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Chapter 1

National Summary Data

Table 1.1. Total Electric Power Industry Summary Statistics, 2013 and 2012

Net Generation and Consumption of Fuels for January through December											
	Total (All Sectors)			Electric Power Sector				Commercial		Industrial	
				Electric Utilities		Independent Power Producers					
Fuel	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
Net Generation (Thousand Megawatthours)											
Coal	1,581,115	1,514,043	4.4%	1,188,452	1,146,480	379,270	354,076	839	883	12,554	12,603
Petroleum Liquids	13,820	13,403	3.1%	9,446	9,892	3,761	2,757	118	191	495	563
Petroleum Coke	13,344	9,787	36.3%	9,522	5,664	1,780	1,758	5	6	2,036	2,359
Natural Gas	1,124,836	1,225,894	-8.2%	501,427	504,958	527,522	627,833	7,154	6,603	88,733	86,500
Other Gas	12,853	11,898	8.0%	798	0	3,524	2,984	0	0	8,531	8,913
Nuclear	789,016	769,331	2.6%	406,114	394,823	382,902	374,509	0	0	0	0
Hydroelectric Conventional	268,565	276,240	-2.8%	243,040	252,936	22,018	20,923	44	28	3,463	2,353
Renewable Sources Excluding Hydroelectric	253,508	218,333	16.1%	32,417	28,017	189,045	160,064	2,956	2,545	29,091	27,707
... Wind	167,840	140,822	19.2%	26,436	22,926	141,306	117,822	61	54	37	19
... Solar Thermal and Photovoltaic	9,036	4,327	108.8%	943	639	7,782	3,525	294	148	17	14
... Wood and Wood-Derived Fuels	40,028	37,799	5.9%	2,534	1,836	9,768	9,214	34	24	27,691	26,725
... Other Biomass	20,830	19,823	5.1%	1,499	1,472	15,419	15,084	2,567	2,319	1,346	948
... Geothermal	15,775	15,562	1.4%	1,005	1,143	14,770	14,419	0	0	0	0
Hydroelectric Pumped Storage	-4,681	-4,950	-5.4%	-3,773	-4,202	-908	-748	0	0	0	0
Other Energy Sources	13,588	13,787	-1.4%	615	603	6,742	7,030	1,118	1,046	5,113	5,108
All Energy Sources	4,065,964	4,047,765	0.4%	2,388,058	2,339,172	1,515,657	1,551,186	12,234	11,301	150,015	146,107
Consumption of Fossil Fuels for Electricity Generation											
Coal (1000 tons)	860,729	825,734	4.2%	638,327	615,467	217,219	205,295	513	307	4,670	4,665
Petroleum Liquids (1000 barrels)	23,231	22,604	2.8%	16,827	17,521	5,494	4,110	328	272	582	702
Petroleum Coke (1000 tons)	4,852	3,675	32.0%	3,409	2,105	779	756	1	1	662	812
Natural Gas (1000 Mcf)	8,596,299	9,484,710	-9.4%	3,970,447	4,101,927	3,917,131	4,686,260	66,570	63,116	642,152	633,407
Consumption of Fossil Fuels for Useful Thermal Output											
Coal (1000 tons)	18,350	19,333	-5.1%	0	0	2,416	2,790	843	1,143	15,090	15,400
Petroleum Liquids (1000 barrels)	3,456	3,097	11.6%	0	0	1,050	992	498	122	1,908	1,984
Petroleum Coke (1000 tons)	1,486	1,346	10.4%	0	0	96	113	11	11	1,379	1,222
Natural Gas (1000 Mcf)	882,385	886,103	-0.4%	0	0	303,177	322,607	51,057	47,883	528,151	515,613
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output											
Coal (1000 tons)	879,078	845,066	4.0%	638,327	615,467	219,635	208,085	1,356	1,450	19,761	20,065
Petroleum Liquids (1000 barrels)	26,687	25,702	3.8%	16,827	17,521	6,544	5,102	826	394	2,490	2,685
Petroleum Coke (1000 tons)	6,338	5,021	26.2%	3,409	2,105	875	869	12	13	2,041	2,034
Natural Gas (1000 Mcf)	9,478,685	10,370,812	-8.6%	3,970,447	4,101,927	4,220,309	5,008,867	117,626	110,999	1,170,303	1,149,020

Sales, Revenue, and Average Retail Price for January through December									
	Total U.S. Electric Power Industry								
	Retail Sales (million kWh)			Retail Revenue (million dollars)			Average Retail Price (cents/kWh)		
Sector	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Percentage Change
Residential	1,394,919	1,374,515	1.5%	169,113	163,280	3.6%	12.12	11.88	2.0%
Commercial	1,344,207	1,327,101	1.3%	138,224	133,898	3.2%	10.28	10.09	1.9%
Industrial	978,352	985,714	-0.7%	66,909	65,761	1.7%	6.84	6.67	2.5%
Transportation	7,625	7,320	4.2%	805	747	7.7%	10.55	10.21	3.3%
All Sectors	3,725,103	3,694,650	0.8%	375,050	363,687	3.1%	10.07	9.84	2.3%

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.
Retail sales 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 retail sales and associated revenue accumulate from bills collected for periods of time that vary depending upon customer class and consumption occurring during and outside the calendar month.
Note: Values are final. Percentage change is calculated before rounding.
See technical notes for additional information including more on the Commercial, Industrial, and Transportation sectors.

Table 1.2. Summary Statistics for the United States, 2003 - 2013

(From Table 2.1.) Number of Ultimate Customers

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2003	117,280,481	16,549,519	713,221	1,127	N/A	134,544,348
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	127,882,249	17,782,198	743,869	75	N/A	146,408,391

(From Table 2.2.) Sales to Ultimate Customers
(Thousand Megawatthours)

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2003	1,275,824	1,198,728	1,012,373	6,810	N/A	3,493,734
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	1,394,919	1,344,206	978,351	7,625	N/A	3,725,101

(From Table 2.3.) Revenue From Ultimate Customers
(Million Dollars)

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2003	111,249	96,263	51,741	514	N/A	259,767
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	169,113	138,229	66,909	805	N/A	375,055

Table 1.2. Summary Statistics for the United States, 2003 - 2013

(From Table 2.4.) Average Retail Price
(Cents per Kilowatthour)

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2003	8.72	8.03	5.11	7.54	N/A	7.44
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	12.12	10.28	6.84	10.55	N/A	10.07

(From Tables 2.11. - 2.13.) Trade
(Thousand Megawatthours)

Year	Purchases	Sales for Resale	Imports	Exports
2003	6,979,669	6,920,954	30,395	23,975
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	68,747	22,024

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

Year	Coal	Petroleum	Natural Gas	Other Gas	Nuclear	Hydro Conven-tional	Wind
2003	1,973,737	119,406	649,908	15,600	763,733	275,806	11,187
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

Table 1.2. Summary Statistics for the United States, 2003 - 2013

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2003	534	37,529	14,424	15,812	-8,535	14,045	3,883,185
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

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

Year	Coal	Petroleum	Natural Gas	Other Gas	Nuclear	Hydro Conven-tional	Wind
2003	313,019	60,730	355,442	1,994	99,209	78,694	5,995
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

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2003	397	5,871	2,133	3,758	20,522	684	948,446
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

Table 1.2. Summary Statistics for the United States, 2003 - 2013

(From Chapter 5.) Consumption of Fossil Fuels

	For Electricity Generation				For Useful Thermal Output			
Year	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)
2003	1,014,058	206,653	5,616,135	156,306	17,720	17,939	721,267	137,838
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

	Total			
Year	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Other Gas (Millions of BTU)
2003	1,031,778	224,593	6,337,402	294,143
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

(From Tables 6.1. and 7.1)

Year End Stocks, Annual Receipts and Average Costs

	Electric Power Sector Year End Stocks		Annual Receipts at All Electricty Generators			Average Cost of Fuel at All Electricty Generators		
Year	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)
2003	121,567	53,170	986,026	185,567	5,500,704	1.28	4.33	5.39
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

Table 1.2. Summary Statistics for the United States, 2003 - 2013

2012	185,116	34,698	841,183	40,364	9,531,389	2.38	12.48	3.42
2013	147,884	33,622	823,222	43,714	8,503,424	2.34	11.57	4.33

(From Tables 10.6. and 10.7.) Energy Efficiency

	Savings		Incremental Costs		Life Cycle Savings		Life Cycle Costs	
Year	Energy (MWh)	Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)	Energy (MWh)	Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)
2013	24,681,728	19,622	2,872,906	1,946,156	251,466,857	135,192	6,035,867	3,997,670

(From Tables 10.8. and 10.9.) Demand Response

	Yearly Energy and Demand Savings				Program Costs	
Year	Customers	Energy (MWh)	Potential Peak Demand (MW)	Actual Peak Demand (MW)	Incentives (thousand dollars)	Other (thousand dollars)
2013	9,187,350	1,401,987	40,010	19,071	1,172,472	569,998

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 muncipal solid waste.

Table 1.2. Summary Statistics for the United States, 2003 - 2013

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, commerical 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.

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: DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, 'Annual Report of International Electric Export/Import Data,' predecessor forms, and National Energy Board of Canada. For 2001 forward, data from the California Independent System Operator are used in combination with the Form OE-781R values to estimate electricity trade with Mexico.

Table 1.3. Supply and Disposition of Electricity, 2003 through 2013

(From Chapter 2.) Supply (Million Megawatthours)

	Generation						
Year	Electric Utilities	IPP (Non-CHP)	IPP (CHP)	Commercial Sector	Industrial Sector	Total Imports	Total Supply
2003	2,462	1,063	196	7	155	30	3,914
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

(From Chapter 2.) Disposition (Million Megawatthours)

	Retail Sales						
Year	Full-Service Providers	Energy-Only Providers	Facility Direct	Direct Use	Total Exports	Losses and Unaccounted For	Total Disposition
2003	3,285	189	20	168	24	228	3,914
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	22	244	4,135

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, 2003 through 2013

Year	Residential	Commercial	Industrial	Transportation	Total
Total Electric Industry					
2003	117,280,481	16,549,519	713,221	1,127	134,544,348
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	127,880,358	17,781,982	743,863	75	146,406,278
Full-Service Providers					
2003	115,029,545	16,136,616	695,616	1,042	131,862,819
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	116,728,089	15,919,862	692,832	48	133,340,831
Energy-Only Providers					
2003	2,250,936	412,903	17,605	85	2,681,529
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

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. Retail Sales and Direct Use of Electricity to Ultimate Customers by Sector, by Provider, 2003 through 2013 (Megawatthours)

Year	Residential	Commercial	Industrial	Transportation	Total	Direct Use	Total End Use
Total Electric Industry							
2003	1,275,823,910	1,198,727,601	1,012,373,247	6,809,728	3,493,734,486	168,294,526	3,662,029,012
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	1,394,890,412	1,344,192,383	978,355,885	7,625,041	3,725,063,721	143,461,937	3,868,525,658
Full-Service Providers							
2003	1,257,766,998	1,112,206,121	931,661,404	3,315,043	3,304,949,566	N/A	3,304,949,566
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	1,291,446,354	1,082,029,490	790,773,860	1,603,318	3,165,853,022	N/A	3,165,853,022
Energy-Only Providers							
2003	18,056,912	86,521,480	80,711,843	3,494,685	188,784,920	N/A	188,784,920
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

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 Retail Sales of Electricity to Ultimate Customers by Sector, by Provider, 2003 through 2013 (Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Total
Total Electric Industry					
2003	111,249	96,263	51,741	514	259,767
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	170,466	138,679	66,934	805	376,884
Full-Service Providers					
2003	109,165	87,764	46,686	226	243,841
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	156,538	109,951	53,309	167	319,965
Restructured Retail Service Providers					
2003	2,084	8,499	5,055	288	15,926
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
Energy-Only Providers					
2003	980	5,210	3,605	215	10,011
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
Delivery-Only Providers					
2003	1,104	3,289	1,450	72	5,915
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

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 Restructured Retail 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 Retail Price of Electricity to Ultimate Customers

by End-Use Sectors 2003 through 2013 (Cents per kilowatthour)

Year	Residential	Commercial	Industrial	Transportation	Total
Total Electric Industry					
2003	8.72	8.03	5.11	7.54	7.44
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	12.22	10.32	6.84	10.55	10.12
Full-Service Providers					
2003	8.68	7.89	5.01	6.82	7.38
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	12.12	10.16	6.74	10.40	10.11
Restructured Retail Service Providers					
2003	11.54	9.82	6.26	8.23	8.44
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
Energy-Only Providers					
2003	5.43	6.02	4.47	6.16	5.30
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
Delivery-Only Providers					
2003	6.11	3.80	1.80	2.07	3.13
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

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 Restructured Retail 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. Retail Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2003 - December 2013 (Million Kilowatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2003	1,275,824	1,198,728	1,012,373	6,810	3,493,734
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	1,394,890	1,344,192	978,356	7,625	3,725,064
Year 2011					
January	145,062	108,251	80,093	710	334,116
February	120,110	99,796	76,361	637	296,903
March	104,922	104,257	82,209	664	292,052
April	93,702	100,506	80,367	629	275,204
May	97,689	107,625	82,061	619	287,993
June	125,983	118,170	83,912	643	328,707
July	154,729	128,065	87,247	650	370,692
August	153,739	129,368	88,987	625	372,720
September	122,719	117,951	84,943	634	326,247
October	94,585	108,650	84,282	616	288,133
November	93,220	100,552	80,872	590	275,235
December	116,341	104,866	79,982	656	301,844
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	131,793	107,981	80,264	664	320,702
February	113,122	101,278	76,441	659	291,499
March	112,103	104,390	80,107	644	297,243
April	95,546	101,885	79,737	630	277,798
May	95,198	109,405	84,187	627	289,418
June	117,991	118,244	83,351	638	320,223
July	143,877	128,322	85,907	649	358,755
August	138,073	128,001	86,870	645	353,589
September	121,427	119,168	82,276	626	323,497
October	98,899	112,547	82,351	591	294,388
November	97,909	103,821	79,204	574	281,509
December	128,952	109,150	77,662	679	316,442

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. Retail 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 retail 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 Retail Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2003 - December 2013 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2003	111,249	96,263	51,741	514	259,767
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	170,466	138,679	66,934	805	376,884
Year 2011					
January	15,771	10,590	5,229	73	31,663
February	13,284	9,968	5,059	67	28,378
March	12,090	10,354	5,370	68	27,882
April	10,936	10,015	5,244	63	26,258
May	11,656	10,963	5,479	66	28,164
June	15,080	12,592	5,993	71	33,735
July	18,709	13,661	6,384	73	38,827
August	18,583	13,874	6,580	68	39,104
September	14,934	12,494	6,074	68	33,571
October	11,427	11,142	5,705	63	28,337
November	10,982	10,034	5,281	59	26,355
December	13,262	10,241	5,207	64	28,774
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	15,219	10,588	5,206	70	31,083
February	13,269	10,225	5,080	70	28,644
March	13,123	10,493	5,306	66	28,988
April	11,490	10,180	5,229	65	26,964
May	11,903	11,251	5,644	66	28,864
June	14,911	12,679	5,974	69	33,632
July	18,349	13,835	6,323	71	38,579
August	17,422	13,760	6,328	69	37,580
September	15,306	12,625	5,875	68	33,874
October	12,310	11,642	5,589	62	29,603
November	11,927	10,498	5,228	60	27,713
December	15,236	10,903	5,152	69	31,360

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
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Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
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Table 2.7. Average Retail Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2003 - December 2013 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2003	8.72	8.03	5.11	7.54	7.44
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	12.22	10.32	6.84	10.55	10.12
Year 2011					
January	10.87	9.78	6.53	10.29	9.48
February	11.06	9.99	6.63	10.55	9.56
March	11.52	9.93	6.53	10.24	9.55
April	11.67	9.96	6.53	9.97	9.54
May	11.93	10.19	6.68	10.70	9.78
June	11.97	10.66	7.14	11.01	10.26
July	12.09	10.67	7.32	11.21	10.47
August	12.09	10.72	7.39	10.82	10.49
September	12.17	10.59	7.15	10.80	10.29
October	12.08	10.25	6.77	10.25	9.83
November	11.78	9.98	6.53	9.93	9.58
December	11.40	9.77	6.51	9.79	9.53
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	11.55	9.81	6.49	10.53	9.69
February	11.73	10.10	6.65	10.56	9.83
March	11.71	10.05	6.62	10.25	9.75
April	12.03	9.99	6.56	10.28	9.71
May	12.50	10.28	6.70	10.50	9.97
June	12.64	10.72	7.17	10.76	10.50
July	12.75	10.78	7.36	10.97	10.75
August	12.62	10.75	7.28	10.77	10.63
September	12.60	10.59	7.14	10.88	10.47
October	12.45	10.34	6.79	10.46	10.06
November	12.18	10.11	6.60	10.49	9.84
December	11.82	9.99	6.63	10.20	9.91

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Table 2.8. Retail Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2013 and 2012 (Million Kilowatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	48,369	47,208	44,938	44,864	27,472	27,818	577	566	121,357	120,456
Connecticut	13,135	12,758	13,009	12,976	3,490	3,566	190	193	29,825	29,492
Maine	4,662	4,481	4,016	4,053	3,177	3,027	0	0	11,855	11,561
Massachusetts	20,728	20,313	17,713	17,723	16,463	16,927	361	350	55,265	55,313
New Hampshire	4,554	4,439	4,517	4,478	1,973	1,953	0	0	11,043	10,870
Rhode Island	3,165	3,121	3,667	3,640	923	923	26	24	7,781	7,708
Vermont	2,125	2,095	2,017	1,994	1,446	1,422	0	0	5,588	5,511
Middle Atlantic	133,575	132,231	157,718	157,278	73,521	69,507	3,979	3,910	368,793	362,925
New Jersey	28,545	28,663	38,231	38,340	7,566	7,762	301	287	74,642	75,053
New York	50,779	50,692	76,343	76,018	17,913	13,705	2,864	2,748	147,899	143,163
Pennsylvania	54,251	52,876	43,144	42,920	48,042	48,039	814	875	146,252	144,710
East North Central	188,048	188,641	182,800	183,333	198,274	202,221	645	614	569,766	574,809
Illinois	46,372	46,902	50,473	50,808	44,387	45,277	573	553	141,805	143,540
Indiana	33,408	32,964	24,253	24,022	47,809	48,168	21	20	105,492	105,173
Michigan	34,013	34,461	37,698	38,514	31,322	31,836	6	7	103,039	104,818
Ohio	52,158	52,288	46,718	46,756	51,387	53,379	44	34	150,307	152,457
Wisconsin	22,096	22,026	23,658	23,233	23,370	23,561	0	0	69,124	68,820
West North Central	106,310	102,799	100,979	99,542	90,213	91,325	41	39	297,544	293,706
Iowa	14,626	13,988	12,444	12,210	19,635	19,512	0	0	46,705	45,709
Kansas	13,593	13,797	15,245	15,456	11,009	11,041	0	0	39,847	40,293
Minnesota	22,850	22,060	23,041	22,496	22,734	23,416	19	17	68,644	67,989
Missouri	35,316	34,337	30,514	30,483	17,551	17,594	22	22	83,404	82,435
Nebraska	10,062	9,680	9,387	9,233	11,251	11,915	0	0	30,701	30,828
North Dakota	5,039	4,485	5,685	5,109	5,309	5,124	0	0	16,033	14,717
South Dakota	4,824	4,454	4,662	4,557	2,724	2,724	0	0	12,210	11,734
South Atlantic	342,952	336,757	303,434	303,319	139,337	139,354	1,320	1,293	787,044	780,723
Delaware	4,570	4,522	4,158	4,243	2,620	2,755	0	0	11,348	11,519
District of Columbia	2,034	2,003	8,499	8,713	227	218	325	325	11,086	11,259
Florida	113,294	112,127	92,145	92,038	16,390	16,426	91	84	221,920	220,674
Georgia	53,544	53,660	45,353	45,937	31,443	31,225	156	157	130,497	130,979
Maryland	27,448	26,678	29,966	30,108	3,944	4,500	541	528	61,899	61,814
North Carolina	56,251	54,672	46,649	46,510	26,872	26,896	7	7	129,780	128,085
South Carolina	28,813	28,366	21,120	21,251	28,669	28,164	0	0	78,602	77,781
Virginia	45,416	43,535	47,751	46,757	17,150	17,316	195	188	110,512	107,795
West Virginia	11,582	11,195	7,794	7,763	12,021	11,856	4	4	31,400	30,817
East South Central	117,535	114,475	91,370	82,290	109,435	123,233	2	2	318,342	320,000
Alabama	31,379	30,632	22,603	21,799	33,870	33,751	0	0	87,852	86,183
Kentucky	26,788	26,097	21,004	18,756	36,972	44,196	0	0	84,764	89,048
Mississippi	18,462	17,993	14,188	13,585	16,132	16,810	0	0	48,782	48,388
Tennessee	40,906	39,754	33,575	28,150	22,462	28,476	2	2	96,944	96,381
West South Central	212,401	208,157	192,511	189,413	166,253	158,384	73	81	571,237	556,035
Arkansas	18,219	17,909	11,898	12,102	16,565	16,848	0	0	46,683	46,860
Louisiana	30,709	30,027	24,254	24,245	30,833	30,449	11	11	85,808	84,731
Oklahoma	23,200	22,810	19,843	19,961	16,886	16,570	0	0	59,929	59,341
Texas	140,273	137,412	136,516	133,105	101,968	94,517	61	70	378,817	365,104
Mountain	96,356	94,872	94,636	94,114	82,044	82,292	124	99	273,161	271,377
Arizona	33,104	32,923	30,039	29,692	12,519	12,448	0	0	75,662	75,063
Colorado	18,529	18,220	20,098	19,997	14,753	15,415	62	52	53,442	53,685
Idaho	8,619	8,159	6,250	5,978	9,338	9,574	0	0	24,208	23,712
Montana	4,926	4,778	4,890	4,918	4,229	4,168	0	0	14,045	13,863
Nevada	12,142	12,123	9,302	9,315	13,759	13,734	8	8	35,211	35,180
New Mexico	6,804	6,764	8,983	9,166	7,278	7,249	0	0	23,065	23,179
Utah	9,402	9,188	11,008	10,803	10,010	9,694	54	38	30,474	29,723
Wyoming	2,829	2,717	4,067	4,245	10,157	10,009	0	0	17,054	16,971
Pacific Contiguous	144,631	144,476	169,710	166,835	86,843	86,536	864	717	402,049	398,563
California	89,319	90,110	123,971	121,792	47,399	46,952	836	685	261,525	259,538
Oregon	19,329	18,855	16,080	15,804	12,210	12,006	22	25	47,641	46,689
Washington	35,983	35,511	29,659	29,240	27,235	27,579	6	7	92,883	92,336
Pacific Noncontiguous	4,713	4,899	6,095	6,113	4,963	5,043	0	0	15,771	16,056
Alaska	2,104	2,160	2,824	2,875	1,340	1,381	0	0	6,268	6,416
Hawaii	2,609	2,739	3,271	3,238	3,623	3,662	0	0	9,503	9,639
U.S. Total	1,394,890	1,374,515	1,344,192	1,327,101	978,356	985,714	7,625	7,320	3,725,064	3,694,650

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 2.9. Revenue from Retail Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2013 and 2012 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	7,846	7,418	6,277	6,137	3,365	3,292	70	38	17,558	16,885
Connecticut	2,306	2,213	1,904	1,901	440	452	20	19	4,669	4,584
Maine	669	657	471	467	265	242	0	0	1,406	1,366
Massachusetts	3,282	3,029	2,521	2,453	2,169	2,127	47	17	8,020	7,627
New Hampshire	744	713	611	598	225	231	0	0	1,579	1,543
Rhode Island	481	450	474	432	109	99	3	2	1,067	982
Vermont	364	356	296	285	157	142	0	0	817	784
Middle Atlantic	21,898	20,195	20,871	20,395	5,345	5,206	486	489	48,600	46,285
New Jersey	4,490	4,524	4,884	4,899	817	816	32	28	10,222	10,267
New York	9,544	8,930	11,722	11,446	1,180	918	391	390	22,836	21,683
Pennsylvania	7,864	6,742	4,266	4,050	3,348	3,472	64	71	15,542	14,335
East North Central	22,843	22,730	17,528	17,336	13,209	13,164	36	39	53,616	53,269
Illinois	4,951	5,335	4,119	4,058	2,664	2,625	31	34	11,765	12,053
Indiana	3,673	3,470	2,328	2,196	3,202	3,053	2	2	9,205	8,721
Michigan	4,962	4,871	4,171	4,211	2,417	2,427	1	1	11,550	11,510
Ohio	6,264	6,148	4,367	4,429	3,196	3,328	3	2	13,831	13,908
Wisconsin	2,993	2,905	2,542	2,442	1,730	1,731	0	0	7,265	7,078
West North Central	12,039	10,888	9,232	8,446	6,015	5,733	4	3	27,290	25,069
Iowa	1,615	1,513	1,050	978	1,104	1,033	0	0	3,769	3,524
Kansas	1,583	1,551	1,476	1,427	814	783	0	0	3,872	3,761
Minnesota	2,698	2,504	2,171	1,989	1,587	1,531	2	2	6,458	6,025
Missouri	3,965	3,492	2,741	2,499	1,105	1,037	2	2	7,813	7,029
Nebraska	1,223	972	921	774	837	835	0	0	2,981	2,581
North Dakota	459	406	477	410	378	336	0	0	1,315	1,152
South Dakota	495	448	397	369	190	179	0	0	1,081	996
South Atlantic	39,047	38,314	28,451	28,421	9,120	9,129	114	109	76,733	75,973
Delaware	592	614	424	430	221	230	0	0	1,237	1,274
District of Columbia	256	246	1,015	1,048	13	12	31	29	1,314	1,335
Florida	12,770	12,807	8,653	8,895	1,247	1,320	8	7	22,678	23,029
Georgia	6,136	5,996	4,529	4,400	1,972	1,866	13	12	12,650	12,275
Maryland	3,638	3,425	3,202	3,141	330	364	46	44	7,215	6,974
North Carolina	6,172	5,963	4,085	4,030	1,733	1,727	1	1	11,991	11,721
South Carolina	3,456	3,338	2,086	2,046	1,723	1,696	0	0	7,265	7,080
Virginia	4,925	4,823	3,820	3,778	1,136	1,163	16	16	9,897	9,780
West Virginia	1,103	1,103	636	654	745	750	0	0	2,485	2,507
East South Central	12,228	11,814	8,964	8,124	6,544	7,530	0	0	27,737	27,468
Alabama	3,533	3,491	2,377	2,318	2,014	2,101	0	0	7,924	7,910
Kentucky	2,623	2,461	1,798	1,637	2,094	2,365	0	0	6,515	6,462
Mississippi	1,990	1,847	1,433	1,267	1,023	1,049	0	0	4,445	4,163
Tennessee	4,083	4,016	3,357	2,902	1,413	2,015	0	0	8,853	8,933
West South Central	22,814	21,435	15,618	15,131	9,673	8,529	7	8	48,112	45,104
Arkansas	1,746	1,665	957	934	1,000	971	0	0	3,704	3,570
Louisiana	2,895	2,514	2,174	1,880	1,825	1,449	1	1	6,896	5,844
Oklahoma	2,246	2,168	1,542	1,461	927	843	0	0	4,715	4,472
Texas	15,926	15,088	10,945	10,857	5,920	5,266	6	7	32,797	31,218
Mountain	10,902	10,378	8,844	8,464	5,313	5,083	13	10	25,073	23,935
Arizona	3,878	3,718	2,958	2,830	833	813	0	0	7,669	7,361
Colorado	2,210	2,088	1,982	1,878	1,083	1,071	7	5	5,282	5,042
Idaho	804	707	460	410	569	525	0	0	1,833	1,642
Montana	509	482	466	449	230	213	0	0	1,205	1,143
Nevada	1,444	1,434	839	822	896	891	1	1	3,180	3,148
New Mexico	795	769	875	855	463	423	0	0	2,132	2,047
Utah	975	912	916	870	588	545	6	4	2,484	2,331
Wyoming	287	268	349	350	652	603	0	0	1,288	1,221
Pacific Contiguous	19,502	18,699	21,340	19,885	7,056	6,735	74	52	47,972	45,370
California	14,459	13,822	17,637	16,327	5,196	4,925	71	49	37,363	35,123
Oregon	1,913	1,849	1,396	1,314	708	671	2	2	4,019	3,835
Washington	3,129	3,028	2,307	2,244	1,152	1,139	0	1	6,589	6,412
Pacific Noncontiguous	1,346	1,409	1,554	1,559	1,294	1,361	0	0	4,194	4,329
Alaska	381	386	440	429	212	232	0	0	1,033	1,048
Hawaii	965	1,023	1,114	1,130	1,082	1,129	0	0	3,161	3,281
U.S. Total	170,466	163,280	138,679	133,898	66,934	65,761	805	747	376,884	363,687

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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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 2.10. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, 2013 and 2012 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	16.22	15.71	13.97	13.68	12.25	11.83	12.15	6.68	14.47	14.02
Connecticut	17.55	17.34	14.63	14.65	12.61	12.67	10.31	9.69	15.66	15.54
Maine	14.35	14.66	11.74	11.53	8.34	7.98	--	--	11.86	11.81
Massachusetts	15.83	14.91	14.23	13.84	13.18	12.57	13.06	4.91	14.51	13.79
New Hampshire	16.33	16.07	13.52	13.36	11.40	11.83	--	--	14.30	14.19
Rhode Island	15.20	14.40	12.92	11.87	11.82	10.68	13.03	8.28	13.72	12.74
Vermont	17.14	17.01	14.66	14.32	10.84	9.98	--	--	14.61	14.22
Middle Atlantic	16.39	15.27	13.23	12.97	7.27	7.49	12.23	12.50	13.18	12.75
New Jersey	15.73	15.78	12.77	12.78	10.80	10.52	10.60	9.77	13.69	13.68
New York	18.79	17.62	15.35	15.06	6.59	6.70	13.65	14.20	15.44	15.15
Pennsylvania	14.50	12.75	9.89	9.44	6.97	7.23	7.81	8.07	10.63	9.91
East North Central	12.15	12.05	9.59	9.46	6.66	6.51	5.61	6.33	9.41	9.27
Illinois	10.68	11.37	8.16	7.99	6.00	5.80	5.34	6.15	8.30	8.40
Indiana	10.99	10.53	9.60	9.14	6.70	6.34	9.87	9.56	8.73	8.29
Michigan	14.59	14.13	11.06	10.93	7.72	7.62	8.77	8.08	11.21	10.98
Ohio	12.01	11.76	9.35	9.47	6.22	6.24	6.62	6.98	9.20	9.12
Wisconsin	13.55	13.19	10.74	10.51	7.40	7.34	--	--	10.51	10.28
West North Central	11.32	10.59	9.14	8.48	6.67	6.28	8.73	7.72	9.17	8.54
Iowa	11.04	10.82	8.44	8.01	5.62	5.30	--	--	8.07	7.71
Kansas	11.64	11.24	9.68	9.24	7.39	7.09	--	--	9.72	9.33
Minnesota	11.81	11.35	9.42	8.84	6.98	6.54	9.79	8.67	9.41	8.86
Missouri	11.23	10.17	8.98	8.20	6.29	5.89	7.81	6.97	9.37	8.53
Nebraska	12.16	10.04	9.81	8.38	7.44	7.01	--	--	9.71	8.37
North Dakota	9.12	9.06	8.39	8.02	7.13	6.55	--	--	8.20	7.83
South Dakota	10.26	10.07	8.51	8.10	6.97	6.57	--	--	8.86	8.49
South Atlantic	11.39	11.38	9.38	9.37	6.55	6.55	8.64	8.44	9.75	9.73
Delaware	12.95	13.58	10.20	10.13	8.43	8.36	--	--	10.90	11.06
District of Columbia	12.57	12.28	11.94	12.02	5.54	5.46	9.52	9.01	11.85	11.85
Florida	11.27	11.42	9.39	9.66	7.61	8.04	8.69	8.45	10.22	10.44
Georgia	11.46	11.17	9.99	9.58	6.27	5.98	8.03	7.65	9.69	9.37
Maryland	13.25	12.84	10.68	10.43	8.36	8.09	8.47	8.29	11.66	11.28
North Carolina	10.97	10.91	8.76	8.66	6.45	6.42	7.94	7.88	9.24	9.15
South Carolina	11.99	11.77	9.88	9.63	6.01	6.02	--	--	9.24	9.10
Virginia	10.84	11.08	8.00	8.08	6.63	6.72	8.17	8.51	8.96	9.07
West Virginia	9.52	9.85	8.17	8.42	6.20	6.33	8.68	8.66	7.91	8.14
East South Central	10.40	10.32	9.81	9.87	5.98	6.11	11.68	11.28	8.71	8.58
Alabama	11.26	11.40	10.51	10.63	5.95	6.22	--	--	9.02	9.18
Kentucky	9.79	9.43	8.56	8.73	5.66	5.35	--	--	7.69	7.26
Mississippi	10.78	10.26	10.10	9.33	6.34	6.24	--	--	9.11	8.60
Tennessee	9.98	10.10	10.00	10.31	6.29	7.08	11.68	11.28	9.13	9.27
West South Central	10.74	10.30	8.11	7.99	5.82	5.39	10.08	10.30	8.42	8.11
Arkansas	9.59	9.30	8.05	7.71	6.04	5.76	11.58	11.23	7.93	7.62
Louisiana	9.43	8.37	8.96	7.75	5.92	4.76	9.45	8.72	8.04	6.90
Oklahoma	9.68	9.51	7.77	7.32	5.49	5.09	--	--	7.87	7.54
Texas	11.35	10.98	8.02	8.16	5.81	5.57	10.19	10.54	8.66	8.55
Mountain	11.31	10.94	9.35	8.99	6.48	6.18	10.47	9.62	9.18	8.82
Arizona	11.71	11.29	9.85	9.53	6.66	6.53	--	--	10.14	9.81
Colorado	11.93	11.46	9.86	9.39	7.34	6.95	10.55	9.69	9.88	9.39
Idaho	9.32	8.67	7.37	6.86	6.09	5.48	--	--	7.57	6.92
Montana	10.33	10.08	9.54	9.13	5.43	5.10	--	--	8.58	8.25
Nevada	11.89	11.83	9.01	8.83	6.52	6.48	8.47	8.40	9.03	8.95
New Mexico	11.68	11.37	9.74	9.32	6.36	5.83	--	--	9.25	8.83
Utah	10.37	9.93	8.32	8.06	5.87	5.62	10.68	9.79	8.15	7.84
Wyoming	10.16	9.85	8.57	8.24	6.42	6.03	--	--	7.55	7.19
Pacific Contiguous	13.48	12.94	12.57	11.92	8.13	7.78	8.54	7.21	11.93	11.38
California	16.19	15.34	14.23	13.41	10.96	10.49	8.54	7.17	14.29	13.53
Oregon	9.90	9.80	8.68	8.31	5.80	5.59	8.88	8.24	8.44	8.21
Washington	8.70	8.53	7.78	7.68	4.23	4.13	8.04	8.06	7.09	6.94
Pacific Noncontiguous	28.56	28.76	25.49	25.50	26.08	26.99	--	--	26.59	26.96
Alaska	18.12	17.88	15.58	14.93	15.83	16.82	--	--	16.49	16.33
Hawaii	36.98	37.34	34.05	34.88	29.87	30.82	--	--	33.26	34.04
U.S. Total	12.22	11.88	10.32	10.09	6.84	6.67	10.55	10.21	10.12	9.84

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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, 2003 through 2013 (Thousand Megawatthours)

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2004	2,725,694	4,170,331	24,258	78,267	6,998,549
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

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, 2003 through 2013 (Thousand Megawatthours)

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2003	1,824,030	3,906,220	1,156,796	33,909	6,920,954
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

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, 2003-2013 (Megawatthours)

	Canada		Mexico		U.S. Total	
Year	Imports from	Exports to	Imports from	Exports to	Imports	Exports
2003	29,324,625	23,584,513	1,069,926	390,190	30,394,551	23,974,703
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	62,539,403	10,674,546	7,815,666	678,304	70,355,069	11,352,850

Sources: National Energy Board of Canada; DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, 'Annual Report of International Electric Export/Import Data,' predecessor forms.
To estimate electricity trade with Mexico, for 2001 forward data from the California Independent System Operator are used in combination with the Form OE-781R values.

