969	700,362	2,378,331	160,326	2,604,711
2008	2,137,452	836,359	2,973,811	181,843	3,186,742
2009	2,221,480	944,261	3,165,741	394,193	3,607,076
2010	2,906,906	1,048,356	3,955,262	275,158	4,230,420
2011	4,002,672	1,213,102	5,215,774	328,622	5,544,396
2012	4,397,635	1,270,391	5,668,026	332,440	6,000,466

2012 was the last year this data was collected.

Direct Costs reflect electric utility costs incurred during the year that are identified with Energy Efficiency and Load Management.

Total Costs are the sum of Direct and Indirect Costs.

Previously, this table included only large respondents. Now it includes large and small respondents, combined.

For the total cost data, prior to 2010, both large and small respondents reported total costs, however small respondents did not break out the costs into direct and indirect. The direct and indirect costs were reported for large respondents only. Therefore, prior to 2010 the total cost does not equal the sum of the direct and indirect costs.

Totals may not equal sum of components because of independent rounding.

Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.6. Energy Efficiency  
Category, by Sector, 2013 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Incremental Annual Savings - Energy Savings (MWh)</b>					
2013	11,031,419	10,478,997	3,141,213	29,894	24,681,523
2014	11,442,191	11,928,895	3,074,819	19,316	26,465,221
<b>Incremental Annual Savings - Peak Demand Savings (MW)</b>					
2013	6,812	11,319	1,463	5	19,599
2014	3,031	2,920	564	2	6,517
<b>Incremental Costs - Customer Incentive (thousand dollars)</b>					
2013	1,252,085	1,274,406	345,676	5	2,872,171
2014	1,522,335	1,561,408	327,227	64	3,411,034
<b>Incremental Costs - All Other Costs (thousand dollars)</b>					
2013	1,015,842	750,299	179,719	33	1,945,877
2014	1,088,970	911,968	208,096	122	2,209,148

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.7. Energy Efficiency - Life Cycle Category, by Sector, 2013 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Life Cycle Savings - Energy Savings (MWh)</b>					
2013	84,525,515	128,026,835	38,500,862	448,421	251,464,746
2014	100,729,499	149,493,353	39,631,016	287,925	290,141,793
<b>Life Cycle Savings - Peak Demand Savings (MW)</b>					
2013	44,351	70,979	19,524	6	134,861
2014	17,911	46,600	12,248	2	76,760
<b>Life Cycle Costs - Customer Incentive (thousand dollars)</b>					
2013	2,698,741	2,875,605	455,357	5	6,029,552
2014	1,749,387	1,912,327	346,218	64	4,007,996
<b>Life Cycle Costs - All Other Costs (thousand dollars)</b>					
2013	2,134,979	1,626,658	234,577	33	3,996,230
2014	1,558,256	1,348,673	216,674	122	3,123,719

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.8. Demand Response - Yearly Energy and Demand Savings Category, by Sector, 2013 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Number of Customers Enrolled</b>					
2013	8,419,233	611,826	155,893	398	9,187,350
2014	8,603,402	605,094	57,129	4	9,265,629
<b>Energy Savings (MWh)</b>					
2013	799,743	486,348	115,895	1	1,401,987
2014	881,563	462,337	92,549	--	1,436,449
<b>Potential Peak Demand Savings (MW)</b>					
2013	7,003	5,124	14,800	168	27,095
2014	8,118	6,215	16,505	353	31,191
<b>Actual Peak Demand Savings (MW)</b>					
2013	3,381	2,548	5,805	149	11,883
2014	3,147	2,652	6,883	1	12,683

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.9. Demand Response - Program Costs  
Category, by Sector, 2013 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Customer Incentives (thousand dollars)</b>					
2013	398,598	286,057	421,208	6,919	1,112,782
2014	345,894	345,435	514,751	11,716	1,217,796
<b>All Other Costs (thousand dollars)</b>					
2013	338,353	95,748	50,982	50	485,133
2014	301,389	101,127	45,028	115	447,659

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

**Table 10.10. Advanced Metering Count by Technology Type,  
2007 through 2014**

Year	Residential	Commercial	Industrial	Transportation	Total
<b>Automated Meter Reading (AMR)</b>					
2007	25,785,782	2,322,329	44,015	109	28,152,235
2008	36,425,943	3,529,985	77,122	13	40,033,063
2009	41,462,111	4,239,531	107,033	11	45,808,686
2010	43,913,225	4,611,877	159,315	626	48,685,043
2011	41,451,888	4,341,105	172,692	77	45,965,762
2012	43,455,437	4,691,018	185,862	125	48,330,822
2013	42,491,242	4,632,744	196,132	1,202	47,321,320
2014	41,830,781	4,781,167	216,459	1,252	46,829,659
<b>Advanced Metering Infrastructure (AMI)</b>					
2007	2,202,222	262,159	9,106	2	2,473,489
2008	4,190,244	444,003	12,757	12	4,647,016
2009	8,712,297	876,419	22,675	10	9,611,401
2010	18,369,908	1,904,983	59,567	67	20,334,525
2011	33,453,548	3,682,159	154,659	7	37,290,373
2012	38,524,639	4,461,350	179,159	35	43,165,183
2013	47,321,995	5,770,067	248,515	845	53,341,422
2014	51,710,725	6,563,614	270,683	916	58,545,938

Prior to 2010, the count was the number of customers, not number of meters.

Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report." Form EIA-861S, "Annual Electric Power Industry Report (Short Form)."

## Appendix

## Technical Notes

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This appendix describes how the U.S. Energy Information Administration collects, estimates, and reports electric power data in the Electric Power Annual.

### Data Quality and Submission

The Electric Power Annual (EPA) is prepared by the Office of Electricity, Renewables, and Uranium Statistics (ERUS), U.S. Energy Information Administration (EIA), U.S. Department of Energy (DOE). ERUS performs routine reviews of the data collection respondent frames, survey forms, and reviews the quality of the data received.

Data are entered directly by respondents into the ERUS Internet Data Collection (IDC) system. A small number of hard copy forms are keyed into the system by ERUS personnel. All data are subject to review via interactive edits built into the IDC system, internal quality assurance reports, and review by ERUS subject matter experts. Questionable data values are verified through contacts with respondents, and survey non-respondents are identified and contacted.

IDC edits include both deterministic checks, in which records are checked for the presence of data in required fields, and statistical checks, in which the data are checked against a range of values based on historical data values and for logical or mathematical consistency with data elements reported in the survey. Discrepancies found in the data, as a result of these checks, must either be corrected by the respondent or the respondent must enter an explanation as to why the data are correct. If these explanations are unsatisfactory the respondent is contacted by EIA for clarification or corrected data.

Those respondents unable to use the electronic reporting method provide the data in hard copy, typically via fax and email. These data are manually entered into the computerized database and are subjected to the same data edits as those performed during e-filing by the respondent.

### Reliability of Data

Annual survey data have non-sampling errors. Non-sampling errors can be attributed to many sources: (1) inability to obtain complete information about all cases (i.e., non-response); (2) response errors; (3) definitional difficulties; (4) differences in the interpretation of questions; (5) mistakes in recording or coding the data; and (6) other errors of collection, response, coverage, and estimation for missing data.

Although no direct measurement of the biases due to non-sampling errors can be obtained, precautionary steps were taken in all phases of the frame development and data collection, processing, and tabulation processes to minimize their influence.

**Imputation:** If the reported values appear to be in error and the data issue cannot be resolved with the respondent, or if the facility is a non-respondent, a regression methodology is used to impute for the facility. The regression methodology relies on other data to make estimates for erroneous or missing responses. The basis for the current methodology involves a 'borrowing of strength' technique for small domains.<sup>1</sup>

## Data Revision Procedure

The EPA presents the most current and complete data available to the EIA. The statistics may differ from those published previously in EIA publications due to corrections, revisions, or other adjustments to the data subsequent to its original release.

After data are disseminated as final, revisions will be considered if a correction would make a difference of 1 percent or greater at the national level. Revisions for differences that do not meet the 1 percent or greater threshold will be determined by the Office Director. In either case, the proposed revision will be subject to the EIA revision policy concerning how it affects other EIA products.

**Sensitive Data (Formerly Identified as Data Confidentiality):** Most of the data collected on the electric power surveys are not considered business sensitive. However, the data that are classified as sensitive are handled by ERUS consistent with EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45 Federal Register 59812 (1980)).

## Rounding and Percent Change Calculations

**Rounding Rules for Data:** To round a number to n digits (decimal places), add one unit to the nth digit if the (n+1) digit is 5 or larger and keep the nth digit unchanged if the (n+1) digit is less than 5. The symbol for a number rounded to zero is (\*).

**Percent Change:** The following formula is used to calculate percent changes:

$$\text{Percent Change} = \left( \frac{x(t_2) - x(t_1)}{x(t_1)} \right) \times 100,$$

where  $x(t_1)$  and  $x(t_2)$  denote the quantity at period  $t_1$  and subsequent period  $t_2$ .

## Data Sources for Electric Power Annual

Data published in the EPA are compiled from forms filed annually or aggregated to an annual basis from monthly forms (see figure on EIA Electric Industry Data Collection in Appendix A). The respondents to these forms include electric utilities, other generators and sellers of electricity, and North American Electric Reliability Corporation (NERC) reliability entities. The EIA forms used are:

- Form EIA-411, "Coordinated Bulk Power Supply Program Report;"
- Form EIA-826, "Monthly Electric Utility Sales and Revenues with State Distributions Report;"
- Form EIA-860, "Annual Electric Generator Report;"
- Form EIA-861, "Annual Electric Power Industry Report;"
- Form EIA-861S, "Annual Electric Power Industry Report (Short Form);"
- Form EIA-923, "Power Plant Operations Report."

These forms can be found on the EIA Internet website at:

<http://www.eia.gov/cneaf/electricity/page/forms.html>.

Survey data from other Federal sources are also utilized for this publication. They include:

- FERC Form 1, “Annual Report of Major Electric Utilities, Licensees, and Others;”
- U. S. Department of Agriculture (USDA) Rural Utility Service Form 7, “Financial and Statistical Report;” and
- USDA Rural Utility Service Form 12, “Operating Report – Financial.”

In addition to the above-named forms, the historical data published in the EPA are compiled from the following inactive forms:

- Form EIA-412, “Annual Electric Industry Financial Report,” FERC Form 423, “Cost and Quality of Fuels for Electric Plants,”
- Form EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants Report;”
- Form EIA-759, “Monthly Power Plant Report,”
- Form EIA-767, “Steam-Electric Plant Operation and Design Report;”
- Form EIA-860A, “Annual Electric Generator Report–Utility,”
- Form EIA-860B, “Annual Electric Generator Report–Nonutility,”
- Form EIA-867, “Annual Nonutility Power Producer Report,”
- Form EIA-900, “Monthly Nonutility Power Report,”
- Form EIA-906, “Power Plant Report;” and
- Form EIA-920, “Combined Heat and Power Plant Report.”

Additionally, some data reported in this publication were acquired from public reports of the National Energy Board of Canada on electricity imports and exports.

**Meanings of Symbols Appearing in Tables:** The following symbols have the meaning described below:

- \* The value reported is less than half of the smallest unit of measure, but is greater than zero.
- P Indicates a preliminary value.
- W Withheld to avoid disclosure of individual company data.
- NM Data value is not meaningful, either (1) when compared to the same value for the previous time period, or (2) when a data value is not meaningful due to having a high Relative Standard Error (RSE).
- (\*) Usage of this symbol indicates a number rounded to zero.

## **Form EIA-411**

The information reported on the mandatory Form EIA-411 includes: (1) actual energy and peak demand for the preceding year and five additional years; (2) existing and future generating capacity and capacity reserve margins; (3) scheduled capacity transfers; (4) projections of capacity, demand, purchases, sales, and scheduled maintenance; (5) power flow cases; and (6) bulk power system maps. The data is collected for EIA by NERC from NERC regional reliability entities, which in turn aggregate reports from regional members. Non-member data is also included. The compiled data is reviewed and edited by NERC and submitted to EIA annually on July 15. The data undergoes additional review by EIA. EIA resolves any quality issues with NERC.

**Instrument and Design History:** The Form EIA-411 program was initiated under the Federal Power Commission (FPC) Docket R-362, Reliability and Adequacy of Electric Service, and Orders 383-2, 383-3, and 383-4. The DOE, established in October 1977, assumed the responsibility for this activity. The responsibility for collecting these data was delegated to the Office of Emergency Planning and Operations within the DOE and was transferred to EIA for the reporting year 1996. Until 2008, this form was voluntary. The data are collected under the authority of the Federal Power Act (Public Law 88-280), the Federal Energy Administration Act of 1974 (Public Law 93-275), and the DOE Organization Act (Public Law 95-91).

**Issues within Historical Data Series:** The Florida Reliability Coordinating Council (FRCC) separated itself from the Southeastern Electric Reliability Council (SERC) in the mid-1990s and all time series data have been adjusted. In 1998, several utilities realigned from Southwest Power Pool (SPP) to SERC. Adjustments were made to the information to account for the separation and to address the tracking of shared reserve capacity that was under long-term contracts with multiple members. Name changes altered the Mid-Continent Area Power Pool (MAPP) to the Midwest Reliability Organization (MRO) and the Western Systems Coordinating Council (WSCC) to the Western Electricity Coordinating Council (WECC). The MRO membership boundaries have altered over time, but WECC membership boundaries have not. The utilities in the associated regional entity identified as the Alaska System Coordination Council (ASCC) dropped their formal participation in NERC. (Alaska and, obviously, Hawaii are not electrically interconnected with the coterminous 48 States).

At the close of calendar year 2005, the following reliability regional councils were dissolved: East Central Area Reliability Coordination Agreement (ECAR), Mid-Atlantic Area Council (MAAC), and Mid-America Interconnected Network (MAIN). On January 1, 2006, the ReliabilityFirst Corporation (RFC) came into existence as a new regional reliability council. Individual utility membership in the former ECAR, MAAC, and MAIN councils mostly shifted to RFC. However, adjustments in membership, as utilities joined or left various reliability councils, impacted MRO, SERC, and SPP. The Texas Regional Entity (TRE) was formed to handle the regional reliability responsibilities of the Electric Reliability Council of Texas (ERCOT). The revised delegation agreements covering all the regions were approved by the FERC on March 21, 2008. Reliability Councils that are unchanged include: Florida Reliability Coordinating Council (FRCC), Northeast Power Coordinating Council (NPCC), and the Western Electricity Coordinating Council (WECC). The historical time series have not been adjusted to account for individual membership shifts.