Table 2.14. Green Pricing Customers by End Use Sector, 2004 through 2012 (Table Discontinued)

Year	Residential	Commercial	Industrial	Transportation	Total
2004	864,794	63,189	289	61	928,333
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), 2003 - 2013
(Thousand Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Renewable Sources Excluding Hydroelectric	Hydroelectric Pumped Storage	Other	Total
Annual Totals											
2003	1,973,737	102,734	16,672	649,908	15,600	763,733	275,806	79,487	-8,535	14,045	3,883,185
2004	1,978,301	100,391	20,754	710,100	15,252	788,528	268,417	83,067	-8,488	14,232	3,970,555
2005	2,012,873	99,840	22,385	760,960	13,464	781,986	270,321	87,329	-6,558	12,821	4,055,423
2006	1,990,511	44,460	19,706	816,441	14,177	787,219	289,246	96,525	-6,558	12,974	4,064,702
2007	2,016,456	49,505	16,234	896,590	13,453	806,425	247,510	105,238	-6,896	12,231	4,156,745
2008	1,985,801	31,917	14,325	882,981	11,707	806,208	254,831	126,101	-6,288	11,804	4,119,388
2009	1,755,904	25,972	12,964	920,979	10,632	798,855	273,445	144,279	-4,627	11,928	3,950,331
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	167,173	-5,501	12,855	4,125,060
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	193,981	-6,421	14,154	4,100,141
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	218,333	-4,950	13,787	4,047,765
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	253,508	-4,681	13,588	4,065,964
2011											
January	170,803	1,902	1,555	74,254	930	72,743	25,531	14,742	-659	1,071	362,872
February	138,311	1,217	1,217	65,924	807	64,789	24,131	16,116	-413	1,027	313,127
March	134,845	1,276	1,416	65,947	945	65,662	31,134	16,650	-349	1,182	318,710
April	124,488	1,459	965	70,029	918	54,547	31,194	18,125	-466	1,141	302,401
May	137,102	1,356	1,023	75,243	875	57,013	32,587	17,638	-417	1,210	323,628
June	158,055	1,374	1,220	90,691	1,013	65,270	32,151	17,284	-567	1,236	367,727
July	176,586	1,714	1,440	119,624	1,098	72,345	31,285	14,000	-708	1,309	418,693
August	171,281	1,295	1,299	119,856	1,087	71,339	25,764	14,054	-692	1,230	406,511
September	140,941	1,119	1,305	91,739	1,004	66,849	21,378	13,048	-583	1,132	337,931
October	126,627	1,114	948	78,819	941	63,337	19,787	16,550	-601	1,176	308,699
November	121,463	1,082	701	75,441	943	64,474	20,681	18,589	-458	1,187	304,102
December	132,929	1,178	1,007	86,122	1,005	71,837	23,732	17,185	-509	1,254	335,740
2012											
January	129,091	1,180	1,297	90,761	1,017	72,381	23,107	19,906	-348	1,137	339,528
February	113,872	908	994	90,610	1,044	63,847	20,283	16,996	-237	1,072	309,389
March	105,526	971	570	92,251	1,076	61,729	25,909	20,200	-281	1,140	309,091
April	96,285	965	538	94,829	1,057	55,871	26,294	18,563	-265	1,091	295,228
May	115,983	1,079	651	107,352	1,002	62,081	28,643	18,898	-371	1,200	336,518
June	131,261	1,306	762	115,598	972	65,140	26,659	18,470	-507	1,166	360,826
July	160,450	1,530	809	138,863	1,042	69,129	26,491	15,725	-619	1,218	414,640
August	152,181	1,202	916	131,736	1,050	69,602	23,034	15,330	-529	1,178	395,700
September	125,589	978	882	108,012	904	64,511	17,604	15,401	-431	1,135	334,585
October	120,999	1,061	744	91,725	895	59,743	16,501	19,225	-378	1,135	311,651
November	128,727	986	824	80,169	875	56,713	18,732	18,217	-409	1,140	305,975
December	134,079	1,235	800	83,989	963	68,584	22,984	21,402	-576	1,176	334,635
2013											
January	138,105	1,733	1,042	88,559	1,144	71,406	24,829	21,518	-465	1,098	348,967
February	123,547	1,130	867	80,283	968	61,483	20,418	20,330	-320	1,020	309,728
March	130,634	990	1,007	84,725	1,070	62,947	20,534	22,810	-462	1,143	325,399
April	111,835	995	891	78,036	1,020	56,767	25,097	23,961	-292	1,024	299,333
May	119,513	1,067	1,345	83,816	1,088	62,848	28,450	23,254	-334	1,110	322,156
June	138,283	1,035	1,307	99,615	1,048	66,430	27,384	20,954	-358	1,125	356,823
July	152,867	1,458	1,354	120,771	1,148	70,539	27,255	18,593	-340	1,201	394,846
August	149,426	1,076	1,372	121,156	1,143	71,344	21,633	17,382	-465	1,217	385,286
September	133,110	964	1,222	102,063	1,087	65,799	16,961	18,991	-439	1,182	340,941
October	120,996	945	1,074	88,587	1,072	63,184	17,199	21,058	-373	1,185	314,925
November	120,940	989	850	84,287	1,060	64,975	17,677	23,030	-413	1,143	314,540
December	141,860	1,438	1,013	92,936	1,006	71,294	21,128	21,626	-421	1,141	353,021

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 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.
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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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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 3.1.B. Net Generation from Renewable Sources: Total (All Sectors), 2003 - 2013
(Thousand Megawatthours)

Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Sources
Annual Totals										
2003	11,187	2	532	37,529	5,077	8,306	2,428	14,424	275,806	355,293
2004	14,144	6	569	38,117	5,128	8,151	2,141	14,811	268,417	351,485
2005	17,811	16	535	38,856	5,142	8,330	1,948	14,692	270,321	357,651
2006	26,589	15	493	38,762	5,677	8,478	1,944	14,568	289,246	385,772
2007	34,450	16	596	39,014	6,158	8,304	2,063	14,637	247,510	352,747
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932
2009	73,886	157	735	36,050	7,924	8,058	2,461	15,009	273,445	417,724
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073
2011										
January	8,550	33	6	3,290	732	542	241	1,347	25,531	40,273
February	10,452	47	39	2,937	680	505	242	1,215	24,131	40,247
March	10,545	65	58	3,081	737	600	228	1,337	31,134	47,784
April	12,422	80	84	2,798	692	602	209	1,239	31,194	49,320
May	11,772	90	100	2,794	728	630	205	1,318	32,587	50,225
June	10,985	98	125	3,230	764	650	218	1,215	32,151	49,435
July	7,489	88	103	3,362	793	659	238	1,269	31,285	45,285
August	7,474	120	109	3,384	805	635	252	1,275	25,764	39,817
September	6,869	108	78	3,178	754	603	232	1,226	21,378	34,425
October	10,525	99	60	2,954	754	630	247	1,281	19,787	36,337
November	12,439	82	25	3,088	793	636	256	1,271	20,681	39,270
December	10,656	101	20	3,353	813	662	256	1,324	23,732	40,917
2012										
January	13,632	82	13	3,314	806	589	206	1,263	23,107	43,013
February	11,052	106	29	3,111	735	561	209	1,193	20,283	37,279
March	14,026	163	68	3,034	801	597	226	1,285	25,909	46,109
April	12,709	223	96	2,704	766	598	219	1,248	26,294	44,858
May	12,541	337	125	2,937	804	633	217	1,304	28,643	47,541
June	11,972	391	136	3,081	790	627	195	1,277	26,659	45,128
July	8,822	392	117	3,352	855	651	216	1,321	26,491	42,216
August	8,469	369	93	3,370	861	621	244	1,304	23,034	38,364
September	8,790	373	85	3,227	808	600	218	1,300	17,604	33,005
October	12,636	365	66	3,113	861	601	254	1,329	16,501	35,726
November	11,649	316	31	3,190	827	604	253	1,347	18,732	36,950
December	14,524	333	16	3,365	890	639	244	1,390	22,984	44,385
2013										
January	14,739	299	11	3,400	870	579	239	1,382	24,829	46,347
February	14,076	387	45	3,083	782	507	213	1,236	20,418	40,749
March	15,756	547	72	3,300	917	601	240	1,378	20,534	43,345
April	17,476	573	93	2,863	848	576	256	1,274	25,097	49,058
May	16,239	649	104	3,174	923	620	238	1,308	28,450	51,704
June	13,748	749	122	3,330	890	617	221	1,278	27,384	48,338
July	11,094	743	85	3,536	911	640	246	1,337	27,255	45,847
August	9,634	845	99	3,634	962	628	258	1,322	21,633	39,015
September	11,674	874	75	3,353	884	597	235	1,299	16,961	35,952
October	13,635	875	112	3,341	863	606	262	1,363	17,199	38,256
November	15,803	775	49	3,407	888	594	283	1,230	17,677	40,707
December	13,967	804	46	3,606	920	621	296	1,366	21,128	42,754

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. 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.
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Table 3.2.A. Net Generation by Energy Source: Electric Utilities, 2003 - 2013
(Thousand Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Renewable Sources Excluding Hydroelectric	Hydroelectric Pumped Storage	Other	Total
Annual Totals											
2003	1,500,281	62,774	7,156	186,967	243	458,829	249,622	3,421	-7,532	519	2,462,281
2004	1,513,641	62,196	11,498	199,662	374	475,682	245,546	3,692	-7,526	467	2,505,231
2005	1,484,855	58,572	11,150	238,204	10	436,296	245,553	4,945	-5,383	643	2,474,846
2006	1,471,421	31,269	9,634	282,088	30	425,341	261,864	6,588	-5,281	700	2,483,656
2007	1,490,985	33,325	7,395	313,785	141	427,555	226,734	8,953	-5,328	586	2,504,131
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	11,308	-5,143	545	2,475,367
2009	1,322,092	18,035	7,182	349,166	96	417,275	247,198	14,617	-3,369	483	2,372,776
2010	1,378,028	17,258	8,807	392,616	52	424,843	236,104	17,927	-4,466	462	2,471,632
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	21,933	-5,492	604	2,460,851
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	28,017	-4,202	603	2,339,172
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	32,417	-3,773	615	2,388,058
2011											
January	126,539	1,210	1,082	29,515	1	37,742	23,602	1,713	-551	46	220,900
February	103,607	888	818	25,456	1	34,119	22,187	1,905	-331	49	188,700
March	102,328	982	922	26,612	1	34,201	28,401	1,930	-277	49	195,148
April	93,647	1,178	600	29,154	1	28,964	28,280	2,098	-403	50	183,567
May	104,296	1,062	655	31,372	7	28,502	29,436	1,975	-366	55	196,994
June	119,780	976	831	38,311	6	34,635	29,631	1,795	-491	60	225,535
July	133,078	1,110	983	49,479	1	38,444	29,180	1,428	-612	51	253,142
August	128,915	924	908	49,617	1	37,435	23,866	1,418	-599	55	242,540
September	105,127	819	945	37,391	2	34,639	19,289	1,383	-500	48	199,144
October	94,046	837	618	33,218	1	33,558	17,509	2,041	-517	46	181,359
November	90,103	822	399	30,532	4	34,107	18,732	2,168	-398	45	176,515
December	99,641	879	667	34,186	3	38,952	21,300	2,079	-450	49	197,306
2012											
January	96,773	858	843	36,548	0	38,270	20,835	2,620	-301	53	196,498
February	86,462	699	658	35,281	0	33,117	18,363	2,124	-202	53	176,554
March	80,689	784	256	36,916	0	30,601	23,555	2,697	-209	43	175,331
April	75,146	766	293	38,669	0	27,884	24,174	2,374	-250	41	169,095
May	87,924	816	380	45,633	0	31,384	26,049	2,645	-291	53	194,593
June	100,022	934	473	48,423	0	34,052	24,540	2,448	-429	52	210,514
July	121,051	1,133	467	57,832	0	35,999	24,766	1,828	-530	48	242,595
August	115,044	906	477	53,961	0	36,149	21,575	1,851	-445	59	229,579
September	94,983	737	520	44,430	0	33,384	16,308	1,814	-368	62	191,871
October	90,924	787	409	38,288	0	31,289	14,911	2,491	-323	48	178,825
November	96,094	717	454	33,438	0	29,038	16,928	2,474	-355	46	178,834
December	101,368	755	434	35,539	0	33,656	20,933	2,653	-499	45	194,884
2013											
January	103,536	1,018	700	39,880	71	36,748	22,563	2,966	-404	45	207,123
February	91,384	723	616	36,248	63	31,144	18,316	2,704	-270	47	180,975
March	97,675	755	687	37,661	59	31,426	18,349	2,846	-382	54	189,129
April	84,352	744	574	33,545	38	28,991	22,654	3,053	-232	42	173,761
May	90,053	785	1,035	36,891	61	32,977	25,924	2,836	-260	52	190,354
June	104,679	751	966	45,152	68	34,504	24,686	2,446	-261	43	213,033
July	114,402	950	976	52,966	66	36,733	24,705	2,245	-238	62	232,867
August	113,917	794	952	55,077	76	37,177	19,864	2,057	-417	60	229,557
September	99,056	664	905	45,845	75	34,459	15,422	2,591	-347	49	198,719
October	91,694	699	759	39,850	61	31,605	15,619	2,682	-307	51	182,713
November	92,146	731	609	36,703	78	32,939	15,975	3,085	-331	56	181,991
December	105,558	832	743	41,610	81	37,412	18,964	2,907	-326	55	207,837

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 non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
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Table 3.2.B. Net Generation from Renewable Sources: Electric Utilities, 2003 - 2013
(Thousand Megawatthours)

Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Sources
Annual Totals										
2003	354	2	0	882	394	326	214	1,249	249,622	253,043
2004	405	6	0	1,209	460	198	166	1,248	245,546	249,238
2005	1,046	16	0	1,829	503	250	175	1,126	245,553	250,499
2006	2,351	15	0	1,937	705	228	190	1,162	261,864	268,452
2007	4,361	10	1	2,226	751	240	226	1,139	226,734	235,687
2008	6,899	16	1	1,888	844	211	252	1,197	229,645	240,953
2009	10,348	28	1	1,748	866	184	261	1,182	247,198	261,815
2010	13,089	101	0	2,328	879	154	259	1,118	236,104	254,031
2011	17,140	187	29	2,023	957	165	295	1,137	291,413	313,346
2012	22,926	551	89	1,836	1,022	184	265	1,143	252,936	280,953
2013	26,436	841	102	2,534	1,114	197	188	1,005	243,040	275,457
2011										
January	1,310	6	3	191	75	10	19	98	23,602	25,315
February	1,519	8	5	174	71	10	33	86	22,187	24,092
March	1,508	12	9	185	76	12	29	99	28,401	30,331
April	1,759	14	3	119	73	14	21	94	28,280	30,378
May	1,622	14	3	126	74	16	23	96	29,436	31,411
June	1,391	13	0	187	76	16	26	86	29,631	31,426
July	997	13	0	203	82	15	24	95	29,180	30,608
August	959	19	0	220	85	15	28	92	23,866	25,283
September	965	25	4	180	74	15	27	93	19,289	20,672
October	1,637	22	0	154	91	16	23	99	17,509	19,550
November	1,813	23	3	108	90	13	20	98	18,732	20,900
December	1,659	19	0	176	88	14	23	100	21,300	23,379
2012										
January	2,222	15	5	172	76	13	19	99	20,835	23,454
February	1,745	18	3	158	76	12	20	92	18,363	20,487
March	2,306	30	10	136	80	16	23	95	23,555	26,252
April	2,022	37	12	92	85	17	22	87	24,174	26,547
May	2,197	53	10	157	90	18	24	97	26,049	28,694
June	2,019	69	9	132	84	14	27	92	24,540	26,987
July	1,361	66	11	165	93	15	22	96	24,766	26,594
August	1,370	59	8	184	94	17	24	96	21,575	23,426
September	1,375	57	6	156	83	15	28	95	16,308	18,122
October	2,078	51	7	124	92	17	23	99	14,911	17,402
November	2,029	48	4	178	85	16	17	97	16,928	19,402
December	2,203	48	4	182	85	14	16	99	20,933	23,586
2013										
January	2,532	26	4	185	87	14	18	99	22,563	25,529
February	2,294	36	7	174	79	13	13	88	18,316	21,020
March	2,374	56	9	190	96	14	13	94	18,349	21,196
April	2,682	60	7	103	92	18	17	74	22,654	25,706
May	2,382	68	13	175	95	18	19	67	25,924	28,760
June	1,945	79	14	195	88	17	13	93	24,686	27,131
July	1,703	76	13	234	88	18	17	96	24,705	26,950
August	1,457	90	11	252	121	17	16	92	19,864	21,921
September	2,032	90	8	244	93	16	15	92	15,422	18,013
October	2,105	96	9	259	92	18	16	86	15,619	18,301
November	2,607	78	3	251	90	18	14	24	15,975	19,060
December	2,324	84	3	272	91	14	18	100	18,964	21,871

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. Biogenic municipal solid waste is included in Other Renewable Sources.
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Table 3.3.A. Net Generation by Energy Source: Independent Power Producers, 2003 - 2013
(Thousand Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Renewable Sources Excluding Hydroelectric	Hydroelectric Pumped Storage	Other	Total
Annual Totals											
2003	452,433	35,818	7,949	380,337	2,404	304,904	21,890	46,060	-1,003	8,088	1,258,879
2004	443,547	33,574	7,410	427,510	3,194	312,846	19,518	48,636	-962	7,856	1,303,129
2005	507,199	37,096	9,664	445,625	3,767	345,690	21,486	51,708	-1,174	6,285	1,427,346
2006	498,316	10,396	8,409	452,329	4,223	361,877	24,390	59,345	-1,277	6,412	1,424,421
2007	507,406	13,645	6,942	500,967	3,901	378,869	19,109	65,751	-1,569	6,191	1,501,212
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	85,776	-1,145	6,414	1,498,982
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	101,860	-1,259	6,146	1,437,061
2010	449,709	5,117	3,497	508,774	2,915	382,126	22,351	120,956	-1,035	6,345	1,500,754
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	141,954	-928	7,059	1,487,335
2012	354,076	2,757	1,758	627,833	2,984	374,509	20,923	160,064	-748	7,030	1,551,186
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	189,045	-908	6,742	1,515,657
2011											
January	42,852	588	349	37,417	242	35,000	1,785	10,446	-108	530	129,100
February	33,475	252	298	33,924	206	30,670	1,782	11,904	-82	503	112,932
March	31,255	229	393	32,750	251	31,461	2,544	12,260	-72	589	111,660
April	29,625	221	258	34,103	243	25,583	2,728	13,669	-63	584	106,952
May	31,525	242	259	36,802	235	28,511	2,950	13,346	-51	590	114,409
June	36,936	347	284	45,115	253	30,635	2,367	12,911	-76	621	129,393
July	42,051	554	358	62,024	261	33,901	1,993	9,969	-96	645	151,659
August	40,884	320	298	61,922	263	33,903	1,800	9,991	-94	614	149,901
September	34,521	246	261	46,908	251	32,210	1,965	9,121	-83	569	125,969
October	31,395	213	225	38,745	239	29,779	2,150	12,071	-84	582	115,317
November	30,220	204	207	37,730	224	30,367	1,801	13,840	-60	593	115,124
December	32,045	238	241	44,007	244	32,885	2,252	12,425	-59	639	124,919
2012											
January	31,101	224	206	46,574	263	34,111	1,995	14,684	-47	577	129,688
February	26,312	147	169	48,027	256	30,730	1,678	12,406	-35	546	120,236
March	23,721	127	138	48,085	261	31,128	2,117	15,075	-71	587	121,167
April	20,138	141	87	49,080	254	27,987	1,940	13,914	-15	561	114,087
May	27,005	210	121	53,993	244	30,697	2,379	13,838	-80	599	129,007
June	30,125	314	119	59,262	253	31,088	1,942	13,609	-78	612	137,247
July	38,127	340	146	72,301	266	33,130	1,586	11,293	-89	620	157,719
August	35,897	235	202	69,198	266	33,453	1,305	10,855	-84	588	151,914
September	29,513	186	151	55,837	232	31,126	1,135	11,021	-62	575	129,715
October	29,028	204	156	45,919	225	28,455	1,395	14,180	-55	575	120,080
November	31,554	213	130	39,163	211	27,674	1,590	13,150	-54	580	114,213
December	31,555	415	133	40,394	253	34,928	1,862	16,039	-77	610	126,112
2013											
January	33,416	635	149	40,509	313	34,658	1,938	15,836	-61	545	127,938
February	31,100	346	132	36,722	261	30,340	1,736	15,140	-50	497	116,224
March	31,794	187	151	39,104	259	31,522	1,878	17,310	-80	574	122,699
April	26,434	206	144	37,081	284	27,776	2,189	18,463	-60	528	113,045
May	28,327	228	101	39,353	306	29,871	2,194	17,795	-74	574	118,674
June	32,481	241	141	46,520	280	31,926	2,365	15,810	-97	586	130,253
July	37,252	460	167	58,993	315	33,807	2,224	13,523	-103	605	147,241
August	34,371	239	211	57,526	300	34,167	1,525	12,505	-47	587	141,386
September	32,990	262	141	48,349	298	31,340	1,297	13,773	-92	561	128,919
October	28,248	202	149	41,022	343	31,578	1,339	15,695	-66	558	119,069
November	27,712	212	144	39,663	289	32,037	1,494	17,275	-82	554	119,297
December	35,144	544	151	42,679	274	33,881	1,839	15,919	-95	574	130,911

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 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.
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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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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, 2003 - 2013
(Thousand Megawatthours)

Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Sources
Annual Totals										
2003	10,834	0	532	8,645	4,435	7,227	1,211	13,175	21,890	67,949
2004	13,739	0	569	8,528	4,377	6,978	884	13,563	19,518	68,154
2005	16,764	0	535	8,741	4,308	7,092	701	13,566	21,486	73,195
2006	24,238	0	493	8,404	4,771	7,259	774	13,406	24,390	83,736
2007	30,089	6	595	8,486	5,177	7,061	839	13,498	19,109	84,860
2008	48,464	60	787	8,750	6,057	6,975	1,040	13,643	23,451	109,226
2009	63,538	129	734	8,990	6,718	6,829	1,095	13,826	24,308	126,168
2010	81,547	316	789	9,118	7,227	6,742	1,116	14,101	22,351	143,306
2011	102,981	734	777	8,709	7,120	6,217	1,237	14,180	26,117	168,071
2012	117,822	2,737	787	9,214	7,852	6,056	1,176	14,419	20,923	180,987
2013	141,306	6,969	813	9,768	8,442	5,838	1,139	14,770	22,018	211,063
2011										
January	7,237	25	3	789	576	459	108	1,249	1,785	12,231
February	8,929	34	34	712	532	433	101	1,129	1,782	13,686
March	9,032	47	49	713	577	516	89	1,238	2,544	14,804
April	10,657	58	81	586	542	515	85	1,145	2,728	16,397
May	10,145	66	97	634	574	524	85	1,222	2,950	16,296
June	9,590	72	125	749	605	549	93	1,129	2,367	15,279
July	6,489	64	103	845	625	557	111	1,174	1,993	11,962
August	6,512	89	109	818	633	531	115	1,183	1,800	11,791
September	5,900	75	74	736	598	504	101	1,132	1,965	11,085
October	8,882	70	60	653	589	528	108	1,182	2,150	14,222
November	10,618	55	22	691	624	536	120	1,173	1,801	15,640
December	8,990	78	20	783	644	565	121	1,224	2,252	14,677
2012										
January	11,402	63	8	799	650	498	98	1,165	1,995	16,679
February	9,301	82	26	754	582	471	89	1,101	1,678	14,084
March	11,713	123	58	757	644	496	94	1,190	2,117	17,192
April	10,680	172	84	624	606	492	96	1,161	1,940	15,854
May	10,338	267	116	656	639	522	93	1,207	2,379	16,217
June	9,948	303	127	802	633	526	84	1,185	1,942	15,551
July	7,457	309	106	882	687	537	91	1,225	1,586	12,878
August	7,095	293	85	876	687	504	107	1,208	1,305	12,160
September	7,411	297	79	792	649	491	96	1,205	1,135	12,156
October	10,550	297	59	752	689	490	112	1,231	1,395	15,574
November	9,613	256	27	733	661	499	111	1,250	1,590	14,740
December	12,313	275	12	786	725	531	106	1,291	1,862	17,901
2013										
January	12,197	262	7	826	691	479	90	1,283	1,938	17,775
February	11,774	336	38	717	622	419	86	1,148	1,736	16,875
March	13,374	468	63	797	728	493	102	1,284	1,878	19,188
April	14,786	487	86	673	676	460	95	1,201	2,189	20,652
May	13,848	552	91	743	733	500	87	1,241	2,194	19,989
June	11,796	638	108	799	705	502	77	1,185	2,365	18,176
July	9,386	638	73	859	723	519	84	1,241	2,224	15,746
August	8,173	725	88	949	741	507	92	1,231	1,525	14,030
September	9,636	752	67	845	700	478	89	1,207	1,297	15,070
October	11,521	746	103	781	678	489	99	1,278	1,339	17,035
November	13,183	671	47	857	710	483	118	1,206	1,494	18,769
December	11,631	696	42	921	734	509	120	1,266	1,839	17,758

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. Biogenic municipal solid waste is included in Other Renewable Sources.
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Table 3.4.A. Net Generation by Energy Source: Commerical Sector, 2003 - 2013
(Thousand Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Renewable Sources Excluding Hydroelectric	Hydroelectric Pumped Storage	Other	Total
Annual Totals											
2003	1,206	416	8	3,899	0	0	72	1,302	0	594	7,496
2004	1,340	493	7	3,969	0	0	105	1,575	0	781	8,270
2005	1,353	368	7	4,249	0	0	86	1,673	0	756	8,492
2006	1,310	228	7	4,355	0	0	93	1,619	0	758	8,371
2007	1,371	180	9	4,257	0	0	77	1,614	0	764	8,273
2008	1,261	136	6	4,188	0	0	60	1,555	0	720	7,926
2009	1,096	157	5	4,225	0	0	71	1,769	0	842	8,165
2010	1,111	117	7	4,725	3	0	80	1,714	0	834	8,592
2011	1,049	86	3	5,487	3	0	26	2,476	0	950	10,080
2012	883	191	6	6,603	0	0	28	2,545	0	1,046	11,301
2013	839	118	5	7,154	0	0	44	2,956	0	1,118	12,234
2011											
January	108	20	1	421	0	0	2	194	0	71	817
February	104	10	1	367	0	0	2	180	0	61	725
March	100	6	1	373	0	0	3	200	0	71	753
April	77	4	0	357	0	0	3	195	0	71	706
May	82	5	0	471	0	0	3	218	0	88	867
June	90	3	0	463	0	0	2	218	0	84	860
July	104	7	0	605	0	0	2	220	0	85	1,023
August	94	7	0	571	0	0	2	225	0	87	985
September	84	7	0	487	0	0	2	208	0	83	870
October	65	6	0	438	0	0	2	204	0	84	799
November	62	6	0	437	0	0	2	208	0	84	800
December	78	5	1	499	0	0	2	207	0	81	874
2012											
January	83	14	1	543	0	0	3	197	0	76	916
February	81	15	1	531	0	0	2	194	0	77	900
March	74	12	1	537	0	0	2	204	0	82	911
April	66	17	0	510	0	0	2	207	0	86	888
May	69	12	0	541	0	0	3	215	0	90	930
June	79	21	0	585	0	0	2	204	0	84	975
July	83	18	1	716	0	0	2	219	0	96	1,135
August	81	18	1	620	0	0	2	228	0	96	1,046
September	66	14	1	537	0	0	2	219	0	91	930
October	57	19	1	513	0	0	2	222	0	91	904
November	67	15	1	488	0	0	2	217	0	86	876
December	77	15	1	483	0	0	2	219	0	91	888
2013											
January	89	19	1	562	0	0	4	222	0	85	981
February	81	14	1	512	0	0	4	202	0	74	888
March	78	7	1	574	0	0	4	241	0	90	995
April	63	7	0	541	0	0	4	235	0	95	946
May	69	8	0	546	0	0	5	256	0	97	981
June	75	7	0	593	0	0	5	253	0	93	1,026
July	76	13	0	779	0	0	5	263	0	100	1,236
August	71	7	1	697	0	0	4	267	0	101	1,147
September	60	6	1	652	0	0	3	252	0	99	1,073
October	49	7	1	550	0	0	2	258	0	96	961
November	60	8	0	525	0	0	2	248	0	92	936
December	68	16	1	623	0	0	3	259	0	95	1,064

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 non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
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Table 3.4.B. Net Generation from Renewable Sources: Commerical Sector, 2003 - 2013
(Thousand Megawatthours)

Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Sources
Annual Totals										
2003	0	0	0	13	152	717	420	0	72	1,374
2004	0	0	0	13	172	945	444	0	105	1,680
2005	0	0	0	16	218	953	486	0	86	1,759
2006	0	0	0	21	173	956	470	0	93	1,713
2007	0	0	0	15	203	962	434	0	77	1,691
2008	0	0	0	21	234	911	389	0	60	1,615
2009	0	0	0	20	318	1,045	386	0	71	1,839
2010	16	5	0	21	256	1,031	386	0	80	1,794
2011	51	84	0	26	952	971	393	0	26	2,502
2012	54	148	0	24	848	1,070	402	0	28	2,573
2013	61	294	0	34	925	1,149	493	0	44	3,000
2011										
January	3	2	0	2	80	73	33	0	2	196
February	4	4	0	3	75	62	32	0	2	182
March	4	6	0	2	83	72	34	0	3	202
April	5	8	0	2	75	73	31	0	3	197
May	5	9	0	2	79	90	33	0	3	220
June	4	11	0	2	81	85	34	0	2	220
July	3	10	0	3	85	87	33	0	2	222
August	3	11	0	2	85	89	36	0	2	227
September	3	8	0	2	80	84	31	0	2	210
October	6	7	0	1	73	86	31	0	2	206
November	6	4	0	2	77	87	32	0	2	209
December	6	4	0	3	79	83	33	0	2	209
2012										
January	6	4	0	2	73	77	35	0	3	200
February	5	5	0	2	70	78	34	0	2	196
March	5	9	0	2	70	85	33	0	2	206
April	5	13	0	2	69	88	31	0	2	210
May	4	16	0	2	68	92	33	0	3	218
June	4	18	0	2	66	85	29	0	2	206
July	3	16	0	2	68	98	31	0	2	221
August	3	15	0	2	74	98	36	0	2	230
September	3	18	0	2	70	93	33	0	2	221
October	5	15	0	2	73	93	34	0	2	225
November	5	11	0	2	75	88	37	0	2	219
December	5	9	0	2	72	93	37	0	2	222
2013										
January	6	9	0	2	77	87	40	0	4	225
February	5	15	0	2	68	76	35	0	4	206
March	5	22	0	3	79	93	40	0	4	246
April	5	25	0	1	66	99	39	0	4	239
May	5	27	0	2	80	101	41	0	5	261
June	4	30	0	2	81	96	40	0	5	258
July	3	28	0	3	84	102	43	0	5	268
August	3	29	0	3	84	103	46	0	4	271
September	4	30	0	2	77	102	38	0	3	255
October	5	32	0	4	77	98	41	0	2	259
November	8	24	0	5	72	94	44	0	2	250
December	7	23	0	5	79	98	47	0	3	262

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. 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 3.5.A. Net Generation by Energy Source: Industrial Sector, 2003 - 2013
(Thousand Megawatthours)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Renewable Sources Excluding Hydroelectric	Hydroelectric Pumped Storage	Other	Total
Annual Totals											
2003	19,817	3,726	1,559	78,705	12,953	0	4,222	28,704	0	4,843	154,530
2004	19,773	4,128	1,839	78,959	11,684	0	3,248	29,164	0	5,129	153,925
2005	19,466	3,804	1,564	72,882	9,687	0	3,195	29,003	0	5,137	144,739
2006	19,464	2,567	1,656	77,669	9,923	0	2,899	28,972	0	5,103	148,254
2007	16,694	2,355	1,889	77,580	9,411	0	1,590	28,919	0	4,690	143,128
2008	15,703	1,555	1,664	76,421	8,507	0	1,676	27,462	0	4,125	137,113
2009	13,686	1,474	1,489	75,748	7,574	0	1,868	26,033	0	4,457	132,329
2010	18,441	844	1,414	81,583	8,343	0	1,668	26,576	0	5,214	144,082
2011	14,490	657	1,234	81,911	8,624	0	1,799	27,619	0	5,541	141,875
2012	12,603	563	2,359	86,500	8,913	0	2,353	27,707	0	5,108	146,107
2013	12,554	495	2,036	88,733	8,531	0	3,463	29,091	0	5,113	150,015
2011											
January	1,304	84	123	6,901	687	0	143	2,389	0	423	12,054
February	1,125	68	100	6,177	600	0	160	2,126	0	414	10,770
March	1,161	59	101	6,212	693	0	187	2,260	0	474	11,149
April	1,139	56	107	6,416	674	0	184	2,164	0	436	11,175
May	1,199	47	109	6,597	633	0	198	2,099	0	477	11,359
June	1,249	48	104	6,802	753	0	150	2,360	0	471	11,938
July	1,353	43	98	7,517	836	0	109	2,384	0	529	12,868
August	1,389	45	94	7,745	823	0	96	2,420	0	474	13,085
September	1,209	46	99	6,953	752	0	122	2,336	0	432	11,948
October	1,120	58	104	6,419	700	0	126	2,233	0	463	11,224
November	1,077	49	95	6,742	715	0	146	2,374	0	465	11,663
December	1,165	55	100	7,429	758	0	178	2,474	0	483	12,642
2012											
January	1,135	84	247	7,096	754	0	275	2,405	0	431	12,425
February	1,017	46	167	6,771	788	0	240	2,272	0	396	11,699
March	1,041	49	176	6,713	815	0	234	2,225	0	428	11,681
April	935	41	158	6,571	803	0	178	2,068	0	403	11,158
May	984	41	150	7,186	758	0	212	2,200	0	458	11,988
June	1,035	37	170	7,327	719	0	175	2,210	0	418	12,091
July	1,189	39	195	8,013	776	0	137	2,385	0	454	13,190
August	1,159	43	235	7,956	784	0	152	2,396	0	434	13,160
September	1,026	40	210	7,209	672	0	159	2,347	0	406	12,069
October	990	50	179	7,006	670	0	192	2,332	0	422	11,841
November	1,012	41	239	7,080	664	0	213	2,376	0	428	12,052
December	1,079	51	233	7,573	709	0	186	2,490	0	430	12,751
2013											
January	1,064	61	192	7,608	759	0	324	2,494	0	423	12,924
February	983	47	118	6,801	644	0	363	2,285	0	402	11,642
March	1,086	42	169	7,387	752	0	302	2,413	0	425	12,576
April	986	37	173	6,869	698	0	250	2,210	0	358	11,580
May	1,063	46	209	7,025	721	0	328	2,367	0	387	12,147
June	1,048	36	201	7,351	699	0	328	2,445	0	402	12,511
July	1,138	36	211	8,033	767	0	320	2,563	0	434	13,502
August	1,066	36	208	7,856	767	0	240	2,553	0	468	13,195
September	1,004	33	175	7,218	714	0	239	2,375	0	473	12,230
October	1,005	37	166	7,165	667	0	239	2,423	0	481	12,182
November	1,022	37	98	7,395	694	0	206	2,422	0	442	12,317
December	1,089	47	118	8,025	650	0	322	2,541	0	417	13,210

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 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 3.5.B. Net Generation from Renewable Sources: Industrial Sector, 2003 - 2013
(Thousand Megawatthours)

Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Sources
Annual Totals										
2003	0	0	0	27,988	96	36	583	0	4,222	32,926
2004	0	0	0	28,367	120	30	647	0	3,248	32,413
2005	0	0	0	28,271	113	34	585	0	3,195	32,199
2006	0	0	0	28,400	29	35	509	0	2,899	31,872
2007	0	0	0	28,287	27	40	565	0	1,590	30,509
2008	0	0	0	26,641	21	0	800	0	1,676	29,138
2009	0	0	0	25,292	22	0	718	0	1,868	27,901
2010	0	2	0	25,706	15	0	853	0	1,668	28,244
2011	5	7	0	26,691	15	2	900	0	1,799	29,418
2012	19	14	0	26,725	81	10	857	0	2,353	30,060
2013	37	17	0	27,691	178	2	1,166	0	3,463	32,554
2011										
January	0	0	0	2,307	1	0	81	0	143	2,532
February	0	0	0	2,048	1	0	76	0	160	2,286
March	0	0	0	2,181	1	0	77	0	187	2,447
April	0	1	0	2,090	1	0	71	0	184	2,348
May	0	1	0	2,033	1	0	64	0	198	2,297
June	0	1	0	2,292	1	0	65	0	150	2,510
July	0	1	0	2,312	1	0	70	0	109	2,493
August	0	1	0	2,343	1	1	74	0	96	2,516
September	0	1	0	2,260	1	0	73	0	122	2,458
October	1	1	0	2,146	1	0	85	0	126	2,359
November	1	0	0	2,286	1	0	84	0	146	2,520
December	1	0	0	2,392	1	0	79	0	178	2,651
2012										
January	2	1	0	2,340	7	1	55	0	275	2,680
February	2	1	0	2,197	6	0	66	0	240	2,513
March	2	1	0	2,140	7	0	76	0	234	2,459
April	2	1	0	1,986	7	1	71	0	178	2,247
May	1	1	0	2,122	7	1	67	0	212	2,412
June	1	1	0	2,144	7	1	55	0	175	2,384
July	1	2	0	2,303	7	1	72	0	137	2,522
August	1	2	0	2,308	7	1	77	0	152	2,548
September	1	2	0	2,277	6	1	61	0	159	2,506
October	2	1	0	2,235	7	1	86	0	192	2,525
November	1	1	0	2,277	7	1	88	0	213	2,588
December	2	NM	0	2,394	8	1	84	0	186	2,676
2013										
January	3	1	0	2,386	14	0	91	0	324	2,818
February	2	1	0	2,190	13	0	80	0	363	2,648
March	3	1	0	2,310	14	0	85	0	302	2,715
April	3	2	0	2,086	14	0	106	0	250	2,460
May	4	2	0	2,254	15	0	92	0	328	2,695
June	3	2	0	2,335	15	1	90	0	328	2,774
July	2	2	0	2,441	15	0	102	0	320	2,883
August	2	2	0	2,430	15	1	105	0	240	2,793
September	2	2	0	2,263	15	0	93	0	239	2,614
October	4	2	0	2,296	15	0	106	0	239	2,661
November	5	1	0	2,294	16	0	106	0	206	2,629
December	5	1	0	2,408	17	0	111	0	322	2,863

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. 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.
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Table 3.6. Net Generation
by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	115,436	120,887	-4.5%	3,812	3,278	104,880	111,191	1,207	1,178	5,537	5,240
Connecticut	35,611	36,118	-1.4%	50	37	34,599	35,347	347	397	615	337
Maine	14,030	14,429	-2.8%	1	0	9,106	10,186	206	208	4,717	4,035
Massachusetts	32,885	36,198	-9.2%	611	591	31,572	34,321	527	469	175	817
New Hampshire	19,779	19,264	2.7%	2,267	2,017	17,411	17,170	70	49	30	29
Rhode Island	6,247	8,309	-24.8%	11	11	6,182	8,246	54	52	0	0
Vermont	6,885	6,570	4.8%	872	623	6,009	5,920	3	3	0	23
Middle Atlantic	427,653	424,451	0.8%	34,844	35,091	386,152	383,441	2,049	1,957	4,608	3,962
New Jersey	64,751	65,263	-0.8%	-123	-88	63,519	64,043	562	534	793	774
New York	136,117	135,768	0.3%	33,860	34,142	100,185	99,621	1,132	1,061	939	945
Pennsylvania	226,786	223,420	1.5%	1,106	1,038	222,449	219,777	355	362	2,876	2,243
East North Central	622,073	613,916	1.3%	326,582	308,307	283,232	292,989	2,041	2,046	10,219	10,573
Illinois	203,005	197,565	2.8%	11,572	12,424	188,129	182,021	644	492	2,660	2,628
Indiana	110,403	114,696	-3.7%	96,048	99,681	10,900	11,522	220	232	3,236	3,261
Michigan	105,418	108,166	-2.5%	83,171	80,483	19,873	25,352	861	968	1,512	1,363
Ohio	137,284	129,746	5.8%	88,764	75,184	47,464	52,962	186	283	871	1,317
Wisconsin	65,963	63,743	3.5%	47,027	40,535	16,865	21,132	130	72	1,940	2,004
West North Central	330,302	327,475	0.9%	286,360	288,973	39,121	33,973	585	554	4,237	3,975
Iowa	56,671	56,675	0.0%	41,933	43,386	12,403	11,018	217	204	2,118	2,067
Kansas	48,473	44,425	9.1%	39,809	39,949	8,588	4,411	0	0	76	65
Minnesota	51,297	52,194	-1.7%	41,156	42,338	8,471	8,358	183	173	1,487	1,324
Missouri	91,627	91,804	-0.2%	89,217	88,747	2,186	2,846	166	160	57	52
Nebraska	37,105	34,217	8.4%	35,170	32,783	1,583	1,072	18	18	333	345
North Dakota	35,022	36,125	-3.1%	31,044	31,983	3,812	4,019	0	0	165	123
South Dakota	10,109	12,034	-16.0%	8,031	9,786	2,078	2,248	0	0	0	0
South Atlantic	760,976	747,508	1.8%	627,855	603,305	112,274	124,669	1,236	701	19,610	18,833
Delaware	7,761	8,634	-10.1%	26	12	6,772	7,846	4	4	959	771
District of Columbia	66	72	-8.3%	0	0	0	9	66	62	0	0
Florida	222,399	221,096	0.6%	202,527	198,199	14,301	17,418	64	65	5,507	5,414
Georgia	120,954	122,306	-1.1%	107,083	100,995	9,120	16,512	28	31	4,723	4,769
Maryland	35,851	37,810	-5.2%	30	9	35,055	37,021	444	235	323	545
North Carolina	125,936	116,682	7.9%	116,317	107,716	6,522	6,542	171	50	2,927	2,374
South Carolina	95,250	96,756	-1.6%	91,796	92,822	1,461	1,970	9	0	1,984	1,964
Virginia	76,897	70,739	8.7%	63,725	56,188	10,668	12,309	451	253	2,053	1,989
West Virginia	75,863	73,413	3.3%	46,351	47,363	28,376	25,043	0	0	1,136	1,007
East South Central	372,776	375,137	-0.6%	325,527	313,555	36,332	51,152	220	186	10,696	10,244
Alabama	150,573	152,879	-1.5%	115,027	108,425	31,398	40,206	0	0	4,148	4,247
Kentucky	89,741	89,950	-0.2%	89,098	89,156	210	326	0	0	433	468
Mississippi	52,810	54,584	-3.3%	45,413	41,077	4,580	10,505	23	22	2,794	2,980
Tennessee	79,652	77,724	2.5%	75,989	74,897	144	114	198	164	3,321	2,548
West South Central	669,387	676,122	-1.0%	252,255	248,120	342,730	355,233	887	768	73,515	72,002
Arkansas	60,322	65,006	-7.2%	46,548	44,190	11,901	18,867	6	6	1,868	1,942
Louisiana	102,010	103,408	-1.4%	56,226	52,048	15,458	23,325	203	45	30,123	27,990
Oklahoma	73,674	77,897	-5.4%	53,349	56,746	19,588	20,286	NM	10	792	855
Texas	433,380	429,813	0.8%	96,132	95,135	295,783	292,756	734	707	40,731	41,215
Mountain	376,452	367,566	2.4%	297,549	289,964	75,172	73,862	462	357	3,269	3,383
Arizona	113,326	110,905	2.2%	92,741	92,800	20,428	17,791	157	121	0	193
Colorado	52,937	52,557	0.7%	42,509	41,539	10,331	10,920	34	25	64	72
Idaho	15,186	15,499	-2.0%	9,600	10,633	4,976	4,274	0	0	609	592
Montana	27,687	27,805	-0.4%	7,362	8,486	20,310	19,310	0	0	15	9
Nevada	36,444	35,173	3.6%	27,888	24,186	8,207	10,631	98	92	251	264
New Mexico	35,871	36,636	-2.1%	29,833	30,705	5,947	5,850	89	81	2	0
Utah	42,517	39,403	7.9%	39,527	36,386	1,853	1,957	84	38	1,053	1,022
Wyoming	52,483	49,589	5.8%	48,089	45,228	3,120	3,128	0	0	1,274	1,232
Pacific Contiguous	374,146	377,287	-0.8%	221,675	236,204	131,756	120,728	2,886	2,974	17,828	17,380
California	200,077	199,519	0.3%	78,408	82,486	103,107	98,738	2,762	2,894	15,800	15,400
Oregon	59,896	60,933	-1.7%	43,254	47,144	15,948	13,102	98	73	595	613
Washington	114,173	116,835	-2.3%	100,014	106,574	12,701	8,888	26	7	1,433	1,366
Pacific Noncontiguous	16,764	17,416	-3.7%	11,600	12,375	4,007	3,949	660	579	497	513
Alaska	6,497	6,946	-6.5%	5,852	6,362	234	220	300	278	111	87
Hawaii	10,267	10,469	-1.9%	5,748	6,013	3,773	3,729	360	301	386	426
U.S. Total	4,065,964	4,047,765	0.4%	2,388,058	2,339,172	1,515,657	1,551,186	12,234	11,301	150,015	146,107

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 3.7. Net Generation from Coal by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	6,166	4,103	50.3%	1,464	1,268	4,650	2,793	0	0	53	42
Connecticut	681	653	4.3%	0	0	681	653	0	0	0	0
Maine	63	45	38.7%	0	0	35	30	0	0	28	15
Massachusetts	3,959	2,137	85.3%	0	0	3,934	2,110	0	0	25	27
New Hampshire	1,464	1,268	15.4%	1,464	1,268	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	95,162	93,597	1.7%	15	36	94,355	92,867	18	11	773	683
New Jersey	2,022	1,897	6.5%	0	0	2,022	1,897	0	0	0	0
New York	4,697	4,551	3.2%	15	36	4,375	4,200	0	0	307	315
Pennsylvania	88,443	87,148	1.5%	0	0	87,959	86,769	18	11	466	368
East North Central	372,100	344,771	7.9%	271,646	250,318	97,208	91,071	262	308	2,984	3,075
Illinois	87,927	80,827	8.8%	10,918	10,887	75,282	68,154	51	52	1,675	1,734
Indiana	92,672	92,461	0.2%	87,229	86,532	5,309	5,747	116	133	18	49
Michigan	56,291	53,136	5.9%	55,616	52,471	334	343	91	118	250	204
Ohio	94,564	85,589	10.5%	78,059	68,519	16,282	16,827	3	2	220	240
Wisconsin	40,645	32,758	24.1%	39,824	31,909	0	0	1	2	820	848
West North Central	219,787	214,964	2.2%	216,345	211,689	30	0	242	228	3,169	3,048
Iowa	33,302	35,331	-5.7%	31,194	33,179	0	0	150	159	1,958	1,993
Kansas	29,767	27,983	6.4%	29,767	27,983	0	0	0	0	0	0
Minnesota	23,518	22,723	3.5%	22,790	22,107	0	0	0	0	728	616
Missouri	76,105	72,775	4.6%	75,933	72,661	30	0	92	68	49	46
Nebraska	26,767	25,019	7.0%	26,434	24,686	0	0	0	0	333	334
North Dakota	27,478	28,214	-2.6%	27,377	28,155	0	0	0	0	101	60
South Dakota	2,849	2,919	-2.4%	2,849	2,919	0	0	0	0	0	0
South Atlantic	268,583	266,385	0.8%	219,054	219,174	47,260	44,770	45	48	2,224	2,393
Delaware	1,545	1,423	8.6%	0	0	1,545	1,423	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	46,343	44,286	4.6%	44,743	42,603	1,400	1,451	0	0	199	233
Georgia	40,233	40,715	-1.2%	39,768	40,197	0	0	0	0	465	518
Maryland	15,538	16,185	-4.0%	0	0	15,395	16,005	4	10	140	169
North Carolina	47,072	50,932	-7.6%	44,974	48,888	1,778	1,745	34	29	287	270
South Carolina	24,407	28,396	-14.0%	24,248	28,208	0	26	0	0	159	161
Virginia	21,161	14,181	49.2%	19,736	12,573	891	970	7	9	527	628
West Virginia	72,284	70,267	2.9%	45,585	46,704	26,252	23,150	0	0	447	413
East South Central	171,541	171,000	0.3%	167,204	166,844	2,925	2,789	26	20	1,387	1,347
Alabama	47,050	45,607	3.2%	46,860	45,378	0	32	0	0	191	197
Kentucky	83,303	82,762	0.7%	83,303	82,762	0	0	0	0	0	0
Mississippi	8,701	7,212	20.7%	5,777	4,455	2,925	2,757	0	0	0	0
Tennessee	32,486	35,419	-8.3%	31,264	34,249	0	0	26	20	1,196	1,150
West South Central	232,137	217,243	6.9%	124,738	119,496	106,932	97,271	0	0	467	476
Arkansas	31,889	28,431	12.2%	27,822	23,979	3,981	4,353	0	0	86	99
Louisiana	20,844	21,422	-2.7%	9,843	11,163	11,001	10,258	0	0	0	0
Oklahoma	29,999	29,302	2.4%	27,746	27,142	1,873	1,783	0	0	381	377
Texas	149,404	138,088	8.2%	59,327	57,211	90,077	80,877	0	0	0	0
Mountain	202,289	191,985	5.4%	184,037	174,807	17,193	16,083	0	0	1,060	1,095
Arizona	43,492	40,116	8.4%	43,492	39,930	0	0	0	0	0	185
Colorado	33,703	34,521	-2.4%	33,584	34,371	112	142	0	0	7	8
Idaho	92	77	19.4%	0	0	0	0	0	0	92	77
Montana	14,880	13,987	6.4%	298	253	14,572	13,726	0	0	10	9
Nevada	5,255	4,079	28.8%	3,863	2,964	1,391	1,115	0	0	0	0
New Mexico	24,145	24,994	-3.4%	24,145	24,994	0	0	0	0	0	0
Utah	34,285	30,799	11.3%	33,382	29,976	413	418	0	0	489	405
Wyoming	46,437	43,412	7.0%	45,271	42,317	704	684	0	0	461	411
Pacific Contiguous	11,323	7,772	45.7%	3,759	2,634	7,173	4,733	0	0	391	405
California	823	1,375	-40.1%	0	0	469	1,005	0	0	354	371
Oregon	3,759	2,634	42.7%	3,759	2,634	0	0	0	0	0	0
Washington	6,740	3,763	79.1%	0	0	6,704	3,728	0	0	37	35
Pacific Noncontiguous	2,028	2,222	-8.7%	191	215	1,545	1,699	246	268	46	40
Alaska	625	685	-8.8%	191	215	188	201	246	268	0	0
Hawaii	1,404	1,537	-8.7%	0	0	1,357	1,498	0	0	46	40
U.S. Total	1,581,115	1,514,043	4.4%	1,188,452	1,146,480	379,270	354,076	839	883	12,554	12,603

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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 3.8. Net Generation from Petroleum Liquids by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	1,096	413	165.3%	154	52	841	267	65	49	36	45
Connecticut	306	112	173.9%	6	4	296	104	2	0	2	4
Maine	239	84	185.5%	1	0	204	65	2	2	32	16
Massachusetts	390	174	123.7%	71	15	287	98	31	37	1	25
New Hampshire	105	22	382.7%	62	20	28	0	14	2	0	0
Rhode Island	51	18	182.8%	11	11	26	0	NM	7	0	0
Vermont	5	3	49.2%	4	2	0	0	1	1	0	0
Middle Atlantic	1,417	859	64.9%	471	324	835	438	20	24	91	73
New Jersey	107	30	252.4%	0	4	100	24	1	1	6	2
New York	1,007	580	73.6%	470	319	444	169	17	22	77	70
Pennsylvania	302	248	21.8%	0	0	291	245	2	2	9	2
East North Central	597	621	-3.9%	479	516	102	90	3	3	14	13
Illinois	72	71	1.5%	25	24	47	47	0	0	0	0
Indiana	139	114	21.5%	131	108	0	0	1	0	7	6
Michigan	130	138	-6.1%	126	134	0	0	1	2	3	3
Ohio	227	258	-12.2%	172	215	52	41	0	0	3	2
Wisconsin	29	39	-25.4%	25	35	2	2	0	0	1	1
West North Central	295	292	1.1%	287	282	4	7	2	1	2	3
Iowa	69	89	-22.5%	68	87	1	2	0	0	0	0
Kansas	51	35	48.1%	51	35	0	0	0	0	0	0
Minnesota	27	30	-8.2%	21	23	3	4	2	1	1	1
Missouri	65	78	-15.8%	65	78	0	0	0	0	0	0
Nebraska	43	23	88.5%	43	23	0	0	0	0	0	0
North Dakota	33	33	-0.1%	33	32	0	0	0	0	1	1
South Dakota	7	6	22.3%	7	5	0	1	0	0	0	0
South Atlantic	1,562	1,756	-11.1%	1,182	1,340	247	257	21	19	112	141
Delaware	23	22	6.0%	0	1	23	21	0	0	0	0
District of Columbia	0	9	-100.0%	0	0	0	9	0	0	0	0
Florida	498	720	-30.9%	474	670	4	9	0	0	20	41
Georgia	68	73	-8.0%	20	27	1	2	2	1	45	43
Maryland	190	137	38.1%	21	6	148	108	19	16	1	8
North Carolina	218	178	22.1%	202	160	5	6	0	0	10	12
South Carolina	103	108	-4.7%	91	99	3	2	0	0	9	8
Virginia	313	364	-13.9%	226	234	61	100	1	1	26	29
West Virginia	150	143	4.4%	147	143	3	1	0	0	0	0
East South Central	325	378	-14.1%	304	339	1	1	0	0	20	38
Alabama	74	110	-32.4%	58	74	1	1	0	0	16	34
Kentucky	107	107	-0.6%	107	107	0	0	0	0	0	0
Mississippi	14	17	-18.1%	11	13	0	0	0	0	3	4
Tennessee	130	144	-9.7%	129	144	0	0	0	0	1	0
West South Central	198	173	14.7%	72	66	107	94	0	1	19	12
Arkansas	42	33	28.0%	26	18	15	13	0	0	1	1
Louisiana	54	38	42.9%	11	10	27	19	0	0	16	9
Oklahoma	10	11	-6.7%	9	11	0	0	NM	0	1	0
Texas	92	91	0.9%	26	27	65	62	0	1	2	2
Mountain	210	222	-5.7%	190	197	19	20	0	0	0	6
Arizona	43	42	2.5%	43	41	0	0	0	0	0	1
Colorado	10	11	-7.7%	10	11	0	0	0	0	0	0
Idaho	0	0	100.0%	0	0	0	0	0	0	0	0
Montana	15	13	13.5%	2	0	12	13	0	0	0	0
Nevada	19	19	0.1%	15	13	4	6	0	0	0	0
New Mexico	58	46	25.4%	56	46	2	1	0	0	0	0
Utah	26	40	-34.6%	25	39	1	1	0	0	0	0
Wyoming	39	52	-24.2%	39	48	0	0	0	0	0	4
Pacific Contiguous	79	167	-52.9%	41	45	16	21	2	86	20	14
California	48	134	-64.2%	32	34	6	13	1	86	8	2
Oregon	6	6	3.8%	6	6	0	0	0	0	0	0
Washington	24	27	-8.8%	3	5	9	9	1	0	11	13
Pacific Noncontiguous	8,041	8,521	-5.6%	6,266	6,732	1,590	1,561	6	8	180	219
Alaska	819	1,038	-21.1%	770	986	0	0	4	7	44	45
Hawaii	7,223	7,483	-3.5%	5,495	5,746	1,590	1,561	2	1	136	174
U.S. Total	13,820	13,403	3.1%	9,446	9,892	3,761	2,757	118	191	495	563

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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 3.9. Net Generation from Petroleum Coke by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
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	212	76	181.0%	0	0	0	0	0	0	212	76
New Jersey	55	40	35.1%	0	0	0	0	0	0	55	40
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	158	35	348.5%	0	0	0	0	0	0	158	35
East North Central	3,269	2,320	40.9%	1,692	887	1,210	1,093	0	0	366	340
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	1,433	831	72.4%	1,433	831	0	0	0	0	0	0
Michigan	403	187	115.5%	198	0	70	73	0	0	134	114
Ohio	1,159	1,023	13.3%	0	0	1,140	1,020	0	0	NM	3
Wisconsin	274	279	-1.7%	61	55	0	0	0	0	213	223
West North Central	72	17	316.2%	0	12	0	0	5	6	67	0
Iowa	72	18	312.9%	0	12	0	0	5	6	67	0
Kansas	0	0	-100.0%	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	2,270	950	138.9%	2,063	646	0	0	0	0	207	305
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	2,063	646	219.4%	2,063	646	0	0	0	0	0	0
Georgia	207	305	-31.9%	0	0	0	0	0	0	207	305
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	1,302	1,429	-8.9%	1,302	1,429	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	1,302	1,429	-8.9%	1,302	1,429	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	5,749	4,385	31.1%	4,465	2,691	101	55	0	0	1,183	1,639
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	4,891	2,992	63.5%	4,465	2,691	0	0	0	0	426	301
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	859	1,393	-38.4%	0	0	101	55	0	0	757	1,337
Mountain	448	454	-1.4%	0	0	448	454	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	448	454	-1.4%	0	0	448	454	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	21	156	-86.6%	0	0	21	156	0	0	0	0
California	21	156	-86.6%	0	0	21	156	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	13,344	9,787	36.3%	9,522	5,664	1,780	1,758	5	6	2,036	2,359

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

Table 3.10. Net Generation from Natural Gas by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	52,153	62,490	-16.5%	240	345	48,333	58,757	852	901	2,728	2,488
Connecticut	15,780	16,537	-4.6%	9	6	14,863	15,801	296	397	612	333
Maine	4,873	6,044	-19.4%	0	0	2,906	4,057	26	26	1,941	1,960
Massachusetts	21,257	24,672	-13.8%	204	278	20,434	23,812	474	416	145	166
New Hampshire	4,100	7,050	-41.8%	25	58	4,030	6,947	16	16	30	29
Rhode Island	6,139	8,185	-25.0%	0	0	6,099	8,140	40	45	0	0
Vermont	3	3	19.3%	3	3	0	0	0	0	0	0
Middle Atlantic	131,369	140,809	-6.7%	13,352	13,508	115,301	124,893	996	909	1,720	1,500
New Jersey	27,077	28,285	-4.3%	39	33	26,449	27,578	174	192	415	481
New York	54,354	59,462	-8.6%	13,310	13,472	40,093	45,132	710	605	242	253
Pennsylvania	49,938	53,062	-5.9%	3	3	48,759	52,182	113	112	1,063	765
East North Central	57,998	81,616	-28.9%	23,739	29,266	31,623	49,915	1,429	1,292	1,207	1,143
Illinois	6,828	11,189	-39.0%	579	1,450	5,297	8,993	591	437	361	309
Indiana	9,032	14,471	-37.6%	6,453	11,432	2,080	2,565	63	56	437	417
Michigan	12,341	21,748	-43.3%	2,658	4,401	8,946	16,697	489	468	249	183
Ohio	21,694	22,665	-4.3%	9,956	6,015	11,505	16,270	180	280	54	100
Wisconsin	8,102	11,542	-29.8%	4,095	5,968	3,795	5,390	107	51	106	134
West North Central	15,104	19,062	-20.8%	12,637	15,878	1,992	2,737	207	208	269	239
Iowa	1,430	1,941	-26.3%	1,327	1,868	0	0	31	11	71	62
Kansas	1,980	2,860	-30.8%	1,905	2,795	0	0	0	0	76	65
Minnesota	6,301	7,088	-11.1%	5,067	5,746	1,025	1,157	109	105	100	79
Missouri	4,400	6,167	-28.7%	3,361	4,495	967	1,580	66	91	5	1
Nebraska	437	770	-43.3%	436	758	0	0	0	1	0	11
North Dakota	54	22	149.8%	37	0	0	0	0	0	17	22
South Dakota	502	214	134.6%	502	214	0	0	0	0	0	0
South Atlantic	250,918	262,975	-4.6%	208,648	204,630	38,477	54,865	496	269	3,297	3,212
Delaware	5,931	6,815	-13.0%	24	9	5,104	6,277	0	0	803	528
District of Columbia	66	62	5.6%	0	0	0	0	66	62	0	0
Florida	138,966	149,700	-7.2%	128,205	136,017	9,282	12,279	30	28	1,449	1,376
Georgia	40,330	42,539	-5.2%	31,143	25,455	8,593	16,285	0	0	594	799
Maryland	2,888	4,945	-41.6%	0	0	2,445	4,658	388	172	55	114
North Carolina	27,983	19,302	45.0%	24,949	15,966	2,936	3,258	5	6	92	72
South Carolina	11,834	14,332	-17.4%	10,505	12,441	1,266	1,801	5	0	58	91
Virginia	22,651	25,038	-9.5%	13,781	14,709	8,622	10,112	3	0	245	217
West Virginia	270	243	11.0%	41	33	229	194	0	0	0	15
East South Central	84,798	105,279	-19.5%	48,944	54,302	33,042	48,046	193	163	2,620	2,768
Alabama	46,586	55,705	-16.4%	14,394	14,696	31,199	39,983	0	0	993	1,026
Kentucky	1,418	2,949	-51.9%	1,013	2,401	201	317	0	0	204	231
Mississippi	31,777	38,550	-17.6%	28,761	29,313	1,643	7,746	23	22	1,350	1,470
Tennessee	5,017	8,075	-37.9%	4,775	7,892	0	0	170	142	72	41
West South Central	298,504	328,607	-9.2%	86,215	89,027	148,589	177,322	846	726	62,854	61,532
Arkansas	12,139	17,117	-29.1%	4,116	2,502	7,759	14,392	1	1	264	222
Louisiana	52,510	58,564	-10.3%	24,227	22,525	3,313	12,042	203	45	24,768	23,952
Oklahoma	30,056	39,024	-23.0%	21,863	26,971	8,166	11,939	NM	10	83	105
Texas	203,798	213,901	-4.7%	36,009	37,029	129,352	138,948	698	671	37,739	37,253
Mountain	85,260	84,720	0.6%	53,862	50,390	29,840	32,753	382	293	1,177	1,284
Arizona	29,685	30,295	-2.0%	11,533	13,911	18,014	16,265	138	113	0	7
Colorado	10,709	10,524	1.8%	7,897	5,898	2,788	4,607	7	4	16	16
Idaho	3,392	1,898	78.7%	1,610	558	1,739	1,291	0	0	43	49
Montana	614	464	32.4%	577	439	38	25	0	0	0	0
Nevada	24,767	25,647	-3.4%	21,356	18,798	3,096	6,527	67	60	248	262
New Mexico	8,975	8,799	2.0%	5,483	5,394	3,405	3,327	86	78	2	0
Utah	6,606	6,580	0.4%	5,373	5,363	744	695	84	38	406	484
Wyoming	512	513	-0.1%	33	30	18	16	0	0	462	467
Pacific Contiguous	145,310	136,731	6.3%	50,434	44,048	80,325	78,546	1,750	1,839	12,801	12,298
California	119,523	119,668	-0.1%	35,398	35,717	69,790	70,066	1,655	1,782	12,680	12,104
Oregon	14,363	11,625	23.6%	5,169	4,025	9,067	7,416	76	51	51	133
Washington	11,424	5,438	110.1%	9,868	4,307	1,468	1,064	19	7	70	61
Pacific Noncontiguous	3,421	3,606	-5.1%	3,356	3,566	0	0	5	3	60	37
Alaska	3,421	3,606	-5.1%	3,356	3,566	0	0	5	3	60	37
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,124,836	1,225,894	-8.2%	501,427	504,958	527,522	627,833	7,154	6,603	88,733	86,500

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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 3.11. Net Generation from Other Gases by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
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	873	740	18.0%	0	0	0	0	0	0	873	740
New Jersey	223	142	57.0%	0	0	0	0	0	0	223	142
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	650	598	8.7%	0	0	0	0	0	0	650	598
East North Central	4,675	4,059	15.2%	73	0	1,651	673	0	0	2,951	3,386
Illinois	356	294	21.2%	0	0	17	8	0	0	339	286
Indiana	2,410	2,491	-3.3%	4	0	0	0	0	0	2,405	2,491
Michigan	957	315	203.9%	68	0	888	315	0	0	0	0
Ohio	953	959	-0.6%	0	0	746	350	0	0	207	609
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	42	35	19.3%	0	0	0	0	0	0	42	35
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	42	35	19.3%	0	0	0	0	0	0	42	35
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	190	394	-51.7%	0	0	0	0	0	0	190	394
Delaware	155	244	-36.2%	0	0	0	0	0	0	155	244
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5	6	-22.8%	0	0	0	0	0	0	5	6
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	112	-100.0%	0	0	0	0	0	0	0	112
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	30	32	-5.3%	0	0	0	0	0	0	30	32
East South Central	281	191	46.8%	0	0	0	0	0	0	281	191
Alabama	268	178	50.7%	0	0	0	0	0	0	268	178
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	-5.3%	0	0	0	0	0	0	13	13
West South Central	4,646	4,246	9.4%	725	0	1,457	1,899	0	0	2,464	2,348
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	2,246	1,247	80.1%	725	0	0	266	0	0	1,521	982
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,400	2,999	-20.0%	0	0	1,457	1,633	0	0	943	1,366
Mountain	289	294	-1.5%	0	0	6	7	0	0	283	286
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	17.1%	0	0	0	0	0	0	0	0
Nevada	6	7	-13.9%	0	0	6	7	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	2	4	-55.0%	0	0	0	0	0	0	2	4
Wyoming	281	282	-0.5%	0	0	0	0	0	0	281	282
Pacific Contiguous	1,816	1,890	-3.9%	0	0	410	405	0	0	1,406	1,484
California	1,406	1,484	-5.3%	0	0	0	0	0	0	1,406	1,484
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	410	405	1.1%	0	0	410	405	0	0	0	0
Pacific Noncontiguous	41	50	-16.8%	0	0	0	0	0	0	41	50
Alaska	0	3	-100.0%	0	0	0	0	0	0	0	3
Hawaii	41	47	-12.1%	0	0	0	0	0	0	41	47
U.S. Total	12,853	11,898	8.0%	798	0	3,524	2,984	0	0	8,531	8,913

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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 3.12. Net Generation from Nuclear Energy by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	37,183	36,116	3.0%	0	0	37,183	36,116	0	0	0	0
Connecticut	17,080	17,078	0.0%	0	0	17,080	17,078	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	4,331	5,860	-26.1%	0	0	4,331	5,860	0	0	0	0
New Hampshire	10,927	8,189	33.4%	0	0	10,927	8,189	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	4,846	4,989	-2.9%	0	0	4,846	4,989	0	0	0	0
Middle Atlantic	156,849	149,059	5.2%	0	0	156,849	149,059	0	0	0	0
New Jersey	33,380	33,110	0.8%	0	0	33,380	33,110	0	0	0	0
New York	44,756	40,775	9.8%	0	0	44,756	40,775	0	0	0	0
Pennsylvania	78,714	75,174	4.7%	0	0	78,714	75,174	0	0	0	0
East North Central	153,849	155,808	-1.3%	22,879	22,842	130,970	132,966	0	0	0	0
Illinois	97,131	96,401	0.8%	0	0	97,131	96,401	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	28,921	28,020	3.2%	22,879	22,842	6,042	5,178	0	0	0	0
Ohio	16,121	17,087	-5.7%	0	0	16,121	17,087	0	0	0	0
Wisconsin	11,675	14,300	-18.4%	0	0	11,675	14,300	0	0	0	0
West North Central	38,429	41,096	-6.5%	33,108	36,749	5,321	4,347	0	0	0	0
Iowa	5,321	4,347	22.4%	0	0	5,321	4,347	0	0	0	0
Kansas	7,168	8,285	-13.5%	7,168	8,285	0	0	0	0	0	0
Minnesota	10,708	11,944	-10.3%	10,708	11,944	0	0	0	0	0	0
Missouri	8,367	10,718	-21.9%	8,367	10,718	0	0	0	0	0	0
Nebraska	6,865	5,802	18.3%	6,865	5,802	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	197,513	184,645	7.0%	183,249	171,066	14,264	13,579	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	26,526	17,870	48.4%	26,526	17,870	0	0	0	0	0	0
Georgia	32,903	33,942	-3.1%	32,903	33,942	0	0	0	0	0	0
Maryland	14,264	13,579	5.0%	0	0	14,264	13,579	0	0	0	0
North Carolina	40,242	39,386	2.2%	40,242	39,386	0	0	0	0	0	0
South Carolina	54,252	51,145	6.1%	54,252	51,145	0	0	0	0	0	0
Virginia	29,326	28,723	2.1%	29,326	28,723	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	80,174	73,239	9.5%	80,174	73,239	0	0	0	0	0	0
Alabama	40,816	40,841	-0.1%	40,816	40,841	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	10,865	7,296	48.9%	10,865	7,296	0	0	0	0	0	0
Tennessee	28,494	25,102	13.5%	28,494	25,102	0	0	0	0	0	0
West South Central	67,215	69,593	-3.4%	28,900	31,152	38,315	38,441	0	0	0	0
Arkansas	11,945	15,493	-22.9%	11,945	15,493	0	0	0	0	0	0
Louisiana	16,954	15,659	8.3%	16,954	15,659	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	38,315	38,441	-0.3%	0	0	38,315	38,441	0	0	0	0
Mountain	31,431	31,934	-1.6%	31,431	31,934	0	0	0	0	0	0
Arizona	31,431	31,934	-1.6%	31,431	31,934	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	26,373	27,841	-5.3%	26,373	27,841	0	0	0	0	0	0
California	17,912	18,507	-3.2%	17,912	18,507	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	8,461	9,334	-9.4%	8,461	9,334	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	789,016	769,331	2.6%	406,114	394,823	382,902	374,509	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 3.13. Net Generation from Hydroelectric (Conventional) Power by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	7,671	7,360	4.2%	1,085	950	6,140	5,966	6	5	440	440
Connecticut	402	312	28.8%	36	27	366	286	0	0	0	0
Maine	3,560	3,733	-4.6%	0	0	3,124	3,320	0	0	437	412
Massachusetts	992	912	8.7%	270	230	712	673	6	5	4	4
New Hampshire	1,427	1,289	10.7%	358	324	1,069	965	0	0	0	0
Rhode Island	4	4	4.2%	0	0	4	4	0	0	0	0
Vermont	1,286	1,109	15.9%	421	369	865	717	0	0	0	23
Middle Atlantic	27,516	26,905	2.3%	21,429	21,762	6,020	5,079	6	4	62	61
New Jersey	18	11	69.9%	0	0	18	11	0	0	0	0
New York	24,973	24,652	1.3%	20,327	20,728	4,579	3,860	6	4	62	61
Pennsylvania	2,525	2,242	12.6%	1,102	1,035	1,423	1,207	0	0	0	0
East North Central	4,454	3,696	20.5%	4,009	3,340	260	208	2	4	184	143
Illinois	120	111	8.2%	46	50	73	59	2	2	0	0
Indiana	387	434	-10.7%	387	434	0	0	0	0	0	0
Michigan	1,419	1,215	16.8%	1,293	1,111	97	78	0	0	29	26
Ohio	549	414	32.6%	549	414	0	0	0	0	0	0
Wisconsin	1,979	1,522	30.0%	1,734	1,332	90	71	0	2	155	117
West North Central	9,450	11,767	-19.7%	9,170	11,529	190	164	0	0	90	74
Iowa	749	766	-2.2%	743	761	6	6	0	0	0	0
Kansas	15	10	39.6%	0	0	15	10	0	0	0	0
Minnesota	511	561	-8.9%	251	339	170	148	0	0	90	74
Missouri	1,136	714	59.1%	1,136	714	0	0	0	0	0	0
Nebraska	1,124	1,257	-10.6%	1,124	1,257	0	0	0	0	0	0
North Dakota	1,852	2,477	-25.2%	1,852	2,477	0	0	0	0	0	0
South Dakota	4,063	5,981	-32.1%	4,063	5,981	0	0	0	0	0	0
South Atlantic	18,748	11,667	60.7%	14,679	8,493	2,483	2,209	18	12	1,568	953
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	254	151	68.9%	254	151	0	0	0	0	0	0
Georgia	3,714	2,236	66.1%	3,677	2,212	14	6	0	0	23	19
Maryland	1,727	1,657	4.3%	0	0	1,727	1,657	0	0	0	0
North Carolina	6,901	3,728	85.1%	5,943	3,311	62	30	15	11	881	375
South Carolina	3,160	1,420	122.5%	3,056	1,367	100	53	4	0	0	0
Virginia	1,254	1,044	20.1%	1,171	969	78	62	0	0	5	12
West Virginia	1,739	1,431	21.5%	578	483	502	401	0	0	659	547
East South Central	28,618	18,093	58.2%	27,534	17,461	9	8	0	0	1,074	623
Alabama	12,899	7,435	73.5%	12,899	7,435	0	0	0	0	0	0
Kentucky	3,275	2,362	38.7%	3,266	2,353	9	8	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	12,443	8,296	50.0%	11,369	7,673	0	0	0	0	1,074	623
West South Central	6,357	4,608	38.0%	5,235	3,850	1,122	758	0	0	0	0
Arkansas	2,655	2,198	20.8%	2,609	2,156	46	43	0	0	0	0
Louisiana	1,045	680	53.6%	0	0	1,045	680	0	0	0	0
Oklahoma	2,178	1,146	90.1%	2,178	1,146	0	0	0	0	0	0
Texas	480	584	-17.9%	449	549	31	36	0	0	0	0
Mountain	29,229	34,743	-15.9%	25,051	30,089	4,171	4,653	7	0	0	0
Arizona	5,915	6,717	-11.9%	5,915	6,717	0	0	0	0	0	0
Colorado	1,213	1,497	-19.0%	1,126	1,430	80	68	7	0	0	0
Idaho	8,473	10,940	-22.5%	7,846	10,005	627	935	0	0	0	0
Montana	9,638	11,283	-14.6%	6,247	7,693	3,391	3,590	0	0	0	0
Nevada	2,682	2,440	9.9%	2,628	2,399	54	42	0	0	0	0
New Mexico	92	223	-58.8%	92	223	0	0	0	0	0	0
Utah	505	748	-32.5%	495	740	10	8	0	0	0	0
Wyoming	711	893	-20.4%	701	883	10	10	0	0	0	0
Pacific Contiguous	135,007	155,712	-13.3%	133,394	153,857	1,608	1,851	5	3	0	1
California	23,755	26,837	-11.5%	22,657	25,548	1,093	1,286	5	3	0	0
Oregon	33,098	39,410	-16.0%	32,854	39,111	244	299	0	0	0	0
Washington	78,155	89,464	-12.6%	77,883	89,197	272	265	0	0	0	1
Pacific Noncontiguous	1,514	1,690	-10.4%	1,454	1,604	15	27	0	0	44	59
Alaska	1,435	1,575	-8.9%	1,435	1,575	0	0	0	0	0	0
Hawaii	78	115	-31.7%	19	29	15	27	0	0	44	59
U.S. Total	268,565	276,240	-2.8%	243,040	252,936	22,018	20,923	44	28	3,463	2,353