The current NERC regional entity names are as follows:

- Florida Reliability Coordinating Council (FRCC),
- Midwest Reliability Organization (MRO),
- Northeast Power Coordinating Council (NPCC),
- ReliabilityFirst Corporation (RFC),
- Southeastern Electric Reliability Council (SERC),
- Southwest Power Pool (SPP),
- Texas Regional Entity (TRE), and
- Western Energy Coordinating Council (WECC).

**Changes Introduced in 2011:** Starting in 2011, NERC modified the bulk power system reporting regions (in contrast to regional reliability entity organizational boundaries) to align them with electric market operations. Consequently, reliability data will be reported for the PJM and MISO regional transmission organization areas and the MAPP area rather than for the MRO and RFC regional areas. This new framework, along with the other NERC regions, now forms the bulk power system reliability assessment areas.

Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. In published EIA reports the historical data series for these regions have not been adjusted. Instead, starting in 2011, EIA has introduced the Balance of Eastern Region category to provide a consistent trend for the Eastern interconnection.

**Concept of Demand within the EIA-411:** The EIA-411 uses the following categorization of electricity demand:

- **Net Internal Demand:** Internal Demand less Direct Control Load Management and Interruptible Demand.
- **Internal Demand:** To collect these data, NERC develops a Total Internal Demand that is the sum of the metered (net) outputs of all generators within the system and the metered line flows into the system, less the metered line flows out of the system. The demand of station service or auxiliary needs (such as fan motors, pump motors, and other equipment essential to the operation of the generating units) is not included nor are any requirement customer (utility) load or capacity found behind the line meters on the system.
- **Direct Control Load Management:** Demand-Side Management that is under the direct control of the system operator. DCLM may control the electric supply to individual appliances or equipment on customer premises; it does not include Interruptible Demand.
- **Interruptible Demand:** The magnitude of customer demand that, in accordance with contractual arrangements, can be interrupted at the time of the Regional Council's seasonal peak by direct control of the System Operator or by action of the customer at the direct request of the System Operator.

For additional information on demand, refer to the NERC's Long-Term Reliability Assessments at <http://www.nerc.com/page.php?cid=4161>.

**Sensitive Data:** Power flow cases and maps are considered business sensitive.

## Form EIA-412 (Terminated)

The Form EIA-412 was used annually to collect accounting, financial, and operating data from publicly owned electric utilities engaged in the generation, transmission, or distribution of electricity which had 150,000 megawatthours of sales to ultimate consumers and/or 150,000 megawatthours of sales for resale for the two previous years. Data was collected annually.

Beginning with the 2001 data collection, the plant statistics reported on Schedule 9 were also collected from unregulated entities that own plants with a nameplate capacity of 10 megawatts or greater.

Beginning with the 2003 collection, the transmission data reported in Schedules 10 and 11 were collected from each generation and transmission cooperative owning transmission lines having a nominal voltage of 132 kilovolts or greater.

**Instrument and Design History:** The FPC created the FPC Form 1M in 1961 as a mandatory survey. It became the responsibility of the EIA in October 1977 when the FPC was merged with DOE and renamed the Federal Energy Regulatory Commission (FERC). In 1979, the FPC Form 1M was superseded by the Economic Regulatory Administration (ERA) Form ERA-412 and in January 1980 by the Form EIA-412.

The criteria used to select the respondents for this survey fit approximately 500 publicly owned electric utilities. Federal electric utilities were required to file the Form EIA-412. The financial data for the U.S. Army Corps of Engineers (except for Saint Mary's Falls at Sault Ste. Marie, Michigan); the U.S. Department of Interior, Bureau of Reclamation; and the U.S. International Boundary and Water Commission were collected on the Form EIA-412 from the Federal power marketing administrations. The form was terminated after the 2003 data year.

**Issues within Historical Data Series:** For 2001 - 2003, the California Department of Water Resources (CDWR) Electric Energy Fund data were included in the EIA-412 data tables. In response to the energy shortfall in California, in 2001 the California State legislature authorized the CDWR, using its undamaged borrowing capability, to enter the wholesale markets on behalf of the California retail customers effective on January 17, 2001 and for the period ending December 31, 2002. Their 2001 revenue collected was \$5,501,000,000 with purchased power costs of \$12,055,000,000. Their 2002 revenue collected was \$4,210,000,000 with purchased power costs of \$3,827,749,811. Their 2003 revenue collected was \$4,627,000,000 with purchased power costs of \$4,732,000,000. The California Public Utility Commission was required by statute to establish the procedures for retail revenue recovery mechanisms for their purchase power costs in the future.

**Sensitive Data:** The nonutility data collected on Schedule 9 "Electric Generating Plant Statistics" for "Cost of Plant" and "Production Expenses," are considered business sensitive. .

### **Form EIA-423 (Replaced in 2008 by the Form EIA-923)**

The Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," collected the cost and quality of fossil fuels delivered to nonutility plants to produce electricity. These plants included independent power producers (including those facilities that formerly reported on the FERC Form 423) and commercial and industrial combined heat and power (CHP) producers whose total fossil-fueled nameplate generating capacity was 50 or more megawatts (MW). (CHP plants are sometimes referred to as co-generators. They produce heat, such as steam for use in a manufacturing process, along with electricity).

**Instrument and Design History:** The Form EIA-423<sup>2</sup> was implemented in January 2002 to collect monthly cost and quality data for fossil fuel receipts from owners or operators of nonutility electricity

generating plants. It was terminated on January 1, 2008, and replaced by the Form EIA-923, "Power Plant Operations Report."

**Issues within Historical Data Series:** Natural gas values do not include blast furnace gas or other gas.

**Sensitive Data:** Plant fuel cost data collected on the survey are considered business sensitive. State- and national-level aggregations are published if sufficient data are available to avoid disclosure of individual company and plant level costs.

### **FERC Form 423 (Replaced in 2008 by Form EIA-923)**

The FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," was administered by FERC. The data were downloaded from the Commission's website into an EIA database. The Form was filed by approximately 600 regulated plants. To meet the criteria for filing, a plant must have had a total steam turbine electric generating capacity and/or combined-cycle (gas turbine with associated steam turbine) generating capacity of 50 or more megawatts. Only fuel delivered for use in steam-turbine and combined-cycle units was reported. Fuel received for use in gas-turbine or internal-combustion units that was not associated with a combined-cycle operation was not reported. The FERC Form 423 was replaced after 2007 by the Form EIA-923.

**Instrument and Design History:** On July 7, 1972, the FPC issued Order Number 453 enacting the New Code of Federal Regulations, Section 141.61, creating the FPC Form 423. Originally, the form was used to collect data only on fossil steam plants, but was amended in 1974 to include data on internal-combustion and combustion-turbine units. When DOE was formed in 1977, most of FPC became FERC. The FERC Form 423 replaced the FPC Form 423 in January 1983. The FERC Form 423 dropped stand-alone combustion turbines. In addition, the generator nameplate capacity threshold was changed from 25 megawatts to 50 megawatts. This reduction in coverage eliminated approximately 50 utilities and 250 plants. All historical FPC Form 423 data in this publication were revised to reflect the new generator-nameplate-capacity threshold of 50 or more megawatts reported on the FERC Form 423. In January 1991, the collection of data on the FERC Form 423 was extended to include combined cycle units. Historical data have not been revised to include these units. On January 1, 2008, EIA assumed responsibility for collection of these data and both the utility and nonutility plants began to report their cost and quality of fuels information on Schedule 2 of Form EIA-923, "Power Plant Operations Report.".

**Issues within Historical Data Series:** These data were collected by FERC for regulatory rather than statistical and publication purposes. EIA did not attempt to resolve any late filing issues in the FERC Form 423 survey. The data were quality reviewed by EIA and when possible quality issues were resolved with FERC.

Natural gas values for 2001 forward do not include blast furnace gas or other gas.

Due to the estimation procedure described below in the discussion of the Form EIA-923, 2003 and later data cannot be directly compared to previous years' data.

**Sensitive Data:** Data collected on FERC Form 423 are not business sensitive.

## **Form EIA-767 (Replaced by Forms EIA-860 and EIA-923)**

The Form EIA-767 was used to collect data annually on plant operations and equipment design, including boiler, generator, cooling system, air pollution control equipment, and stack characteristics. Data were collected from a mandatory restricted-universe census of all electric power plants with a total existing or planned organic-fueled or combustible renewable steam-electric generator nameplate rating of 10 or more megawatts. The entire form was filed by approximately 800 power plants with a nameplate capacity of 100 or more megawatts. An additional 600 power plants with a nameplate capacity under 100 megawatts submitted information only on fuel consumption and quality, boiler and generator configuration, and nitrogen oxides, mercury, particulate matter, and sulfur dioxide controls.

**Instrument and Design History:** The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data. The predecessor form, FPC-67, "Steam-Electric Plant Air and Water Quality Control Data," was used to collect data from 1969 to 1980, when the form number was changed to Form EIA-767. In 1982, the form was completely redesigned and re-titled Form EIA-767, "Steam-Electric Plant Operation and Design Report." In 1986, the respondent universe of 700 plants was increased to 900 plants to include plants with nameplate capacity from 10 megawatts to 100 megawatts. In 2002, the respondent universe was increased by almost 1,370 plants with the addition of nonutility plants.

Collection of data via the form was suspended for the 2006 data year. Starting with the collection of 2007 calendar year data, most of the Form EIA-767 information is now collected on either the revised Form EIA-860, "Annual Electric Generator Report" or the new Form EIA-923, "Power Plant Operations Report."

**Estimation of EIA-767 Data:** No estimation of Form EIA-767 data was performed. Normally the survey had no non-response.

**Issues within Historical Data Series:** As noted above, no data were collected for calendar year 2006.

**Sensitive Data:** Latitude and longitude data collected on the Form EIA-767 were considered business sensitive.

## **Form EIA-826**

The Form EIA 826, "Monthly Electric Utility Sales and Revenues with State Distributions Report," is a monthly collection of data from a sample of approximately 520 of the largest electric utilities (primarily investor and publicly owned) as well as a census of energy service providers with sales to ultimate consumers in deregulated States. Form EIA-861 (see below), with approximately 3,300 respondents, serves as a frame from which the Form 826 sample is drawn. Based on this sample, a model is used to estimate for the entire universe of U.S. electric utilities on a monthly basis.

**Instrument and design history:** The collection of electric power sales data and related information began in the early 1940's and was established as FPC Form 5 by FPC Order 141 in 1947. In 1980, the report was revised with only selected income items remaining and became the FERC Form 5. The Form EIA 826, "Electric Utility Company Monthly Statement," replaced the FERC Form 5 in January 1983. In January 1987, the "Electric Utility Company Monthly Statement" was changed to the "Monthly Electric

Utility Sales and Revenue Report with State Distributions.” The title was changed again in January 2002 to “Monthly Electric Utility Sales and Revenues with State Distributions Report” to become consistent with other EIA report titles. The Form EIA 826 was revised in January 1990, and some data elements were eliminated.

In 1993, EIA for the first time used a model sample for the Form EIA 826. A stratified random sample, employing auxiliary data, was used for each of the four previous years. The sample for the Form EIA 826 was designed to obtain estimates of electricity sales and average retail price of electricity at the State level by end use sector.

Starting with data for January 2001, the restructuring of the electric power industry was taken into account by forming three schedules on the Form EIA-826. Schedule 1, Part A is for full service utilities that operate as in the past. Schedule 1, Part B is for electric service providers only, and Schedule 1, Part C is for those utilities providing distribution service for those on Schedule 1, Part B. In addition, Schedule 1 Part D is for those retail energy providers or power marketers that provide bundled service. Also, the Form EIA-826 frame was modified to include all investor-owned electric utilities and a sample of companies from other ownership classes. A new method of estimation was implemented at this same time. (See Electric Power Monthly, April 2001, p.1.)

With the October 2004 issue of the Electric Power Monthly (EPM), EIA published for the first time preliminary electricity sales data for the Transportation Sector. These data are for electricity delivered to and consumed by local, regional, and metropolitan transportation systems. The data being published for the first time in the October EPM included July 2004 data as well as year-to-date. EIA’s efforts to develop these new data have identified anomalies in several States and the District of Columbia. Some of these anomalies are caused by issues such as: 1) Some respondents have classified themselves as outside the realm of the survey. The Form EIA-826 collects retail data from those respondents providing electricity and other services to the ultimate end users. EIA has experienced specific situations where, although the respondents’ customers are the ultimate end users, particular end users qualify under wholesale rate schedules. 2) The Form EIA-826 is a cutoff sample and not intended to be a census.

**Data processing and data system editing:** Monthly Form EIA-826 submission is available via an Internet Data Collection (IDC) system. The completed data are due to EIA by the last calendar day of the month following the reporting month. Nonrespondents are contacted to obtain the data. The data are edited and additional checks are completed. Following verification, imputation is run, and tables and text of the aggregated data are produced for inclusion in the EPM.

**Imputation:** Regression prediction, or imputation, is done for entities not in the monthly sample and for any nonrespondents. Regressor data for Schedule 1, Part A is the average monthly sales or revenue from the most recent finalized data from survey Form EIA-861. Beginning with January 2008 data and the finalized 2007 data, the regressor data for Schedule 1 Parts B and C is the prior month’s data.

**Formulas and methodologies:** The Form EIA 826 data are collected by end-use sector (residential, commercial, industrial, and transportation) and State. Form EIA 861 (see below) data are used as the frame from which the sample is selected and in some instances also as regressor data. Updates are made to the frame to reflect mergers that affect data processing.

With the revised definitions for the commercial and industrial sectors to include all data previously reported as ‘other’ data except transportation, and a separate transportation sector, all responses that would formerly have been reported under the “other” sector are now to be reported under one of the sectors that currently exist. This means there is probably a lower correlation, in general, between, say, commercial Form EIA-826 data for 2004 and commercial Form EIA-861 data for 2003 than there was between commercial Form EIA-826 data for 2003 and commercial Form EIA-861 data for 2002 or earlier years, although commercial and industrial definitions have always been somewhat nebulous due to power companies not having complete information on all customers.

Data submitted for January 2004 represent the first time respondents were to provide data specifically for the transportation end-use sector.

During 2003 transportation data were collected annually through Form EIA-861. Beginning in 2004 the transportation data were collected on a monthly basis via Form EIA-826. In order to develop an estimate of the monthly transportation data for 2003, values for both sales of electricity to ultimate customers and revenue from sales of electricity to ultimate customers were estimated using the 2004 monthly profile for the sales and revenues from the data collected via Form EIA-826. All monthly non-transportation data for 2003 (i.e. street lighting, etc.), which were previously reported in the “other” end-use sector on the Form EIA-826 have been prorated into the Commercial and Industrial end-use sectors based on the 2003 Form EIA-861 profile.