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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 3.14. Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	9,487	8,557	10.9%	869	664	6,282	5,652	175	136	2,160	2,105
Connecticut	652	667	-2.2%	0	0	626	667	26	0	0	0
Maine	4,893	4,099	19.4%	0	0	2,642	2,468	91	92	2,160	1,539
Massachusetts	1,448	1,843	-21.4%	66	68	1,366	1,198	16	11	0	566
New Hampshire	1,695	1,381	22.7%	359	347	1,297	1,003	40	31	0	0
Rhode Island	53	102	-48.3%	0	0	53	102	0	0	0	0
Vermont	745	465	60.1%	444	249	298	214	2	2	0	0
Middle Atlantic	13,089	10,932	19.7%	215	41	11,522	9,625	569	544	783	722
New Jersey	1,447	1,281	13.0%	41	41	1,164	1,044	241	194	1	1
New York	5,888	5,192	13.4%	175	0	5,254	4,727	209	220	251	246
Pennsylvania	5,754	4,459	29.0%	0	0	5,104	3,854	119	130	531	475
East North Central	24,889	20,666	20.4%	2,795	1,791	20,072	16,813	191	235	1,830	1,828
Illinois	10,285	8,373	22.8%	4	14	10,282	8,358	0	0	0	0
Indiana	3,888	3,546	9.6%	315	286	3,511	3,209	21	22	41	29
Michigan	5,514	3,785	45.7%	1,190	274	3,357	2,510	146	196	822	806
Ohio	2,009	1,739	15.6%	28	20	1,619	1,367	3	0	359	352
Wisconsin	3,192	3,223	-1.0%	1,259	1,197	1,303	1,370	22	16	608	641
West North Central	46,412	39,730	16.8%	14,287	12,555	31,481	26,570	101	83	543	521
Iowa	15,727	14,183	10.9%	8,600	7,479	7,075	6,664	31	28	21	12
Kansas	9,491	5,253	80.7%	917	852	8,574	4,401	0	0	0	0
Minnesota	9,871	9,454	4.4%	2,143	2,016	7,170	6,901	45	38	513	499
Missouri	1,241	1,299	-4.4%	41	28	1,189	1,266	8	0	3	5
Nebraska	1,869	1,347	38.8%	268	258	1,583	1,072	18	17	0	0
North Dakota	5,524	5,280	4.6%	1,707	1,256	3,812	4,019	0	0	5	6
South Dakota	2,688	2,915	-7.8%	610	667	2,078	2,248	0	0	0	0
South Atlantic	19,023	17,334	9.7%	1,393	1,056	7,348	6,784	445	241	9,837	9,253
Delaware	107	131	-18.7%	2	2	100	125	4	4	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,659	4,524	3.0%	262	243	2,221	2,243	34	37	2,141	2,001
Georgia	3,839	3,279	17.1%	0	0	512	219	26	29	3,301	3,030
Maryland	941	898	4.8%	9	3	773	717	33	36	126	141
North Carolina	2,955	2,704	9.3%	7	4	1,512	1,362	118	4	1,318	1,334
South Carolina	2,226	2,143	3.9%	439	458	86	40	0	0	1,702	1,646
Virginia	2,906	2,358	23.2%	674	345	753	782	230	130	1,249	1,101
West Virginia	1,391	1,297	7.2%	0	0	1,391	1,297	0	0	0	0
East South Central	5,761	5,455	5.6%	99	96	355	307	2	NM	5,305	5,050
Alabama	2,876	2,777	3.6%	0	1	199	190	0	0	2,677	2,586
Kentucky	327	333	-1.9%	98	95	0	0	0	0	228	238
Mississippi	1,448	1,509	-4.0%	0	0	12	3	0	0	1,436	1,506
Tennessee	1,110	836	32.7%	0	0	144	114	2	NM	964	720
West South Central	53,653	46,628	15.1%	1,951	1,912	46,107	39,392	42	41	5,553	5,282
Arkansas	1,601	1,660	-3.6%	0	0	100	65	5	6	1,496	1,590
Louisiana	2,787	2,430	14.7%	0	0	73	60	0	0	2,714	2,370
Oklahoma	11,506	8,521	35.0%	1,630	1,594	9,550	6,564	0	0	326	363
Texas	37,760	34,017	11.0%	321	319	36,385	32,704	37	36	1,017	958
Mountain	26,836	22,677	18.3%	3,208	2,700	23,146	19,510	74	64	408	403
Arizona	2,733	1,698	61.0%	302	188	2,411	1,502	20	8	0	0
Colorado	7,536	6,192	21.7%	172	74	7,342	6,093	19	21	3	3
Idaho	3,152	2,515	25.4%	144	70	2,610	2,048	0	0	398	397
Montana	1,760	1,262	39.5%	237	101	1,517	1,161	0	0	5	0
Nevada	3,690	2,969	24.3%	0	0	3,656	2,934	32	32	3	3
New Mexico	2,600	2,574	1.0%	57	48	2,540	2,522	3	4	0	0
Utah	932	1,100	-15.3%	251	269	681	831	0	0	0	0
Wyoming	4,433	4,369	1.5%	2,045	1,951	2,389	2,418	0	0	0	0
Pacific Contiguous	53,034	45,388	16.8%	7,472	7,160	41,888	34,748	1,128	1,046	2,546	2,434
California	35,578	29,967	18.7%	2,214	2,105	31,514	26,055	1,100	1,024	750	783
Oregon	8,635	7,207	19.8%	1,467	1,369	6,603	5,344	22	22	543	472
Washington	8,822	8,214	7.4%	3,792	3,687	3,771	3,348	7	0	1,253	1,179
Pacific Noncontiguous	1,324	965	37.3%	127	41	844	662	228	153	125	109
Alaska	197	40	393.8%	99	19	46	18	46	0	6	3
Hawaii	1,127	925	21.9%	29	22	798	644	183	153	118	106
U.S. Total	253,508	218,333	16.1%	32,417	28,017	189,045	160,064	2,956	2,545	29,091	27,707

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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 3.15. Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	-369	-305	21.0%	0	0	-369	-305	0	0	0	0
Connecticut	-1	3	-138.7%	0	0	-1	3	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-368	-308	19.6%	0	0	-368	-308	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	-1,184	-1,022	15.8%	-645	-579	-539	-443	0	0	0	0
New Jersey	-202	-166	21.6%	-202	-166	0	0	0	0	0	0
New York	-443	-413	7.2%	-443	-413	0	0	0	0	0	0
Pennsylvania	-539	-443	21.5%	0	0	-539	-443	0	0	0	0
East North Central	-871	-773	12.6%	-871	-773	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	-871	-773	12.6%	-871	-773	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	296	33	785.3%	296	33	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	296	33	785.3%	296	33	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	-2,411	-3,099	-22.2%	-2,411	-3,099	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	-427	-838	-49.0%	-427	-838	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	-795	-896	-11.3%	-795	-896	0	0	0	0	0	0
Virginia	-1,189	-1,366	-12.9%	-1,189	-1,366	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-42	-163	-74.2%	-42	-163	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	-42	-163	-74.2%	-42	-163	0	0	0	0	0	0
West South Central	-48	-74	-35.9%	-48	-74	0	0	0	0	0	0
Arkansas	31	42	-27.3%	31	42	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-78	-117	-32.8%	-78	-117	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-256	-165	55.2%	-256	-165	0	0	0	0	0	0
Arizona	24	79	-69.4%	24	79	0	0	0	0	0	0
Colorado	-280	-244	14.7%	-280	-244	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	203	618	-67.1%	203	618	0	0	0	0	0	0
California	196	575	-65.9%	196	575	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	7	44	-83.5%	7	44	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	-4,681	-4,950	-5.4%	-3,773	-4,202	-908	-748	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 3.16. Net Generation from Other Energy Sources by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	2,049	2,153	-4.8%	0	0	1,820	1,944	110	88	119	121
Connecticut	711	756	-6.0%	0	0	688	756	23	0	0	0
Maine	401	424	-5.5%	0	0	195	245	86	88	119	92
Massachusetts	876	906	-3.4%	0	0	876	877	0	0	0	29
New Hampshire	61	66	-6.9%	0	0	61	66	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	2,349	2,497	-5.9%	7	0	1,809	1,924	440	465	93	107
New Jersey	625	633	-1.2%	0	0	386	378	146	147	93	107
New York	884	968	-8.7%	7	0	686	757	191	211	0	0
Pennsylvania	841	896	-6.2%	0	0	737	789	103	107	0	0
East North Central	1,113	1,133	-1.7%	140	121	137	159	154	205	681	648
Illinois	285	299	-4.9%	0	0	0	0	0	0	285	299
Indiana	442	347	27.7%	96	57	0	0	19	20	327	269
Michigan	312	395	-20.9%	14	25	139	159	135	185	24	27
Ohio	8	12	-36.1%	0	0	-2	0	0	0	10	12
Wisconsin	66	80	-17.4%	30	39	0	0	0	0	36	41
West North Central	415	478	-13.1%	230	246	103	149	28	28	55	55
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	361	394	-8.5%	176	163	103	149	28	28	55	55
Missouri	16	20	-18.1%	16	20	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	38	64	-40.3%	38	64	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,580	4,501	1.8%	0	0	2,194	2,205	210	113	2,175	2,183
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	3,086	3,194	-3.4%	0	0	1,393	1,436	0	0	1,693	1,757
Georgia	88	56	56.7%	0	0	0	0	0	0	88	56
Maryland	303	296	2.1%	0	0	302	296	0	1	0	0
North Carolina	567	452	25.5%	0	0	229	141	0	0	338	311
South Carolina	62	106	-41.6%	0	0	5	48	0	0	57	58
Virginia	475	397	19.7%	0	0	265	284	210	113	0	1
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	18	235	-92.5%	9	8	0	0	0	0	9	227
Alabama	3	227	-98.5%	0	0	0	0	0	0	3	227
Kentucky	9	8	6.3%	9	8	0	0	0	0	0	0
Mississippi	5	0	NM	0	0	0	0	0	0	5	0
Tennessee	1	1	0.2%	0	0	0	0	0	0	1	1
West South Central	974	714	36.4%	0	0	-1	0	0	0	975	714
Arkansas	21	30	-32.3%	0	0	0	0	0	0	21	30
Louisiana	679	376	80.8%	0	0	0	0	0	0	679	376
Oklahoma	2	10	-80.1%	0	0	0	0	0	0	2	10
Texas	272	298	-8.6%	0	0	-1	0	0	0	273	298
Mountain	715	702	1.9%	26	12	348	381	0	0	341	309
Arizona	3	24	-86.3%	0	0	3	24	0	0	0	0
Colorado	46	55	-16.6%	0	0	8	11	0	0	38	45
Idaho	77	69	11.3%	0	0	0	0	0	0	77	69
Montana	332	341	-2.6%	0	0	332	341	0	0	0	0
Nevada	25	12	112.8%	25	12	0	0	0	0	0	0
New Mexico	1	0	--	1	0	0	0	0	0	0	0
Utah	161	133	20.9%	0	0	5	5	0	0	156	128
Wyoming	69	67	3.4%	0	0	0	0	0	0	69	67
Pacific Contiguous	980	1,012	-3.2%	-1	0	317	268	0	0	664	744
California	816	815	0.2%	-1	0	215	158	0	0	602	657
Oregon	35	50	-31.0%	0	0	35	42	0	0	0	8
Washington	129	147	-12.1%	0	0	67	69	0	0	62	78
Pacific Noncontiguous	394	363	8.5%	205	216	13	0	175	147	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	394	363	8.6%	205	216	13	0	175	147	0	0
U.S. Total	13,588	13,787	-1.4%	615	603	6,742	7,030	1,118	1,046	5,113	5,108

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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. Net Generation from Wind by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	1,880	1,294	45.4%	189	85	1,676	1,199	15	9	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	1,048	887	18.1%	0	0	1,048	887	0	0	0	0
Massachusetts	205	90	128.5%	62	59	128	21	15	9	0	0
New Hampshire	389	209	86.5%	0	0	389	209	0	0	0	0
Rhode Island	3	1	87.7%	0	0	3	1	0	0	0	0
Vermont	236	107	120.8%	127	26	109	81	0	0	0	0
Middle Atlantic	6,902	5,132	34.5%	0	0	6,899	5,128	0	0	4	4
New Jersey	11	12	-6.0%	0	0	11	12	0	0	0	0
New York	3,539	2,992	18.3%	0	0	3,536	2,988	0	0	4	4
Pennsylvania	3,352	2,129	57.5%	0	0	3,352	2,129	0	0	0	0
East North Central	18,610	14,612	27.4%	2,205	1,242	16,374	13,357	1	1	29	12
Illinois	9,625	7,727	24.6%	4	14	9,622	7,713	0	0	0	0
Indiana	3,481	3,210	8.4%	0	0	3,480	3,209	1	1	0	0
Michigan	2,800	1,132	147.4%	1,190	274	1,609	858	0	0	0	0
Ohio	1,146	985	16.3%	14	14	1,102	959	0	0	29	12
Wisconsin	1,558	1,558	0.0%	997	939	561	618	0	0	0	0
West North Central	44,436	37,561	18.3%	13,791	12,051	30,614	25,479	31	31	0	0
Iowa	15,568	14,032	10.9%	8,576	7,452	6,989	6,578	4	3	0	0
Kansas	9,433	5,195	81.6%	917	852	8,516	4,343	0	0	0	0
Minnesota	8,259	7,615	8.4%	1,762	1,613	6,469	5,975	28	28	0	0
Missouri	1,167	1,245	-6.3%	0	0	1,167	1,245	0	0	0	0
Nebraska	1,802	1,284	40.4%	219	212	1,583	1,072	0	0	0	0
North Dakota	5,519	5,275	4.6%	1,707	1,256	3,812	4,019	0	0	0	0
South Dakota	2,688	2,915	-7.8%	610	667	2,078	2,248	0	0	0	0
South Atlantic	1,713	1,611	6.3%	0	0	1,708	1,608	4	4	0	0
Delaware	4	4	22.5%	0	0	0	0	4	4	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	322	322	0.0%	0	0	322	322	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	1,387	1,286	7.8%	0	0	1,387	1,286	0	0	0	0
East South Central	47	47	-1.6%	0	0	47	47	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	47	47	-1.6%	0	0	47	47	0	0	0	0
West South Central	47,036	40,372	16.5%	1,951	1,912	45,085	38,459	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	11,162	8,158	36.8%	1,630	1,594	9,532	6,564	0	0	0	0
Texas	35,874	32,214	11.4%	321	319	35,553	31,895	0	0	0	0
Mountain	19,285	17,080	12.9%	2,585	2,186	16,689	14,882	8	9	3	3
Arizona	450	532	-15.4%	0	0	450	532	0	0	0	0
Colorado	7,204	5,969	20.7%	171	74	7,025	5,886	5	5	3	3
Idaho	2,460	1,891	30.1%	133	60	2,328	1,830	0	0	0	0
Montana	1,755	1,262	39.1%	237	101	1,517	1,161	0	0	0	0
Nevada	251	129	94.5%	0	0	251	129	0	0	0	0
New Mexico	2,193	2,226	-1.5%	0	0	2,190	2,222	3	4	0	0
Utah	540	704	-23.3%	0	0	540	704	0	0	0	0
Wyoming	4,433	4,369	1.5%	2,045	1,951	2,389	2,418	0	0	0	0
Pacific Contiguous	27,282	22,697	20.2%	5,615	5,431	21,664	17,266	1	0	2	0
California	12,822	9,754	31.5%	892	797	11,928	8,957	1	0	2	0
Oregon	7,456	6,343	17.5%	1,397	1,299	6,059	5,044	0	0	0	0
Washington	7,004	6,600	6.1%	3,327	3,335	3,678	3,265	0	0	0	0
Pacific Noncontiguous	649	416	56.1%	99	19	550	396	0	0	0	0
Alaska	145	37	288.5%	99	19	46	18	0	0	0	0
Hawaii	503	378	33.1%	0	0	503	378	0	0	0	0
U.S. Total	167,840	140,822	19.2%	26,436	22,926	141,306	117,822	61	54	37	19

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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 3.18. Net Generation from Biomass by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	7,480	7,229	3.5%	676	570	4,485	4,428	160	125	2,160	2,105
Connecticut	652	667	-2.2%	0	0	626	667	26	0	0	0
Maine	3,846	3,212	19.7%	0	0	1,595	1,581	91	92	2,160	1,539
Massachusetts	1,137	1,724	-34.0%	0	0	1,137	1,157	1	1	0	566
New Hampshire	1,306	1,173	11.4%	359	347	907	795	40	31	0	0
Rhode Island	48	101	-52.1%	0	0	48	101	0	0	0	0
Vermont	491	353	39.1%	317	223	172	128	2	2	0	0
Middle Atlantic	5,619	5,411	3.8%	175	0	4,190	4,194	485	506	770	711
New Jersey	999	965	3.5%	0	0	841	808	158	157	0	0
New York	2,282	2,148	6.2%	175	0	1,651	1,687	209	220	247	242
Pennsylvania	2,339	2,298	1.8%	0	0	1,697	1,699	119	130	523	469
East North Central	6,150	5,987	2.7%	584	544	3,578	3,395	188	233	1,801	1,816
Illinois	608	615	-1.2%	0	0	608	615	0	0	0	0
Indiana	376	336	12.0%	315	286	0	0	20	21	41	29
Michigan	2,715	2,654	2.3%	0	0	1,747	1,652	146	196	822	806
Ohio	817	717	14.0%	7	0	481	377	0	0	329	340
Wisconsin	1,634	1,666	-1.9%	262	258	742	751	22	16	608	641
West North Central	1,973	2,169	-9.0%	496	504	864	1,091	70	53	543	521
Iowa	159	151	5.1%	24	27	86	86	27	25	21	12
Kansas	58	57	1.1%	0	0	58	57	0	0	0	0
Minnesota	1,610	1,838	-12.4%	381	403	699	926	17	10	513	499
Missouri	74	54	37.6%	41	28	22	21	8	0	3	5
Nebraska	67	63	6.6%	49	46	0	0	18	17	0	0
North Dakota	5	6	-1.1%	0	0	0	0	0	0	5	6
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	16,633	15,342	8.4%	1,205	888	5,206	4,968	385	233	9,837	9,253
Delaware	57	105	-45.3%	0	0	57	105	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,449	4,330	2.7%	92	85	2,183	2,209	33	36	2,141	2,001
Georgia	3,825	3,276	16.8%	0	0	501	218	23	28	3,301	3,030
Maryland	556	554	0.4%	0	0	401	378	29	35	126	141
North Carolina	2,610	2,564	1.8%	0	1	1,221	1,227	70	3	1,318	1,334
South Carolina	2,226	2,143	3.8%	439	458	86	40	0	0	1,702	1,646
Virginia	2,906	2,358	23.2%	674	345	753	782	230	130	1,249	1,101
West Virginia	4	11	-62.1%	0	0	4	11	0	0	0	0
East South Central	5,694	5,395	5.5%	99	96	290	250	0	0	5,305	5,050
Alabama	2,876	2,777	3.6%	0	1	199	190	0	0	2,677	2,586
Kentucky	327	333	-1.9%	98	95	0	0	0	0	228	238
Mississippi	1,448	1,509	-4.0%	0	0	12	3	0	0	1,436	1,506
Tennessee	1,043	777	34.3%	0	0	79	57	0	0	964	720
West South Central	6,454	6,138	5.2%	0	0	862	815	40	41	5,553	5,282
Arkansas	1,601	1,660	-3.6%	0	0	100	65	5	6	1,496	1,590
Louisiana	2,787	2,430	14.7%	0	0	73	60	0	0	2,714	2,370
Oklahoma	344	363	-5.3%	0	0	18	0	0	0	326	363
Texas	1,723	1,684	2.3%	0	0	671	691	34	35	1,017	958
Mountain	1,027	911	12.8%	39	36	585	475	0	3	403	397
Arizona	171	211	-18.6%	26	26	145	181	0	3	0	0
Colorado	84	58	45.2%	2	0	82	58	0	0	0	0
Idaho	652	549	18.7%	11	10	243	143	0	0	398	397
Montana	5	0	--	0	0	0	0	0	0	5	0
Nevada	24	19	28.0%	0	0	24	19	0	0	0	0
New Mexico	19	14	29.8%	0	0	19	14	0	0	0	0
Utah	71	60	19.1%	0	0	71	60	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	9,446	8,757	7.9%	732	648	5,128	4,682	1,046	996	2,540	2,431
California	6,635	6,311	5.1%	205	231	4,670	4,328	1,017	974	744	779
Oregon	994	832	19.5%	63	67	366	271	22	22	543	472
Washington	1,817	1,614	12.6%	465	351	93	83	7	0	1,253	1,179
Pacific Noncontiguous	381	284	34.5%	29	22	0	0	228	153	125	109
Alaska	52	3	NM	0	0	0	0	46	0	6	3
Hawaii	329	281	17.2%	29	22	0	0	183	153	118	106
U.S. Total	60,858	57,622	5.6%	4,034	3,308	25,187	24,298	2,601	2,343	29,037	27,674

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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 3.19. Net Generation from Geothermal by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
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	3,029	2,757	9.9%	251	269	2,778	2,488	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	40	75	-46.9%	0	0	40	75	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,670	2,347	13.7%	0	0	2,670	2,347	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	319	335	-4.7%	251	269	68	66	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	12,471	12,545	-0.6%	754	875	11,717	11,670	0	0	0	0
California	12,307	12,519	-1.7%	754	875	11,553	11,644	0	0	0	0
Oregon	165	26	541.9%	0	0	165	26	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	275	261	5.3%	0	0	275	261	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	275	261	5.3%	0	0	275	261	0	0	0	0
U.S. Total	15,775	15,562	1.4%	1,005	1,143	14,770	14,419	0	0	0	0

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

Table 3.20. Net Generation from Solar by State, by Sector, 2013 and 2012 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	126	35	262.6%	4	9	121	25	1	1	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	106	30	259.5%	4	9	102	20	1	1	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	2	0	--	0	0	2	0	0	0	0	0
Vermont	17	5	241.5%	0	0	17	5	0	0	0	0
Middle Atlantic	568	389	45.8%	41	41	434	303	83	37	10	8
New Jersey	437	304	43.7%	41	41	312	225	83	37	1	1
New York	67	53	27.1%	0	0	67	53	0	0	0	0
Pennsylvania	63	32	96.3%	0	0	55	26	0	0	8	6
East North Central	129	67	91.2%	7	6	119	61	3	0	0	0
Illinois	52	31	70.0%	0	0	52	31	0	0	0	0
Indiana	31	NM	NM	0	0	31	NM	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	46	37	26.4%	7	6	37	31	3	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	3	0	--	0	0	3	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	3	0	--	0	0	3	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	677	381	77.8%	187	168	435	209	56	5	0	0
Delaware	45	23	98.3%	2	2	43	20	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	210	194	8.4%	170	159	38	34	2	1	0	0
Georgia	14	3	396.4%	0	0	11	NM	3	2	0	0
Maryland	63	22	182.5%	9	3	51	18	4	1	0	0
North Carolina	345	139	147.1%	7	4	291	135	47	1	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	20	12	67.4%	0	0	18	10	2	NM	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	20	12	67.4%	0	0	18	10	2	NM	0	0
West South Central	163	118	37.8%	0	0	161	118	2	1	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	163	118	37.8%	0	0	161	118	2	1	0	0
Mountain	3,495	1,930	81.1%	333	210	3,094	1,665	65	52	3	3
Arizona	2,111	955	121.0%	276	162	1,816	789	20	4	0	0
Colorado	248	165	50.2%	0	0	234	150	14	16	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	745	473	57.4%	0	0	711	438	32	32	3	3
New Mexico	388	334	16.3%	57	48	331	286	0	0	0	0
Utah	2	2	29.7%	0	0	2	2	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	3,835	1,390	176.0%	371	205	3,378	1,130	82	51	5	4
California	3,814	1,382	175.9%	364	202	3,364	1,126	82	51	5	4
Oregon	20	6	219.6%	7	3	14	4	0	0	0	0
Washington	1	1	-4.0%	1	1	0	0	0	0	0	0
Pacific Noncontiguous	19	5	322.4%	0	0	19	5	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	19	5	322.4%	0	0	19	5	0	0	0	0
U.S. Total	9,036	4,327	108.8%	943	639	7,782	3,525	294	148	17	14

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

Table 3.21. Useful Thermal Output by Energy Source: Total Combined Heat and Power (All Sectors), 2003 - 2013
(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2003	333,361	68,329	16,934	610,122	110,263	632,366	54,960	1,826,335
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
2011								
January	28,049	2,161	1,867	45,950	7,869	53,111	1,943	140,950
February	24,489	1,437	1,798	41,202	8,688	46,989	2,404	127,007
March	25,103	1,325	1,669	42,279	8,789	49,555	2,621	131,341
April	22,645	1,150	1,857	40,914	7,980	45,774	2,332	122,652
May	23,267	1,140	1,903	42,606	8,549	45,054	2,616	125,135
June	22,940	1,148	1,811	42,816	8,424	48,089	2,747	127,974
July	24,535	1,096	1,847	49,682	8,484	48,877	2,714	137,236
August	24,093	1,135	1,610	50,264	8,442	49,078	2,749	137,371
September	22,602	1,096	1,783	45,244	9,122	48,147	2,709	130,703
October	22,495	1,238	1,825	42,548	9,477	48,366	2,762	128,711
November	22,098	1,163	1,740	43,060	8,591	50,337	2,652	129,641
December	23,893	1,140	1,841	48,587	9,203	52,922	2,817	140,403
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
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

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.
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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 3.22. Useful Thermal Output by Energy Source: Electric Power Sector Combined Heat and Power, 2003 - 2013
(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2003	38,249	5,551	1,828	200,077	9,282	19,785	3,296	278,068
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
2011								
January	3,424	410	55	16,673	1,708	1,727	550	24,547
February	3,031	312	92	15,005	1,594	1,555	521	22,108
March	3,095	334	122	15,548	1,854	1,329	546	22,828
April	2,804	376	102	14,699	1,625	998	419	21,023
May	3,122	371	119	14,857	1,735	1,223	533	21,960
June	2,756	372	102	15,092	1,601	1,248	527	21,699
July	3,057	393	119	18,064	1,718	1,341	514	25,206
August	2,975	410	116	17,845	1,683	1,278	477	24,785
September	2,753	401	114	15,831	1,748	1,274	452	22,571
October	2,788	391	86	14,690	1,693	1,313	491	21,451
November	2,530	370	94	15,247	1,660	1,337	454	21,692
December	2,874	344	112	17,161	1,817	1,405	560	24,273
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
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

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 3.23. Useful Thermal Output by Energy Source: Commerical Sector Combined Heat and Power, 2003 - 2013
(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2003	22,780	2,520	196	16,955	0	8,296	6,142	56,889
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
2011								
January	1,966	310	26	2,275	1	542	348	5,469
February	1,770	91	21	1,857	1	511	376	4,627
March	1,665	33	25	1,771	1	554	529	4,579
April	1,263	9	0	1,657	1	562	428	3,921
May	1,306	29	0	1,817	1	612	535	4,301
June	1,378	15	0	1,778	1	664	568	4,404
July	1,534	37	0	2,435	1	623	521	5,152
August	1,372	33	0	2,442	1	726	580	5,154
September	1,272	40	0	2,130	1	622	584	4,649
October	1,086	16	0	1,979	1	613	493	4,189
November	1,176	62	12	2,163	1	720	491	4,624
December	1,445	11	28	2,544	1	683	533	5,245
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
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

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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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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Table 3.24. Useful Thermal Output by Energy Source: Industrial Sector Combined Heat and Power, 2003 - 2013
(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2003	272,332	60,258	14,910	393,090	100,981	604,285	45,522	1,491,378
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
2011								
January	22,659	1,441	1,787	27,002	6,159	50,841	1,044	110,933
February	19,689	1,034	1,685	24,341	7,093	44,923	1,507	100,271
March	20,342	958	1,522	24,960	6,934	47,672	1,546	103,933
April	18,577	765	1,756	24,557	6,354	44,215	1,485	97,709
May	18,839	739	1,783	25,932	6,813	43,219	1,547	98,873
June	18,806	761	1,709	25,946	6,821	46,177	1,652	101,872
July	19,944	666	1,728	29,183	6,765	46,913	1,678	106,879
August	19,746	692	1,494	29,976	6,758	47,073	1,692	107,432
September	18,576	656	1,670	27,284	7,373	46,251	1,674	103,483
October	18,621	831	1,740	25,879	7,783	46,439	1,778	103,072
November	18,392	731	1,634	25,650	6,930	48,280	1,708	103,324
December	19,575	786	1,701	28,882	7,384	50,834	1,724	110,885
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
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

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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Chapter 4

Generation Capacity

Table 4.1. Count of Electric Power Industry Power Plants, by Sector, by Predominant Energy Sources within Plant, 2003 through 2013

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources
Total (All Sectors)									
2003	629	1,166	1,693	40	66	1,425	741	38	27
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
Electric Utilities									
2003	359	827	715	1	37	912	64	33	1
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
Independent Power Producers, Non-Combined Heat and Power Plants									
2003	99	182	350	--	29	456	468	5	2
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
Independent Power Producers, Combined Heat and Power Plants									
2003	49	17	187	3	--	--	34	--	--
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	--	1	51	--	5
Commercial Sector									
2003	22	65	121	--	--	9	44	--	--
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
Industrial Sector									
2003	100	71	310	36	--	48	130	--	24
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

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, 2003 through 2013 (Megawatts)

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewable Sources	Hydroelectric Pumped Storage	Other Energy Sources	Total
Total (All Sectors)										
2003	313,019	60,730	355,442	1,994	99,209	78,694	18,153	20,522	684	948,446
2004	313,020	59,119	371,011	2,296	99,628	77,641	18,717	20,764	746	962,942
2005	313,380	58,548	383,061	2,063	99,988	77,541	21,205	21,347	887	978,020
2006	312,956	58,097	388,294	2,256	100,334	77,821	24,113	21,461	882	986,215
2007	312,738	56,068	392,876	2,313	100,266	77,885	30,069	21,886	788	994,888
2008	313,322	57,445	397,460	1,995	100,755	77,930	38,466	21,858	942	1,010,171
2009	314,294	56,781	401,272	1,932	101,004	78,518	48,552	22,160	888	1,025,400
2010	316,800	55,647	407,028	2,700	101,167	78,825	53,811	22,199	884	1,039,062
2011	317,640	51,482	415,191	1,934	101,419	78,652	61,221	22,293	1,420	1,051,251
2012	309,680	47,167	422,364	1,946	101,885	78,738	77,155	22,368	1,729	1,063,033
2013	303,306	43,523	425,390	2,108	99,240	79,200	82,600	22,389	2,307	1,060,064
Electric Utilities										
2003	236,473	32,570	125,612	61	60,964	72,827	925	17,803	13	547,249
2004	235,976	31,415	131,734	58	60,651	71,696	960	18,048	13	550,550
2005	229,705	30,867	147,752	--	56,564	71,568	1,545	18,195	39	556,235
2006	230,644	30,419	157,742	104	56,143	71,840	2,291	18,301	39	567,523
2007	231,289	29,115	162,756	104	54,211	72,186	2,806	18,693	39	571,200
2008	231,857	30,657	173,106	--	54,376	72,142	4,066	18,664	39	584,908
2009	234,397	30,174	180,571	--	54,355	72,690	5,614	18,930	39	596,769
2010	235,707	28,972	184,231	539	54,369	72,974	6,316	18,969	--	602,076
2011	236,392	27,670	193,631	--	54,352	72,182	7,811	19,062	5	611,105
2012	232,079	26,732	206,774	--	54,717	72,505	9,824	19,094	61	621,785
2013	228,478	24,649	208,486	12	52,399	72,755	10,118	19,115	787	616,799
Independent Power Producers, Non-Combined Heat and Power Plants										
2003	66,538	26,028	178,624	6	38,244	5,058	11,786	2,719	46	329,049
2004	67,242	25,918	190,855	8	38,978	5,274	12,070	2,717	46	343,106
2005	73,734	26,041	188,043	12	43,424	5,284	13,864	3,152	46	353,601
2006	72,730	25,384	184,196	20	44,190	5,263	15,865	3,160	46	350,854
2007	71,943	24,818	184,888	8	46,055	5,346	21,002	3,193	26	357,278
2008	71,864	24,823	179,169	--	46,379	5,433	28,139	3,193	46	359,044
2009	70,123	24,657	176,035	8	46,649	5,470	36,556	3,230	46	362,773
2010	71,214	24,867	178,190	8	46,798	5,489	41,014	3,230	77	370,887
2011	72,120	22,399	176,517	--	47,067	5,539	46,698	3,230	169	373,739
2012	69,068	18,644	170,654	--	47,168	5,569	60,117	3,274	470	374,964
2013	67,154	17,445	171,654	47	46,841	5,762	64,891	3,274	231	377,298
Independent Power Producers, Combined Heat and Power Plants										
2003	5,534	1,051	34,895	185	--	1	665	--	--	42,332
2004	5,609	677	32,600	289	--	1	555	--	--	39,731
2005	5,560	530	31,740	289	--	1	614	--	--	38,735
2006	5,837	970	30,031	325	--	1	628	--	--	37,793
2007	5,885	907	29,468	339	--	--	656	--	--	37,254
2008	5,927	900	29,575	206	--	--	701	--	--	37,309
2009	5,940	897	28,875	206	--	--	740	--	--	36,658
2010	5,451	766	29,006	182	--	--	846	--	--	36,250
2011	5,146	317	29,373	30	--	--	793	--	53	35,712
2012	4,756	317	29,129	83	--	--	981	--	--	35,266
2013	4,314	322	29,081	83	--	4	945	--	122	34,871
Commercial Sector										
2003	347	343	994	--	--	22	371	--	--	2,077
2004	368	321	1,069	5	--	22	404	--	--	2,188
2005	397	333	1,024	5	--	25	435	--	--	2,219
2006	428	341	1,040	5	--	25	433	--	--	2,272
2007	428	348	1,064	5	--	22	443	--	3	2,312
2008	428	352	1,059	5	--	22	444	--	3	2,312
2009	424	348	1,105	5	--	22	480	--	3	2,386
2010	418	368	1,155	5	--	22	520	--	3	2,490
2011	436	406	1,283	--	--	234	694	--	4	3,056
2012	436	443	1,545	--	--	18	777	--	4	3,223
2013	342	456	1,779	--	--	18	948	--	9	3,551
Industrial Sector										
2003	4,127	738	15,316	1,742	--	786	4,406	--	625	27,740
2004	3,825	789	14,753	1,937	--	648	4,728	--	687	27,367
2005	3,984	777	14,501	1,757	--	662	4,747	--	802	27,230
2006	3,317	983	15,285	1,802	--	693	4,896	--	797	27,773
2007	3,194	880	14,699	1,858	--	331	5,163	--	720	26,844
2008	3,246	713	14,551	1,784	--	334	5,116	--	854	26,599
2009	3,412	704	14,686	1,714	--	337	5,162	--	800	26,815
2010	4,010	674	14,447	1,967	--	341	5,116	--	804	27,359
2011	3,547	690	14,389	1,904	--	697	5,225	--	1,188	27,639
2012	3,342	1,032	14,263	1,863	--	646	5,457	--	1,194	27,795
2013	3,019	652	14,390	1,966	--	661	5,699	--	1,158	27,544

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, 2003 through 2013 (Megawatts) (Page 1)

Year	Wind	Solar Thermal and Photovoltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Total (Other Renewable Sources)
Total (All Sectors)						
2003	5,995	397	5,871	2,133	3,758	18,153
2004	6,456	398	6,182	2,152	3,529	18,717
2005	8,706	411	6,193	2,285	3,609	21,205
2006	11,329	411	6,372	2,274	3,727	24,113
2007	16,515	502	6,704	2,214	4,134	30,069
2008	24,651	536	6,864	2,229	4,186	38,466
2009	34,296	619	6,939	2,382	4,317	48,552
2010	39,135	866	7,037	2,405	4,369	53,811
2011	45,676	1,524	7,077	2,409	4,536	61,221
2012	59,075	3,170	7,508	2,592	4,811	77,155
2013	59,973	6,623	8,354	2,607	5,043	82,600
Electric Utilities						
2003	140	9	268	162	346	925
2004	326	10	313	152	160	960
2005	765	11	391	242	136	1,545
2006	1,441	11	428	240	172	2,291
2007	1,928	12	418	158	290	2,806
2008	3,190	14	427	159	276	4,066
2009	4,655	42	431	159	327	5,614
2010	5,338	79	414	159	325	6,316
2011	6,735	202	359	159	356	7,811
2012	8,489	332	364	162	477	9,824
2013	8,425	488	564	164	477	10,118
Independent Power Producers, Non-Combined Heat and Power Plants						
2003	5,855	388	1,121	1,972	2,450	11,786
2004	6,130	388	1,138	2,000	2,414	12,070
2005	7,941	400	1,033	2,044	2,447	13,864
2006	9,888	400	1,037	2,034	2,505	15,865
2007	14,587	489	1,066	2,056	2,803	21,002
2008	21,461	521	1,196	2,070	2,891	28,139
2009	29,640	575	1,220	2,223	2,898	36,556
2010	33,784	780	1,275	2,246	2,930	41,014
2011	38,912	1,263	1,313	2,250	2,961	46,698
2012	50,548	2,731	1,399	2,384	3,056	60,117
2013	51,498	5,934	1,845	2,401	3,212	64,891

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, 2003 through 2013 (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						
2003	--	--	204	--	461	665
2004	--	--	179	--	375	555
2005	--	--	218	--	395	614
2006	--	--	212	--	416	628
2007	--	--	210	--	446	656
2008	--	--	223	--	478	701
2009	--	--	237	--	503	740
2010	--	--	393	--	453	846
2011	--	--	356	--	437	793
2012	--	--	490	46	446	981
2013	--	--	469	42	434	945
Commercial Sector						
2003	--	--	7	--	364	371
2004	--	--	7	--	397	404
2005	--	--	7	--	428	435
2006	--	--	7	--	426	433
2007	--	--	8	--	435	443
2008	--	--	8	--	436	444
2009	1	*	8	--	471	480
2010	11	6	8	--	496	520
2011	25	54	8	--	608	694
2012	30	100	8	--	640	777
2013	33	193	8	--	713	948
Industrial Sector						
2003	--	--	4,271	--	136	4,406
2004	--	--	4,545	--	183	4,728
2005	--	--	4,545	--	202	4,747
2006	--	--	4,688	--	208	4,896
2007	--	1	5,002	--	160	5,163
2008	--	1	5,010	--	105	5,116
2009	--	1	5,043	--	118	5,162
2010	2	1	4,948	--	165	5,116
2011	4	4	5,041	--	175	5,225
2012	9	7	5,247	--	193	5,457
2013	18	8	5,467	--	206	5,699

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, 2013 (Megawatts)

Energy Source	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal	1,212	329,815	303,306	305,824
Petroleum	3,601	49,794	43,523	47,412
Natural Gas	5,700	488,169	425,390	458,175
Other Gases	99	2,452	2,108	2,100
Nuclear	100	104,424	99,240	100,980
Hydroelectric Conventional	4,002	78,581	79,200	78,677
Wind	977	60,712	59,973	60,068
Solar Thermal and Photovoltaic	874	6,674	6,623	6,492
Wood and Wood-Derived Fuels	369	9,477	8,354	8,420
Geothermal	193	3,765	2,607	2,805
Other Biomass	1,850	5,832	5,043	5,118
Hydroelectric Pumped Storage	156	21,602	22,389	22,354
Other Energy Sources	110	2,728	2,307	2,347
Total	19,243	1,164,022	1,060,064	1,100,772

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, 2013 (Megawatts)

Producer Type	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Electric Power Sector				
Electric Utilities	9,463	674,828	616,799	639,350
Independent Power Producers, Non-Combined Heat and Power Plants	6,502	413,993	377,298	391,014
Independent Power Producers, Combined Heat and Power Plants	588	39,729	34,871	37,567
Total	16,553	1,128,549	1,028,969	1,067,931
Commercial and Industrial Sectors				
Commercial Sector	1,042	3,947	3,551	3,682
Industrial Sector	1,648	31,526	27,544	29,160
Total	2,690	35,473	31,095	32,841
All Sectors				
Total	19,243	1,164,022	1,060,064	1,100,772

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.

Table 4.5. Planned Generating Capacity Changes, by Energy Source, 2014-2018 (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
2014						
U.S. Total	703	17,761	149	7,157	554	10,604
Coal	1	62	35	3,005	-34	-2,943
Petroleum	29	54	32	801	-3	-747
Natural Gas	76	8,009	52	2,326	24	5,683
Other Gases	--	--	4	40	-4	-40
Nuclear	--	--	1	619	-1	-619
Hydroelectric Conventional	47	347	3	128	44	220
Wind	56	4,969	2	53	54	4,916
Solar Thermal and Photovoltaic	432	4,069	2	4	430	4,064
Wood and Wood-Derived Fuels	3	111	5	129	-2	-19
Geothermal	2	11	--	--	2	11
Other Biomass	55	111	12	23	43	88
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	2	18	1	27	1	-9
2015						
U.S. Total	362	23,567	210	18,102	152	5,466
Coal	--	--	100	15,022	-100	-15,022
Petroleum	1	1	24	820	-23	-819
Natural Gas	99	8,333	59	2,033	40	6,300
Other Gases	--	--	--	--	--	--
Nuclear	1	1,122	--	--	1	1,122
Hydroelectric Conventional	12	293	15	160	-3	133
Wind	104	11,038	2	25	102	11,012
Solar Thermal and Photovoltaic	125	2,523	--	--	125	2,523
Wood and Wood-Derived Fuels	2	65	5	39	-3	27
Geothermal	1	49	--	--	1	49
Other Biomass	16	143	5	3	11	141
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	1	1	--	--	1	1
2016						
U.S. Total	184	18,422	70	4,989	114	13,433
Coal	3	276	26	3,774	-23	-3,498
Petroleum	1	1	14	124	-13	-123
Natural Gas	94	9,618	26	974	68	8,643
Other Gases	--	--	--	--	--	--
Nuclear	--	--	--	--	--	--
Hydroelectric Conventional	6	148	1	104	5	44
Wind	29	4,299	--	--	29	4,299
Solar Thermal and Photovoltaic	42	3,835	--	--	42	3,835
Wood and Wood-Derived Fuels	2	104	1	11	1	94
Geothermal	1	25	--	--	1	25
Other Biomass	3	21	2	2	1	19
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	3	95	--	--	3	95

Notes: These data reflect plans as of December 31, 2013
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, 2014-2018 (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
2017						
U.S. Total	72	14,495	54	7,585	18	6,910
Coal	1	350	22	5,097	-21	-4,747
Petroleum	--	--	2	452	-2	-452
Natural Gas	42	10,024	16	1,751	26	8,273
Other Gases	--	--	--	--	--	--
Nuclear	2	2,200	--	--	2	2,200
Hydroelectric Conventional	6	163	2	208	4	-45
Wind	11	1,138	3	39	8	1,099
Solar Thermal and Photovoltaic	2	400	--	--	2	400
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	2	90	--	--	2	90
Other Biomass	2	31	9	38	-7	-7
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	4	100	--	--	4	100
2018						
U.S. Total	52	8,689	20	2,954	32	5,735
Coal	1	17	10	2,618	-9	-2,601
Petroleum	2	3	7	194	-5	-191
Natural Gas	36	5,095	2	125	34	4,970
Other Gases	1	3	--	--	1	3
Nuclear	2	2,200	--	--	2	2,200
Hydroelectric Conventional	3	177	--	--	3	177
Wind	2	965	1	17	1	948
Solar Thermal and Photovoltaic	--	--	--	--	--	--
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	3	180	--	--	3	180
Other Biomass	2	49	--	--	2	49
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	--	--	--	--	--	--
2014-2018						
U.S. Total	1,373	82,933	503	40,786	870	42,147
Coal	6	705	193	29,517	-187	-28,811
Petroleum	33	59	79	2,391	-46	-2,332
Natural Gas	347	41,079	155	7,209	192	33,869
Other Gases	1	3	4	40	-3	-37
Nuclear	5	5,522	1	619	4	4,903
Hydroelectric Conventional	74	1,128	21	600	53	529
Wind	202	22,409	8	135	194	22,274
Solar Thermal and Photovoltaic	601	10,827	2	4	599	10,822
Wood and Wood-Derived Fuels	7	280	11	178	-4	101
Geothermal	9	355	--	--	9	355
Other Biomass	78	354	28	66	50	289
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	10	214	1	27	9	186

Notes: These data reflect plans as of December 31, 2013
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, 2013 (Count, Megawatts)

	Generator Additions				Generator Retirements			
Energy Source	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	4	1,813	1,508	1,569	61	6,964	6,291	6,492
Petroleum	27	71	62	66	130	2,027	1,871	1,920
Natural Gas	89	7,509	6,868	7,376	121	6,631	5,843	6,024
Other Gases	4	13	12	12	--	--	--	--
Nuclear	--	--	--	--	4	3,705	3,576	3,601
Hydroelectric Conventional	21	424	413	405	36	168	168	168
Wind	22	859	859	859	2	9	9	9
Solar Thermal and Photovoltaic	259	3,469	3,461	3,440	3	3	3	3
Wood and Wood-Derived Fuels	13	599	548	550	2	19	19	19
Geothermal	10	91	71	72	1	14	11	11
Other Biomass	93	235	205	210	37	44	39	38
Hydroelectric Pumped Storage	--	--	--	--	--	--	--	--
Other Energy Sources	7	49	49	49	3	24	24	24
Total	549	15,131	14,054	14,606	400	19,606	17,852	18,308

	Other Changes to Existing Capacity			
Energy Source		Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal		-1,375	-1,591	-1,546
Petroleum		-2,040	-1,835	-1,974
Natural Gas		1,333	2,000	1,609
Other Gases		186	150	155
Nuclear		190	931	399
Hydroelectric Conventional		84	218	225
Wind		232	48	135
Solar Thermal and Photovoltaic		-8	-6	2
Wood and Wood-Derived Fuels		378	317	319
Geothermal		-36	-45	-37
Other Biomass		115	67	62
Hydroelectric Pumped Storage		744	21	83
Other Energy Sources		699	553	583
Total		502	829	15

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.

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, 2013 and 2012 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	4,403.4	4,157.7	23,564.2	24,619.1	1,753.4	1,753.4	3.0	3.0	4,645.4	4,630.3	52.9	48.0	34,422.3	35,211.5
Connecticut	331.6	294.7	6,274.1	6,607.7	29.4	29.4	0.0	0.0	2,102.5	2,102.5	30.9	26.0	8,768.5	9,060.3
Maine	1,809.6	1,704.5	2,667.3	2,764.9	0.0	0.0	0.0	0.0	0.0	0.0	22.0	22.0	4,498.9	4,491.4
Massachusetts	746.5	761.5	10,526.8	11,155.2	1,724.0	1,724.0	3.0	3.0	677.3	677.3	0.0	0.0	13,677.6	14,321.0
New Hampshire	930.5	838.4	2,236.7	2,238.7	0.0	0.0	0.0	0.0	1,246.2	1,246.2	0.0	0.0	4,413.4	4,323.3
Rhode Island	49.5	27.9	1,759.8	1,752.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,809.3	1,780.7
Vermont	535.7	530.7	99.5	99.8	0.0	0.0	0.0	0.0	619.4	604.3	0.0	0.0	1,254.6	1,234.8
Middle Atlantic	10,088.6	9,621.4	69,239.5	71,813.3	3,341.0	3,321.0	40.0	28.0	19,234.3	19,055.4	11.2	11.2	101,954.6	103,850.3
New Jersey	575.5	464.5	13,882.4	13,933.9	420.0	400.0	0.0	0.0	4,107.5	4,114.5	11.2	11.2	18,996.6	18,924.1
New York	6,649.2	6,436.4	26,428.0	26,392.2	1,400.0	1,400.0	20.0	28.0	5,421.0	5,263.3	0.0	0.0	39,918.2	39,519.9
Pennsylvania	2,863.9	2,720.5	28,929.1	31,487.2	1,521.0	1,521.0	20.0	0.0	9,705.8	9,677.6	0.0	0.0	43,039.8	45,406.3
East North Central	9,077.8	8,761.8	122,181.5	123,094.3	1,872.0	1,871.0	20.0	0.0	18,838.1	19,359.2	109.1	114.1	152,098.5	153,200.4
Illinois	3,718.2	3,715.1	29,654.6	29,884.7	0.0	0.0	0.0	0.0	11,577.5	11,541.0	0.0	5.0	44,950.3	45,145.8
Indiana	1,711.6	1,661.7	25,396.6	25,087.6	0.0	0.0	0.0	0.0	0.0	0.0	88.0	88.0	27,196.2	26,837.3
Michigan	1,849.5	1,571.1	22,477.6	22,953.5	1,872.0	1,871.0	0.0	0.0	3,929.1	3,936.2	0.0	0.0	30,128.2	30,331.8
Ohio	703.6	738.0	29,624.1	29,982.3	0.0	0.0	20.0	0.0	2,134.0	2,134.0	0.0	0.0	32,481.7	32,854.3
Wisconsin	1,094.9	1,075.9	15,028.6	15,186.2	0.0	0.0	0.0	0.0	1,197.5	1,748.0	21.1	21.1	17,342.1	18,031.2
West North Central	18,191.6	17,735.7	62,092.9	62,162.0	657.0	657.0	1.0	0.0	5,888.0	5,805.0	24.5	23.7	86,855.0	86,383.4
Iowa	5,207.5	5,167.4	10,120.1	10,249.8	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	15,929.0	16,018.6
Kansas	2,990.9	2,733.2	10,077.3	10,185.1	0.0	0.0	0.0	0.0	1,175.0	1,175.0	0.8	0.0	14,244.0	14,093.3
Minnesota	3,467.5	3,389.9	10,598.3	10,444.8	0.0	0.0	1.0	0.0	1,673.0	1,594.0	18.4	18.4	15,758.2	15,447.1
Missouri	1,039.1	1,038.1	18,910.6	19,118.6	657.0	657.0	0.0	0.0	1,194.0	1,190.0	0.0	0.0	21,800.7	22,003.7
Nebraska	819.1	741.6	6,384.9	6,286.9	0.0	0.0	0.0	0.0	1,244.6	1,244.6	0.0	0.0	8,448.6	8,273.1
North Dakota	2,279.0	2,277.0	4,281.4	4,208.1	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	6,565.7	6,490.4
South Dakota	2,388.5	2,388.5	1,720.3	1,668.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,108.8	4,057.2
South Atlantic	12,360.5	11,516.0	160,969.0	162,937.3	7,905.2	7,905.2	32.0	32.0	24,562.6	25,020.0	930.0	406.0	206,759.3	207,816.5
Delaware	38.3	34.3	3,207.4	3,322.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,245.7	3,356.5
District of Columbia	0.0	0.0	9.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	10.0
Florida	1,303.2	1,156.4	53,125.5	53,455.8	0.0	0.0	0.0	0.0	3,572.0	4,175.0	780.0	352.0	58,780.7	59,139.2
Georgia	2,813.6	2,699.9	29,473.5	29,865.0	1,862.2	1,862.2	0.0	0.0	4,061.0	4,061.0	0.0	0.0	38,210.3	38,488.1
Maryland	910.3	880.9	9,713.1	9,618.4	0.0	0.0	0.0	0.0	1,716.0	1,716.0	0.0	0.0	12,339.4	12,215.3
North Carolina	2,892.1	2,614.2	21,939.5	22,638.5	86.0	86.0	0.0	0.0	5,076.1	4,998.0	54.0	54.0	30,047.7	30,390.7
South Carolina	1,769.5	1,725.1	11,974.9	12,133.7	2,716.0	2,716.0	0.0	0.0	6,556.2	6,508.0	0.0	0.0	23,016.6	23,082.8
Virginia	1,747.5	1,533.0	16,162.0	16,512.6	3,241.0	3,241.0	0.0	0.0	3,581.3	3,562.0	96.0	0.0	24,827.8	24,848.6
West Virginia	886.0	872.2	15,364.1	15,381.1	0.0	0.0	32.0	32.0	0.0	0.0	0.0	0.0	16,282.1	16,285.3
East South Central	7,986.2	7,936.7	70,632.1	71,173.3	1,616.3	1,616.3	0.0	0.0	9,857.5	9,634.1	151.4	1.4	90,243.5	90,361.8
Alabama	3,948.6	3,948.9	23,361.1	23,555.1	0.0	0.0	0.0	0.0	5,043.4	5,043.4	0.0	0.0	32,353.1	32,547.4
Kentucky	901.4	896.7	20,102.2	20,192.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21,003.6	21,088.8
Mississippi	278.2	236.7	13,718.2	13,975.5	0.0	0.0	0.0	0.0	1,413.4	1,190.0	151.4	1.4	15,561.2	15,403.6
Tennessee	2,858.0	2,854.4	13,450.6	13,450.6	1,616.3	1,616.3	0.0	0.0	3,400.7	3,400.7	0.0	0.0	21,325.6	21,322.0
West South Central	19,933.9	19,687.0	144,309.4	145,586.8	288.0	288.0	36.0	37.0	8,904.4	8,922.0	425.9	435.9	173,897.6	174,956.7
Arkansas	1,632.6	1,666.5	11,306.3	12,832.8	28.0	28.0	0.0	0.0	1,819.0	1,828.0	0.0	0.0	14,785.9	16,355.3
Louisiana	642.9	571.5	23,257.3	22,634.8	0.0	0.0	0.0	0.0	2,125.4	2,134.0	202.3	207.6	26,227.9	25,547.9
Oklahoma	4,076.3	4,064.5	18,963.9	19,160.6	260.0	260.0	0.0	0.0	0.0	0.0	0.0	0.0	23,300.2	23,485.1
Texas	13,582.1	13,384.5	90,781.9	90,958.6	0.0	0.0	36.0	37.0	4,960.0	4,960.0	223.6	228.3	109,583.6	109,568.4
Mountain	19,834.8	19,102.2	63,937.0	64,689.6	778.8	778.8	2.6	1.8	3,937.0	3,937.0	111.4	111.4	88,601.6	88,620.8
Arizona	4,157.5	3,628.9	19,599.1	19,804.3	216.3	216.3	0.0	0.0	3,937.0	3,937.0	0.0	0.0	27,909.9	27,586.5
Colorado	3,122.8	3,055.1	11,074.8	11,319.9	562.5	562.5	0.0	0.0	0.0	0.0	9.3	9.3	14,769.4	14,946.8
Idaho	3,771.5	3,762.9	1,137.4	1,133.1	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	4,923.7	4,910.8
Montana	3,373.5	3,359.4	2,911.7	2,913.7	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,329.2	6,317.1
Nevada	1,967.5	1,916.0	8,684.6	8,559.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,652.1	10,475.7
New Mexico	1,060.4	1,027.4	6,874.9	7,344.0	0.0	0.0	2.6	1.8	0.0	0.0	0.0	0.0	7,937.9	8,373.2
Utah	666.0	638.1	7,000.3	6,960.7	0.0	0.0	0.0	0.0	0.0	0.0	31.8	31.8	7,698.1	7,630.6
Wyoming	1,715.6	1,714.4	6,654.2	6,654.2	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,381.3	8,380.1
Pacific Contiguous	58,902.3	56,418.4	53,355.5	51,279.1	4,177.6	4,177.6	6.0	0.0	3,373.0	5,522.0	275.4	385.8	120,089.8	117,782.9
California	22,516.6	20,165.1	44,927.2	42,534.2	3,863.6	3,863.6	6.0	0.0	2,240.0	4,390.0	218.6	375.8	73,772.0	71,328.7
Oregon	12,026.1	11,949.0	3,635.4	3,595.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15,661.5	15,544.2
Washington	24,359.6	24,304.3	4,792.9	5,149.7	314.0	314.0	0.0	0.0	1,133.0	1,132.0	56.8	10.0	30,656.3	30,910.0
Pacific Noncontiguous	1,021.0	956.3	4,045.7	3,802.8	0.0	0.0	48.0	63.0	0.0	0.0	26.6	26.6	5,141.3	4,848.7
Alaska	482.6	453.9	1,874.4	1,637.6	0.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	2,384.0	2,118.5
Hawaii	538.4	502.4	2,171.3	2,165.2	0.0	0.0	21.0	36.0	0.0	0.0	26.6	26.6	2,757.3	2,730.2
U.S. Total	161,800.1	155,893.2	774,326.8	781,157.6	22,389.3	22,368.3	188.6	164.8	99,240.3	101,885.0	2,118.4	1,564.1	1,060,063.5	1,063,033.0

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 signifciant 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 of Utility Scale Units Using Primarily Renewable Energy Sources and by State, 2013 and 2012 (Megawatts)

Census Division and State	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources	
	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	797.5	784.1	154.8	49.2	0.0	0.0	1,952.6	1,956.9	1,498.5	1,367.5	0.0	0.0	4,403.4	4,157.7
Connecticut	0.0	0.0	5.0	0.0	0.0	0.0	122.2	122.2	204.4	172.5	0.0	0.0	331.6	294.7
Maine	430.6	427.6	0.0	0.0	0.0	0.0	726.7	742.3	652.3	534.6	0.0	0.0	1,809.6	1,704.5
Massachusetts	72.7	63.8	130.7	41.2	0.0	0.0	263.0	261.1	280.1	395.4	0.0	0.0	746.5	761.5
New Hampshire	171.0	171.0	0.0	0.0	0.0	0.0	514.4	505.0	245.1	162.4	0.0	0.0	930.5	838.4
Rhode Island	3.0	1.5	6.9	0.0	0.0	0.0	2.7	2.7	36.9	23.7	0.0	0.0	49.5	27.9
Vermont	120.2	120.2	12.2	8.0	0.0	0.0	323.6	323.6	79.7	78.9	0.0	0.0	535.7	530.7
Middle Atlantic	3,082.2	2,987.8	424.9	304.6	0.0	0.0	5,227.8	5,076.7	1,353.7	1,252.3	0.0	0.0	10,088.6	9,621.4
New Jersey	7.5	7.5	337.9	236.1	0.0	0.0	3.3	3.3	226.8	217.6	0.0	0.0	575.5	464.5
New York	1,730.8	1,636.4	46.2	31.5	0.0	0.0	4,332.3	4,311.9	539.9	456.6	0.0	0.0	6,649.2	6,436.4
Pennsylvania	1,343.9	1,343.9	40.8	37.0	0.0	0.0	892.2	761.5	587.0	578.1	0.0	0.0	2,863.9	2,720.5
East North Central	6,897.8	6,765.9	113.0	60.8	0.0	0.0	912.3	817.0	1,154.7	1,118.1	0.0	0.0	9,077.8	8,761.8
Illinois	3,525.1	3,520.1	31.6	29.0	0.0	0.0	34.1	34.1	127.4	131.9	0.0	0.0	3,718.2	3,715.1
Indiana	1,539.7	1,539.7	49.3	3.5	0.0	0.0	60.4	59.5	62.2	59.0	0.0	0.0	1,711.6	1,661.7
Michigan	1,080.3	874.8	0.0	0.0	0.0	0.0	331.4	237.0	437.8	459.3	0.0	0.0	1,849.5	1,571.1
Ohio	424.1	461.7	32.1	28.3	0.0	0.0	101.9	101.6	145.5	146.4	0.0	0.0	703.6	738.0
Wisconsin	328.6	369.6	0.0	0.0	0.0	0.0	384.5	384.8	381.8	321.5	0.0	0.0	1,094.9	1,075.9
West North Central	14,398.2	14,030.0	1.7	0.0	0.0	0.0	3,292.2	3,282.1	499.5	423.6	0.0	0.0	18,191.6	17,735.7
Iowa	5,047.0	5,005.0	0.0	0.0	0.0	0.0	144.9	147.8	15.6	14.6	0.0	0.0	5,207.5	5,167.4
Kansas	2,968.9	2,719.1	0.0	0.0	0.0	0.0	7.0	7.0	15.0	7.1	0.0	0.0	2,990.9	2,733.2
Minnesota	2,843.7	2,842.3	1.7	0.0	0.0	0.0	184.2	175.7	437.9	371.9	0.0	0.0	3,467.5	3,389.9
Missouri	458.5	458.5	0.0	0.0	0.0	0.0	570.3	570.3	10.3	9.3	0.0	0.0	1,039.1	1,038.1
Nebraska	530.4	455.4	0.0	0.0	0.0	0.0	277.8	275.3	10.9	10.9	0.0	0.0	819.1	741.6
North Dakota	1,759.2	1,759.2	0.0	0.0	0.0	0.0	510.0	508.0	9.8	9.8	0.0	0.0	2,279.0	2,277.0
South Dakota	790.5	790.5	0.0	0.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,388.5	2,388.5
South Atlantic	705.3	705.3	546.7	234.9	0.0	0.0	7,193.2	7,145.5	3,915.3	3,430.3	0.0	0.0	12,360.5	11,516.0
Delaware	2.0	2.0	28.3	24.3	0.0	0.0	0.0	0.0	8.0	8.0	0.0	0.0	38.3	34.3
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
Florida	0.0	0.0	66.4	65.2	0.0	0.0	54.5	54.5	1,182.3	1,036.7	0.0	0.0	1,303.2	1,156.4
Georgia	0.0	0.0	61.1	3.2	0.0	0.0	2,044.9	2,047.9	707.6	648.8	0.0	0.0	2,813.6	2,699.9
Maryland	120.0	120.0	55.2	27.6	0.0	0.0	590.0	590.0	145.1	143.3	0.0	0.0	910.3	880.9
North Carolina	0.0	0.0	333.2	114.6	0.0	0.0	1,997.0	1,964.2	561.9	535.4	0.0	0.0	2,892.1	2,614.2
South Carolina	0.0	0.0	2.5	0.0	0.0	0.0	1,340.3	1,336.0	426.7	389.1	0.0	0.0	1,769.5	1,725.1
Virginia	0.0	0.0	0.0	0.0	0.0	0.0	866.0	866.2	881.5	666.8	0.0	0.0	1,747.5	1,533.0
West Virginia	583.3	583.3	0.0	0.0	0.0	0.0	300.5	286.7	2.2	2.2	0.0	0.0	886.0	872.2
East South Central	29.1	29.1	13.6	12.8	0.0	0.0	6,719.4	6,715.9	1,224.1	1,178.9	0.0	0.0	7,986.2	7,936.7
Alabama	0.0	0.0	0.0	0.0	0.0	0.0	3,272.2	3,272.2	676.4	676.7	0.0	0.0	3,948.6	3,948.9
Kentucky	0.0	0.0	0.0	0.0	0.0	0.0	831.1	827.6	70.3	69.1	0.0	0.0	901.4	896.7
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	278.2	236.7	0.0	0.0	278.2	236.7
Tennessee	29.1	29.1	13.6	12.8	0.0	0.0	2,616.1	2,616.1	199.2	196.4	0.0	0.0	2,858.0	2,854.4
West South Central	15,454.8	15,311.8	125.9	75.2	0.0	0.0	3,072.2	3,080.2	1,281.0	1,219.8	0.0	0.0	19,933.9	19,687.0
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	1,324.2	1,340.7	308.4	325.8	0.0	0.0	1,632.6	1,666.5
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0	192.0	450.9	379.5	0.0	0.0	642.9	571.5
Oklahoma	3,132.9	3,132.9	0.0	0.0	0.0	0.0	867.2	858.2	76.2	73.4	0.0	0.0	4,076.3	4,064.5
Texas	12,321.9	12,178.9	125.9	75.2	0.0	0.0	688.8	689.3	445.5	441.1	0.0	0.0	13,582.1	13,384.5
Mountain	6,775.7	6,758.1	1,472.5	1,167.8	363.9	69.5	10,551.0	10,507.8	184.8	159.9	486.9	439.1	19,834.8	19,102.2
Arizona	237.3	237.3	866.9	631.7	295.4	1.0	2,719.4	2,720.4	38.5	38.5	0.0	0.0	4,157.5	3,628.9
Colorado	2,302.9	2,271.1	120.2	115.4	0.0	0.0	672.3	655.6	27.4	13.0	0.0	0.0	3,122.8	3,055.1
Idaho	962.7	962.7	0.0	0.0	0.0	0.0	2,704.5	2,703.4	94.3	86.8	10.0	10.0	3,771.5	3,762.9
Montana	612.4	627.8	0.0	0.0	0.0	0.0	2,758.1	2,731.6	3.0	0.0	0.0	0.0	3,373.5	3,359.4
Nevada	150.0	150.0	292.1	258.8	68.5	68.5	1,051.4	1,051.4	3.2	3.2	402.3	384.1	1,967.5	1,916.0
New Mexico	777.5	777.5	192.0	160.6	0.0	0.0	82.9	82.9	6.4	6.4	1.6	0.0	1,060.4	1,027.4
Utah	324.4	324.4	1.3	1.3	0.0	0.0	255.3	255.4	12.0	12.0	73.0	45.0	666.0	638.1
Wyoming	1,408.5	1,407.3	0.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,715.6	1,714.4
Pacific Contiguous	11,567.2	11,464.4	2,467.8	781.6	922.5	406.5	39,838.7	39,715.3	2,029.0	1,940.6	2,077.1	2,110.0	58,902.3	56,418.4
California	5,600.0	5,506.3	2,456.6	770.4	922.5	406.5	10,173.4	10,145.7	1,304.7	1,243.9	2,059.4	2,092.3	22,516.6	20,165.1
Oregon	3,160.9	3,151.9	10.7	10.7	0.0	0.0	8,515.7	8,454.7	321.1	314.0	17.7	17.7	12,026.1	11,949.0
Washington	2,806.3	2,806.2	0.5	0.5	0.0	0.0	21,149.6	21,114.9	403.2	382.7	0.0	0.0	24,359.6	24,304.3
Pacific Noncontiguous	265.6	238.3	15.2	7.2	0.0	0.0	440.6	440.6	256.6	227.2	43.0	43.0	1,021.0	956.3
Alaska	60.0	32.7	0.0	0.0	0.0	0.0	415.6	415.6	7.0	5.6	0.0	0.0	482.6	453.9
Hawaii	205.6	205.6	15.2	7.2	0.0	0.0	25.0	25.0	249.6	221.6	43.0	43.0	538.4	502.4
U.S. Total	59,973.4	59,074.8	5,336.1	2,694.1	1,286.4	476.0	79,200.0	78,738.0	13,397.2	12,318.2	2,607.0	2,592.1	161,800.1	155,893.2

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 signifciant portion of existing or planned capacity for some technologies such as solar photovoltaic generation.