A monthly distribution factor was developed for the monthly data collected in 2004 (for the months of January through November). The transportation sales and revenues for December 2004 were assumed to be equivalent to the transportation sales and revenues for November 2004. The monthly distribution factors for January through November were applied to the annual values for transportation sales and revenues collected via Form EIA-861 to develop corresponding 2003 monthly values. The eleven month estimated totals from January through November 2003 were subtracted from the annual values obtained from Form EIA-861 in order to obtain the December 2003 values.

Data from the Form EIA-826 are used to determine estimates by sector at the State, Census division, and national level. State level sales and revenues estimates are first calculated. Then the ratio of revenue divided by sales is calculated to estimate retail price of electricity at the State level. The estimates are accumulated separately to produce the Census division and U.S. level estimates<sup>3</sup>.

Some electric utilities provide service in more than one State. To facilitate the estimation, the State service area is actually used as the sampling unit. For each State served by each utility, there is a utility State part, or “State service area.” This approach allows for an explicit calculation of estimates for sales, revenue, and average retail price of electricity by end use sector at State, Census division, and national level. Estimation procedures include imputation to account for nonresponse. Non-sampling error must also be considered. The non-sampling error is not estimated directly, although attempts are made to minimize the non-sampling error.

Average retail price of electricity represents the cost per unit of electricity sold and is calculated by dividing retail electric revenue by the corresponding sales of electricity. The average retail price of electricity is calculated for all consumers and for each end-use sector.

The electric revenue used to calculate the average retail price of electricity is the operating revenue reported by the electric utility. Operating revenue includes energy charges, demand charges, consumer service charges, environmental surcharges, fuel adjustments, and other miscellaneous charges. Electric utility operating revenues also include State and Federal income taxes and taxes other than income taxes paid by the utility.

The average retail price of electricity reported in this publication by sector represents a weighted average of consumer revenue and sales within sectors and across sectors for all consumers, and does not reflect the per kWh rate charged by the electric utility to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs to the electric utility for providing electrical service.

**Adjusting monthly data to annual data:** As a final adjustment based on our most complete data, use is made of final Form EIA-861 data, when available. The annual totals for Form EIA-826 data by State and end-use sector are compared to the corresponding Form EIA-861 values for sales and revenue. The ratio of these two values in each case is then used to adjust each corresponding monthly value.

**Sensitive data:** Most of the data collected on the Form EIA-826 are not considered business sensitive. However, monthly revenue, sales, and customer data collected from energy service providers (Schedule 1, Part B), which do not also provide energy delivery, are considered business sensitive and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

## Form EIA-860

The Form EIA-860 is a mandatory annual census of all existing and planned electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts. The survey is used to collect data on existing power plants and 10 year plans for constructing new plants, as well as generating unit additions, modifications, and retirements in existing plants. Data on the survey are collected at the individual generator level. Certain power plant environmental-related data are collected at the boiler level. These data include environmental equipment design parameters and boiler air emission standards and boiler emission controls.

**Instrument and Design History:** The Form EIA-860 was originally implemented in January 1985 to collect plant data on electric utilities as of year-end 1984. It was preceded by several Federal Power Commission (FPC) forms including the FPC Form 4, Form 12 and 12E, Form 67, and Form 411. In January 1999, the Form EIA-860 was renamed the Form EIA-860A and was implemented to collect data as of January 1, 1999.

In 1989, the Form EIA-867, "Annual Nonutility Power Producer Report," was initiated to collect plant data on unregulated entities with a total generator nameplate capacity of 5 or more megawatts. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts. Previously, data were collected every 3 years from facilities with a nameplate capacity between 1 and 5 megawatts. In 1998, the Form EIA-867, was renamed Form EIA-860B, "Annual Electric Generator Report – Nonutility." The Form EIA-860B was a mandatory survey

of all existing and planned nonutility electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts.

Beginning with data collected for the year 2001, the infrastructure data collected on the Form EIA-860A and the Form EIA-860B were combined into the new Form EIA-860 and the monthly and annual versions of the Form EIA-906. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

Starting with 2007, design parameters data formerly collected on Form EIA-767 were collected on Form EIA-860. These include design parameters associated with certain steam-electric plants' boilers, cooling systems, flue gas particulate collectors, flue gas desulfurization units, and stacks and flues.

**Estimation of EIA-860 Data:** No imputation was required for EIA-860 data.

**Issues within Historical Data Series Regarding Categorization of Capacity by Business Sector:** There are a small number of electric utility CHP plants, as well as a small number of industrial and commercial generating facilities that are not CHP. For the purposes of this report the data for these plants are included, respectively, in the following categories: "Electricity Generators, Electric Utilities," "Combined Heat and Power, Industrial," and "Combined Heat and Power, Commercial."

Some capacity in 2001 through 2004 is classified based on the operating company's classification as an electric utility or an independent power producer. Starting in the EPA 2006, capacity by producer type was determined at the power plant level for 2005 and all subsequent data collections. This change required revisions to the original published 2005 data.

**Issues within Historical Data Series Regarding Planned Capacity:** Delays and cancellations may have occurred subsequent to respondent data reporting as of December 31 of the data year.

**Issues within Historical Data Series Regarding Capacity by Energy Source:** Prior to the EPA 2005, the capacity for generators for which natural gas or petroleum was the most predominant energy source was presented in the following three categories: petroleum only, natural gas only, and dual-fired. The dual-fired category, which was EIA's effort to infer which generators could fuel-switch between natural gas and fuel oil, included only the capacity of generators for which the most predominant energy source and second most predominant energy source were reported as natural gas or petroleum. Beginning in 2005, capacity is assigned to energy source based solely on the most predominant (primary) energy source reported for a generator. The "dual-fired" category was eliminated. Separately, summaries of capacity associated with generators with fuel-switching capability are presented for 2005 and later years. These summaries are based on data collected from new questions added to the Form EIA-860 survey that directly address the ability of generators to switch fuels and co-fire fuels.

In the EPA 2005, certain petroleum-fired capacity was misclassified as natural gas-fired capacity for 1995 – 2003. This was corrected in the EPA 2006. Corrections were noted as revised data.

**Prime Movers:** The Form EIA-860 sometimes represents a generator's prime mover by using the abbreviations in the table below.

Prime Mover Code	Prime Mover Description
BA	Energy Storage, Battery
CE	Energy Storage, Compressed Air
CP	Energy Storage, Concentrated Solar Power
FW	Energy Storage, Flywheel
PS	Energy Storage, Reversible Hydraulic Turbine (Pumped Storage)
ES	Energy Storage, Other
ST	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)
GT	Combustion (Gas) Turbine (including jet engine design)
IC	Internal Combustion Engine (diesel, piston, reciprocating)
CA	Combined Cycle Steam Part
CT	Combined Cycle Combustion Turbine Part
CS	Combined Cycle Single Shaft
CC	Combined Cycle Total Unit
HA	Hydrokinetic, Axial Flow Turbine
HB	Hydrokinetic, Wave Buoy
HK	Hydrokinetic, Other
HY	Hydroelectric Turbine (including turbines associated with delivery of water by pipeline)
BT	Turbines Used in a Binary Cycle (including those used for geothermal applications)
PV	Photovoltaic
WT	Wind Turbine, Onshore
WS	Wind Turbine, Offshore
FC	Fuel Cell
OT	Other

**Energy Sources:** The Form EIA-860 sometimes represents the energy sources associated with generators by using the abbreviations and/or groupings in the table below.

Energy Source Grouping	Energy Source Code	Energy Source Description
Coal	ANT	Anthracite Coal
	BIT	Bituminous Coal
	LIG	Lignite Coal
	SUB	Subbituminous Coal
	SGC	Coal-Derived Synthesis Gas
	WC	Waste/Other Coal (including anthracite culm, bituminous gob, fine coal, lignite waste, waste coal)
Petroleum Products	DFO	Distillate Fuel Oil (including diesel, No. 1, No. 2, and No. 4 fuel oils)
	JF	Jet Fuel
	KER	Kerosene
	PC	Petroleum Coke
	PG	Gaseous Propane
	RFO	Residual Fuel Oil (including No. 5, and No. 6 fuel oils, and bunker C fuel oil)
Natural Gas and Other Gases	SG	Synthesis Gas from Petroleum Coke
	WO	Waste/Other Oil (including crude oil, liquid butane, liquid propane, naphtha, oil waste, re-refined motor oil, sludge oil, tar oil, or other petroleum-based liquid wastes)
	BFG	Blast Furnace Gas
	NG	Natural Gas
Nuclear	OG	Other Gas
	NUC	Nuclear (including Uranium, Plutonium, and Thorium)
Hydroelectric Conventional	WAT	Water at a Conventional
	(Prime Mover = HY)	Hydroelectric Turbine, and water used in Wave Buoy Hydrokinetic Technology, Current Hydrokinetic Technology, and Tidal Hydrokinetic Technology
	WAT	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
Hydroelectric Pumped Storage	WDS	Wood/Wood Waste Solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids)
	WDL	Wood Waste Liquids (excluding Black Liquor but including red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids)
Wood and Wood-Derived Fuels	BLQ	Black Liquor
	AB	Agricultural By-Products
	MSW	Municipal Solid Waste
	OBG	Other Biomass Gas (including digester gas, methane, and other biomass gases)
	OBL	Other Biomass Liquids
	OBS	Other Biomass Solids
Other Biomass	LFG	Landfill Gas
	SLW	Sludge Waste
	SUN	Solar (including solar thermal)
	WND	Wind
	GEO	Geothermal
	PUR	Purchased Steam
Other Renewable Energy Sources	WH	Waste heat not directly attributed to a fuel source
	TDF	Tire-Derived Fuels
	MWH	Electricity used for energy storage
	OTH	Other

**Sensitive Data:** The tested heat rate data collected on the Form EIA-860 are considered business sensitive.

## Form EIA-861

The Form EIA-861 is a mandatory annual census of electric power industry participants in the United States. Prior to data year 2012, the survey was used to collect information on power sales and revenue data from approximately 3,300 respondents. About 3,100 are electric utilities, and the remainders are nontraditional entities such as energy service providers or the unregulated subsidiaries of electric utilities and power marketers.

For data year 2012 and forward, EIA modified the frame of the Form EIA-861, "Annual Electric Power Industry Report," from a census to a sample, and EIA is using model-based methods to estimate the sales, revenues, and customer counts by sector and state for those respondents that have been removed from the frame. EIA created a new Form EIA-861S, "Annual Electric Power Industry Report (Short Form)," for the respondents that have been removed from the Form EIA-861 frame. The form collects limited data such as total sales, revenues, and customer counts by state.

**Transportation Sector:** Prior to 2003, sales of electric power for transportation (e.g., city subway systems) were included in the Other Sector, along with sales to customers for public buildings, traffic signals, public street lighting, and sales to irrigation consumers. Beginning with the 2003 data collection, sales to the Transportation Sector were collected separately. The balance of the Other Sector was reclassified as Commercial Sector sales except that sales to irrigation customers, where separately identified, were reclassified to the Industrial Sector.

On the Form EIA-861, the Transportation Sector is defined as electrified rail, primarily urban transit, light rail, automated guideway, and other rail systems whose primary propulsive energy source is electricity. Electricity sales to Transportation Sector consumers whose primary propulsive energy source is not electricity (i.e., gasoline, diesel fuel, etc.) are not included.

Benchmark statistics were reviewed from outside surveys, most notably the U.S. Department of Transportation (DOT) Federal Transit Administration's National Transportation Database, a source previously used by EIA to estimate electricity transportation consumption. The DOT survey indicated the State and City locations of expected respondents. The Form EIA-861 survey methodology assumed that sales, revenue, and customer counts associated with these mass transit systems would be provided by the incumbent utilities in these areas, relying on information drawn routinely from rate schedules and classifications designed to serve the sector separately and distinctly. In 2010, 64 respondents reported transportation data in 28 States.

**Data Reconciliation:** The Electric Power Annual reports total sales volumes (megawatthours) of electricity to ultimate consumers and customer counts in States with deregulated markets as the sum of bundled sales reported by full-service providers and delivery reported by transmission and distribution utilities. ERUS has concluded that the sales of electricity to ultimate consumers data reported by delivery utilities are more reliable than data reported by power marketers and Energy Service Providers (ESPs).

The reporting methodology change uses sales volumes and a customer count reported by distribution utilities, and modifies only an incremental revenue value, representing revenue associated with misreported sales assumed to be attributable to the ESPs that were under-represented in the survey frame.

**Instrument and Design History:** The Form EIA-861 was implemented in January 1985 for collection of data as of year-end 1984. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

**Average Retail Price of Electricity:** This value represents the average cost per unit of electricity sold and is calculated by dividing retail electric revenue by the corresponding sales of electricity. The average retail price of electricity is calculated for all consumers and for each end-use sector.

The electric revenue used to calculate the average retail price of electricity is the operating revenue reported by the electric power industry participant. Operating revenue includes energy charges, demand charges, consumer service charges, environmental surcharges, fuel adjustments, and other miscellaneous charges. Electric power industry participant operating revenues also include ratepayer reimbursements for State and Federal income taxes and other taxes paid by the utility.

This computed average retail price of electricity reported in this publication is a weighted average of consumer revenue and sales and does not equal the per kWh rate charged by the electric power industry participant to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs of the electric power industry participant for providing electrical service.

**Issues within Historical Data Series:** Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. The number of ultimate customers is an average of the number of customers at the close of each month. Also see the discussion of the Transportation Sector, above.

**Net-Metering:** This section was expanded in 2011. Previously, customer count by sector was the only data collected and published. In 2010, the EIA-861 started collecting the capacity of the net-metered installations by sector and technology. The technology types are: photovoltaic (PV), wind and other.

**Demand-Side Management (DSM):** Prior to 2011, DSM data was separated into two categories, large and small utilities. Some tables contained data for just large utilities and others contained both categories, published separately. Starting in 2011, there is no longer a division in the data. All tables now include all DSM data from utilities; this change is also reflected in the historical data.

Starting in 2011, a new category of respondents were added to the EIA-861, non-utility DSM administrators: Efficiency Maine Trust, Energy trust of Oregon, Focus on Energy, NYSERDA and Vermont Energy Investment Corporation.

The following definitions are supplied to assist in interpreting DSM data. Utility costs reflect the total cash expenditures for the year, in nominal dollars, that used to support DSM programs.

- **Actual Peak Load Reduction** is the actual reduction in annual peak load achieved by all program participants during the reporting year, at the time of annual peak load, as opposed to the installed peak load reduction capability (potential peak load reduction). Actual peak load reduction is reported by large utilities only.
- **Energy Savings** is the change in aggregate electricity use (measured in megawatthours) for consumers that participate in a utility DSM program. These savings represent changes at the consumer's meter (i.e., exclude transmission and distribution effects) and reflect only activities that are undertaken specifically in response to utility-administered programs, including those activities implemented by third parties under contract to the utility.
- **Large Utilities** are those electric utilities with annual sales to ultimate customers or sales for resale greater than or equal to 150 million kilowatthours in 1998-2009 and, for years prior, the threshold was set at 120 million kilowatthours.
- **Potential Peak Load Reduction** is the potential peak load reduction as a result of load management.

**Advanced Metering:** New in 2011, Automated Meter Reading (AMR) and Advanced Metering Infrastructure (AMI), including historical data back to 2007. From 2007-2009, the count by sector is for number of customers, for 2010-2011, the count is the actual number of meters. For example; if an industrial customer had 12 meters, in 2007-2009 the count would have been 1, in 2010-2011, the count would be 12.

**Sensitive Data:** None.

### **Forms EIA-906 and EIA-920 (Replaced in 2008 by Form EIA-923)**

The Form EIA-906 was used to collect plant-level data on generation, fuel consumption, stocks, and fuel heat content, from electric utilities and nonutilities. Data were collected monthly from a model-based sample of approximately 1,700 utility and nonutility electric power plants. The form was also used to collect these statistics from another 2,667 plants (i.e., all other generators 1 MW or greater) on an annual basis. The form was ended after the 2007 data collection and replaced by the Form EIA-923.

**Instrument and Design History:** The Bureau of Census and the U.S. Geological Survey collected, compiled, and published data on the electric power industry prior to 1936. After 1936, the FPC assumed all data collection and publication responsibilities for the electric power industry and implemented the Form FPC-4. The Federal Power Act, Section 311 and 312, and FPC Order 141 defined the legislative authority to collect power production data. The Form EIA-759 replaced the Form FPC-4 in January 1982. In 1996, the Form EIA-900 was initiated to collect sales for resale data from unregulated entities. In 1998, the Form EIA-900 was modified to collect sales for resale, gross generation, and sales to end user

data. In 1999, the form was modified to collect net generation, consumption, and ending stock data. In 2000, the form was modified to include data on the production of useful thermal output (typically process steam) by combined heat and power (CHP) plants.

In January 2001, Form EIA-906 superseded Forms EIA-759 and EIA-900. In January 2004, Form EIA-920 superseded Form EIA-906 for those plants defined as CHP plants; all other plants that generated electricity continued to report on Form EIA-906. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data. In January 2008, the Form EIA-923 superseded this form.

**Issues within Historical Data Series:** A relatively small number electric commercial- and industrial-only plants are, for the purposes of this report, included in the CHP data categories. The small number of electric utility plants that are CHP units are reported together with other utility plants. No information on the production of useful thermal output (UTO) or fuel consumption for UTO was collected or estimated for the electric utility CHP plants.

**Sensitive Data:** The only business sensitive data element collected on the Forms EIA-906 and EIA-920 was fuel stocks at the end of the reporting period.

### **Form EIA-923**

Form EIA-923, "Power Plant Operations Report," is used to collect information on receipts and cost of fossil fuels, fuel stocks, generation, consumption of fuel for generation, nonutility source and disposition of electricity, combustion by-product collection and disposal, and cooling systems, as well as operational data for flue gas desulfurization, particulates, and nitrous oxide controls. Data are collected from a monthly sample of approximately 1,900 plants, which includes a census of nuclear and pumped-storage hydroelectric plants. The plants in the monthly sample report their receipts, cost and stocks of fossil fuels, electric power generation, and the total consumption of fuels for both electric power generation and, at combined heat and power (CHP) plants, useful thermal output. At the end of the year, the monthly respondents report their annual source and disposition of electric power (nonutilities only), operational data for air emissions controls and cooling systems, and the collection and disposal of combustion by-products on the Form EIA-923 Supplemental Form (Schedules 6, 7, and 8A to 8F). Approximately 4,200 plants, representing all generators not included in the monthly sample and with a nameplate capacity of 1 MW or more, report applicable data on the entire form annually. In addition to electric power generating plants, respondents include fuel storage terminals without generating capacity that receive shipments of fossil fuel for eventual use in electric power generation. The monthly data are due by the last day of the month following the reporting period.

Receipts of fossil fuels, fuel cost and quality information, and fuel stocks at the end of the reporting period are all reported at the plant level. Fuel receipts and costs are collected from plants with a nameplate capacity of 50 MW or more and burn fossil fuels. Plants that burn organic fuels and have a steam turbine capacity of at least 10 megawatts report consumption at the boiler level and generation at the generator level for each month, regardless of whether the plant reports in the monthly sample or reports annually. For all other plants, consumption is reported at the prime-mover level and generation is reported at the prime-mover level or, for noncombustible sources (e.g., wind, nuclear), at the prime-

mover and energy source levels (including generating units for nuclear only). The source and disposition of electricity are reported annually for nonutilities at the plant level, as is revenue from sales for resale. Operational data for air emissions equipment are collected annually from facilities that have a steam turbine capacity of at least 10 megawatts, and operational data on cooling systems and data on the collection and disposal of combustion by-products are collected from facilities that have a steam turbine capacity of at least 100 megawatts.

**Instrument and Design History:** See discussion of predecessor forms (EIA-906, -920, -767, and -423, and FERC Form 423).

**Imputation:** For data collected monthly, regression prediction, or imputation, is done for all missing data including non-sampled units and any non-respondents. For data collected annually, imputation is performed for non-respondents. For gross generation and total fuel consumption, multiple regression is used for imputation (see discussion, above). Approximately 0.02 percent of the national total generation for is imputed, although this will vary by State and energy source.

When gross generation is reported and net generation is not available, or vice versa, net or gross generation is estimated by using a fixed ratio of net to gross generation by prime-mover type and installed emissions equipment. These ratios are:

Net Generation = (Factor) x Gross Generation
<u>Prime Movers:</u>
Combined Cycle Steam - 0.97
Combined Cycle Single Shaft - 0.97
Combined Cycle Combustion Turbine - 0.97
Compressed Air - 0.97
Fuel Cell - 0.99
Gas Turbine - 0.98
Hydroelectric Turbine - 0.99
Hydroelectric Pumped Storage - 0.99
Internal Combustion Engine - 0.98
Other - 0.97
Photovoltaic - 0.99
Steam Turbine - 0.97
Wind Turbine - 0.99
<u>Environmental Equipment:</u>
Flue Gas Desulfurization - 0.97
Flue Gas Particulate 0.99
All Others - 0.97

For stocks, a linear combination of the prior month's ending stocks value and the current month's consumption and receipts values is used.

**Receipts of Fossil Fuels:** Receipts data, including cost and quality of fuels, are collected at the plant level from selected electric generating plants and fossil-fuel storage terminals in the United States. Power plants include independent power producers, electric utilities, and commercial and industrial CHP

facilities with a total fossil-fueled nameplate capacity of 50 megawatts or more. The data on cost and quality of fuel shipments are used to produce aggregates and weighted averages for each fuel type at the State, Census division, and U.S. levels.

The units for receipts are: 1) coal and petroleum coke, tons and million Btu per ton; 2) petroleum, barrels and million Btu per barrel.; and gases, thousand cubic feet (Mcf) and million Btu per thousand cubic feet.

**Net and Gross Generation and Fuel Consumption and Stocks:** Generation data are collected in megawatthours from all power plants with a sum of nameplate capacity at least 1 MW. The fuels consumed are collected in tons (solids), barrels (liquids) and thousand cubic feet (gases). Fuels are grouped into coal, petroleum liquids, petroleum coke, natural gas, other gases, and other miscellaneous fuels. Energy consumption is not collected for nuclear, wind, solar, geothermal or other plants that do not burn fuels. For information on fuel groupings, see the instructions to the Form EIA-923 at [http://www.eia.gov/survey/form/eia\\_923/instructions.pdf](http://www.eia.gov/survey/form/eia_923/instructions.pdf). **Combustion By-Product Collection and Disposal:** Data are collected in thousand tons. Associated financial data for by-products (O&M and capital expenses and revenue) are collected in thousand dollars.

**Air Emissions Equipment:** Operational efficiencies and emission rates are collected for flue gas desulfurization, particulate matter, and nitrous oxide control equipment for steam-electric units with at least 10 MW nameplate capacity.

**Cooling Systems:** Operational data on water use is collected from steam-electric plants, including nuclear plants, with at least 100 MW nameplate capacity.

**Methodology to Estimate Biogenic and Non-biogenic Municipal Solid Waste:**<sup>4</sup> Municipal Solid Waste (MSW) consumption for generation of electric power is split into its biogenic and non-biogenic components beginning with 2001 data by the following methodology:

The tonnage of MSW consumed is reported on the Form EIA-923. The composition of MSW and categorization of the components were obtained from the Environmental Protection Agency (EPA) publication, *Municipal Solid Waste in the United States: 2005 Facts and Figures*. The Btu contents of the components of MSW were obtained from various sources.

In 2011, the components of MSW as a percentage of the total were updated. The updated values were applied to final 2011 data and to preliminary 2012 and 2013 data. Although updated component percentages for 2006 through 2010 were available, historical EIA data series for consumption of MSW and net generation were not revised for 2005 to 2010. The tables below are the percentages applied to the EIA data for each year.

The potential quantities of combustible MSW discards (which include all MSW material available for combustion with energy recovery, discards to landfill, and other disposal) were multiplied by their respective Btu contents. The EPA-based categories of MSW were then classified into renewable and non-renewable groupings. From this, EIA calculated how much of the energy potentially consumed from

MSW was attributed to biogenic components and how much to non-biogenic components (see Table 1 and 2, below).<sup>5</sup>

These values are used to allocate consumption of municipal solid waste and net generation published in the Electric Power Monthly tables. The tons of biogenic and non-biogenic components were estimated with the assumption that glass and metals were removed prior to combustion. The average Btu/ton for the biogenic and non-biogenic components is estimated by dividing the total Btu consumption by the total tons. Published net generation attributed to biogenic MSW and non-biogenic MSW is classified under Other Renewables and Other, respectively.

**Table 1. Btu consumption for biogenic and non-biogenic municipal solid waste (percent)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Biogenic	57	56	55	55	56	56	56	56	56	56	51
Non-biogenic	43	44	45	45	44	44	4	44	44	44	49

**Table 2. Tonnage consumption for biogenic and non-biogenic municipal solid waste (percent)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Biogenic	77	77	76	76	75	75	75	75	75	75	64
Non-biogenic	23	23	24	24	25	25	25	25	25	25	36

**Useful Thermal Output (UTO):** With the implementation of the Form EIA-923, “Power Plant Operations Report,” in 2008, combined heat and power (CHP) plants were required to report total fuel consumed and electric power generation. Beginning with preliminary January 2008 data, EIA estimated the allocation of the total fuel consumed at CHP plants between electric power generation and UTO.

The estimated allocation methodology is summarized in the following paragraphs. The methodology was retroactively applied to 2004-2007 data. Prior to 2004, UTO was collected on the Form EIA-906 and an estimated allocation of fuel for electricity was not necessary.

First, an efficiency factor is determined for each plant and prime mover type. Based on data for electric power generation and UTO collected in 2003 (on Form EIA-906, “Power Plant Report”), efficiency was calculated for each prime mover type at a plant. The efficiency factor is the total output in Btu, including electric power and UTO, divided by the total input in Btu. Electric power is converted to Btu at 3,412 Btu per kilowatthour.

Second, to calculate the amount of fuel for electric power, the gross generation in Btu is divided by the efficiency factor. The fuel for UTO is the difference between the total fuel reported and the fuel for electric power generation. UTO is calculated by multiplying the fuel for UTO by the efficiency factor.

In addition, if the total fuel reported is less than the estimated fuel for electric power generation, then the fuel for electric power generation is equal to the total fuel consumed, and the UTO will be zero.

**Issues within Historical Data Series for Receipts and Cost and Quality of Fossil Fuels:** Values for receipts of natural gas for 2001 forward do not include blast furnace gas or other gas.

Historical data collected on FERC Form 423 and published by EIA have been reviewed for consistency between volumes and prices and for their consistency over time. However, these data were collected by FERC for regulatory rather than statistical and publication purposes. EIA did not attempt to resolve any late filing issues in the FERC Form 423 data. In 2003, EIA introduced a procedure to estimate for late or non-responding entities that were required to report on the FERC Form 423. Due to the introduction of this procedure, 2003 and later data cannot be directly compared to previous years' data.

Prior to 2008, regulated plants reported receipts data on the FERC Form 423. These plants, along with unregulated plants, now report receipts data on Schedule 2 of Form EIA-923. Because FERC issued waivers to Form 423 filing requirements to some plants who met certain criteria, and because not all types of generators were required to report (only steam turbines and combined cycle units reported), a significant number of plants either did not submit fossil fuel receipts data or submitted only a portion of their fossil fuel receipts. Since Form EIA-923 does not have exemptions based on generator type, or reporting waivers, receipts data from 2008 and later cannot be directly compared to previous years' data for the regulated sector. Also beginning with January 2008 data, tables for total receipts included imputed quantities for plants with capacity one megawatt or more, to be consistent with other electric power data. Previous published receipts data were from plants at or over a 50 megawatt threshold, which was a legacy of their original collection as information for a regulatory agency, not as a survey to provide more meaningful estimates of totals for statistical purposes. Totals appeared to become smaller as more electric production came from unregulated plants, until the Form EIA-423 was created to help fill that gap. As a further improvement, estimation of all receipts for the universe normally depicted in the Electric Power Annual (i.e., one megawatt and above), with associated relative standard errors, provides a more complete assessment of the market.

**Issues within Historical Data Series for Generation and Consumption:** Beginning in 2008, a new method of allocating fuel consumption between electric power generation and UTO was implemented (see above). This new methodology evenly distributes a CHP plant's losses between the two output products (electric power and UTO). In the historical data, UTO was consistently assumed to be 80 percent efficient and all other losses at the plant were allocated to electric power. This change causes the fuel for electric power to be lower while the fuel for UTO is higher as both are given the same efficiency. This results in the appearance of an increase in efficiency of production of electric power between periods.

**Sensitive Data:** The total delivered cost of fuel delivered to nonutilities, the commodity cost of fossil fuels, and fuel stocks are considered business sensitive.