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.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, 2013 and 2012 (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 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	11,720.9	12,190.5	1,111.3	1,090.0	884.9	876.4	2,382.7	2,546.1	0.0	0.0	7,464.4	7,916.1	0.0	0.0	23,564.2	24,619.1
Connecticut	2,504.6	2,513.4	482.2	458.1	75.9	61.0	383.4	389.1	0.0	0.0	2,828.0	3,186.1	0.0	0.0	6,274.1	6,607.7
Maine	1,250.0	1,250.0	297.2	306.0	119.0	119.0	85.0	85.0	0.0	0.0	916.1	1,004.9	0.0	0.0	2,667.3	2,764.9
Massachusetts	5,033.1	5,498.9	328.1	322.1	679.6	686.0	1,380.4	1,538.1	0.0	0.0	3,105.6	3,110.1	0.0	0.0	10,526.8	11,155.2
New Hampshire	1,201.0	1,203.0	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	2,238.7
Rhode Island	1,732.2	1,725.2	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	1,752.8
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	99.8	0.0	0.0	99.5	99.8
Middle Atlantic	22,426.7	22,470.6	8,760.8	8,708.5	10,148.3	9,616.3	19,095.8	21,966.2	11.6	11.6	8,695.9	8,939.7	100.4	100.4	69,239.5	71,813.3
New Jersey	5,852.0	5,871.3	4,062.8	4,099.2	670.4	642.9	1,988.8	2,006.6	11.6	11.6	1,296.8	1,302.3	0.0	0.0	13,882.4	13,933.9
New York	8,236.0	8,338.6	3,017.0	3,011.4	7,679.3	7,194.6	2,507.3	2,703.7	0.0	0.0	4,988.4	5,143.9	0.0	0.0	26,428.0	26,392.2
Pennsylvania	8,338.7	8,260.7	1,681.0	1,597.9	1,798.6	1,778.8	14,599.7	17,255.9	0.0	0.0	2,410.7	2,493.5	100.4	100.4	28,929.1	31,487.2
East North Central	16,267.1	16,834.9	25,701.7	25,669.0	3,626.7	3,419.7	72,138.7	72,502.6	570.1	570.1	2,935.9	3,191.9	941.3	906.1	122,181.5	123,094.3
Illinois	2,957.7	2,976.6	10,169.6	10,314.6	228.0	238.7	15,498.4	15,574.0	0.0	0.0	683.2	663.1	117.7	117.7	29,654.6	29,884.7
Indiana	2,471.2	2,451.9	3,119.6	3,189.6	8.7	4.0	18,648.2	18,140.4	274.0	274.0	268.4	456.4	606.5	571.3	25,396.6	25,087.6
Michigan	4,210.1	4,777.0	3,614.4	3,319.3	3,117.1	2,979.3	10,946.5	11,261.8	47.2	47.2	542.3	568.9	0.0	0.0	22,477.6	22,953.5
Ohio	3,965.2	3,960.3	5,426.7	5,443.1	133.4	57.4	18,894.8	19,267.5	142.0	142.0	844.9	894.9	217.1	217.1	29,624.1	29,982.3
Wisconsin	2,662.9	2,669.1	3,371.4	3,402.4	139.5	140.3	8,150.8	8,258.9	106.9	106.9	597.1	608.6	0.0	0.0	15,028.6	15,186.2
West North Central	5,730.6	5,714.1	11,334.4	11,201.8	3,170.7	3,257.3	37,701.1	37,843.8	32.0	32.0	4,115.7	4,104.6	8.4	8.4	62,092.9	62,162.0
Iowa	1,112.8	1,161.5	1,105.6	1,113.9	292.6	261.4	6,562.3	6,683.4	32.0	32.0	1,014.8	997.6	0.0	0.0	10,120.1	10,249.8
Kansas	0.0	0.0	2,350.7	2,377.8	1,996.2	2,043.0	5,188.1	5,223.0	0.0	0.0	542.3	541.3	0.0	0.0	10,077.3	10,185.1
Minnesota	2,158.2	2,107.2	2,580.4	2,558.4	231.2	278.7	4,822.3	4,696.5	0.0	0.0	806.2	804.0	0.0	0.0	10,598.3	10,444.8
Missouri	1,830.0	1,834.8	3,370.9	3,397.5	230.8	267.4	12,332.9	12,457.5	0.0	0.0	1,146.0	1,161.4	0.0	0.0	18,910.6	19,118.6
Nebraska	339.6	320.6	1,152.2	1,111.6	407.3	394.2	4,170.5	4,145.7	0.0	0.0	315.3	314.8	0.0	0.0	6,384.9	6,286.9
North Dakota	0.0	0.0	80.0	0.0	0.0	0.0	4,128.4	4,141.1	0.0	0.0	64.6	58.6	8.4	8.4	4,281.4	4,208.1
South Dakota	290.0	290.0	694.6	642.6	12.6	12.6	496.6	496.6	0.0	0.0	226.5	226.9	0.0	0.0	1,720.3	1,668.7
South Atlantic	44,984.5	43,584.2	31,813.3	31,464.5	4,667.4	3,497.9	64,429.1	67,099.3	669.8	633.8	14,139.9	16,522.6	265.0	135.0	160,969.0	162,937.3
Delaware	1,196.0	1,130.0	181.0	355.0	876.0	854.8	575.0	742.0	0.0	0.0	114.4	105.4	265.0	135.0	3,207.4	3,322.2
District of Columbia	0.0	0.0	9.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	10.0
Florida	24,667.9	23,942.6	8,405.4	7,958.9	2,647.3	1,755.5	10,117.0	10,266.0	586.0	550.0	6,701.9	8,982.8	0.0	0.0	53,125.5	53,455.8
Georgia	7,921.8	7,956.0	7,799.1	7,836.9	155.0	115.0	12,412.1	12,737.1	83.8	83.8	1,101.7	1,136.2	0.0	0.0	29,473.5	29,865.0
Maryland	230.0	230.0	1,590.4	1,488.3	325.8	335.5	4,757.0	4,757.0	0.0	0.0	2,809.9	2,807.6	0.0	0.0	9,713.1	9,618.4
North Carolina	4,706.6	4,074.6	6,035.7	6,011.7	0.0	0.0	10,794.8	12,104.8	0.0	0.0	402.4	447.4	0.0	0.0	21,939.5	22,638.5
South Carolina	2,416.0	2,281.7	2,841.2	2,852.2	110.8	110.8	5,945.5	6,225.5	0.0	0.0	661.4	663.5	0.0	0.0	11,974.9	12,133.7
Virginia	3,846.2	3,969.3	3,877.6	3,877.6	546.9	320.7	5,554.1	5,976.3	0.0	0.0	2,337.2	2,368.7	0.0	0.0	16,162.0	16,512.6
West Virginia	0.0	0.0	1,073.9	1,073.9	5.6	5.6	14,273.6	14,290.6	0.0	0.0	11.0	11.0	0.0	0.0	15,364.1	15,381.1
East South Central	17,642.3	17,725.9	12,829.5	12,865.8	2,744.4	2,865.5	37,111.0	37,415.2	0.0	0.0	205.1	197.1	99.8	103.8	70,632.1	71,173.3
Alabama	9,373.1	9,325.7	2,530.6	2,550.6	178.3	169.1	11,136.7	11,367.3	0.0	0.0	42.6	42.6	99.8	99.8	23,361.1	23,555.1
Kentucky	0.0	0.0	4,812.6	4,828.9	0.0	0.0	15,219.7	15,293.3	0.0	0.0	69.9	69.9	0.0	0.0	20,102.2	20,192.1
Mississippi	6,866.2	6,997.2	1,716.9	1,716.9	2,566.1	2,696.4	2,526.0	2,526.0	0.0	0.0	43.0	35.0	0.0	4.0	13,718.2	13,975.5
Tennessee	1,403.0	1,403.0	3,769.4	3,769.4	0.0	0.0	8,228.6	8,228.6	0.0	0.0	49.6	49.6	0.0	0.0	13,450.6	13,450.6
West South Central	55,721.7	56,430.9	12,311.6	11,725.5	36,756.5	38,460.0	37,956.7	36,984.8	984.2	1,409.8	198.8	195.9	379.9	379.9	144,309.4	145,586.8
Arkansas	4,630.5	4,660.5	727.6	753.1	813.7	2,258.0	5,122.3	5,144.0	0.0	0.0	12.2	17.2	0.0	0.0	11,306.3	12,832.8
Louisiana	7,053.4	7,324.2	2,640.4	2,406.2	9,068.5	8,434.2	3,437.8	3,414.0	973.6	975.0	49.3	46.9	34.3	34.3	23,257.3	22,634.8
Oklahoma	7,097.5	7,512.5	1,189.9	1,191.9	5,297.0	5,092.5	5,305.1	5,294.4	0.0	0.0	74.4	69.3	0.0	0.0	18,963.9	19,160.6
Texas	36,940.3	36,933.7	7,753.7	7,374.3	21,577.3	22,675.3	24,091.5	23,132.4	10.6	434.8	62.9	62.5	345.6	345.6	90,781.9	90,958.6
Mountain	21,173.5	21,136.7	8,869.8	8,778.6	3,395.2	3,545.8	30,022.9	30,756.4	52.0	52.0	328.7	325.2	94.9	94.9	63,937.0	64,689.6
Arizona	9,806.4	9,882.4	2,367.6	2,353.6	1,177.6	1,320.8	6,157.0	6,157.0	0.0	0.0	90.5	90.5	0.0	0.0	19,599.1	19,804.3
Colorado	2,731.7	2,733.2	2,539.3	2,545.5	352.2	381.0	5,281.8	5,482.3	0.0	0.0	169.8	177.9	0.0	0.0	11,074.8	11,319.9
Idaho	567.5	567.5	543.0	543.0	4.3	0.0	17.2	17.2	0.0	0.0	5.4	5.4	0.0	0.0	1,137.4	1,133.1
Montana	0.0	0.0	362.1	362.1	54.0	54.0	2,442.1	2,442.1	52.0	52.0	0.0	2.0	1.5	1.5	2,911.7	2,913.7
Nevada	5,410.5	5,287.2	1,385.6	1,380.6	587.1	587.1	1,295.4	1,293.4	0.0	0.0	6.0	11.4	0.0	0.0	8,684.6	8,559.7
New Mexico	1,456.4	1,465.4	1,035.4	947.2	888.7	896.0	3,471.0	4,031.0	0.0	0.0	23.4	4.4	0.0	0.0	6,874.9	7,344.0
Utah	1,201.0	1,201.0	520.2	530.0	325.3	300.9	4,926.0	4,901.0	0.0	0.0	27.8	27.8	0.0	0.0	7,000.3	6,960.7
Wyoming	0.0	0.0	116.6	116.6	6.0	6.0	6,432.4	6,432.4	0.0	0.0	5.8	5.8	93.4	93.4	6,654.2	6,654.2
Pacific Contiguous	25,609.5	24,264.9	11,347.1	9,042.1	13,544.1	15,073.4	2,177.8	2,275.5	17.0	0.0	448.3	412.1	211.7	211.1	53,355.5	51,279.1
California	19,924.0	18,322.8	10,572.1	8,207.1	13,516.5	15,045.8	252.8	350.5	17.0	0.0	433.1	396.9	211.7	211.1	44,927.2	42,534.2
Oregon	2,916.6	2,876.4	133.8	133.8	0.0	0.0	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	3,635.4	3,595.2
Washington	2,768.9	3,065.7	641.2	701.2	27.6	27.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	4,792.9	5,149.7
Pacific Noncontiguous	605.2	329.4	476.2	510.0	13.8	14.2	290.5	290.5	0.0	0.0	2,653.6	2,652.7	6.4	6.0	4,045.7	3,802.8
Alaska	605.2	329.4	476.2	510.0	13.8	14.2	110.5	110.5	0.0	0.0	668.7	673.5	0.0	0.0	1,874.4	1,637.6
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,984.9	1,979.2	6.4	6.0	2,171.3	2,165.2
U.S. Total	221,882.0	220,682.1	124,555.7	121,055.8	78,952.0	80,626.5	303,306.3	309,680.4	2,336.7	2,709.3	41,186.3	44,457.9	2,107.8	1,945.6	774,326.8	781,157.6

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 signifciant portion of existing or planned capacity for some technologies such as solar photovoltaic generation.

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 4.9. Total Capacity of Distributed and Dispersed Generators by Technology Type, 2005 through 2013

	Capacity (MW)										
Year	Internal Combustion	Combustion Turbine	Steam Turbine	Hydro	Wind	Photovoltaic	Storage	Other	Wind and Other	Total	Number of Generators
Distributed Generators											
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	913.5	89.1	28.7	101.4	111.6	1,196.5	2.0	121.0	--	2,563.3	38,643
Dispersed Generators											
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	3,259.7	159.8	17.0	1.9	4.5	21.6	8.7	25.8	--	3,499.0	17,991
Distributed and Dispersed Generators											
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	4,173.2	248.9	45.7	103.3	116.1	1,218.1	10.7	146.8	--	6,062.3	56,634

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, 2003 through 2013

	Capacity (MW)					Customers				
Year	Residential	Commercial	Industrial	Transportation	Total	Residential	Commercial	Industrial	Transportation	Total
Historical Data										
2003	N/A	N/A	N/A	N/A	N/A	5,870	775	168	--	6,813
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
Photovoltaic										
2010	698	518	243	--	1,459	137,618	11,897	1,225	--	150,740
2011	1,024	1,089	382	--	2,495	198,255	18,345	2,418	--	219,018
2012	1,542	1,742	395	--	3,680	294,437	27,611	1,317	--	323,365
2013	2,286	2,352	464	--	5,101	437,373	35,669	1,666	--	474,708
Wind										
2010	84	26	6	--	116	3,467	583	37	--	4,087
2011	28	44	10	--	82	4,456	905	50	--	5,411
2012	33	75	17	--	126	4,796	1,143	48	--	5,987
2013	42	93	14	--	148	5,213	1,307	61	--	6,581
Other										
2010	11	35	25	--	71	767	271	56	--	1,094
2011	5	49	57	--	111	807	242	100	--	1,149
2012	8	66	83	--	157	862	314	122	--	1,298
2013	7	74	64	--	145	683	329	165	--	1,177
All Technologies										
2010	793	579	274	--	1,646	141,852	12,751	1,318	--	155,921
2011	1,057	1,183	448	--	2,688	203,518	19,492	2,568	--	225,578
2012	1,583	1,882	496	--	3,962	300,095	29,068	1,487	--	330,650
2013	2,334	2,519	541	--	5,395	443,269	37,305	1,892	--	482,466

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, 2013

(Megawatts, Percent)

		Fuel-Switchable Part of Total			
Producer Type	Total Net Summer Capacity of All Generators Reporting Natural Gas as the Primary Fuel	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	208,486	80,223	38.5	80,010	18,953
Independent Power Producers, Non-Combined Heat and Power Plants	171,654	42,099	24.5	37,883	8,646
Independent Power Producers, Combined Heat and Power Plants	29,081	6,487	22.3	6,080	1,264
Electric Power Sector Subtotal	409,221	128,809	31.5	123,973	28,863
Commercial Sector	1,779	788	44.3	755	106
Industrial Sector	14,390	1,330	9.2	1,247	282
All Sectors	425,390	130,927	30.8	125,975	29,252

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, 2013 (Megawatts, Percent)

		Fuel-Switchable Part of Total		
Producer Type	Total Net Summer Capacity of All Generators Reporting Petroleum Liquids as the Primary Fuel	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	22,842	5,921	25.9	6,429
Independent Power Producers, Non-Combined Heat and Power Plants	17,309	7,095	41.0	5,852
Independent Power Producers, Combined Heat and Power Plants	270	--	--	--
Electric Power Sector Subtotal	40,421	13,016	32.2	12,281
Commercial Sector	456	21	4.7	21
Industrial Sector	309	19	6.0	19
All Sectors	41,186	13,055	31.7	12,320

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, 2013 (Megawatts, Percent)

Prime Mover Type	Number of Generators	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	189	29,066	10,287
Combined Cycle	417	44,593	6,741
Internal Combustion	343	1,054	318
Gas Turbine	914	56,214	11,906
All Fuel Switchable Prime Movers	1,863	130,927	29,252

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, 2013 (Megawatts, Percent)

Year of Initial Commercial Operation	Number of Generators	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	316	12,102	5,537
1970-1974	349	18,161	6,959
1975-1979	101	11,466	3,525
1980-1984	47	970	336
1985-1989	93	2,865	391
1990-1994	220	12,110	1,615
1995-1999	132	9,498	1,748
2000-2004	391	38,528	7,892
2005-2009	128	16,171	1,160
2010-2013	86	9,057	90
Total	1,863	130,927	29,252

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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,014,058	757,384	245,652	582	10,440
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
2011					
January	90,208	66,083	23,598	40	487
February	73,614	54,434	18,733	39	409
March	72,645	54,115	18,034	37	460
April	67,128	49,443	17,200	25	460
May	73,522	54,959	18,051	25	487
June	84,156	62,690	20,931	27	507
July	94,304	69,942	23,782	32	548
August	92,297	68,137	23,570	29	562
September	76,790	55,844	20,442	26	479
October	69,605	50,644	18,520	21	419
November	67,059	48,879	17,762	21	397
December	73,610	54,146	18,917	26	521
2012					
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
2013					
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

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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	17,720	0	2,080	1,234	14,406
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
2011					
January	2,084	0	340	149	1,595
February	1,833	0	307	135	1,391
March	1,869	0	310	127	1,431
April	1,713	0	287	98	1,327
May	1,776	0	328	99	1,349
June	1,726	0	287	103	1,336
July	1,824	0	313	113	1,397
August	1,807	0	305	101	1,400
September	1,689	0	283	96	1,309
October	1,712	0	294	89	1,329
November	1,689	0	277	96	1,315
December	1,812	0	296	113	1,403
2012					
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
2013					
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

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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,031,778	757,384	247,732	1,816	24,846
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
2011					
January	92,292	66,083	23,939	189	2,082
February	75,447	54,434	19,040	173	1,800
March	74,514	54,115	18,343	164	1,891
April	68,841	49,443	17,487	124	1,787
May	75,298	54,959	18,379	124	1,836
June	85,881	62,690	21,218	130	1,843
July	96,128	69,942	24,095	145	1,946
August	94,103	68,137	23,875	129	1,962
September	78,479	55,844	20,724	122	1,788
October	71,317	50,644	18,814	110	1,748
November	68,748	48,879	18,039	117	1,712
December	75,422	54,146	19,213	139	1,923
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	20,366,879	15,391,188	4,745,545	13,080	217,066
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
2011					
January	1,763,170	1,307,741	444,639	836	9,955
February	1,432,157	1,072,748	350,173	798	8,438
March	1,400,484	1,061,807	328,646	756	9,274
April	1,295,986	972,440	313,907	529	9,110
May	1,432,180	1,086,571	335,344	537	9,727
June	1,646,308	1,246,730	388,860	596	10,123
July	1,847,192	1,390,380	445,064	682	11,066
August	1,797,976	1,351,103	434,923	617	11,333
September	1,471,083	1,094,574	366,248	548	9,712
October	1,321,304	978,991	333,369	436	8,509
November	1,271,795	944,086	319,257	415	8,036
December	1,394,662	1,044,244	338,714	513	11,191
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	416,700	0	47,817	28,479	340,405
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
2011					
January	46,693	0	7,965	3,205	35,523
February	40,900	0	7,129	2,879	30,892
March	42,037	0	7,448	2,680	31,909
April	38,014	0	6,703	2,064	29,247
May	39,478	0	7,680	2,137	29,662
June	38,498	0	6,693	2,258	29,547
July	40,876	0	7,353	2,508	31,015
August	40,319	0	7,136	2,239	30,945
September	37,717	0	6,626	2,077	29,014
October	38,024	0	6,905	1,781	29,339
November	37,180	0	6,248	1,914	29,019
December	40,087	0	6,971	2,317	30,799
2012					
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
2013					
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

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.F. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	20,783,579	15,391,188	4,793,362	41,559	557,471
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
2011					
January	1,809,863	1,307,741	452,604	4,040	45,479
February	1,473,056	1,072,748	357,302	3,677	39,330
March	1,442,520	1,061,807	336,094	3,436	41,183
April	1,334,000	972,440	320,611	2,593	38,357
May	1,471,658	1,086,571	343,024	2,674	39,389
June	1,684,806	1,246,730	395,552	2,854	39,670
July	1,888,069	1,390,380	452,416	3,191	42,082
August	1,838,295	1,351,103	442,059	2,856	42,277
September	1,508,800	1,094,574	372,875	2,625	38,726
October	1,359,328	978,991	340,273	2,216	37,848
November	1,308,974	944,086	325,505	2,329	37,055
December	1,434,749	1,044,244	345,685	2,829	41,990
2012					
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
2013					
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

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 5.2.A. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	175,136	105,319	61,420	882	7,514
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
2011					
January	3,325	2,207	1,005	26	87
February	2,077	1,590	400	16	72
March	2,160	1,737	351	10	63
April	2,450	2,091	296	5	57
May	2,291	1,886	347	5	52
June	2,355	1,745	553	5	53
July	2,926	1,906	958	14	49
August	2,290	1,749	480	12	49
September	1,834	1,427	342	13	52
October	1,835	1,481	280	10	64
November	1,832	1,488	278	10	55
December	1,952	1,539	343	8	62
2012					
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
2013					
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

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, 2003 - 2013 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	14,124	0	1,197	512	12,414
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
2011					
January	538	0	94	69	375
February	370	0	72	26	272
March	333	0	75	9	249
April	287	0	83	3	201
May	287	0	82	7	198
June	286	0	82	4	200
July	272	0	87	8	176
August	284	0	92	8	184
September	280	0	89	11	180
October	311	0	87	5	219
November	293	0	83	14	195
December	286	0	76	3	207
2012					
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
2013					
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

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, 2003 - 2013 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	189,260	105,319	62,617	1,394	19,929
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
2011					
January	3,863	2,207	1,099	95	462
February	2,447	1,590	472	42	343
March	2,493	1,737	425	19	312
April	2,736	2,091	380	8	258
May	2,578	1,886	430	12	250
June	2,642	1,745	636	9	253
July	3,198	1,906	1,045	23	225
August	2,573	1,749	572	20	233
September	2,114	1,427	431	23	232
October	2,145	1,481	367	14	283
November	2,124	1,488	361	24	251
December	2,238	1,539	419	11	269
2012					
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
2013					
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

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 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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,089,307	658,868	380,378	5,358	44,702
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
2011					
January	20,010	13,314	6,015	160	521
February	12,446	9,595	2,331	95	425
March	12,977	10,490	2,054	57	376
April	14,715	12,631	1,713	32	340
May	13,840	11,454	2,050	29	307
June	14,196	10,558	3,296	28	313
July	17,692	11,583	5,739	86	284
August	13,843	10,674	2,810	72	286
September	10,910	8,569	1,960	76	305
October	10,891	8,840	1,613	57	381
November	10,872	8,879	1,605	61	326
December	11,562	9,169	1,978	47	368
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	85,488	0	6,963	3,176	75,349
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
2011					
January	3,261	0	554	434	2,273
February	2,197	0	415	169	1,613
March	1,988	0	443	56	1,490
April	1,702	0	495	16	1,191
May	1,704	0	489	42	1,173
June	1,706	0	489	23	1,193
July	1,614	0	517	53	1,045
August	1,680	0	543	47	1,090
September	1,656	0	527	65	1,063
October	1,849	0	515	29	1,304
November	1,736	0	490	86	1,160
December	1,708	0	452	20	1,236
2012					
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
2013					
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

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 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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,174,795	658,868	387,341	8,534	120,051
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
2011					
January	23,271	13,314	6,569	594	2,794
February	14,643	9,595	2,746	264	2,038
March	14,965	10,490	2,497	113	1,866
April	16,417	12,631	2,208	47	1,531
May	15,544	11,454	2,539	71	1,480
June	15,901	10,558	3,785	52	1,507
July	19,306	11,583	6,256	138	1,329
August	15,522	10,674	3,353	119	1,376
September	12,566	8,569	2,487	142	1,369
October	12,740	8,840	2,128	86	1,685
November	12,608	8,879	2,095	148	1,487
December	13,269	9,169	2,429	67	1,605
2012					
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
2013					
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

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 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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	6,303	2,554	3,166	2	582
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
2011					
January	552	400	124	0	28
February	431	295	114	0	22
March	517	344	151	0	22
April	336	218	94	0	24
May	357	232	101	0	24
June	432	302	107	0	22
July	510	359	131	0	19
August	464	330	110	0	24
September	454	333	95	0	26
October	338	229	83	0	25
November	257	155	77	0	25
December	365	252	88	0	25
2012					
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
2013					
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

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.B. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	763	0	80	9	675
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
2011					
January	93	0	5	1	86
February	90	0	9	1	81
March	85	0	11	1	73
April	92	0	9	0	83
May	95	0	11	0	84
June	89	0	9	0	80
July	89	0	11	0	79
August	81	0	11	0	70
September	90	0	10	0	80
October	91	0	7	0	84
November	88	0	9	1	79
December	95	0	10	1	84
2012					
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
2013					
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

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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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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	7,067	2,554	3,245	11	1,257
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
2011					
January	645	400	129	1	114
February	521	295	122	1	102
March	603	344	162	1	95
April	428	218	103	0	107
May	452	232	112	0	108
June	521	302	117	0	102
July	599	359	142	0	98
August	545	330	121	0	94
September	545	333	105	0	106
October	429	229	90	0	109
November	345	155	86	1	103
December	460	252	98	2	109
2012					
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
2013					
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

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.D. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	176,657	69,695	90,102	65	16,796
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
2011					
January	15,806	11,407	3,591	5	802
February	12,355	8,480	3,247	4	624
March	14,855	9,896	4,321	5	633
April	9,679	6,299	2,693	0	686
May	10,278	6,675	2,894	0	709
June	12,476	8,724	3,103	0	649
July	14,730	10,320	3,844	0	565
August	13,397	9,457	3,259	0	681
September	13,161	9,629	2,800	0	732
October	9,750	6,619	2,414	0	717
November	7,377	4,473	2,205	2	697
December	10,543	7,278	2,551	4	710
2012					
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
2013					
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

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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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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	21,170	0	2,282	244	18,644
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
2011					
January	2,698	0	152	35	2,511
February	2,661	0	250	29	2,383
March	2,502	0	317	34	2,151
April	2,723	0	269	0	2,455
May	2,806	0	308	0	2,499
June	2,660	0	273	0	2,386
July	2,682	0	311	0	2,371
August	2,420	0	307	0	2,113
September	2,690	0	301	0	2,389
October	2,698	0	212	0	2,485
November	2,601	0	254	16	2,331
December	2,802	0	292	38	2,472
2012					
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
2013					
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

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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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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	197,827	69,695	92,384	309	35,440
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
2011					
January	18,504	11,407	3,743	40	3,313
February	15,016	8,480	3,496	33	3,007
March	17,356	9,896	4,638	39	2,784
April	12,402	6,299	2,962	0	3,141
May	13,085	6,675	3,202	0	3,208
June	15,135	8,724	3,376	0	3,035
July	17,412	10,320	4,156	0	2,936
August	15,816	9,457	3,565	0	2,794
September	15,851	9,629	3,101	0	3,122
October	12,448	6,619	2,626	0	3,203
November	9,978	4,473	2,459	18	3,028
December	13,345	7,278	2,843	42	3,182
2012					
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
2013					
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

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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.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	5,616,135	1,763,764	3,145,485	38,480	668,407
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
2011					
January	563,712	238,731	273,552	3,518	47,910
February	505,126	208,813	250,551	3,069	42,692
March	503,090	217,538	239,429	3,169	42,953
April	545,924	243,866	253,900	3,062	45,096
May	598,689	268,818	279,002	4,043	46,826
June	727,189	330,305	344,944	3,957	47,982
July	967,125	430,187	478,936	5,316	52,686
August	951,425	421,042	471,544	5,001	53,838
September	711,980	306,699	352,213	4,290	48,779
October	599,544	266,740	284,312	3,727	44,764
November	568,007	242,306	275,414	3,709	46,579
December	642,055	271,041	315,311	4,309	51,394
2012					
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
2013					
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

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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.
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Table 5.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	721,267	0	225,967	19,973	475,327
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
2011					
January	72,765	0	27,509	3,590	41,667
February	65,092	0	24,322	2,962	37,808
March	66,500	0	24,958	2,875	38,666
April	64,265	0	23,687	2,685	37,894
May	67,344	0	24,178	3,047	40,119
June	66,791	0	24,165	2,912	39,714
July	77,883	0	29,452	3,910	44,520
August	78,356	0	28,864	3,877	45,616
September	70,438	0	25,286	3,339	41,812
October	66,780	0	23,880	3,155	39,744
November	67,698	0	24,826	3,422	39,450
December	75,769	0	27,542	4,083	44,145
2012					
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
2013					
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

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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.
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Table 5.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	6,337,402	1,763,764	3,371,452	58,453	1,143,734
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
2011					
January	636,477	238,731	301,061	7,108	89,577
February	570,218	208,813	274,873	6,032	80,500
March	569,590	217,538	264,388	6,044	81,620
April	610,190	243,866	277,587	5,747	82,990
May	666,033	268,818	303,180	7,090	86,945
June	793,979	330,305	369,109	6,869	87,696
July	1,045,008	430,187	508,388	9,226	97,207
August	1,029,781	421,042	500,407	8,878	99,454
September	782,418	306,699	377,499	7,629	90,591
October	666,323	266,740	308,192	6,882	84,509
November	635,705	242,306	300,240	7,130	86,029
December	717,824	271,041	342,852	8,392	95,539
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	5,735,770	1,809,003	3,200,057	39,424	687,286
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
2011					
January	575,521	243,212	279,664	3,624	49,021
February	516,427	212,934	256,497	3,160	43,836
March	513,724	221,498	244,797	3,258	44,171
April	557,693	248,459	259,863	3,145	46,225
May	611,133	273,835	285,175	4,157	47,965
June	742,708	336,934	352,589	4,066	49,119
July	987,734	438,636	489,752	5,457	53,889
August	972,096	429,646	482,196	5,139	55,114
September	727,690	312,770	360,489	4,416	50,015
October	612,031	271,503	290,845	3,834	45,849
November	579,856	246,548	281,804	3,817	47,686
December	655,696	275,756	322,811	4,435	52,694
2012					
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
2013					
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

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.E. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	762,779	0	250,120	21,238	491,421
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
2011					
January	74,528	0	28,057	3,686	42,785
February	66,742	0	24,863	3,042	38,837
March	68,226	0	25,457	2,958	39,812
April	65,865	0	24,174	2,759	38,932
May	69,019	0	24,680	3,131	41,208
June	68,611	0	24,792	2,993	40,826
July	79,769	0	30,061	4,015	45,693
August	80,249	0	29,349	3,988	46,912
September	72,408	0	25,930	3,442	43,036
October	68,525	0	24,469	3,248	40,808
November	69,359	0	25,380	3,518	40,461
December	77,705	0	28,198	4,198	45,309
2012					
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
2013					
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

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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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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	6,498,549	1,809,003	3,450,177	60,662	1,178,707
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
2011					
January	650,049	243,212	307,721	7,310	91,806
February	583,169	212,934	281,360	6,203	82,672
March	581,951	221,498	270,254	6,216	83,983
April	623,558	248,459	284,037	5,904	85,157
May	680,152	273,835	309,856	7,288	89,173
June	811,319	336,934	377,381	7,059	89,945
July	1,067,503	438,636	519,813	9,472	99,582
August	1,052,345	429,646	511,546	9,127	102,026
September	800,097	312,770	386,419	7,857	93,051
October	680,557	271,503	315,315	7,081	86,658
November	649,215	246,548	307,185	7,336	88,147
December	733,401	275,756	351,009	8,632	98,003
2012					
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
2013					
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

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.D. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	519,294	16,545	139,852	437	362,460
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
2011					
January	30,922	3,447	11,785	45	15,646
February	27,914	3,268	10,751	58	13,837
March	28,821	3,307	10,692	39	14,783
April	25,010	2,086	8,705	38	14,182
May	25,819	2,213	9,641	32	13,933
June	29,975	3,118	11,126	41	15,690
July	31,289	3,345	12,173	48	15,724
August	31,729	3,661	12,097	43	15,928
September	29,534	3,116	10,967	34	15,417
October	27,245	2,722	9,960	23	14,540
November	27,979	2,117	10,322	34	15,506
December	31,385	3,075	11,889	47	16,375
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	746,375	0	10,893	762	734,720
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
2011					
January	80,138	0	1,676	91	78,371
February	70,603	0	1,528	79	68,996
March	75,045	0	1,293	74	73,678
April	70,916	0	1,159	107	69,650
May	69,518	0	1,327	83	68,108
June	74,262	0	1,390	96	72,776
July	75,431	0	1,443	106	73,882
August	75,179	0	1,411	84	73,684
September	74,155	0	1,409	70	72,676
October	72,932	0	1,358	52	71,522
November	75,474	0	1,228	82	74,164
December	79,660	0	1,354	99	78,207
2012					
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
2013					
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

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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Table 5.5.F. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,265,669	16,545	150,745	1,199	1,097,180
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
2011					
January	111,060	3,447	13,461	135	94,017
February	98,517	3,268	12,279	137	82,833
March	103,866	3,307	11,985	113	88,461
April	95,927	2,086	9,863	145	83,832
May	95,337	2,213	10,968	115	82,041
June	104,237	3,118	12,516	136	88,466
July	106,720	3,345	13,615	155	89,606
August	106,908	3,661	13,508	128	89,611
September	103,689	3,116	12,376	104	88,093
October	100,177	2,722	11,318	75	86,062
November	103,453	2,117	11,550	116	89,670
December	111,046	3,075	13,244	145	94,582
2012					
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
2013					
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

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.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	136,421	9,168	121,984	3,280	1,989
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
2011					
January	18,885	1,725	14,677	2,454	30
February	17,636	1,598	13,612	2,400	26
March	19,016	1,703	14,660	2,626	28
April	17,861	1,677	13,752	2,402	30
May	18,908	1,728	14,628	2,518	33
June	19,707	1,755	15,382	2,535	35
July	20,419	1,841	15,878	2,667	33
August	20,779	1,965	16,090	2,687	37
September	19,319	1,730	15,116	2,440	33
October	19,291	2,137	14,995	2,126	32
November	20,227	2,107	15,817	2,267	36
December	20,747	2,120	16,249	2,347	32
2012					
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
2013					
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

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.
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Table 5.6.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	993	0	116	0	876
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
2011					
January	312	0	276	29	7
February	280	0	246	28	6
March	274	0	237	31	6
April	239	0	203	29	7
May	238	0	200	30	8
June	246	0	209	29	8
July	252	0	217	28	8
August	282	0	245	28	9
September	281	0	244	30	8
October	307	0	266	33	8
November	171	0	132	30	8
December	313	0	279	26	7
2012					
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
2013					
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

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.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	137,414	9,168	122,100	3,280	2,865
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
2011					
January	19,197	1,725	14,952	2,483	37
February	17,916	1,598	13,858	2,428	32
March	19,290	1,703	14,897	2,656	34
April	18,100	1,677	13,954	2,431	37
May	19,146	1,728	14,829	2,548	41
June	19,954	1,755	15,592	2,564	43
July	20,672	1,841	16,095	2,695	40
August	21,061	1,965	16,335	2,715	46
September	19,600	1,730	15,360	2,470	41
October	19,597	2,137	15,261	2,159	40
November	20,398	2,107	15,949	2,298	45
December	21,060	2,120	16,527	2,374	39
2012					
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
2013					
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

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.D. Landfill Gas: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	65,770	3,930	59,089	1,753	998
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
2011					
January	9,090	862	7,268	943	16
February	8,461	801	6,752	893	14
March	9,138	858	7,279	987	15
April	8,588	836	6,851	886	16
May	9,079	861	7,261	940	18
June	9,517	873	7,656	970	18
July	9,864	929	7,900	1,018	17
August	10,041	986	8,007	1,029	20
September	9,368	866	7,520	964	17
October	9,420	1,095	7,438	870	17
November	9,867	1,091	7,853	903	19
December	10,105	1,086	8,073	929	17
2012					
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
2013					
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

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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Table 5.6.E. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	500	0	61	0	439
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
2011					
January	160	0	142	14	4
February	143	0	127	13	3
March	141	0	123	14	3
April	123	0	105	14	4
May	122	0	104	14	4
June	126	0	108	14	4
July	129	0	112	13	4
August	145	0	127	13	5
September	144	0	126	14	4
October	157	0	138	15	4
November	86	0	67	14	5
December	160	0	144	12	4
2012					
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
2013					
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

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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Table 5.6.F. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	66,270	3,930	59,149	1,753	1,438
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
2011					
January	9,250	862	7,411	957	20
February	8,604	801	6,879	907	17
March	9,278	858	7,401	1,001	18
April	8,711	836	6,956	899	19
May	9,201	861	7,365	954	22
June	9,644	873	7,764	983	23
July	9,993	929	8,012	1,031	21
August	10,186	986	8,133	1,042	24
September	9,512	866	7,646	978	22
October	9,577	1,095	7,575	885	21
November	9,953	1,091	7,921	918	24
December	10,265	1,086	8,216	942	21
2012					
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
2013					
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

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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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, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	21,196	695	18,300	2,087	115
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
2011					
January	1,282	26	1,100	156	0
February	1,206	23	1,046	136	0
March	1,412	29	1,229	154	0
April	1,387	31	1,201	156	0
May	1,440	36	1,227	177	0
June	1,482	38	1,274	170	0
July	1,514	36	1,305	173	1
August	1,481	37	1,274	170	1
September	1,429	36	1,226	166	1
October	1,445	34	1,241	169	1
November	1,422	30	1,226	165	1
December	1,472	31	1,275	164	1
2012					
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
2013					
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

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.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	1,358	0	311	865	182
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
2011					
January	158	0	73	79	6
February	146	0	62	78	6
March	167	0	68	86	12
April	146	0	48	86	12
May	175	0	69	92	13
June	177	0	63	101	12
July	167	0	60	95	12
August	185	0	58	110	17
September	180	0	62	102	16
October	174	0	61	96	18
November	187	0	56	114	17
December	181	0	61	107	13
2012					
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
2013					
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

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.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	22,554	695	18,611	2,952	296
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
2011					
January	1,441	26	1,173	235	6
February	1,352	23	1,108	214	6
March	1,579	29	1,298	240	12
April	1,534	31	1,248	242	12
May	1,615	36	1,296	270	13
June	1,659	38	1,338	271	12
July	1,681	36	1,365	268	13
August	1,667	37	1,332	279	18
September	1,609	36	1,288	268	16
October	1,619	34	1,302	265	18
November	1,609	30	1,283	279	17
December	1,653	31	1,336	272	14
2012					
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
2013					
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

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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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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	148,110	5,766	128,947	13,095	302
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
2011					
January	10,271	231	8,780	1,260	0
February	9,567	207	8,254	1,106	0
March	11,176	256	9,690	1,231	0
April	11,046	277	9,496	1,273	0
May	11,442	319	9,685	1,438	0
June	11,809	336	10,079	1,395	0
July	12,098	313	10,338	1,441	5
August	11,731	326	10,033	1,365	7
September	11,301	316	9,652	1,327	5
October	11,551	304	9,850	1,392	5
November	11,424	266	9,798	1,355	6
December	11,825	282	10,186	1,351	6
2012					
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
2013					
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

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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Table 5.7.E. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	13,694	0	3,118	8,858	1,718
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
2011					
January	1,262	0	555	661	46
February	1,184	0	480	653	50
March	1,363	0	538	728	98
April	1,203	0	380	729	94
May	1,433	0	546	786	102
June	1,459	0	497	863	98
July	1,369	0	469	804	97
August	1,533	0	460	934	139
September	1,480	0	488	866	126
October	1,433	0	475	818	140
November	1,548	0	443	971	133
December	1,499	0	477	918	104
2012					
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
2013					
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

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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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.
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Table 5.7.F. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	161,803	5,766	132,065	21,953	2,020
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
2011					
January	11,533	231	9,335	1,920	46
February	10,751	207	8,734	1,759	50
March	12,539	256	10,228	1,958	98
April	12,249	277	9,876	2,002	94
May	12,875	319	10,231	2,224	102
June	13,268	336	10,576	2,258	98
July	13,467	313	10,807	2,245	101
August	13,264	326	10,493	2,299	146
September	12,781	316	10,140	2,193	131
October	12,984	304	10,325	2,210	146
November	12,972	266	10,241	2,326	139
December	13,324	282	10,663	2,269	110
2012					
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
2013					
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

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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Table 5.8.D. Other Waste Biomass: Consumption for Electricity Generation, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	34,775	2,456	15,859	4,566	11,894
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
2011					
January	2,484	252	1,398	323	511
February	2,571	461	1,306	312	491
March	2,528	436	1,231	331	529
April	2,320	319	1,195	296	510
May	2,255	355	1,070	321	509
June	2,499	411	1,261	321	506
July	2,718	374	1,492	327	525
August	2,831	427	1,498	340	566
September	2,566	422	1,305	303	537
October	2,652	372	1,373	309	598
November	2,597	272	1,453	312	560
December	2,751	388	1,532	321	511
2012					
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
2013					
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

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Table 5.8.E. Other Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	29,854	0	10,655	757	18,442
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
2011					
January	4,962	0	1,040	146	3,776
February	4,546	0	895	125	3,526
March	3,858	0	500	126	3,233
April	2,428	0	228	111	2,089
May	2,561	0	326	133	2,101
June	2,671	0	323	135	2,213
July	2,854	0	431	127	2,297
August	2,859	0	388	167	2,303
September	2,896	0	367	99	2,430
October	4,323	0	486	124	3,712
November	4,855	0	779	138	3,938
December	4,670	0	697	134	3,839
2012					
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
2013					
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

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, 2003 - 2013 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2003	64,629	2,456	26,514	5,323	30,337
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
2011					
January	7,445	252	2,438	469	4,287
February	7,117	461	2,201	437	4,018
March	6,386	436	1,731	457	3,762
April	4,748	319	1,423	407	2,599
May	4,816	355	1,396	454	2,610
June	5,170	411	1,583	456	2,719
July	5,573	374	1,923	454	2,822
August	5,690	427	1,886	508	2,869
September	5,462	422	1,671	402	2,967
October	6,974	372	1,859	433	4,311
November	7,452	272	2,232	451	4,498
December	7,421	388	2,229	455	4,349
2012					
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
2013					
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

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, 2013 and 2012 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	2,773	1,787	55.0%	616	520	2,144	1,257	0	0	13	10
Connecticut	419	297	41.0%	0	0	419	297	0	0	0	0
Maine	15	11	33.0%	0	0	7	6	0	0	8	5
Massachusetts	1,723	959	80.0%	0	0	1,718	954	0	0	5	5
New Hampshire	616	520	19.0%	616	520	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	44,603	44,000	1.4%	1	6	44,361	43,734	6	4	236	256
New Jersey	854	833	2.5%	0	0	854	833	0	0	0	0
New York	2,294	2,158	6.3%	1	6	2,224	2,083	0	0	69	70
Pennsylvania	41,456	41,009	1.1%	0	0	41,284	40,819	6	4	167	186
East North Central	195,548	182,280	7.3%	138,501	128,058	55,912	53,050	78	97	1,057	1,076
Illinois	52,610	49,162	7.0%	6,261	6,377	45,735	42,132	19	30	595	623
Indiana	46,522	46,587	-0.1%	43,742	43,475	2,742	3,062	32	36	5	14
Michigan	31,855	29,796	6.9%	31,434	29,449	203	212	22	28	196	107
Ohio	40,688	37,242	9.3%	33,390	29,475	7,233	7,645	4	2	62	121
Wisconsin	23,874	19,494	22.0%	23,674	19,283	0	0	1	1	199	210
West North Central	138,338	135,575	2.0%	136,497	133,859	16	0	69	64	1,756	1,651
Iowa	20,421	21,638	-5.6%	19,517	20,747	0	0	39	43	864	848
Kansas	18,915	17,759	6.5%	18,915	17,759	0	0	0	0	0	0
Minnesota	14,193	13,704	3.6%	13,765	13,384	0	0	1	1	426	319
Missouri	44,405	42,386	4.8%	44,333	42,340	16	0	28	21	28	26
Nebraska	16,191	15,274	6.0%	15,829	14,884	0	0	0	0	361	390
North Dakota	22,366	22,862	-2.2%	22,289	22,795	0	0	0	0	76	68
South Dakota	1,847	1,950	-5.3%	1,847	1,950	0	0	0	0	0	0
South Atlantic	117,662	116,543	1.0%	96,964	96,679	20,167	19,242	21	31	509	591
Delaware	708	677	4.7%	0	0	708	677	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	20,689	19,699	5.0%	20,103	19,080	548	567	0	0	38	52
Georgia	20,737	20,985	-1.2%	20,633	20,836	0	0	0	0	103	149
Maryland	6,816	6,981	-2.4%	0	0	6,770	6,919	9	19	37	43
North Carolina	19,078	20,761	-8.1%	18,318	20,040	695	661	9	8	55	52
South Carolina	10,035	11,706	-14.0%	9,973	11,622	0	17	0	0	62	67
Virginia	9,555	6,213	54.0%	9,049	5,634	399	451	3	4	103	124
West Virginia	30,044	29,521	1.8%	18,888	19,468	11,046	9,950	0	0	110	103
East South Central	86,724	84,979	2.1%	83,259	81,613	3,169	3,081	5	4	291	281
Alabama	24,448	23,056	6.0%	24,400	22,993	0	15	0	0	48	47
Kentucky	39,475	38,978	1.3%	39,475	38,978	0	0	0	0	0	0
Mississippi	5,867	5,240	12.0%	2,698	2,175	3,169	3,066	0	0	0	0
Tennessee	16,935	17,705	-4.3%	16,686	17,466	0	0	5	4	243	234
West South Central	154,042	147,598	4.4%	78,913	76,768	74,920	70,624	0	0	208	207
Arkansas	18,787	17,048	10.0%	16,454	14,571	2,312	2,451	0	0	22	25
Louisiana	13,787	14,747	-6.5%	6,769	8,106	7,018	6,640	0	0	0	0
Oklahoma	18,980	18,499	2.6%	17,596	17,115	1,198	1,201	0	0	186	182
Texas	102,487	97,305	5.3%	38,095	36,974	64,392	60,331	0	0	0	0
Mountain	112,695	107,089	5.2%	101,207	96,176	10,990	10,421	0	0	498	493
Arizona	23,298	21,519	8.3%	23,298	21,461	0	0	0	0	0	58
Colorado	18,695	19,025	-1.7%	18,661	18,983	29	36	0	0	5	5
Idaho	21	18	21.0%	0	0	0	0	0	0	21	18
Montana	9,570	9,064	5.6%	292	248	9,270	8,809	0	0	8	7
Nevada	2,933	2,258	30.0%	2,188	1,630	745	628	0	0	0	0
New Mexico	14,270	14,452	-1.3%	14,270	14,452	0	0	0	0	0	0
Utah	15,796	14,304	10.0%	15,099	13,639	430	445	0	0	268	220
Wyoming	28,112	26,449	6.3%	27,400	25,763	516	502	0	0	196	184
Pacific Contiguous	6,914	4,596	50.0%	2,183	1,583	4,649	2,930	0	0	83	83
California	293	502	-42.0%	0	0	220	428	0	0	73	74
Oregon	2,183	1,583	38.0%	2,183	1,583	0	0	0	0	0	0
Washington	4,438	2,511	77.0%	0	0	4,429	2,502	0	0	10	9
Pacific Noncontiguous	1,430	1,287	11.0%	185	206	890	958	334	105	21	17
Alaska	729	530	37.0%	185	206	210	219	334	105	0	0
Hawaii	701	757	-7.4%	0	0	680	739	0	0	21	17
U.S. Total	860,729	825,734	4.2%	638,327	615,467	217,219	205,295	513	307	4,670	4,665

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,. 2013 and 2012 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	2,017	891	126.0%	308	119	1,584	650	90	80	35	41
Connecticut	555	259	114.0%	11	8	535	247	6	0	2	4
Maine	461	197	134.0%	1	0	424	176	6	6	30	14
Massachusetts	713	325	119.0%	126	30	546	226	39	46	2	22
New Hampshire	187	58	224.0%	135	46	41	0	11	11	0	0
Rhode Island	75	31	146.0%	22	29	38	0	14	1	0	0
Vermont	27	22	24.0%	13	6	0	0	14	15	0	0
Middle Atlantic	2,559	1,720	49.0%	896	642	1,533	986	25	22	105	71
New Jersey	187	77	143.0%	1	9	180	67	1	1	4	1
New York	1,705	1,053	62.0%	894	633	721	338	19	17	72	65
Pennsylvania	667	590	13.0%	1	0	632	582	5	4	29	4
East North Central	1,190	1,262	-5.7%	954	1,058	212	182	4	3	20	18
Illinois	136	137	-0.7%	49	49	87	88	0	0	0	0
Indiana	257	217	18.0%	246	208	0	0	1	1	9	8
Michigan	259	281	-7.8%	251	273	0	0	2	2	6	6
Ohio	466	526	-11.0%	342	433	121	90	1	0	3	3
Wisconsin	72	100	-28.0%	66	95	5	4	0	0	1	1
West North Central	684	634	7.8%	666	617	11	11	3	2	3	3
Iowa	184	204	-10.0%	181	199	3	4	0	0	0	0
Kansas	109	78	39.0%	109	78	0	0	0	0	0	0
Minnesota	75	62	21.0%	63	53	8	6	2	2	2	2
Missouri	136	163	-17.0%	136	163	0	0	0	0	0	0
Nebraska	94	43	118.0%	94	43	0	0	0	0	0	0
North Dakota	65	66	-1.6%	64	64	0	0	0	0	1	1
South Dakota	21	18	20.0%	20	17	1	1	0	0	0	0
South Atlantic	3,046	3,416	-11.0%	2,241	2,539	507	535	190	149	107	194
Delaware	43	46	-7.1%	0	1	42	44	0	0	0	0
District of Columbia	0	26	-100.0%	0	0	0	26	0	0	0	0
Florida	866	1,262	-31.0%	836	1,206	13	20	0	0	17	36
Georgia	172	232	-26.0%	127	126	3	3	3	3	39	99
Maryland	544	409	33.0%	41	15	317	243	185	143	1	7
North Carolina	401	352	14.0%	383	330	9	10	0	0	10	12
South Carolina	208	216	-3.7%	180	196	8	4	0	0	20	16
Virginia	542	624	-13.0%	409	417	111	182	1	2	21	23
West Virginia	270	250	7.8%	265	249	5	2	0	0	0	0
East South Central	650	757	-14.0%	608	691	2	4	0	0	41	62
Alabama	143	198	-28.0%	107	138	2	4	0	0	34	57
Kentucky	227	232	-2.1%	227	232	0	0	0	0	0	0
Mississippi	25	29	-13.0%	23	26	0	0	0	0	3	3
Tennessee	255	297	-14.0%	251	295	0	0	0	0	4	2
West South Central	369	415	-11.0%	137	126	205	268	2	1	26	20
Arkansas	73	56	30.0%	46	32	26	23	0	0	1	2
Louisiana	95	73	30.0%	24	23	50	35	0	0	21	16
Oklahoma	19	22	-11.0%	18	21	0	0	NM	0	1	1
Texas	182	264	-31.0%	48	51	129	210	2	1	3	2
Mountain	406	433	-6.2%	365	382	40	45	0	0	1	6
Arizona	81	77	5.1%	81	76	0	0	0	0	0	1
Colorado	29	31	-5.3%	29	31	0	0	0	0	0	0
Idaho	0	0	160.0%	0	0	0	0	0	0	0	0
Montana	33	31	5.1%	5	0	28	31	0	0	0	0
Nevada	35	41	-15.0%	28	30	6	11	0	0	0	0
New Mexico	110	88	26.0%	106	86	5	1	0	0	0	0
Utah	46	71	-36.0%	44	67	1	2	0	0	0	2
Wyoming	73	95	-23.0%	72	92	0	0	0	0	0	3
Pacific Contiguous	159	166	-4.5%	78	85	40	47	3	2	38	33
California	95	97	-1.8%	59	61	23	32	2	1	12	3
Oregon	11	12	-8.6%	10	12	0	0	1	0	0	0
Washington	52	57	-8.3%	8	12	17	15	1	0	27	30
Pacific Noncontiguous	12,151	12,910	-5.9%	10,574	11,261	1,360	1,382	11	12	206	254
Alaska	1,386	1,710	-19.0%	1,307	1,615	0	0	6	9	74	86
Hawaii	10,765	11,200	-3.9%	9,267	9,646	1,360	1,382	5	4	133	168
U.S. Total	23,231	22,604	2.8%	16,827	17,521	5,494	4,110	328	272	582	702

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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.
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, 2013 and 2012 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
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	54	56	-4.7%	0	0	0	0	0	0	54	56
New Jersey	6	11	-47.0%	0	0	0	0	0	0	6	11
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	48	46	5.2%	0	0	0	0	0	0	48	46
East North Central	1,085	801	35.0%	464	236	552	502	0	0	68	64
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	343	204	68.0%	343	204	0	0	0	0	0	0
Michigan	144	53	174.0%	91	0	32	34	0	0	22	19
Ohio	523	468	12.0%	0	0	520	468	0	0	3	0
Wisconsin	74	76	-2.4%	31	31	0	0	0	0	43	45
West North Central	30	6	385.0%	0	5	0	0	1	1	28	0
Iowa	30	6	385.0%	0	5	0	0	1	1	28	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	793	298	166.0%	757	246	0	0	0	0	36	52
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	757	246	208.0%	757	246	0	0	0	0	0	0
Georgia	36	52	-31.0%	0	0	0	0	0	0	36	52
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	499	542	-7.9%	499	542	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	499	542	-7.9%	499	542	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	2,211	1,741	27.0%	1,689	1,076	47	25	0	0	476	640
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,796	1,155	55.0%	1,689	1,076	0	0	0	0	107	79
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	415	586	-29.0%	0	0	47	25	0	0	369	561
Mountain	172	172	0.1%	0	0	172	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	172	172	0.1%	0	0	172	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	9	58	-84.0%	0	0	9	58	0	0	0	0
California	9	58	-84.0%	0	0	9	58	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	4,852	3,675	32.0%	3,409	2,105	779	756	1	1	662	812

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 Nautral Gas for Electricity Generation by State, by Sector, 2013 and 2012 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	388,323	460,887	-16.0%	2,587	3,652	354,489	428,781	8,407	8,630	22,839	19,824
Connecticut	115,211	120,380	-4.3%	114	69	106,231	113,620	2,986	3,952	5,880	2,739
Maine	36,922	44,424	-17.0%	0	0	20,904	28,456	349	307	15,670	15,662
Massachusetts	159,436	184,330	-14.0%	2,074	2,792	151,703	176,497	4,503	3,749	1,156	1,293
New Hampshire	29,966	50,678	-41.0%	355	754	29,289	49,655	188	139	134	131
Rhode Island	46,743	61,037	-23.0%	0	0	46,362	60,553	381	483	0	0
Vermont	44	38	16.0%	44	38	0	0	0	0	0	0
Middle Atlantic	1,014,727	1,096,021	-7.4%	127,285	131,110	866,210	946,544	9,634	8,003	11,598	10,364
New Jersey	209,799	219,175	-4.3%	358	320	203,823	213,482	1,867	1,380	3,750	3,993
New York	448,127	491,430	-8.8%	126,900	130,766	312,882	353,376	6,542	5,443	1,802	1,845
Pennsylvania	356,802	385,415	-7.4%	27	24	349,506	379,686	1,224	1,180	6,046	4,525
East North Central	462,070	638,823	-28.0%	190,971	232,311	248,720	379,014	10,844	14,395	11,536	13,103
Illinois	55,230	95,068	-42.0%	5,279	12,659	42,757	72,451	4,690	7,729	2,504	2,228
Indiana	76,626	113,236	-32.0%	53,291	85,667	19,676	24,183	352	318	3,308	3,068
Michigan	106,990	169,806	-37.0%	27,553	41,177	71,661	119,531	3,028	2,874	4,748	6,224
Ohio	161,863	173,754	-6.8%	72,085	45,449	87,171	124,273	2,166	3,159	440	872
Wisconsin	61,361	86,961	-29.0%	32,762	47,358	27,454	38,576	608	315	536	711
West North Central	135,310	170,587	-21.0%	113,907	144,889	15,780	20,583	3,312	3,050	2,312	2,066
Iowa	13,239	17,124	-23.0%	12,070	16,508	0	0	426	55	743	560
Kansas	24,124	33,262	-27.0%	23,268	32,520	0	0	0	0	856	742
Minnesota	51,573	58,725	-12.0%	40,589	47,262	8,325	9,074	2,087	1,901	573	488
Missouri	37,283	51,047	-27.0%	28,968	38,436	7,455	11,508	799	1,090	61	13
Nebraska	4,605	7,867	-41.0%	4,604	7,696	0	0	1	4	0	167
North Dakota	414	97	327.0%	337	1	0	0	0	0	78	97
South Dakota	4,071	2,465	65.0%	4,071	2,465	0	0	0	0	0	0
South Atlantic	1,871,068	2,027,116	-7.7%	1,537,482	1,556,238	302,358	444,508	5,224	3,250	26,005	23,120
Delaware	51,434	60,033	-14.0%	229	87	41,227	53,163	0	0	9,978	6,783
District of Columbia	900	1,019	-12.0%	0	0	0	0	900	1,019	0	0
Florida	1,040,363	1,143,253	-9.0%	955,851	1,036,033	74,874	97,848	174	166	9,464	9,207
Georgia	283,295	311,419	-9.0%	216,505	182,391	62,879	125,140	0	0	3,911	3,888
Maryland	27,549	51,189	-46.0%	0	0	23,236	48,313	4,020	2,023	292	852
North Carolina	202,035	151,311	34.0%	179,920	127,498	21,569	23,368	33	42	513	403
South Carolina	90,653	116,711	-22.0%	79,389	98,325	10,518	17,592	67	0	679	794
Virginia	172,002	189,760	-9.4%	105,103	111,469	65,701	77,159	30	0	1,167	1,132
West Virginia	2,838	2,421	17.0%	484	435	2,354	1,925	0	0	0	62
East South Central	645,019	813,127	-21.0%	380,637	439,019	237,438	346,672	1,566	1,454	25,378	25,982
Alabama	341,316	409,036	-17.0%	109,084	114,320	223,568	285,876	0	0	8,664	8,840
Kentucky	16,077	33,068	-51.0%	12,350	27,707	2,186	3,487	0	0	1,541	1,874
Mississippi	249,151	306,475	-19.0%	222,590	234,031	11,684	57,309	108	103	14,769	15,031
Tennessee	38,475	64,548	-40.0%	36,613	62,961	0	0	1,458	1,351	404	236
West South Central	2,333,083	2,572,269	-9.3%	789,831	824,116	1,083,107	1,293,055	8,154	6,077	451,991	449,020
Arkansas	88,619	123,878	-28.0%	34,000	24,399	52,902	98,125	11	7	1,707	1,348
Louisiana	458,282	498,772	-8.1%	239,746	225,881	21,652	79,084	1,978	255	194,906	193,552
Oklahoma	247,998	318,424	-22.0%	188,711	232,526	58,749	85,234	64	60	475	605
Texas	1,538,184	1,631,194	-5.7%	327,374	341,311	949,804	1,030,613	6,101	5,755	254,905	253,516
Mountain	659,072	654,440	0.7%	416,867	394,561	225,026	242,649	4,097	3,086	13,082	14,144
Arizona	224,151	229,825	-2.5%	91,603	111,256	131,088	117,416	1,460	1,115	0	38
Colorado	87,650	84,984	3.1%	63,200	48,631	24,182	36,116	52	28	217	210
Idaho	24,885	13,685	82.0%	12,464	4,394	11,985	8,827	0	0	436	464
Montana	7,273	5,370	35.0%	6,348	5,145	925	224	0	0	0	0
Nevada	180,669	188,769	-4.3%	153,922	136,828	23,886	48,990	695	629	2,166	2,322
New Mexico	73,209	72,592	0.9%	47,697	48,015	24,497	23,734	976	839	40	4
Utah	57,911	55,880	3.6%	41,294	39,975	8,267	7,163	916	476	7,434	8,266
Wyoming	3,324	3,335	-0.3%	338	317	197	179	0	0	2,789	2,840
Pacific Contiguous	1,052,826	1,011,056	4.1%	376,937	336,272	584,003	584,454	15,295	15,153	76,590	75,178
California	867,611	889,837	-2.5%	267,749	276,436	509,639	524,909	14,400	14,552	75,823	73,940
Oregon	102,013	81,995	24.0%	36,429	27,956	64,421	52,659	813	570	350	810
Washington	83,202	39,224	112.0%	72,759	31,880	9,943	6,885	82	31	417	428
Pacific Noncontiguous	34,801	40,383	-14.0%	33,944	39,758	0	0	37	18	821	606
Alaska	34,801	40,383	-14.0%	33,944	39,758	0	0	37	18	821	606
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,596,299	9,484,710	-9.4%	3,970,447	4,101,927	3,917,131	4,686,260	66,570	63,116	642,152	633,407

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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, 2013 and 2012 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	8,911	9,595	-7.1%	0	0	8,201	9,074	711	520	0	0
Connecticut	549	595	-7.7%	0	0	549	595	0	0	0	0
Maine	829	518	60.0%	0	0	829	518	0	0	0	0
Massachusetts	4,087	3,603	13.0%	0	0	4,087	3,603	0	0	0	0
New Hampshire	1,839	1,790	2.7%	0	0	1,128	1,270	711	520	0	0
Rhode Island	956	2,409	-60.0%	0	0	956	2,409	0	0	0	0
Vermont	652	679	-4.1%	0	0	652	679	0	0	0	0
Middle Atlantic	55,992	51,169	9.4%	0	0	54,345	50,867	302	302	1,344	0
New Jersey	10,110	9,691	4.3%	0	0	10,047	9,691	64	0	0	0
New York	16,851	16,418	2.6%	0	0	16,851	16,418	0	0	0	0
Pennsylvania	29,031	25,060	16.0%	0	0	27,448	24,758	238	302	1,344	0
East North Central	66,326	63,904	3.8%	7,415	6,497	58,169	56,893	433	210	309	303
Illinois	15,444	16,204	-4.7%	0	0	15,444	16,204	0	0	0	0
Indiana	7,322	6,601	11.0%	7,014	6,297	0	0	0	0	309	303
Michigan	20,603	18,536	11.0%	0	0	20,603	18,536	0	0	0	0
Ohio	11,080	9,784	13.0%	242	0	10,838	9,784	0	0	0	0
Wisconsin	11,877	12,780	-7.1%	159	200	11,285	12,369	433	210	0	0
West North Central	9,945	9,301	6.9%	3,034	2,903	6,911	6,398	0	0	0	0
Iowa	1,989	2,021	-1.6%	0	0	1,989	2,021	0	0	0	0
Kansas	1,636	1,205	36.0%	0	0	1,636	1,205	0	0	0	0
Minnesota	3,605	3,489	3.3%	769	768	2,836	2,720	0	0	0	0
Missouri	1,519	1,488	2.1%	1,069	1,037	450	452	0	0	0	0
Nebraska	1,197	1,098	9.0%	1,197	1,098	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	42,409	41,593	2.0%	5,439	4,763	30,635	32,235	3,364	2,353	2,970	2,242
Delaware	1,288	2,426	-47.0%	0	0	1,288	2,426	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	8,541	7,839	9.0%	1,861	1,718	6,550	6,122	0	0	130	0
Georgia	3,494	2,924	19.0%	0	0	2,359	2,452	445	472	690	0
Maryland	3,676	3,374	8.9%	0	0	1,960	1,797	1,716	1,577	0	0
North Carolina	8,118	6,497	25.0%	0	0	7,158	6,461	960	36	0	0
South Carolina	5,928	5,490	8.0%	3,479	2,953	298	295	0	0	2,151	2,242
Virginia	11,275	12,779	-12.0%	99	92	10,933	12,420	244	267	0	0
West Virginia	89	262	-66.0%	0	0	89	262	0	0	0	0
East South Central	4,505	3,898	16.0%	2,460	2,398	2,045	1,500	0	0	0	0
Alabama	236	226	4.5%	0	0	236	226	0	0	0	0
Kentucky	2,460	2,398	2.6%	2,460	2,398	0	0	0	0	0	0
Mississippi	214	48	343.0%	0	0	214	48	0	0	0	0
Tennessee	1,595	1,226	30.0%	0	0	1,595	1,226	0	0	0	0
West South Central	16,355	15,086	8.4%	0	0	15,716	14,429	639	657	0	0
Arkansas	1,422	1,193	19.0%	0	0	1,422	1,193	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	450	0	--	0	0	450	0	0	0	0	0
Texas	14,483	13,893	4.2%	0	0	13,844	13,237	639	657	0	0
Mountain	5,607	4,328	30.0%	1,077	948	4,529	3,380	0	0	0	0
Arizona	1,651	1,367	21.0%	843	728	808	639	0	0	0	0
Colorado	1,385	565	145.0%	0	0	1,385	565	0	0	0	0
Idaho	724	741	-2.2%	234	220	490	521	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	539	402	34.0%	0	0	539	402	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1,308	1,253	4.3%	0	0	1,308	1,253	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	61,066	57,502	6.2%	7,833	7,684	31,390	27,187	21,843	22,630	0	0
California	52,551	50,347	4.4%	3,317	3,549	27,870	24,663	21,364	22,134	0	0
Oregon	4,806	4,165	15.0%	1,254	1,360	3,073	2,309	480	496	0	0
Washington	3,709	2,990	24.0%	3,262	2,775	447	215	0	0	0	0
Pacific Noncontiguous	851	0	--	0	0	0	0	851	0	0	0
Alaska	851	0	--	0	0	0	0	851	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	271,967	256,376	6.1%	27,259	25,193	211,942	201,965	28,143	26,672	4,623	2,545

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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, 2013 and 2012 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	3,913	4,041	-3.2%	0	0	3,630	3,838	283	203	0	0
Connecticut	1,416	1,415	0.1%	0	0	1,330	1,415	86	0	0	0
Maine	312	440	-29.0%	0	0	115	237	196	203	0	0
Massachusetts	2,029	2,017	0.6%	0	0	2,029	2,017	0	0	0	0
New Hampshire	156	169	-7.7%	0	0	156	169	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	5,438	5,512	-1.3%	0	0	4,261	4,315	1,178	1,198	0	0
New Jersey	1,403	1,367	2.7%	0	0	1,059	1,015	345	351	0	0
New York	2,034	2,077	-2.1%	0	0	1,469	1,505	565	572	0	0
Pennsylvania	2,001	2,069	-3.3%	0	0	1,733	1,795	268	274	0	0
East North Central	242	272	-11.0%	34	37	0	0	208	234	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	12	12	0.4%	0	0	0	0	12	12	0	0
Michigan	195	222	-12.0%	0	0	0	0	195	222	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	34	37	-8.6%	34	37	0	0	0	0	0	0
West North Central	660	630	4.8%	422	380	216	229	22	21	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	660	630	4.8%	422	380	216	229	22	21	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	5,526	5,429	1.8%	0	0	5,109	5,041	417	388	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	3,710	3,654	1.5%	0	0	3,710	3,654	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	768	737	4.2%	0	0	768	737	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	1,047	1,038	0.9%	0	0	631	650	417	388	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	8	12	-35.0%	0	0	0	0	0	0	8	12
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	8	12	-35.0%	0	0	0	0	0	0	8	12
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	3	3	-0.4%	0	0	3	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	3	3	-0.4%	0	0	3	3	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	838	810	3.5%	0	0	838	810	0	0	0	0
California	551	515	7.0%	0	0	551	515	0	0	0	0
Oregon	117	120	-2.7%	0	0	117	120	0	0	0	0
Washington	170	175	-2.5%	0	0	170	175	0	0	0	0
Pacific Noncontiguous	379	260	46.0%	0	0	0	0	379	260	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	379	260	46.0%	0	0	0	0	379	260	0	0
U.S. Total	17,007	16,968	0.2%	456	418	14,057	14,235	2,485	2,304	8	12

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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, 2003 - 2013

	Electric Power Sector			Electric Utilities			Independent Power Producers		
Period	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
2003	121,567	45,752	1,484	97,831	28,062	378	23,736	17,691	1,105
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
2011, End of Month Stocks									
January	164,575	35,116	799	134,983	24,759	657	29,591	10,357	142
February	161,064	34,662	707	131,893	24,552	594	29,171	10,110	113
March	166,255	34,318	495	135,359	24,448	437	30,896	9,870	59
April	173,427	33,895	526	141,094	24,222	463	32,334	9,672	63
May	174,093	33,745	563	140,536	24,187	490	33,557	9,557	73
June	165,149	35,339	496	133,988	25,847	433	31,161	9,492	64
July	147,296	34,903	463	120,226	25,535	411	27,070	9,368	52
August	138,527	34,637	437	113,210	25,297	379	25,317	9,339	58
September	143,711	34,666	385	118,038	25,313	332	25,673	9,353	53
October	156,196	35,293	440	128,170	25,756	346	28,026	9,536	94
November	167,754	35,437	494	137,122	25,967	391	30,632	9,470	102
December	172,387	34,847	508	142,103	25,648	404	30,284	9,198	104
2012, End of Month Stocks									
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
2013, End of Month Stocks									
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

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, 2013 and 2012

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	December 2013	December 2012	Percentage Change	December 2013	December 2012	Percentage Change	December 2013	December 2012	Percentage Change
New England	1,129	1,030	9.6%	3,613	2,483	45.0%	0	0	--
Connecticut	W	W	W	1,141	1,300	-12.0%	0	0	--
Maine	0	0	--	W	W	W	0	0	--
Massachusetts	582	W	W	1,496	837	79.0%	0	0	--
New Hampshire	W	W	W	W	W	W	0	0	--
Rhode Island	0	0	--	W	W	W	0	0	--
Vermont	0	0	--	NM	51	NM	0	0	--
Middle Atlantic	5,973	7,553	-21.0%	4,943	5,496	-10.0%	W	W	W
New Jersey	1,045	926	13.0%	803	1,084	-26.0%	0	0	--
New York	429	556	-23.0%	3,409	3,498	-2.5%	0	0	--
Pennsylvania	4,499	6,070	-26.0%	731	914	-20.0%	W	W	W
East North Central	28,279	36,139	-22.0%	1,158	1,223	-5.4%	86	56	54.0%
Illinois	6,273	8,931	-30.0%	118	118	0.5%	0	0	--
Indiana	8,034	9,127	-12.0%	117	117	0.4%	0	0	--
Michigan	6,032	6,729	-10.0%	382	439	-13.0%	W	W	W
Ohio	4,536	6,340	-28.0%	318	316	0.4%	W	W	W
Wisconsin	3,403	5,012	-32.0%	223	234	-4.7%	W	W	W
West North Central	22,930	30,554	-25.0%	1,127	1,052	7.1%	0	0	--
Iowa	6,734	8,580	-22.0%	161	152	6.0%	0	0	--
Kansas	3,155	3,741	-16.0%	134	165	-19.0%	0	0	--
Minnesota	1,971	2,691	-27.0%	154	168	-8.1%	0	0	--
Missouri	7,195	10,230	-30.0%	285	316	-9.8%	0	0	--
Nebraska	2,522	3,321	-24.0%	271	132	106.0%	0	0	--
North Dakota	W	W	W	44	36	22.0%	0	0	--
South Dakota	W	W	W	77	83	-6.8%	0	0	--
South Atlantic	32,373	38,859	-17.0%	12,640	13,603	-7.1%	W	W	W
Delaware	W	W	W	365	392	-6.8%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	W	W	W	6,382	7,128	-10.0%	W	W	W
Georgia	7,992	9,970	-20.0%	900	908	-0.9%	0	0	--
Maryland	1,327	1,544	-14.0%	732	826	-11.0%	0	0	--
North Carolina	5,541	7,164	-23.0%	1,134	1,110	2.2%	0	0	--
South Carolina	5,107	W	W	620	650	-4.6%	0	W	W
Virginia	1,428	2,118	-33.0%	2,335	2,440	-4.3%	0	0	--
West Virginia	5,402	5,643	-4.3%	172	150	15.0%	W	W	W
East South Central	16,840	19,657	-14.0%	1,972	1,928	2.3%	W	W	W
Alabama	4,285	6,123	-30.0%	301	279	8.0%	0	0	--
Kentucky	7,925	8,417	-5.8%	260	257	1.3%	W	W	W
Mississippi	1,427	1,964	-27.0%	589	559	5.3%	0	0	--
Tennessee	3,203	3,153	1.6%	822	832	-1.3%	0	0	--
West South Central	23,375	28,807	-19.0%	2,273	2,548	-11.0%	W	W	W
Arkansas	3,253	4,181	-22.0%	W	245	W	0	0	--
Louisiana	3,790	3,342	13.0%	639	662	-3.5%	W	W	W
Oklahoma	3,072	4,739	-35.0%	W	209	W	0	0	--
Texas	13,261	16,545	-20.0%	1,310	1,432	-8.5%	0	W	W
Mountain	15,732	20,385	-23.0%	905	654	38.0%	W	W	W
Arizona	2,645	4,235	-38.0%	194	209	-7.1%	0	0	--
Colorado	3,701	4,131	-10.0%	243	129	89.0%	0	0	--
Idaho	0	0	--	W	W	W	0	0	--
Montana	W	W	W	20	W	W	W	W	W
Nevada	639	W	W	179	179	-0.2%	0	0	--
New Mexico	W	W	W	W	49	W	0	0	--
Utah	4,099	4,737	-13.0%	W	NM	W	0	0	--
Wyoming	2,742	3,962	-31.0%	31	29	7.0%	0	0	--
Pacific Contiguous	W	W	W	417	395	5.6%	W	W	W
California	W	W	W	235	NM	NM	W	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	2,626	2,842	-7.6%	0	0	--
Alaska	W	W	W	290	279	3.9%	0	0	--
Hawaii	W	W	W	2,336	2,562	-8.8%	0	0	--
U.S. Total	147,884	185,116	-20.0%	31,673	32,224	-1.7%	390	495	-21.0%

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 6.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Divison, 2013 and 2012

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**December 2013**	**December 2012**	**Percentage Change**	**December 2013**	**December 2012**	**December 2013**	**December 2012**
Coal (Thousand Tons)							
New England	1,129	1,030	9.6%	W	W	W	W
Middle Atlantic	5,973	7,553	-20.9%	0	W	5,973	W
East North Central	28,279	36,139	-21.7%	22,076	27,069	6,203	9,070
West North Central	22,930	30,554	-25.0%	W	30,554	W	0
South Atlantic	32,373	38,859	-16.7%	29,241	35,527	3,132	3,331
East South Central	16,840	19,657	-14.3%	16,840	19,657	0	0
West South Central	23,375	28,807	-18.9%	13,676	17,047	9,700	11,760
Mountain	15,732	20,385	-22.8%	W	W	W	W
Pacific Contiguous	W	W	W	W	W	W	W
Pacific Noncontiguous	W	W	W	W	W	W	W
U.S. Total	**147,884**	**185,116**	**-20.1%**	**120,792**	**150,942**	**27,092**	**34,174**
Petroleum Liquids (Thousand Barrels)							
New England	3,613	2,483	45.5%	W	464	W	2,020
Middle Atlantic	4,943	5,496	-10.1%	2,025	2,482	2,918	3,014
East North Central	1,158	1,223	-5.4%	944	1,007	214	217
West North Central	1,127	1,052	7.1%	1,099	1,020	28	31
South Atlantic	12,640	13,603	-7.1%	10,476	11,314	2,163	2,289
East South Central	1,972	1,928	2.3%	W	W	W	W
West South Central	2,273	2,548	-10.8%	W	1,953	W	595
Mountain	905	654	38.3%	863	W	42	W
Pacific Contiguous	417	395	5.6%	324	W	93	W
Pacific Noncontiguous	2,626	2,842	-7.6%	W	W	W	W
U.S. Total	**31,673**	**32,224**	**-1.7%**	**22,494**	**23,875**	**9,179**	**8,349**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	W	W	W	0	0	W	W
East North Central	86	56	54.1%	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	W
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	W	W	W	0	0	W	W
Pacific Noncontiguous	0	0	--	0	0	0	0
U.S. Total	**390**	**495**	**-21.2%**	**303**	**414**	**86**	**81**

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, 2003 - 2013

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2003	57,716	59,884	3,967	121,567
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
2011, End of Month Stocks				
January	76,100	82,111	6,364	164,575
February	75,549	79,101	6,414	161,064
March	77,414	82,337	6,504	166,255
April	79,734	86,900	6,793	173,427
May	79,250	88,099	6,744	174,093
June	75,011	83,599	6,539	165,149
July	66,549	74,518	6,229	147,296
August	64,584	67,775	6,168	138,527
September	66,763	70,804	6,144	143,711
October	74,236	75,766	6,193	156,196
November	79,726	81,302	6,726	167,754
December	82,056	85,151	5,179	172,387
2012, End of Month Stocks				
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
2013, End of Month Stocks				
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

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, 2003 through 2013

	Coal				Petroleum				Natural Gas		All Fossil Fuels
			Average Cost				Average Cost			Average Cost	Average Cost
Period	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)
2003	986,026	0.97	1.28	26.00	185,567	1.53	4.33	26.78	5,500,704	5.39	2.28
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

– = 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:
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 Petroleum Liquids and Petroleum Coke.
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.
See the Technical Notes for fuel conversion factors.

Table 7.2. Receipts and Quality of Coal Delivered for the Electric Power Industry, 2003 through 2013

	Bituminous			Subbituminous			Lignite		
Period	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
2003	467,286	1.50	10.0	432,513	0.38	6.4	79,869	1.03	14.4
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

– 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:
Bituminous coal includes anthracite, synthetic, 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.
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.