## Average Capacity Factors

This section describes the methodology for calculating capacity factors by fuel and technology type for operating electric power plants. Capacity factor is a measure (expressed as a percent) of how often an

electric generator operates over a specific period of time, using a ratio of the actual output to the maximum possible output over that time period.

The capacity factor calculation only includes operating electric generators in the Electric Power Sector (sectors 1, 2 and 3) using the net generation reported on the Form EIA-923 and the net summer capacity reported on the Form EIA-860. The capacity factor for a particular fuel/technology type is given by:

$$\text{capacity factor} = \frac{\sum_{x,m} \text{generation}_{x,m}}{\sum_{x,m} \text{capacity}_x * \text{available time}_{x,m}}$$

Where x represents generators of that fuel/technology combination and m represents the period of time (month or year). Generation and capacity are specific to a generator, and the generator is categorized by its primary fuel type as reported on the EIA-860. All generation from that generator is included, regardless of other fuels consumed. Available time is also specific to the generator in order to account for differing online and retirement dates. Therefore, these published capacity factors will differ from a simple calculation using annual generation and capacity totals from the appropriate tables in this publication.

## Air Emissions

This section describes the methodology for calculating estimated emissions of carbon dioxide (CO<sub>2</sub>) from electric generating plants for 1989 through the present, as well as the estimated emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) from electric generating plants for 2001 through the present. For a description of the methodology used for other years, see the technical notes to the EPA 2003.

**Methodology Overview:** Initial estimates of uncontrolled SO<sub>2</sub> and NO<sub>x</sub> emissions for all plants are made by applying an emissions factor to fuel consumption data collected by EIA on the Form EIA-923. An emission factor is the average quantity of a pollutant released from a power plant when a unit of fuel is burned, assuming no use of pollution control equipment. The basic relationship is:

$$\text{Emissions} = \text{Quantity of Fuel Consumed} \times \text{Emission Factor}$$

Quantity is defined in physical units (e.g., tons of solid fuels, million cubic feet of gaseous fuels, and thousands of barrels of liquid fuels) for determining NO<sub>x</sub> and SO<sub>2</sub> emissions. As discussed below, physical quantities are converted to millions of Btus for calculating CO<sub>2</sub> emissions.

For some fuels, the calculation of SO<sub>2</sub> emissions requires including in the formula the sulfur content of the fuel measured in percentage of weight. Examples include coal and fuel oil. In these cases the formula is:

$$\text{Emissions} = \text{Quantity of Fuel Consumed} \times \text{Emission Factor} \times \text{Sulfur Content}$$

The fuels that require the percent sulfur as part of the emissions calculation are indicated in Table A.1., which lists the SO<sub>2</sub> emission factors used for this report.

In the case of SO<sub>2</sub> and NO<sub>x</sub> emissions, the factor applied to a fuel can also vary with the combustion system: a steam-producing boiler, a combustion turbine, or an internal combustion engine. In the case of boilers, NO<sub>x</sub> emissions can also vary with the firing configuration of a boiler and whether or not the boiler is a wet-bottom or dry-bottom design.<sup>6</sup> These distinctions are shown in Tables A.1. and A.2.

For SO<sub>2</sub> and NO<sub>x</sub>, the initial estimate of uncontrolled emissions is reduced to account for the plant's operational pollution control equipment, when data on control equipment are available from the historical Form EIA-767 survey (i.e., data for the years 2005 and earlier) and the EIA-860 and EIA-923 surveys for the years 2007 through 2010. A special case for removal of SO<sub>2</sub> is the fluidized bed boiler, in which the sulfur removal process is integral with the operation of the boiler. The SO<sub>2</sub> emission factors shown in Table A.1. for fluidized bed boilers already account for 90 percent removal of SO<sub>2</sub> since, in effect, the plant has no uncontrolled emissions of this pollutant.

Although SO<sub>2</sub> and NO<sub>x</sub> emission estimates are made for all plants, in many cases the estimated emissions can be replaced with actual emissions data collected by the U.S. Environmental Protection Agency's (U.S. EPA's) Continuous Emissions Monitoring System (CEMS) program. (CEMS data for CO<sub>2</sub> are incomplete and are not used in this report.) The CEMS data account for the bulk of SO<sub>2</sub> and NO<sub>x</sub> emissions from the electric power industry. For those plants for which CEMS data are available, the EIA estimates of SO<sub>2</sub> and NO<sub>x</sub> emissions are employed for the limited purpose of allocating emissions by fuel, since the CEMS data itself do not provide a detailed breakdown of plant emissions by fuel. For plants for which CEMS data are unavailable, the EIA-computed values are used as the final emissions estimates.

There are a number of reasons why the historical data are periodically revised. These include data revisions, revisions in emission and technology factors, and changes in methodology. For instance, the 2008 Electric Power Annual report features a revision in historic CO<sub>2</sub> values. This revision occurred due to a change in the accepted methodology regarding adjustments made for the percentage combustion of fuels.

The emissions estimation methodologies are described in more detail below.

**CO<sub>2</sub> Emissions:** CO<sub>2</sub> emissions are estimated using the information on fuel consumption in physical units and the heat content of fuel collected on the Form EIA-923 and predecessors. Heat content information is used to convert physical units to millions of Btu (MMBtu) consumed. To estimate CO<sub>2</sub> emissions, the fuel-specific emission factor from Table A.3. is multiplied by the fuel consumption in MMBtu.

The estimation procedure calculates uncontrolled CO<sub>2</sub> emissions. CO<sub>2</sub> control technologies are currently in the early stages of research and there are no commercial systems installed. Therefore, no estimates of controlled CO<sub>2</sub> emissions are made.

**SO<sub>2</sub> and NO<sub>x</sub> Emissions:** To comply with environmental regulations controlling SO<sub>2</sub> emissions, many coal-fired generating plants have installed flue gas desulfurization (FGD) units. Similarly, NO<sub>x</sub> control regulations require many fossil-fueled plants to install low-NO<sub>x</sub> burners, selective catalytic reduction systems, or other technologies to reduce emissions. It is common for power plants to employ two or even three NO<sub>x</sub> control technologies; accordingly, the NO<sub>x</sub> emissions estimation approach accounts for the combined effect of the equipment (Table A.4.). However, control equipment information is available only for plants that reported on the Form EIA-923 and for historical data from the Form EIA-767. The Form EIA-860, EIA-923, and the historical EIA-767 surveys are limited to plants with boilers fired by combustible fuels<sup>7</sup> with a minimum generating capacity of 10 megawatts (nameplate). Pollution control equipment data are unavailable from EIA sources for plants that did not report on the historical EIA-767 survey, or the Forms EIA-860 and EIA-923.

The following method is used to estimate SO<sub>2</sub> and NO<sub>x</sub> emissions:

- For steam electric plants, uncontrolled emissions are estimated using the emission factors shown in Tables A.1. and A.2. as well as reported data on fuel consumption, sulfur content, and boiler firing configuration. Controlled emissions are then determined when pollution control equipment is present. Although information on control equipment was not collected in 2006, updates for new installations during this period were made based on EPA data. Beginning in 2007, these data were collected on the Forms EIA-860 and EIA-923. For SO<sub>2</sub>, the reported efficiency of the plant's FGD units is used to convert uncontrolled to controlled emission estimates. For NO<sub>x</sub>, the reduction percentages shown in Table A.4. are applied to the uncontrolled estimates.
- For plants and prime movers not reported on the historical Form EIA-767 survey or Forms EIA-860 and EIA-923, uncontrolled emissions are estimated using the Table A.1. and Table A.2. emission factors and the following data and assumptions:
  - Fuel consumption is taken from the Form EIA-923 and predecessors.
  - The sulfur content of the fuel is estimated from fuel receipts for the plant reported on the Form EIA-923. When plant-specific sulfur content data are unavailable, the national average sulfur content for the fuel, computed from the Form EIA-923 is applied to the plant.
  - As noted earlier, the emission factor for plants with boilers depends in part on the type of combustion system, including whether a boiler is wet-bottom or dry-bottom, and the boiler firing configuration. However, this boiler information is unavailable for steam electric plants that did not report on the historical Forms EIA-767 or EIA-860. For these cases, the plant is assumed to have a dry-bottom, non-cyclone boiler using a firing method that falls into the "All Other" category shown on Table A.1.<sup>8</sup>

For the plants that did not report on the historical Form EIA-767 or EIA-860, pollution control equipment data are unavailable and the uncontrolled estimates are not reduced.
- If actual emissions of SO<sub>2</sub> or NO<sub>x</sub> are reported in the EPA's CEMS data, the EIA estimates are replaced with the CEMS values, using the EIA estimates to allocate the CEMS plant-level data by fuel. If CEMS data are unavailable, the EIA estimates are used as the final values.

### **Conversion Factors for Propane, Petroleum Coke, and Synthesis Gases.**

The quantity conversion for petroleum coke is 5 barrels (of 42 U.S. gallons each) per short ton (2,000 pounds), propane is 1.53 thousand cubic feet per barrel, coal-derived synthesis gas is 98.06 thousand cubic feet per ton, and petroleum coke-derived synthesis gas is 107.31 thousand cubic feet per ton.

### **Relative Standard Error**

The relative standard error (RSE) statistic, usually given as a percent, describes the magnitude of sampling error that might reasonably be incurred. The RSE is the square root of the estimated variance, divided by the variable of interest. The variable of interest may be the ratio of two variables, or a single variable.

The sampling error may be less than the non-sampling error. In fact, large RSE estimates found in preliminary work with these data have often indicated non-sampling errors, which were then identified and corrected. Non-sampling errors may be attributed to many sources, including response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding data obtained, and other errors of collection, response, or coverage. These non-sampling errors also occur in complete censuses.

Using the Central Limit Theorem, which applies to sums and means such as are applicable here, there is approximately a 68 percent chance that the true total or mean is within one RSE of the estimated total. Note that reported RSEs are always estimates, themselves, and are usually, as here, reported as percents. As an example, suppose that a net generation from coal value is estimated to be 1,507 total million kilowatthours with an estimated RSE of 4.9 percent. This means that, ignoring any non-sampling error, there is approximately a 68 percent chance that the true million kilowatthour value is within approximately 4.9 percent of 1,507 million kilowatthours (that is, between 1,433 and 1,581 million kilowatthours). Also under the Central Limit Theorem, there is approximately a 95 percent chance that the true mean or total is within 2 RSEs of the estimated mean or total.

Note that there are times when a model may not apply, such as in the case of a substantial reclassification of sales, when the relationship between the variable of interest and the regressor data does not hold. In such a case, the new information represents only itself, and such numbers are added to model results when estimating totals. Further, there are times when sample data may be known to be in error, or are not reported. Such cases are treated as if they were never part of the model-based sample, and values are imputed.

## Business Classification

Nonutility power producers consist of entities that own or operate electric generating units but are not subject to direct economic regulation of rates, such as by state utility commissions. Nonutility power producers do not have a designated franchised service area. In addition to entities whose primary business is the production and sale of electric power, entities with other primary business classifications can and do sell electric power. These can consist of, for example, manufacturing facilities and paper mills.

The EIA, in the Electric Power Annual and other data products, classifies nonutility power producers into the following categories:

- **Electric Utility (Sector 1):** All regulated plants with a primary purpose of selling electricity in the public markets (NAICS = 22).
- **Independent Power Producers (Sector 2):** All non-regulated plants with a primary purpose of electric power generation and a primary purpose of selling electricity in the public markets (NAICS = 22) with no ability to cogenerate heat and power.
- **Electric Power, Combined Heat and Power (Sector 3):** All non-regulated plants with a primary purpose of electric power generation and a primary purpose of selling electricity in the public markets (NAICS = 22) with the ability to cogenerate heat and power.
- **Commercial, Non-Combined Heat and Power (Sector 4):** All plants with a commercial primary purpose with no ability to cogenerate heat and power.

- **Commercial, Combined Heat and Power (Sector 5):** All plants with a commercial primary purpose with the ability to cogenerate heat and power.
- **Industrial, Non-Combined Heat and Power (Sector 6):** All plants with an industrial primary purpose with no ability to cogenerate heat and power.
- **Industrial, Combined Heat and Power (Sector 7):** All plants with an industrial primary purpose with the ability to cogenerate heat and power.

The following is a list of the North American Industry Classification System (NAICS) classifications used by EIA.

	<b>Agriculture, Forestry, Fishing and Hunting</b>
111	Crop Production
112	Animal Production
113	Forestry and Logging
114	Fishing, Hunting and Trapping
115	Support Activities for Agriculture and Forestry
	<b>Mining, Quarrying, and Oil and Gas Extraction</b>
211	Oil and Gas Extraction
2121	Coal Mining
2122	Metal Ore Mining
2123	Nonmetallic Mineral Mining and Quarrying
	<b>Utilities</b>
22	Electric Power Generation, Transmission and Distribution (other than 2212, 2213, 22131, 22132 or 22133)
2212	Natural Gas Distribution
22131	Water Supply and Irrigation Systems
22132	Sewage Treatment Facilities
22133	Steam and Air-Conditioning Supply
	<b>Manufacturing</b>
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills (Fiber, Yarn, Thread, Fabric, and Textiles)
314	Textile Product Mills
315	Apparel Manufacturing
316	Leather and Allied Product Manufacturing
321	Wood Product Manufacturing
322	Paper Manufacturing (other than 322122 or 32213)
322122	Newsprint Mills
32213	Paperboard Mills
323	Printing and Related Support Activities
324	Petroleum and Coal Products Manufacturing (other than 32411)
32411	Petroleum Refineries
325	Chemical Manufacturing (other than 32511, 32512, 325193, 325188, 3252 325211, 3253 or 325311)
32511	Petrochemical Manufacturing
32512	Industrial Gas Manufacturing
325193	Ethyl Alcohol Manufacturing (including Ethanol)
325188	Industrial Inorganic Chemicals
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing (other than

325211) 325211  
325211 Plastics Material and Resin Manufacturing  
3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing (other than 325311)  
325311 Nitrogenous Fertilizer Manufacturing  
326 Plastics and Rubber Products Manufacturing  
327 Nonmetallic Mineral Product Manufacturing (other than 32731)  
32731 Cement Manufacturing  
331 Primary Metal Manufacturing (other than 331111 or 331312)  
331111 Iron and Steel Mills  
331312 Primary Aluminum Production  
332 Fabricated Metal Product Manufacturing  
333 Machinery Manufacturing  
334 Computer and Electronic Product Manufacturing  
335 Electrical Equipment, Appliance, and Component Manufacturing  
336 Transportation Equipment Manufacturing  
337 Furniture and Related Product Manufacturing  
339 Miscellaneous Manufacturing

**421 Wholesale Trade**

**441 Retail Trade**

**Transportation and Warehousing**

481 Air Transportation  
482 Rail Transportation  
483 Water Transportation  
484 Truck Transportation  
485 Transit and Ground Passenger Transportation  
486 Pipeline Transportation  
487 Scenic and Sightseeing Transportation  
488 Support Activities for Transportation (other than 4881, 4882, 4883 or 4884)  
4881 Support Activities for Air Transportation (including Airports)  
4882 Support Activities for Rail Transportation (including Rail Stations)  
4883 Support Activities for Water Transportation (including Marinas)  
4884 Support Activities for Road Transportation  
491 Postal Service  
492 Couriers and Messengers  
493 Warehousing and Storage

**Information**

511 Publishing Industries (except Internet)  
512 Motion Picture and Sound Recording Industries  
515 Broadcasting (except Internet)  
517 Telecommunications  
518 Data Processing, Hosting, and Related Services  
519 Other Information Services

**521 Finance and Insurance**

**53 Real Estate and Rental and Leasing (including Convention Centers and Office Buildings)**

**541 Professional, Scientific, and Technical Services**

**55 Management of Companies and Enterprises**

	<b>Administrative and Support and Waste Management and Remediation Services</b>
561	Administrative and Support Services
562	Waste Management and Remediation Services (other than 562212 or 562213)
562212	Solid Waste Landfill
562213	Solid Waste Combustors and Incinerators
611	<b>Educational Services</b>
	<b>Health Care and Social Assistance</b>
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities
624	Social Assistance
	<b>Arts, Entertainment, and Recreation</b>
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
	<b>Accommodation and Food Services</b>
721	Accommodation
722	Food Services and Drinking Places
	<b>Other Services (except Public Administration)</b>
811	Repair and Maintenance
812	Personal and Laundry Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
814	Private Households
92	<b>Public Administration (other than 921, 922, 92214 or 928)</b>
921	Executive, Legislative, and Other General Government Services
922	Justice, Public Order and Safety Activities (other than 92214)
92214	Correctional Facilities
928	National Security and International Affairs (including Military Bases)

## Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

Monthly generation from small scale PV solar resources is an estimation of the generation produced from PV solar resources and not the results of a data collection effort for generation directly, with the exception of "Third Party Owned" or (TPO) solar installations which has direct data collection. TPO data however is not comprehensive. TPOs do not operate in every state, TPO collected data is not a large portion of the estimated amount, and the data has been collected for limited period of time. The generation estimate is based on data collected for PV solar capacity.

Capacity of PV solar resources is collected directly from respondents. These data are collected on several EIA forms and from several types of respondents. Monthly data for net-metered PV solar capacity is reported on the Form EIA-826. Form EIA-826 is a cutoff sample drawn from the annual survey Form EIA-861 which collects this data from all respondents. Using data from both of these surveys we have a regression model to impute for the non-sampled monthly capacity.

The survey instruments collect solar net metering capacity from reporting utilities by state and customer class. There are four customer classes: residential, commercial, industrial and transportation.

However, the estimation process included only the residential, commercial and industrial customers.<sup>1</sup>

Data for these customer classes were further classified by U.S. Census Regions, to ensure adequate number of customer observations in for each estimation group.

**Estimation Model:** The total PV capacity reported by utilities in the annual EIA-861 survey is the single primary input (regressor) to the monthly estimation of PV capacity by state. The model tested for each Census Region was of the form:

$$y_{i_{2015,m}} = \beta_1 x_{i_{2013}} + w_i^{-1/2} e_i, \text{ where}$$

$x_{i_{2013}}$  is the  $i^{\text{th}}$  utility's 2013 (or the last published year) solar PV capacity

$y_{i_{2015,m}}$  is the  $i^{\text{th}}$  utility's month  $m$ , 2015 (or the current year) reported solar PV capacity

$w_i$  is the weight factor, which is the inverse of  $x_{i_{2013}}$

$\beta_1$  is effectively the growth rate of reported month  $m$  solar PV capacity

$e_i$  is the error term

The model checks for outliers and removes them from the regression equation inputs. The model calculates RSEs by sector, state, census region, and US total. Once we have imputed for all of the monthly net-metered PV solar capacity we add to total net metered capacity, the PV solar capacity collected on the Form EIA-861 for distributed and dispersed resources that are not net metered.

We use a second model to estimate the generation using this capacity as an input. The original methodology was developed for the “Annual Energy Outlook” based on our “NEMS” modelled projections several years ago. The original method underwent a calibration project designed to develop PV production levels for the NEMS projections consistent with simulations of a National Renewable Energy Laboratory model called PVWatts, which is itself embedded in PC software under the umbrella of the NREL’s System Advisor Model (SAM).

The PVWatts simulations require, panel azimuth orientations and tilts, something that the NEMS projections do not include. Call the combinations of azimuths and tilts “orientations.” The orientation and solar insolation (specific to a location) have a direct effect on the PV production level. The calibration project selected the 100 largest population Metropolitan Statistical Areas (MSAs) and relied on weights derived from orientation data from California Solar Initiative dataset to develop typical outputs for each of the 100 MSAs. It then was expanded from an annual estimate to a monthly estimate. A further description of this model is located here. A listing of the MSAs are included in Appendix 1.

Using Form EIA-861 data for service territories, which lists the counties that each electric distribution company (EDC) provides service, and NREL solar insolation data by county a simple average of insolation values by EDC is calculated.

Using the estimation model, we produce by utility, by state and by sector an estimate of generation. All the utilities' capacity and generation estimates are summed by state and sector and a KWh/KW rate by state and sector is calculated.

Capacity from the Form EIA-860 that is net metered is subtracted from the total capacity by state and sector as well as the capacity reported on the EIA-826 from TPOs, resulting in a new "net" capacity amount. This capacity amount is multiplied by the KWh/KW rate to produce the non-TPO generation estimate and then it is added to the TPO reported sales to ultimate customers from the EIA-826 to obtain a final estimate for generation and a blended KWh/KW rate is calculated. The estimate for generation is aggregated by US census regions and US totals. The RSEs for capacity are checked for level of error and if they pass, the summary data by state, US census region and US total are reported in the EPM.

Appendix 2 contains a flow diagram of the data inputs, data quality control checks and data analysis required to perform this estimation.

# Appendix 1- MSAs

## TMY3 (1991-2005) Weather Stations by MSA

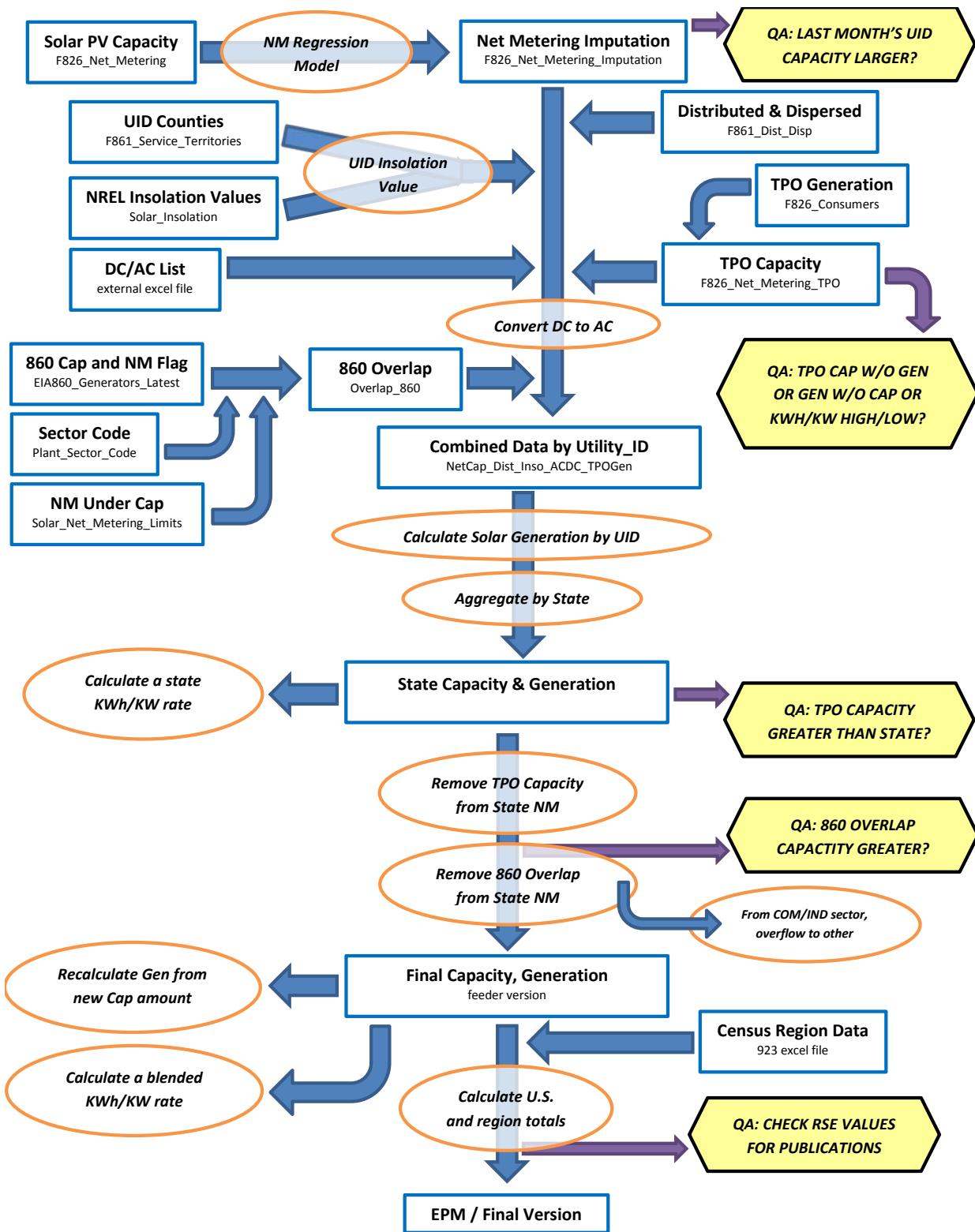
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Site	Weather Location	MSA
1	USA NY New York Central Park Obs.	New York-Newark-Jersey City, NY-NJ-PA MSA
2	USA CA Los Angeles Intl Airport	Los Angeles-Long Beach-Anaheim, CA MSA
3	USA IL Chicago Midway Airport	Chicago-Naperville-Elgin, IL-IN-WI MSA
4	USA TX Dallas-fort Worth Intl Airport	Dallas-Fort Worth-Arlington, TX MSA
5	USA TX Houston Bush Intercontinental	Houston-The Woodlands-Sugar Land, TX MSA
6	USA PA Philadelphia Int'l Airport	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA
7	USA VA Washington Dc Reagan Airport	Washington-Arlington-Alexandria, DC-VA-MD-WV MSA
8	USA FL Miami Intl Airport	Miami-Fort Lauderdale-West Palm Beach, FL MSA
9	USA GA Atlanta Hartsfield Intl Airport	Atlanta-Sandy Springs-Roswell, GA MSA
10	USA MA Boston Logan Int'l Airport	Boston-Cambridge-Newton, MA-NH MSA
11	USA CA San Francisco Intl Airport	San Francisco—Oakland—Hayward, CA MSA
12	USA AZ Phoenix Sky Harbor Intl Airport	Phoenix-Mesa-Scottsdale, AZ MSA
13	USA CA Riverside Municipal Airport	Riverside-San Bernardino-Ontario, CA MSA
14	USA MI Detroit City Airport	Detroit-Warren-Dearborn, MI MSA
15	USA WA Seattle Seattle-Tacoma Intl Airport	Seattle-Tacoma-Bellevue, WA MSA
16	USA MN Minneapolis-St. Paul Int'l Arp	Minneapolis-St. Paul-Bloomington, MN-WI MSA
17	USA CA San Diego Lindbergh Field	San Diego-Carlsbad, CA MSA
18	USA FL Tampa Int'l Airport	Tampa-St. Petersburg-Clearwater, FL MSA
19	USA MO St Louis Lambert Int'l Airport	St. Louis, MO-IL MSA
20	USA MD Baltimore-Washington Int'l Airport	Baltimore-Columbia-Towson, MD MSA
21	USA CO Denver Centennial [Golden - NREL]	Denver-Aurora-Lakewood, CO MSA
22	USA PA Pittsburgh Allegheny Co Airport	Pittsburgh, PA MSA
23	USA NC Charlotte Douglas Intl Airport	Charlotte-Concord-Gastonia, NC-SC MSA
24	USA OR Portland Hillsboro	Portland-Vancouver-Hillsboro, OR-WA MSA
25	USA TX San Antonio Intl Airport	San Antonio-New Braunfels, TX MSA
26	USA FL Orlando Intl Airport	Orlando-Kissimmee-Sanford, FL MSA
27	USA CA Sacramento Executive Airport	Sacramento—Roseville—Arden-Arcade, CA MSA
28	USA OH Cincinnati Municipal Airport	Cincinnati, OH-KY-IN MSA
29	USA OH Cleveland Hopkins Intl Airport	Cleveland-Elyria, OH MSA
30	USA MO Kansas City Int'l Airport	Kansas City, MO-KS MSA
31	USA NV Las Vegas McCarran Intl Airport	Las Vegas-Henderson-Paradise, NV MSA
32	USA OH Columbus Port Columbus Intl A	Columbus, OH MSA
33	USA IN Indianapolis Intl Airport	Indianapolis-Carmel-Anderson, IN MSA
34	USA CA San Jose Intl Airport	San Jose-Sunnyvale-Santa Clara, CA MSA
35	USA TX Austin Mueller Municipal Airport	Austin-Round Rock, TX MSA
36	USA TN Nashville Int'l Airport	Nashville-Davidson—Murfreesboro—Franklin, TN MSA

37	USA VA Norfolk Int'l Airport	Virginia Beach-Norfolk-Newport News, VA-NC MSA
38	USA RI Providence T F Green State	Providence-Warwick, RI-MA MSA
39	USA WI Milwaukee Mitchell Intl Airport	Milwaukee-Waukesha-West Allis, WI MSA
40	USA FL Jacksonville Craig	Jacksonville, FL MSA
41	USA TN Memphis Int'l Airport	Memphis, TN-MS-AR MSA
42	USA OK Oklahoma City Will Rogers	Oklahoma City, OK MSA
43	USA KY Louisville Bowman Field	Louisville/Jefferson County, KY-IN MSA
44	USA VA Richmond Int'l Airport	Richmond, VA MSA
45	USA LA New Orleans Alvin Callender	New Orleans-Metairie, LA MSA
46	USA CT Hartford Bradley Intl Airport	Hartford-West Hartford-East Hartford, CT MSA
47	USA NC Raleigh Durham Int'l	Raleigh, NC MSA
48	USA UT Salt Lake City Int'l Airport	Salt Lake City, UT MSA
49	USA AL Birmingham Municipal Airport	Birmingham-Hoover, AL MSA
50	USA NY Buffalo Niagara Intl Airport	Buffalo-Cheektowaga-Niagara Falls, NY MSA
51	USA NY Rochester Greater Rochester	Rochester, NY MSA
52	USA MI Grand Rapids Kent County Int'l Airport	Grand Rapids-Wyoming, MI MSA
53	USA AZ Tucson Int'l Airport	Tucson, AZ MSA
54	USA HI Honolulu Intl Airport	Urban Honolulu, HI MSA
55	USA OK Tulsa Int'l Airport	Tulsa, OK MSA
56	USA CA Fresno Yosemite Intl Airport	Fresno, CA MSA
57	USA CT Bridgeport Sikorsky Memorial	Bridgeport-Stamford-Norwalk, CT MSA
58	USA MA Worcester Regional Airport	Worcester, MA-CT MSA
59	USA NM Albuquerque Intl Airport	Albuquerque, NM MSA
60	USA NE Omaha Eppley Airfield	Omaha-Council Bluffs, NE-IA MSA
61	USA NY Albany County Airport	Albany-Schenectady-Troy, NY MSA
62	USA CA Bakersfield Meadows Field	Bakersfield, CA MSA
63	USA CT New Haven Tweed Airport	New Haven-Milford, CT MSA
64	USA TN Knoxville McGhee Tyson Airport	Knoxville, TN MSA
65	USA SC Greenville Downtown Airport	Greenville-Anderson-Mauldin, SC MSA
66	USA CA Oxnard Airport	Oxnard-Thousand Oaks-Ventura, CA MSA
67	USA TX El Paso Int'l Airport	El Paso, TX MSA
68	USA PA Allentown Lehigh Valley Intl	Allentown-Bethlehem-Easton, PA-NJ MSA
69	USA LA Baton Rouge Ryan Airport	Baton Rouge, LA MSA
70	USA TX McAllen Miller Intl Airport	McAllen-Edinburg-Mission, TX MSA
71	USA OH Dayton Int'l Airport	Dayton, OH MSA
72	USA SC Columbia Metro Airport	Columbia, SC MSA
73	USA NC Greensboro Piedmont Triad Int'l Airport	Greensboro-High Point, NC MSA
74	USA FL Sarasota Bradenton	North Port-Sarasota-Bradenton, FL MSA
75	USA AR Little Rock Adams Field	Little Rock-North Little Rock-Conway, AR MSA
76	USA SC Charleston Intl Airport	Charleston-North Charleston, SC MSA
77	USA OH Akron Akron-canton Reg. Airport	Akron, OH MSA
78	USA CA Stockton Metropolitan Airport	Stockton-Lodi, CA MSA

79	USA CO Colorado Springs Muni Airport	Colorado Springs, CO MSA
80	USA NY Syracuse Hancock Int'l Airport	Syracuse, NY MSA
81	USA FL Fort Myers Page Field	Cape Coral-Fort Myers, FL MSA
82	USA NC Winston-Salem Reynolds Airport	Winston-Salem, NC MSA
83	USA ID Boise Air Terminal	Boise City, ID MSA
84	USA KS Wichita Mid-continent Airport	Wichita, KS MSA
85	USA WI Madison Dane Co Regional Airport	Madison, WI MSA
86	USA MA Worcester Regional Airport	Springfield, MA MSA
87	USA FL Lakeland Linder Regional Airport	Lakeland-Winter Haven, FL MSA
88	USA UT Ogden Hinkley Airport	Ogden-Clearfield, UT MSA
89	USA OH Toledo Express Airport	Toledo, OH MSA
90	USA FL Daytona Beach Intl Airport	Deltona-Daytona Beach-Ormond Beach, FL MSA
91	USA IA Des Moines Intl Airport	Des Moines-West Des Moines, IA MSA
92	USA GA Augusta Bush Field	Augusta-Richmond County, GA-SC MSA
93	USA MS Jackson Int'l Airport	Jackson, MS MSA
94	USA UT Provo Muni	Provo-Orem, UT MSA
95	USA PA Wilkes-Barre Scranton Intl Airport	Scranton—Wilkes-Barre—Hazleton, PA MSA
96	USA PA Harrisburg Capital City Airport	Harrisburg-Carlisle, PA MSA
97	USA OH Youngstown Regional Airport	Youngstown-Warren-Boardman, OH-PA MSA
98	USA FL Melbourne Regional Airport	Palm Bay-Melbourne-Titusville, FL MSA
99	USA TN Chattanooga Lovell Field Airport	Chattanooga, TN-GA MSA
100	USA WA Spokane Int'l Airport	Spokane-Spokane Valley, WA MSA

## Appendix 2 – Flow diagram of data sources and analysis



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<sup>1</sup> The basic technique employed is described in the paper “Model-Based Sampling and Inference,” on the EIA website. Additional references can be found on the InterStat website (<http://interstat.statjournals.net/>). See the following sources: Knaub, J.R., Jr. (1999a), “Using Prediction-Oriented Software for Survey Estimation,” InterStat, August 1999, <http://interstat.statjournals.net/>; Knaub, J.R. Jr. (1999b), “Model-Based Sampling, Inference and Imputation,” EIA web site: <http://www.eia.gov/cneaf/electricity/forms/eiawebme.pdf>; Knaub, J.R., Jr. (2005), “Classical Ratio Estimator,” InterStat, October 2005, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2007a), “Cutoff Sampling and Inference,” InterStat, April 2007, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2008), “Cutoff Sampling.” Definition in Encyclopedia of Survey Research Methods, Editor: Paul J. Lavrakas, Sage, to appear; Knaub, J.R., Jr. (2000), “Using Prediction-Oriented Software for Survey Estimation - Part II: Ratios of Totals,” InterStat, June 2000, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2001), “Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias,” InterStat, June 2001, <http://interstat.statjournals.net/>.

<sup>2</sup> Due to the restructuring of the electric power industry, many plants which had historically submitted this information for utility plants on the FERC Form 423 (see subsequent section) were being transferred to the nonutility sector. As a result, a large percentage of fossil fuel receipts were no longer being reported. The Form EIA-423 was implemented to fill this void and to capture the data associated with existing nonregulated power producers. Its design closely follows that of the FERC Form 423.

<sup>3</sup> The basic technique employed is described in the paper “Model-Based Sampling and Inference,” on the EIA website. Additional references can be found on the InterStat website (<http://interstat.statjournals.net/>). See the following sources: Knaub, J.R., Jr. (1999a), “Using Prediction-Oriented Software for Survey Estimation,” InterStat, August 1999, <http://interstat.statjournals.net/>; Knaub, J.R. Jr. (1999b), “Model-Based Sampling, Inference and Imputation,” EIA web site: <http://www.eia.gov/cneaf/electricity/forms/eiawebme.pdf>; Knaub, J.R., Jr. (2005), “Classical Ratio Estimator,” InterStat, October 2005, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2007a), “Cutoff Sampling and Inference,” InterStat, April 2007, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2008), “Cutoff Sampling.” Definition in Encyclopedia of Survey Research Methods, Editor: Paul J. Lavrakas, Sage, to appear; Knaub, J.R., Jr. (2000), “Using Prediction-Oriented Software for Survey Estimation - Part II: Ratios of Totals,” InterStat, June 2000, <http://interstat.statjournals.net/>; Knaub, J.R., Jr. (2001), “Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias,” InterStat, June 2001, <http://interstat.statjournals.net/>.

<sup>4</sup> See the following sources: Bahillo, A. et al. Journal of Energy Resources Technology, “NO<sub>x</sub> and N<sub>2</sub>O Emissions During Fluidized Bed Combustion of Leather Wastes.” Volume 128, Issue 2, June 2006. pp. 99-103; U.S. Energy Information Administration. *Renewable Energy Annual 2004*. “Average Heat Content of Selected Biomass Fuels.” Washington, DC, 2005; Penn State Agricultural College Agricultural and Biological Engineering and Council for Solid Waste Solutions. Garth, J. and Kowal, P. Resource Recovery, Turning Waste into Energy, University Park, PA, 1993; Utah State University Recycling Center Frequently Asked Questions

<sup>5</sup> Biogenic components include newsprint, paper, containers and packaging, leather, textiles, yard trimmings, food wastes, and wood. Non-biogenic components include plastics, rubber and other miscellaneous non-biogenic waste.

<sup>6</sup> A boiler’s firing configuration relates to the arrangement of the fuel burners in the boiler, and whether the boiler is of conventional or cyclone design. Wet- and dry-bottom boilers use different methods to collect a portion of the ash that results from burning coal. For information on wet- and dry-bottom boilers, see the EIA Glossary at <http://www.eia.gov/glossary/index.html>. Additional information on wet- and dry-bottom boilers and on other aspects of boiler design and operation, including the differences between conventional and cyclone designs, can be found in Babcock and Wilcox, *Steam: Its Generation and Use*, 41<sup>st</sup> Edition, 2005.

<sup>7</sup> Boilers that rely entirely on waste heat to create steam, including the heat recovery portion of most combined cycle plants, did not report on the historical Form EIA-767 or EIA-923.

<sup>8</sup> The “All Other” firing configuration category includes, for example, arch firing and concentric firing. For a full list of firing method options for reporting on the historical Form EIA-767, see the form instructions, page xi, at [http://www.eia.gov/survey/form/eia\\_767/instructions\\_form.pdf](http://www.eia.gov/survey/form/eia_767/instructions_form.pdf).



**Table A.1. Sulfur Dioxide Uncontrolled Emission Factors**

Fuel	EIA Fuel Code	Source and Tables (As Appropriate)	Emissions Units Lbs = Pounds MMCF = Million Cubic Feet MG = Thousand Gallons	Combustion System Type / Firing Configuration						
				Cyclone Firing Boiler	Fluidized Bed Firing Boiler	Stoker Boiler	Tangential Firing Boiler	All Other Boiler Types	Combustion Turbine	Internal Combustion Engine
Distillate Fuel Oil*	DFO	Source: 2, Table 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	142.00	14.20	142.00	142.00	142.00	140.00	140.00
Jet Fuel*	JF	Assumed to have emissions similar to DFO.	Lbs per MG	142.00	14.20	142.00	142.00	142.00	140.00	140.00
Kerosene*	KER	Assumed to have emissions similar to DFO.	Lbs per MG	142.00	14.20	142.00	142.00	142.00	140.00	140.00
Other Biomass Liquids*	OBL	Source: 1 (including footnotes 3 and 16 within source)	Lbs per MG	142.00	14.20	142.00	142.00	142.00	140.00	140.00
Residual Fuel Oil*	RFO	Source: 2, Table 1.3-1; Combustion turbines and internal combustion engines assumed to have emissions similar to DFO.	Lbs per MG	157.00	15.70	157.00	157.00	157.00	140.00	140.00
Wood Waste Liquids*	WDL	Source: 1 (including footnotes 3 and 16 within source)	Lbs per MG	142.00	14.20	142.00	142.00	142.00	140.00	140.00
Waste Oil*	WO	Source: 2, Table 1.11-2; Combustion turbines and internal combustion engines assumed to have emissions similar to DFO.	Lbs per MG	147.00	14.70	147.00	147.00	147.00	140.00	140.00
Blast Furnace Gas	BFG	Sources: 1 (including footnote 7 within source); 2, Table 1.4-2 (including footnote d within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Landfill Gas	LFG	Sources: 1 (including footnote 7 within source); 2, Table 1.4-2 (including footnote d within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Natural Gas	NG	Sources: 1 (including footnote 7 within source); 2, Table 1.4-2 (including footnote d within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Other Biomass Gas	OBG	Sources: 1 (including footnote 7 within source); 2, Table 1.4-2 (including footnote d within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Other Gases	OG	Source: 1 (including footnote 7 within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Other	OTH	Assumed to have emissions similar to Natural Gas.	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Propane Gas	PG	Sources: 1 (including footnote 7 within source); 2, Table 1.4-2 (including footnote d within source)	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Coal-Derived Synthesis Gas	SGC	Assumed to have emissions similar to Natural Gas	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Synthesis Gas from Petroleum Coke	SGP	Assumed to have emissions similar to Natural Gas	Lbs per MMCF	0.60	0.06	0.60	0.60	0.60	0.60	0.60
Agricultural Byproducts	AB	Source: 1	Lbs per ton	0.08	0.01	0.08	0.08	0.08	N/A	N/A
Bituminous Coal*	BIT	Source: 2, Table 1.1-3	Lbs per ton	38.00	3.80	38.00	38.00	38.00	N/A	N/A
Lignite Coal*	LIG	Source: 2, Table 1.7-1	Lbs per ton	30.00	3.00	30.00	30.00	30.00	N/A	N/A
Municipal Solid Waste	MSW	Source: 1	Lbs per ton	1.70	0.17	1.70	1.70	1.70	N/A	N/A
Other Biomass Solids	OBS	Source: 1 (including footnote 11 within source)	Lbs per ton	0.23	0.02	0.23	0.23	0.23	N/A	N/A
Petroleum Coke*	PC	Source: 1	Lbs per ton	39.00	3.90	39.00	39.00	39.00	N/A	N/A
Subbituminous Coal*	SUB	Source: 2, Table 1.1-3	Lbs per ton	35.00	3.50	35.00	35.00	35.00	N/A	N/A
Tire-Derived Fuel*	TDF	Source: 1 (including footnote 13 within source)	Lbs per ton	38.00	3.80	38.00	38.00	38.00	N/A	N/A
Waste Coal*	WC	Source: 1 (including footnote 20 within source)	Lbs per ton	30.00	3.00	30.00	30.00	30.00	N/A	N/A
Wood Waste Solids	WDS	Source: 1	Lbs per ton	0.29	0.08	0.08	0.29	0.29	N/A	N/A
Black Liquor	BLQ	Source: 1	Lbs per ton **	7.00	0.70	7.00	7.00	7.00	N/A	N/A
Sludge Waste	SLW	Source: 1 (including footnote 11 within source)	Lbs per ton **	2.80	0.28	2.80	2.80	2.80	N/A	N/A

## Notes:

\* For these fuels, emissions are estimated by multiplying the emissions factor by the physical volume of fuel and the sulfur percentage of the fuel (other fuels do not require the sulfur percentage in the calculation). Note that EIA data do not provide the sulfur content of TDF. The value used (1.56 percent) is from U.S. EPA, Control of Mercury Emissions from Coal-Fired Electric Utility Boilers, April 2002, EPA-600/R-01-109, Table A-11 (available at: <http://www.epa.gov/appcdwww/aptb/EPA-600-R-01-109A.pdf>).

\*\* Although Sludge Waste and Black Liquor consist substantially of liquids, these fuels are measured and reported to EIA in tons.

## Sources:

1. Eastern Research Group, Inc. and E.H. Pechan & Associates, Inc., Documentation for the 2002 Electric Generating Unit National Emissions Inventory, Table 6, September 2004.

Prepared for the U.S. Environmental Protection Agency, Emission Factor and Inventory Group (D205-01), Emissions, Monitoring and Analysis Division, Research Triangle Park

2. U.S. Environmental Protection Agency, AP 42, Fifth Edition (Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources); available at: <http://www.epa.gov/ttn/chief/ap42/>

**Table A.2. Nitrogen Oxides Uncontrolled Emission Factors**

Fuel, Code, Source and Emission Units				Combustion System Type / Firing Configuration								
Fuel	EIA Fuel Code	Source and Tables (As Appropriate)	Emissions Units Lbs = Pounds MMCF = Million Cubic Feet MG = Thousand Gallons			Tangential Boiler		All Other Boiler Types				
				Cyclone Firing Boiler	Fluidized Bed Firing Boiler	Stoker Boiler	Dry-Bottom Boilers	Wet-Bottom Boilers	Dry-Bottom Boilers	Wet-Bottom Boilers	Combustion Turbine	Internal Combustion Engine
Distillate Fuel Oil	DFO	Source: 2, Tables 1.3-1, 3.1-1, & 3.4-1	Lbs per MG	24.00	24.00	24.00	24.00	24.00	24.00	24.00	122.00	443.80
Jet Fuel	JF	Source: 2, Tables 1.3-1, 3.1-1, & 3.4-1	Lbs per MG	24.00	24.00	24.00	24.00	24.00	24.00	24.00	118.80	432.00
Kerosene	KER	Source: 2, Tables 1.3-1, 3.1-1, & 3.4-1	Lbs per MG	24.00	24.00	24.00	24.00	24.00	24.00	24.00	118.80	432.00
Other Biomass Liquids	OBL	Source: 1 (including footnote 3 within source); EIA estimates	Lbs per MG	19.00	19.00	19.00	19.00	19.00	19.00	19.00	112.30	408.30
Residual Fuel Oil	RFO	Source: 2, Table 1.3-1; EIA estimates	Lbs per MG	47.00	47.00	47.00	32.00	32.00	47.00	47.00	131.70	479.00
Wood Waste Liquids	WDL	Source: 1 (including footnote 16 within source); EIA estimates	Lbs per MG	5.43	5.43	5.43	5.43	5.43	5.43	5.43	230.50	838.10
Waste Oil	WO	Source: 2, Table 1.11-2; EIA estimates	Lbs per MG	19.00	19.00	19.00	19.00	19.00	19.00	19.00	92.20	335.20
Blast Furnace Gas	BFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	15.40	15.40	15.40	15.40	15.40	15.40	15.40	30.40	256.55
Landfill Gas	LFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	72.44	72.44	72.44	72.44	72.44	72.44	72.44	144.00	1,215.22
Natural Gas	NG	Source: 2, Tables 1.4-1, 3.1-1, and 3.4-1	Lbs per MMCF	280.00	280.00	280.00	170.00	170.00	280.00	280.00	328.00	2,768.00
Other Biomass Gas	OBG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	112.83	112.83	112.83	112.83	112.83	112.83	112.83	313.60	2,646.48
Other Gases	OG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	152.82	152.82	152.82	152.82	152.82	152.82	152.82	263.82	2,226.41
Other	OTH	Assumed to have emissions similar to Natural Gas.	Lbs per MMCF	280.00	280.00	280.00	170.00	170.00	280.00	280.00	328.00	2,768.00
Propane Gas	PG	Sources: 3; EIA estimates	Lbs per MMCF	522.26	522.26	522.26	522.26	522.26	522.26	522.26	803.36	6,779.57
Synthesis Gas from Petroleum Coke	SGC	Assumed to have emissions similar to Natural Gas	Lbs per MMCF	280.00	280.00	280.00	170.00	170.00	280.00	280.00	328.00	2,768.00
Coal-Derived Synthesis Gas	SGP	Assumed to have emissions similar to Natural Gas	Lbs per MMCF	280.00	280.00	280.00	170.00	170.00	280.00	280.00	328.00	2,768.00
Agricultural Byproducts	AB	Source: 1	Lbs per ton	1.20	1.20	1.20	1.20	1.20	1.20	1.20	N/A	N/A
Bituminous Coal	BIT	Source: 2, Table 1.1-3	Lbs per ton	33.00	5.00	11.00	10.00	14.00	12.00	31.00	N/A	N/A
Lignite Coal	LIG	Source: 2, Table 1.7-1	Lbs per ton	15.00	3.60	5.80	7.10	7.10	6.30	6.30	N/A	N/A
Municipal Solid Waste	MSW	Source: 1	Lbs per ton	5.00	5.00	5.00	5.00	5.00	5.00	5.00	N/A	N/A
Other Biomass Solids	OBS	Source: 1 (including footnote 11 within source)	Lbs per ton	2.00	2.00	2.00	2.00	2.00	2.00	2.00	N/A	N/A
Petroleum Coke	PC	Source: 1 (including footnote 8 within source)	Lbs per ton	21.00	5.00	21.00	21.00	21.00	21.00	21.00	N/A	N/A
Subbituminous Coal	SUB	Source: 2, Table 1.1-3	Lbs per ton	17.00	5.00	8.80	7.20	7.20	7.40	24.00	N/A	N/A
Tire-Derived Fuel	TDF	Source: 1 (including footnote 13 within source)	Lbs per ton	33.00	5.00	11.00	10.00	14.00	12.00	31.00	N/A	N/A
Waste Coal	WC	Source: 1 (including footnote 20 within source)	Lbs per ton	15.00	3.60	5.80	7.10	7.10	6.30	6.30	N/A	N/A
Wood Waste Solids	WDS	Source: 1	Lbs per ton	2.51	2.00	1.50	2.51	2.51	2.51	2.51	N/A	N/A
Black Liquor	BLQ	Source: 1	Lbs per ton **	1.50	1.50	1.50	1.50	1.50	1.50	1.50	N/A	N/A
Sludge Waste	SLW	Source: 1 (including footnote 11 within source)	Lbs per ton **	5.00	5.00	5.00	5.00	5.00	5.00	5.00	N/A	N/A

## Notes:

\*\* Although Sludge Waste and Black Liquor consist substantially of liquids, these fuels are measured and reported to EIA in tons.

## Sources:

1. Eastern Research Group, Inc. and E.H. Pechan &amp; Associates, Inc., Documentation for the 2002 Electric Generating Unit National Emissions Inventory, Table 6, September 2004.

Prepared for the U.S. Environmental Protection Agency, Emission Factor and Inventory Group (D205-01), Emissions, Monitoring and Analysis Division, Research Triangle Park

2. U.S. Environmental Protection Agency, AP 42, Fifth Edition (Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources); available at: <http://www.epa.gov/ttn/chief/ap42/>3. U.S. Environmental Protection Agency, Factor Information Retrieval (FIRE) Database, Version 6.25; available at: <http://www.epa.gov/ttn/chief/software/fire/index.html>

**Table A.3. Carbon Dioxide Uncontrolled Emission Factors**

Fuel	EIA Fuel Code	Factor (Kilograms of CO2 Per Million Btu)***	Notes
Bituminous Coal	BIT	93.30	
Distillate Fuel Oil	DFO	73.16	
Geothermal	GEO	7.71	
Jet Fuel	JF	70.90	
Kerosene	KER	72.30	
Lignite Coal	LIG	97.70	
Municipal Solid Waste	MSW	41.69	
Natural Gas	NG	53.07	
Petroleum Coke	PC	102.10	
Propane Gas	PG	63.07	
Residual Fuel Oil	RFO	78.79	
Coal-Derived Synthesis Gas	SGC	53.07	Assumed to have emissions similar to Natural Gas
Synthesis Gas from Petroleum Coke	SGP	53.07	Assumed to have emissions similar to Natural Gas
Subbituminous Coal	SUB	97.20	
Tire-Derived Fuel	TDF	85.97	
Waste Coal	WC	93.30	Assumed to have emissions similar to Bituminous Coal.
Waste Oil	WO	95.25	

Notes:

\*\*\* CO2 factors do not vary by combustion system type or boiler firing configuration.

Source: Energy Information Administration estimates:

[http://www.eia.gov/environment/emissions/co2\\_vol\\_mass.cfm](http://www.eia.gov/environment/emissions/co2_vol_mass.cfm)

**Table A.4. Nitrogen Oxides Control Technology Emissions Reduction Factors**

Nitrogen Oxides Control Technology	EIA Code	Coal	Reduction Factor						
			Residual Fuel Oil and Distillate Fuel Oil	Natural Gas	Wood	Other Solids	Other Liquids	Other Gases	Other Fuels
Burner Out of Service	BO	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Low Excess Air	LA	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Biased Firing (Alternative Burners)	BF	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Overfire Air	OV	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Advanced Overfire Air	AA	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
Low NOx Burners	LN	45.00%	45.00%	50.00%	45.00%	45.00%	45.00%	50.00%	45.00%
Fuel Reburning	FU	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%	55.00%
Selective Noncatalytic Reduction	SN	45.00%	32.50%	32.50%	55.00%	45.00%	32.50%	32.50%	45.00%
Selective Catalytic Reduction	SR	80.00%	80.00%	85.00%	80.00%	80.00%	80.00%	85.00%	80.00%
Ammonia Injection	NH3	62.50%	56.25%	58.75%	67.50%	62.50%	56.25%	58.75%	62.50%
Flue Gas Recirculation	FR	45.00%	45.00%	45.00%	45.00%	45.00%	45.00%	45.00%	45.00%
Water Injection	H2O	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Steam Injection	STM	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Other	OT	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%

Nitrogen Oxides Control Technology	EIA Code	Coal	Source of Selected Reduction Factor						
			Residual Fuel Oil and Distillate Fuel Oil	Natural Gas	Wood	Other Solids	Other Liquids	Other Gases	Other Fuels
Burner Out of Service	BO	Source: 1	Source: 2	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Low Excess Air	LA	Source: 1	Source: 2	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Biased Firing (Alternative Burners)	BF	Source: 1	Source: 2	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Overfire Air	OV	Source: 1	Source: 9	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Advanced Overfire Air	AA	Source: 1	Source: 9	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Low NOx Burners	LN	Source: 1	Source: 2	Source: 3	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Fuel Reburning	FU	Source: 1	Source: 9	Source: 9	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Selective Noncatalytic Reduction	SN	Source: 1	Source: 2	Source: 4	Source: 5	Source: 9	Source: 10	Source: 11	Source: 9
Selective Catalytic Reduction	SR	Source: 1	Source: 2	Source: 4	Source: 9	Source: 9	Source: 10	Source: 11	Source: 9
Ammonia Injection	NH3	Source: 6	Source: 6	Source: 6	Source: 6	Source: 9	Source: 10	Source: 11	Source: 9
Flue Gas Recirculation	FR	Source: 10	Source: 2	Source: 10	Source: 10	Source: 9	Source: 10	Source: 11	Source: 9
Water Injection	H2O	Source: 8	Source: 8	Source: 8	Source: 8	Source: 9	Source: 10	Source: 11	Source: 9
Steam Injection	STM	Source: 8	Source: 8	Source: 8	Source: 8	Source: 9	Source: 10	Source: 11	Source: 9
Other	OT	Source: 7	Source: 7	Source: 7	Source: 7	Source: 9	Source: 10	Source: 11	Source: 9

Source: U.S. Environmental Protection Agency, AP 42, Fifth Edition (Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources); available at: <http://www.epa.gov/ttn/chief/ap42/>

Source 1: AP-42, Table 1.1-2

Source 2: AP-42, Section 1.3.4.3 Text

Source 3: AP-42, Table 1.4-1

Source 4: AP-42, Section 1.4.4 Text

Source 5: AP-42, Section 1.6.4 Text

Source 6: Average of Selective Catalytic Reduction and Selective Noncatalytic Reduction

Source 7: Minimum of other technologies for fuel group

Source 8: Matches Other selection

Source 9: Assumed to have reduction similar to coal

Source 10: Assumed to have reduction similar to Residual Fuel Oil and Distillate Fuel Oil

Source 11: Assumed to have reduction similar to natural gas

Notes:

Coal reduction factors are applied to Bituminous Coal, Subbituminous Coal, Lignite Coal, and Waste Coal.

Wood reduction factors are applied to Wood Waste Solids, Black Liquor, and Wood Waste Liquids.

Other Solids reduction factors are applied to Petroleum Coke, Municipal Solid Waste, Tire-Derived Fuels, Sludge Waste, Agricultural Byproducts, and Other Biomass Solids.

Other Liquids reduction factors are applied to Jet Fuel, Kerosene, Waste Oil, and Other Biomass Liquids.

Other Gases reduction factors are applied to Blast Furnace Gas, Landfill Gas, Propane Gas, Coal-Derived Synthesis Gas, Synthesis Gas from Petroleum Coke, Other Biomass Gas, and Other Gas.

**Table A.5. Unit of Measure Equivalents**

<b>Unit</b>	<b>Equivalent</b>
Kilowatt (kW)	1,000 (One Thousand) Watts
Megawatt (MW)	1,000,000 (One Million) Watts
Gigawatt (GW)	1,000,000,000 (One Billion) Watts
Terawatt (TW)	1,000,000,000,000 (One Trillion) Watts
Gigawatt	1,000,000 (One Million) Kilowatts
Thousand Gigawatts	1,000,000,000 (One Billion) Kilowatts
Kilowatthours (kWh)	1,000 (One Thousand) Watthours
Megawatthours (MWh)	1,000,000 (One Million) Watthours
Gigawatthours (GWh)	1,000,000,000 (One Billion) Watthours
Terawatthours (TWh)	1,000,000,000,000 (One Trillion) Watthours
Gigawatthours	1,000,000 (One Million) Kilowatthours
Thousand Gigawatthours	1,000,000,000 (One Billion Kilowatthours
U.S. Dollar	1,000 (One Thousand) Mills
U.S. Cent	10 (Ten) Mills
Barrel of Oil	42 Gallons

Source: U.S. Energy Information Administration

# EIA Electric Industry Data Collection