Table 7.3. Average Quality of Fossil Fuel Receipts for the Electric Power Industry, 2003 through 2013

	Coal			Petroleum			Natural Gas
Period	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
2003	10,137	0.97	9.0	147,086	1.53	0.1	1,030
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

* = 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:
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 Petroleum Liquids and Petroleum Coke.
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.
See the Technical Notes for fuel conversion factors.
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 (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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, 2003 through 2013

	Coal								Petroleum		Natural Gas		Total Fossil	
	Bituminous		Subbituminous		Lignite		All Coal Ranks							
Period	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)	Receipts (Trillion Btu)	Average Cost (Dollars per MMBtu)
2003	11,284	1.43	7,598	1.10	1,026	1.03	19,990	1.28	1,146	4.33	5,663	5.39	26,799	2.28
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

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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.
Bituminous coal includes anthracite coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum includes Petroleum Liquids and Petroleum Coke.
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.
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Table 7.5. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2003 - 2013

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(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
Annual Totals												
2003	15,292,394	746,594	1.26	25.82	0.91	98.6	605,651	95,534	4.68	29.66	0.95	90.7
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
2011												
January	1,181,833	59,577	2.34	46.34	1.15	90.2	14,279	2,372	16.98	102.20	0.53	107.5
February	1,078,032	54,003	2.36	47.10	1.20	99.2	9,943	1,659	18.27	109.47	0.47	104.4
March	1,163,288	58,858	2.35	46.35	1.12	108.8	13,842	2,284	19.55	118.45	0.52	131.5
April	1,093,579	55,135	2.39	47.33	1.14	111.5	11,543	1,898	20.30	123.47	0.40	90.8
May	1,100,898	55,254	2.44	48.70	1.16	100.5	16,158	2,618	19.03	117.46	0.75	138.8
June	1,123,670	56,315	2.39	47.78	1.20	89.8	15,427	2,528	21.88	133.55	0.66	144.9
July	1,135,869	56,951	2.45	48.91	1.18	81.4	9,455	1,569	21.86	131.77	0.47	82.3
August	1,252,336	62,531	2.49	49.81	1.18	91.8	9,575	1,579	20.63	125.10	0.43	90.3
September	1,217,947	61,325	2.46	48.78	1.17	109.8	10,186	1,683	20.94	126.69	0.49	118.0
October	1,200,982	60,696	2.41	47.77	1.14	119.9	13,068	2,171	21.63	130.21	0.48	146.6
November	1,145,469	58,329	2.39	46.88	1.15	119.3	11,052	1,853	21.75	129.72	0.48	124.5
December	1,177,657	60,381	2.37	46.18	1.14	111.5	9,729	1,645	21.94	129.73	0.48	106.9
2012												
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
2013												
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

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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.
See the Technical Notes for fuel conversion factors.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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, 2003 - 2013 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(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)
Annual Totals												
2003	89,618	3,165	0.74	20.94	5.51	124.0	1,486,088	1,439,513	5.59	5.77	81.6	1.74
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
2011												
January	8,049	282	3.35	95.62	5.29	70.5	250,362	245,767	5.49	5.59	103.0	3.03
February	7,252	252	3.02	87.15	5.43	85.3	219,131	214,884	5.34	5.45	102.9	2.98
March	7,009	241	3.32	96.60	5.70	70.2	224,855	220,793	4.95	5.04	101.5	2.93
April	7,274	252	3.52	101.68	5.20	115.4	255,479	251,362	5.19	5.27	103.1	3.07
May	7,519	261	3.57	102.83	5.01	112.7	278,209	273,629	5.17	5.25	101.8	3.18
June	8,072	278	2.85	82.53	5.08	92.2	341,274	335,202	5.28	5.37	101.5	3.26
July	10,742	374	3.41	98.06	4.79	104.0	443,001	434,122	5.11	5.22	100.9	3.31
August	10,040	349	3.18	91.43	5.26	105.9	434,451	425,557	4.97	5.07	101.1	3.22
September	9,822	341	2.94	84.64	5.14	102.3	316,215	311,382	4.89	4.97	101.5	3.08
October	8,352	289	3.23	93.48	5.11	126.2	275,463	270,541	4.71	4.80	101.4	3.01
November	7,303	253	2.11	60.87	5.15	163.4	250,718	246,675	4.50	4.57	101.8	2.91
December	7,774	273	2.34	66.68	5.09	108.4	282,188	277,700	4.40	4.47	102.5	2.88
2012												
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
2013												
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	4.75	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

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Table 7.7 Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2003 - 2013

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(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
Annual Totals												
2003	4,365,996	223,984	1.34	26.20	1.15	90.4	347,546	56,138	5.41	33.50	0.58	89.7
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
2011												
January	381,239	20,717	2.23	40.96	1.20	86.5	4,653	783	17.44	103.58	0.56	71.2
February	336,384	18,030	2.26	42.18	1.29	94.7	3,276	560	18.64	108.99	0.77	118.7
March	363,257	19,787	2.26	41.58	1.19	107.9	2,270	392	21.18	122.73	0.55	92.1
April	330,831	17,944	2.28	42.03	1.21	102.6	3,235	550	21.43	126.18	0.27	144.8
May	348,283	18,569	2.32	43.58	1.33	101.0	2,752	466	21.66	127.89	0.59	108.5
June	330,390	17,898	2.34	43.25	1.23	84.4	3,232	553	20.81	121.69	0.48	87.0
July	351,423	19,120	2.35	43.14	1.24	79.4	5,604	955	21.18	124.33	0.40	91.4
August	386,958	20,994	2.34	43.11	1.26	87.9	2,883	497	16.66	96.71	0.49	86.7
September	377,183	20,755	2.31	42.04	1.25	100.2	2,674	462	22.29	129.10	0.53	107.1
October	379,229	20,611	2.25	41.35	1.27	109.6	3,946	655	20.28	122.12	0.52	178.5
November	357,960	19,649	2.24	40.77	1.24	108.9	3,617	635	20.57	117.22	0.44	175.8
December	349,148	19,221	2.18	39.64	1.23	100.0	3,457	589	22.35	131.11	0.47	140.6
2012												
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
2013												
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	4,345	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

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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.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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 7.8. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2003 - 2013 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(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)
Annual Totals												
2003	59,377	2,086	0.60	17.16	4.88	64.3	3,335,086	3,244,368	5.33	5.48	96.2	3.15
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
2011												
January	1,730	60	W	W	4.24	46.8	309,865	303,301	5.59	5.71	100.7	W
February	1,809	64	W	W	4.21	52.2	283,811	277,469	5.06	5.17	100.9	W
March	2,563	89	W	W	3.37	54.8	271,713	265,931	4.57	4.67	100.6	W
April	3,046	106	2.36	67.43	3.57	103.0	284,857	278,599	4.71	4.82	100.4	3.49
May	3,339	116	2.44	70.04	4.01	103.9	312,436	305,861	4.75	4.85	100.9	3.54
June	2,623	92	1.99	56.95	4.81	78.6	379,462	371,553	4.95	5.05	100.7	3.80
July	3,119	107	2.39	69.60	4.60	75.3	520,203	508,834	4.94	5.05	100.1	4.00
August	3,166	110	W	W	4.84	90.6	515,581	504,743	4.57	4.67	100.9	W
September	2,511	88	W	W	4.87	83.4	391,415	382,298	4.39	4.49	101.3	W
October	3,603	126	W	W	5.08	139.5	320,549	313,229	4.12	4.22	101.6	W
November	2,652	94	W	W	5.52	108.9	308,988	301,865	3.92	4.01	100.5	W
December	3,483	123	W	W	5.08	125.6	353,160	344,934	3.86	3.95	100.6	W
2012												
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
2013												
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

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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, 2003 - 2013

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(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
Annual Totals												
2003	8,835	372	1.99	47.24	2.43	20.5	248	43	7.00	40.82	0.04	3.1
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
2011												
January	3,297	155	2.80	59.41	1.84	82.3	NM	NM	NM	NM	0.62	49.1
February	3,289	154	2.88	61.47	1.79	88.9	NM	NM	NM	NM	0.63	104.3
March	3,388	161	2.79	58.87	1.74	97.7	NM	NM	NM	NM	0.55	165.7
April	2,649	126	2.79	58.65	1.92	101.9	NM	NM	NM	NM	0.30	160.4
May	2,730	127	3.08	66.22	1.75	102.4	NM	NM	NM	NM	0.72	127.4
June	3,222	147	3.16	68.99	1.79	113.1	NM	NM	NM	NM	0.65	215.3
July	2,954	137	3.04	65.63	1.90	94.3	NM	NM	NM	NM	0.43	171.7
August	2,881	132	3.12	68.18	1.88	101.9	NM	NM	NM	NM	0.51	126.1
September	2,710	126	3.01	64.84	1.80	102.8	NM	NM	NM	NM	0.53	71.7
October	2,789	136	2.74	56.21	1.56	123.7	NM	NM	NM	NM	0.52	225.0
November	2,922	140	2.82	58.95	1.72	119.0	NM	NM	NM	NM	0.52	101.0
December	3,061	145	2.87	60.55	1.71	104.4	NM	NM	NM	NM	0.51	163.2
2012												
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
2013												
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

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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.
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Table 7.10. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2003 - 2013 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(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)
Annual Totals												
2003	0	0	--	--	--	0.0	18,169	17,827	4.96	5.06	30.5	4.02
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
2011												
January	42	1	W	W	5.16	98.3	NM	NM	6.00	6.13	107.7	W
February	36	1	W	W	5.29	105.1	NM	NM	5.76	5.88	108.6	W
March	34	1	W	W	5.54	81.8	NM	NM	5.46	5.58	107.0	W
April	NM	NM	W	W	5.45	0.0	NM	NM	5.40	5.52	106.3	W
May	NM	NM	W	W	5.83	0.0	NM	NM	5.28	5.39	105.7	W
June	NM	NM	W	W	5.83	0.0	NM	NM	5.40	5.51	106.3	W
July	NM	NM	W	W	5.83	0.0	NM	NM	5.24	5.35	104.5	W
August	NM	NM	W	W	5.83	0.0	NM	NM	5.09	5.20	106.4	W
September	NM	NM	W	W	5.83	0.0	NM	NM	4.92	5.04	108.2	W
October	NM	NM	W	W	5.27	0.0	NM	NM	4.87	4.98	107.5	W
November	NM	NM	W	W	5.34	62.8	NM	NM	4.68	4.77	110.3	W
December	44	2	W	W	5.29	98.8	NM	NM	4.61	4.70	109.0	W
2012												
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
2013												
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

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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 7.11. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2003 - 2013

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(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
Annual Totals												
2003	322,547	15,076	1.45	31.01	1.37	60.7	27,538	4,624	4.85	28.86	1.25	23.2
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
2011												
January	41,774	1,929	2.88	62.38	1.31	92.7	3,443	575	15.11	90.47	1.33	124.6
February	36,699	1,689	2.89	62.91	1.34	93.8	2,346	394	15.91	94.86	1.27	114.7
March	38,893	1,813	2.86	61.26	1.36	95.8	2,408	404	17.46	104.16	1.17	129.5
April	38,978	1,827	2.93	62.47	1.28	102.3	2,648	446	17.97	106.58	0.86	173.1
May	36,984	1,731	2.97	63.47	1.27	94.3	NM	NM	NM	NM	1.16	225.1
June	39,329	1,826	2.93	63.01	1.34	99.1	2,628	447	19.51	114.66	0.94	176.7
July	39,487	1,850	2.96	63.18	1.32	95.1	1,869	318	19.19	112.81	0.99	141.5
August	44,259	2,057	3.01	64.88	1.36	104.8	1,840	308	16.33	97.49	1.08	132.6
September	40,384	1,886	2.91	62.21	1.35	105.5	1,785	301	18.39	109.02	1.02	129.7
October	38,861	1,824	2.94	62.68	1.30	104.4	2,410	407	18.70	110.71	0.87	143.6
November	38,803	1,816	2.94	62.81	1.39	106.1	NM	NM	18.91	110.85	0.99	154.1
December	41,657	1,957	2.96	62.90	1.33	101.7	1,957	329	19.58	116.55	1.15	122.4
2012												
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
2013												
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

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Totals may not equal sum of components because of independent rounding.
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.
See the Technical Notes for fuel conversion factors.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor form(s) 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, 2003 - 2013 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(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)
Annual Totals												
2003	16,383	594	1.04	28.74	5.73	47.3	823,681	798,996	5.32	5.48	69.9	4.20
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
2011												
January	3,075	110	3.16	88.56	4.70	96.3	112,015	109,254	4.54	4.65	122.0	4.31
February	2,430	86	2.99	83.98	4.66	84.3	99,431	96,876	4.55	4.67	120.3	4.28
March	2,687	95	3.24	91.51	4.75	100.0	102,958	100,259	4.08	4.19	122.8	3.96
April	2,336	83	W	W	4.46	78.3	103,922	101,255	4.43	4.55	122.0	W
May	2,259	81	W	W	4.97	74.5	108,328	105,579	4.53	4.65	121.4	W
June	2,558	91	W	W	5.03	88.9	109,529	106,731	4.61	4.74	121.7	W
July	4,019	141	W	W	5.13	144.0	120,609	117,663	4.62	4.73	121.0	W
August	3,728	132	W	W	5.17	140.7	126,012	122,745	4.48	4.60	123.4	W
September	3,738	132	W	W	5.27	125.0	117,462	112,976	4.19	4.36	124.7	W
October	3,512	126	W	W	5.17	114.9	106,879	104,110	3.96	4.06	123.2	W
November	3,267	117	W	W	5.29	113.3	109,257	106,529	3.69	3.78	123.8	W
December	4,372	156	W	W	5.25	143.8	115,575	112,652	3.67	3.76	117.9	W
2012												
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
2013												
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

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Table 7.13. Receipts of Coal Delivered for Electricity Generation by State, 2013 and 2012
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	2,917	1,146	155.0%	726	353	2,163	773	0	0	28	19
Connecticut	320	41	671.0%	0	0	320	41	0	0	0	0
Maine	66	51	29.0%	0	0	38	32	0	0	28	19
Massachusetts	1,805	700	158.0%	0	0	1,805	700	0	0	0	0
New Hampshire	726	353	106.0%	726	353	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	42,558	43,998	-3.3%	0	0	41,664	43,082	0	0	893	916
New Jersey	1,105	1,059	4.3%	0	0	1,105	1,059	0	0	0	0
New York	2,467	2,218	11.0%	0	0	2,127	1,884	0	0	341	333
Pennsylvania	38,986	40,721	-4.3%	0	0	38,433	40,138	0	0	552	583
East North Central	185,713	182,345	1.8%	122,129	117,309	60,337	61,732	58	111	3,189	3,193
Illinois	59,536	61,119	-2.6%	6,391	6,163	50,924	52,682	0	42	2,221	2,232
Indiana	36,386	36,672	-0.8%	33,802	33,943	2,585	2,729	0	0	0	0
Michigan	29,349	29,547	-0.7%	29,010	29,218	172	214	58	69	110	46
Ohio	37,839	35,005	8.1%	30,933	28,628	6,657	6,108	0	0	250	269
Wisconsin	22,602	20,003	13.0%	21,994	19,357	0	0	0	0	608	646
West North Central	133,327	139,220	-4.2%	129,798	135,816	0	0	94	81	3,435	3,323
Iowa	20,286	24,436	-17.0%	17,979	22,264	0	0	0	0	2,308	2,172
Kansas	18,424	17,919	2.8%	18,424	17,919	0	0	0	0	0	0
Minnesota	13,266	13,125	1.1%	12,908	12,729	0	0	0	0	358	396
Missouri	41,138	43,850	-6.2%	41,044	43,768	0	0	94	81	0	0
Nebraska	15,761	15,368	2.6%	14,991	14,613	0	0	0	0	769	755
North Dakota	22,665	22,708	-0.2%	22,665	22,708	0	0	0	0	0	0
South Dakota	1,788	1,813	-1.4%	1,788	1,813	0	0	0	0	0	0
South Atlantic	111,898	118,709	-5.7%	87,605	94,956	22,058	21,351	0	0	2,235	2,402
Delaware	614	645	-4.9%	0	0	614	645	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	19,754	18,400	7.4%	18,766	17,388	756	770	0	0	232	242
Georgia	19,015	23,258	-18.0%	18,651	22,863	0	0	0	0	364	395
Maryland	6,828	7,025	-2.8%	0	0	6,490	6,634	0	0	337	390
North Carolina	16,296	19,811	-18.0%	15,038	18,726	877	699	0	0	381	386
South Carolina	9,130	11,606	-21.0%	8,981	11,400	0	27	0	0	149	179
Virginia	9,640	6,528	48.0%	8,426	5,327	760	728	0	0	454	473
West Virginia	30,621	31,436	-2.6%	17,742	19,252	12,561	11,847	0	0	318	337
East South Central	85,706	89,288	-4.0%	80,432	83,677	3,685	3,940	0	0	1,589	1,670
Alabama	22,582	24,639	-8.3%	22,582	24,544	0	0	0	0	0	94
Kentucky	39,161	39,483	-0.8%	39,161	39,483	0	0	0	0	0	0
Mississippi	5,783	6,590	-12.0%	2,098	2,651	3,685	3,940	0	0	0	0
Tennessee	18,181	18,576	-2.1%	16,591	16,999	0	0	0	0	1,589	1,576
West South Central	147,020	152,230	-3.4%	74,409	77,882	72,129	73,848	0	0	482	500
Arkansas	17,641	16,969	4.0%	15,558	14,503	2,083	2,466	0	0	0	0
Louisiana	13,990	15,586	-10.0%	7,094	8,073	6,896	7,513	0	0	0	0
Oklahoma	17,472	19,605	-11.0%	15,889	17,871	1,101	1,233	0	0	482	500
Texas	97,917	100,071	-2.2%	35,868	37,435	62,049	62,636	0	0	0	0
Mountain	107,007	108,207	-1.1%	96,075	97,626	10,702	10,142	0	0	230	438
Arizona	21,589	23,238	-7.1%	21,589	23,029	0	0	0	0	0	208
Colorado	18,056	18,687	-3.4%	18,056	18,687	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	9,262	8,808	5.2%	292	248	8,970	8,560	0	0	0	0
Nevada	2,268	2,215	2.4%	1,482	1,580	786	635	0	0	0	0
New Mexico	14,153	14,604	-3.1%	14,153	14,604	0	0	0	0	0	0
Utah	15,043	13,834	8.7%	14,383	13,159	430	445	0	0	230	230
Wyoming	26,637	26,821	-0.7%	26,121	26,319	516	502	0	0	0	0
Pacific Contiguous	6,348	5,375	18.0%	1,597	1,826	4,105	2,806	0	0	646	743
California	793	935	-15.0%	0	0	148	292	0	0	646	643
Oregon	1,597	1,826	-13.0%	1,597	1,826	0	0	0	0	0	0
Washington	3,957	2,615	51.0%	0	0	3,957	2,514	0	0	0	100
Pacific Noncontiguous	728	667	9.1%	0	0	728	667	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	728	667	9.1%	0	0	728	667	0	0	0	0
U.S. Total	823,222	841,183	-2.1%	592,772	609,445	217,572	218,341	151	192	12,727	13,206

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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, 2013 and 2012
(Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	3,177	560	467.0%	421	20	2,730	365	0	39	25	138
Connecticut	594	161	268.0%	0	3	594	158	0	0	0	0
Maine	898	151	496.0%	0	0	873	13	0	0	25	138
Massachusetts	1,300	238	447.0%	154	6	1,146	193	0	39	0	0
New Hampshire	354	9	NM	268	9	86	0	0	0	0	0
Rhode Island	31	0	--	0	0	31	0	0	0	0	0
Vermont	0	1	-100.0%	0	1	0	0	0	0	0	0
Middle Atlantic	2,088	1,562	34.0%	451	548	1,607	1,002	0	0	31	11
New Jersey	52	124	-58.0%	0	0	52	124	0	0	0	0
New York	1,548	1,022	51.0%	451	548	1,077	471	0	0	21	4
Pennsylvania	488	415	18.0%	0	0	478	407	0	0	10	8
East North Central	1,177	1,149	2.4%	929	926	216	174	0	0	31	49
Illinois	129	131	-1.3%	40	36	89	95	0	0	0	0
Indiana	252	230	9.7%	252	207	0	0	0	0	0	23
Michigan	230	215	7.3%	216	201	0	0	0	0	14	13
Ohio	466	518	-10.0%	327	432	124	75	0	0	15	11
Wisconsin	99	56	76.0%	94	51	3	4	0	0	2	1
West North Central	500	542	-7.9%	499	541	0	0	0	0	0	1
Iowa	127	187	-32.0%	127	187	0	0	0	0	0	0
Kansas	103	73	41.0%	103	73	0	0	0	0	0	0
Minnesota	45	27	68.0%	45	26	0	0	0	0	0	1
Missouri	101	158	-36.0%	101	158	0	0	0	0	0	0
Nebraska	35	29	20.0%	35	29	0	0	0	0	0	0
North Dakota	78	63	25.0%	78	63	0	0	0	0	0	0
South Dakota	10	5	105.0%	10	5	0	0	0	0	0	0
South Atlantic	2,675	3,217	-17.0%	1,979	1,960	391	371	0	5	305	881
Delaware	22	34	-35.0%	0	0	22	34	0	0	0	0
District of Columbia	0	7	-100.0%	0	0	0	7	0	0	0	0
Florida	865	948	-8.8%	826	699	8	14	0	0	30	234
Georgia	222	398	-44.0%	145	228	4	8	0	0	73	162
Maryland	193	218	-11.0%	0	0	193	142	0	0	0	77
North Carolina	394	432	-8.7%	296	274	54	7	0	0	45	150
South Carolina	246	469	-47.0%	120	246	0	0	0	0	126	223
Virginia	436	455	-4.1%	296	266	109	149	0	5	31	35
West Virginia	296	257	15.0%	296	247	0	10	0	0	0	0
East South Central	632	471	34.0%	629	466	1	1	0	0	2	4
Alabama	131	107	22.0%	130	102	1	1	0	0	0	4
Kentucky	195	211	-7.5%	195	211	0	0	0	0	0	0
Mississippi	41	22	88.0%	39	22	0	0	0	0	2	0
Tennessee	265	132	102.0%	265	132	0	0	0	0	0	0
West South Central	284	293	-3.3%	106	122	177	171	0	0	0	0
Arkansas	63	74	-14.0%	33	47	30	26	0	0	0	0
Louisiana	64	50	26.0%	14	17	50	33	0	0	0	0
Oklahoma	13	14	-4.6%	13	14	0	0	0	0	0	0
Texas	144	156	-7.6%	46	44	98	111	0	0	0	0
Mountain	368	396	-7.2%	345	347	22	48	0	0	0	2
Arizona	97	77	25.0%	97	76	0	0	0	0	0	2
Colorado	4	10	-57.0%	4	10	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	15	36	-59.0%	0	0	15	36	0	0	0	0
Nevada	34	40	-14.0%	28	30	6	10	0	0	0	0
New Mexico	96	95	1.7%	96	95	0	0	0	0	0	0
Utah	51	53	-3.1%	50	52	1	1	0	0	0	0
Wyoming	70	85	-18.0%	70	85	0	0	0	0	0	0
Pacific Contiguous	40	96	-59.0%	25	43	14	44	0	0	0	9
California	0	50	-100.0%	0	17	0	30	0	0	0	2
Oregon	6	14	-55.0%	6	14	0	0	0	0	0	0
Washington	34	33	0.8%	19	12	14	14	0	0	0	7
Pacific Noncontiguous	9,474	11,176	-15.0%	7,429	9,278	2,045	1,898	0	0	0	0
Alaska	0	965	-100.0%	0	965	0	0	0	0	0	0
Hawaii	9,474	10,211	-7.2%	7,429	8,313	2,045	1,898	0	0	0	0
U.S. Total	20,413	19,464	4.9%	12,814	14,252	7,205	4,073	0	43	394	1,095

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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, 2013 and 2012
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
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	105	106	-0.7%	0	0	0	0	0	0	105	106
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	105	106	-0.7%	0	0	0	0	0	0	105	106
East North Central	860	893	-3.7%	143	248	575	507	0	0	143	138
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	204	-100.0%	0	204	0	0	0	0	0	0
Michigan	151	36	320.0%	122	0	29	36	0	0	0	0
Ohio	546	471	16.0%	0	0	546	471	0	0	0	0
Wisconsin	163	182	-10.0%	20	44	0	0	0	0	143	138
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	1,235	741	67.0%	1,103	563	0	0	0	0	132	178
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	1,103	563	96.0%	1,103	563	0	0	0	0	0	0
Georgia	132	178	-26.0%	0	0	0	0	0	0	132	178
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	535	532	0.6%	535	532	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	535	532	0.6%	535	532	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	1,926	1,649	17.0%	1,683	1,178	0	35	0	0	243	436
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,683	1,178	43.0%	1,683	1,178	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	243	471	-48.0%	0	0	0	35	0	0	243	436
Mountain	0	251	-100.0%	0	0	0	251	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	251	-100.0%	0	0	0	251	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	8	-100.0%	0	0	0	8	0	0	0	0
California	0	8	-100.0%	0	0	0	8	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	4,660	4,180	11.0%	3,463	2,521	575	801	0	0	623	858

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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, 2013 and 2012
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	364,201	440,421	-17.0%	1,600	3,652	348,352	419,062	0	3,636	14,249	14,072
Connecticut	104,666	112,084	-6.6%	0	71	104,666	112,012	0	0	0	0
Maine	35,119	42,374	-17.0%	0	0	20,871	28,302	0	0	14,249	14,072
Massachusetts	148,736	175,314	-15.0%	1,245	2,789	147,491	168,890	0	3,636	0	0
New Hampshire	29,644	50,408	-41.0%	355	754	29,289	49,655	0	0	0	0
Rhode Island	46,035	60,203	-24.0%	0	0	46,035	60,203	0	0	0	0
Vermont	0	37	-100.0%	0	37	0	0	0	0	0	0
Middle Atlantic	943,046	1,024,559	-8.0%	107,551	109,942	833,669	912,518	0	0	1,826	2,099
New Jersey	197,576	200,570	-1.5%	0	0	197,576	200,570	0	0	0	0
New York	403,332	447,049	-9.8%	107,551	109,942	295,077	336,374	0	0	704	734
Pennsylvania	342,138	376,940	-9.2%	0	0	341,016	375,574	0	0	1,122	1,366
East North Central	432,952	621,882	-30.0%	181,367	225,621	243,978	374,934	4,573	9,274	3,034	12,054
Illinois	40,427	78,693	-49.0%	4,962	12,147	35,407	61,024	0	5,479	59	42
Indiana	74,303	117,031	-37.0%	51,670	83,545	22,632	25,956	0	0	0	7,530
Michigan	101,525	175,163	-42.0%	23,973	39,101	72,016	129,602	4,573	3,795	964	2,665
Ohio	158,008	163,870	-3.6%	72,165	45,366	85,178	118,387	0	0	666	117
Wisconsin	58,688	87,126	-33.0%	28,597	45,462	28,745	39,964	0	0	1,346	1,699
West North Central	121,439	157,891	-23.0%	103,987	133,673	16,444	20,546	878	1,217	131	2,455
Iowa	17,012	18,348	-7.3%	16,978	18,302	0	0	0	0	33	46
Kansas	15,620	26,639	-41.0%	15,620	26,639	0	0	0	0	0	0
Minnesota	47,289	56,036	-16.0%	37,701	44,549	9,491	9,571	0	0	96	1,916
Missouri	34,013	47,085	-28.0%	26,182	34,892	6,953	10,976	878	1,217	0	0
Nebraska	3,764	8,141	-54.0%	3,762	7,648	0	0	0	0	1	493
North Dakota	1	1	18.0%	1	1	0	0	0	0	0	0
South Dakota	3,742	1,642	128.0%	3,742	1,642	0	0	0	0	0	0
South Atlantic	1,846,076	2,020,211	-8.6%	1,539,907	1,562,634	273,806	410,674	0	0	32,363	46,903
Delaware	55,626	65,059	-14.0%	0	0	39,547	52,550	0	0	16,079	12,508
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,008,097	1,122,939	-10.0%	957,981	1,034,639	48,599	74,051	0	0	1,518	14,249
Georgia	289,741	328,446	-12.0%	217,464	190,029	62,748	124,927	0	0	9,529	13,491
Maryland	22,368	47,231	-53.0%	0	0	21,759	45,325	0	0	609	1,906
North Carolina	201,751	150,372	34.0%	179,194	126,867	21,569	23,368	0	0	989	138
South Carolina	88,597	109,809	-19.0%	78,337	97,550	9,897	11,902	0	0	364	357
Virginia	177,042	193,993	-8.7%	106,493	113,146	67,272	76,593	0	0	3,277	4,254
West Virginia	2,854	2,362	21.0%	439	403	2,415	1,959	0	0	0	0
East South Central	624,917	807,339	-23.0%	385,062	432,604	236,708	348,415	0	0	3,147	26,321
Alabama	319,071	395,377	-19.0%	96,430	100,108	222,641	282,985	0	0	0	12,284
Kentucky	14,610	31,026	-53.0%	12,424	27,812	2,186	3,214	0	0	0	0
Mississippi	250,869	317,211	-21.0%	238,989	241,231	11,881	62,216	0	0	0	13,764
Tennessee	40,366	63,726	-37.0%	37,219	63,453	0	0	0	0	3,147	272
West South Central	2,638,753	2,896,365	-8.9%	775,126	812,628	1,234,714	1,445,605	0	3,881	628,913	634,252
Arkansas	90,794	128,030	-29.0%	31,144	23,235	59,650	104,796	0	0	0	0
Louisiana	470,733	531,471	-11.0%	237,312	223,287	27,891	96,745	0	0	205,530	211,438
Oklahoma	246,794	313,960	-21.0%	188,773	229,849	57,723	83,441	0	0	298	671
Texas	1,830,431	1,922,904	-4.8%	317,897	336,257	1,089,449	1,160,623	0	3,881	423,085	422,143
Mountain	597,406	611,904	-2.4%	401,118	382,271	195,743	223,404	0	0	545	6,229
Arizona	219,444	227,210	-3.4%	90,467	111,161	128,976	115,891	0	0	0	159
Colorado	81,620	80,575	1.3%	60,785	46,149	20,836	34,427	0	0	0	0
Idaho	22,741	12,738	79.0%	11,262	4,395	11,479	8,343	0	0	0	0
Montana	49	19	161.0%	7	8	42	10	0	0	0	0
Nevada	163,416	177,682	-8.0%	155,915	138,470	7,500	39,212	0	0	0	0
New Mexico	64,705	64,840	-0.2%	42,839	43,108	21,866	21,732	0	0	0	0
Utah	45,088	43,553	3.5%	39,513	38,681	5,029	3,776	0	0	545	1,096
Wyoming	344	5,287	-94.0%	329	301	14	12	0	0	0	4,974
Pacific Contiguous	909,950	917,681	-0.8%	330,839	307,298	534,484	541,480	0	0	44,626	68,903
California	739,610	793,427	-6.8%	230,231	250,913	464,752	477,250	0	0	44,626	65,265
Oregon	100,738	81,111	24.0%	36,742	28,231	63,995	52,846	0	0	0	34
Washington	69,603	43,143	61.0%	63,866	28,155	5,737	11,384	0	0	0	3,604
Pacific Noncontiguous	24,685	33,135	-26.0%	24,685	33,135	0	0	0	0	0	0
Alaska	24,685	33,135	-26.0%	24,685	33,135	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,503,424	9,531,389	-11.0%	3,851,241	4,003,457	3,917,898	4,696,637	5,450	18,008	728,835	813,288

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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, 2013 and 2012
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012
New England	W	3.59	W	4.21	4.07	W	3.34
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.21	4.07	3.4%	4.21	4.07	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.54	2.50	1.6%	--	--	2.54	2.50
New Jersey	3.87	4.05	-4.4%	--	--	3.87	4.05
New York	3.02	3.12	-3.2%	--	--	3.02	3.12
Pennsylvania	2.47	2.43	1.6%	--	--	2.47	2.43
East North Central	2.28	2.37	-3.8%	2.42	2.53	1.95	2.05
Illinois	1.88	1.93	-2.6%	2.06	2.08	1.86	1.91
Indiana	W	W	W	2.53	2.59	W	W
Michigan	W	W	W	2.66	2.78	W	W
Ohio	W	W	W	2.25	2.41	W	W
Wisconsin	2.32	2.37	-2.1%	2.32	2.37	--	--
West North Central	1.76	1.72	2.3%	1.76	1.72	--	--
Iowa	1.67	1.48	13.0%	1.67	1.48	--	--
Kansas	1.77	1.83	-3.3%	1.77	1.83	--	--
Minnesota	2.00	1.98	1.0%	2.00	1.98	--	--
Missouri	1.90	1.85	2.7%	1.90	1.85	--	--
Nebraska	1.42	1.55	-8.4%	1.42	1.55	--	--
North Dakota	1.55	1.49	4.0%	1.55	1.49	--	--
South Dakota	2.00	2.19	-8.7%	2.00	2.19	--	--
South Atlantic	3.20	3.35	-4.5%	3.32	3.45	2.76	2.92
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.41	3.49	W	W
Georgia	3.17	3.47	-8.6%	3.17	3.47	--	--
Maryland	3.43	3.62	-5.2%	--	--	3.43	3.62
North Carolina	3.80	3.77	0.8%	3.86	3.82	2.72	2.59
South Carolina	3.75	W	W	3.75	3.97	--	W
Virginia	3.32	W	W	3.26	3.61	3.98	W
West Virginia	2.48	2.54	-2.4%	2.68	2.70	2.19	2.27
East South Central	W	W	W	2.53	2.69	W	W
Alabama	2.80	3.01	-7.0%	2.80	3.01	--	--
Kentucky	2.36	2.42	-2.5%	2.36	2.42	--	--
Mississippi	W	W	W	3.95	4.45	W	W
Tennessee	2.39	2.61	-8.4%	2.39	2.61	--	--
West South Central	2.09	2.00	4.5%	2.24	2.12	1.90	1.87
Arkansas	W	W	W	2.40	2.25	W	W
Louisiana	W	W	W	2.90	2.87	W	W
Oklahoma	W	W	W	2.02	1.97	W	W
Texas	1.97	1.88	4.8%	2.15	1.99	1.86	1.82
Mountain	1.91	1.84	3.8%	1.94	1.87	1.60	1.42
Arizona	2.07	2.07	0.0%	2.07	2.07	--	--
Colorado	1.91	1.84	3.8%	1.91	1.84	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.83	1.61	W	W
Nevada	W	W	W	2.74	2.55	W	W
New Mexico	2.31	2.18	6.0%	2.31	2.18	--	--
Utah	2.04	1.92	6.3%	2.04	1.92	--	--
Wyoming	W	W	W	1.52	1.45	W	W
Pacific Contiguous	W	W	W	1.96	1.89	W	W
California	W	W	W	--	--	W	W
Oregon	1.96	1.89	3.7%	1.96	1.89	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	--	--	W	W
Alaska	--	--	--	--	--	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.33	2.37	-1.7%	2.38	2.43	2.20	2.21

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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, 2013 and 2012
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012
New England	W	18.64	W	18.60	21.43	W	18.47
Connecticut	W	W	W	--	23.87	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	18.16	17.17	5.8%	21.91	17.45	17.68	17.16
New Hampshire	W	23.23	W	16.84	23.23	W	--
Rhode Island	W	--	W	--	--	W	--
Vermont	--	24.11	--	--	24.11	--	--
Middle Atlantic	20.47	W	W	21.97	21.01	20.04	W
New Jersey	21.37	19.77	8.1%	--	--	21.37	19.77
New York	19.93	W	W	21.97	21.01	19.05	W
Pennsylvania	22.22	21.84	1.7%	--	--	22.22	21.84
East North Central	22.90	23.10	-0.9%	22.84	22.98	23.11	23.73
Illinois	W	W	W	23.49	24.35	W	W
Indiana	22.96	23.19	-1.0%	22.96	23.19	--	--
Michigan	W	W	W	22.75	22.67	W	W
Ohio	22.93	23.06	-0.6%	22.88	23.03	23.09	23.22
Wisconsin	W	W	W	22.39	22.00	W	W
West North Central	22.63	22.37	1.2%	22.63	22.37	--	--
Iowa	22.54	22.91	-1.6%	22.54	22.91	--	--
Kansas	22.41	22.93	-2.3%	22.41	22.93	--	--
Minnesota	23.13	23.76	-2.7%	23.13	23.76	--	--
Missouri	22.25	20.42	9.0%	22.25	20.42	--	--
Nebraska	22.39	22.96	-2.5%	22.39	22.96	--	--
North Dakota	23.28	23.80	-2.2%	23.28	23.80	--	--
South Dakota	23.32	20.69	13.0%	23.32	20.69	--	--
South Atlantic	W	W	W	20.71	21.38	W	W
Delaware	W	W	W	--	--	W	W
District of Columbia	--	W	W	--	--	--	W
Florida	W	W	W	19.38	20.16	W	W
Georgia	W	W	W	23.39	24.24	W	W
Maryland	21.81	22.67	-3.8%	--	--	21.81	22.67
North Carolina	W	W	W	22.55	23.18	W	W
South Carolina	23.10	21.36	8.1%	23.10	21.36	--	--
Virginia	W	W	W	17.88	18.74	W	W
West Virginia	23.43	W	W	23.43	23.34	--	W
East South Central	W	W	W	22.49	22.62	W	W
Alabama	W	W	W	22.30	22.81	W	W
Kentucky	22.61	22.92	-1.4%	22.61	22.92	--	--
Mississippi	21.57	22.22	-2.9%	21.57	22.22	--	--
Tennessee	22.64	22.08	2.5%	22.64	22.08	--	--
West South Central	22.24	22.72	-2.1%	22.25	22.88	22.24	22.59
Arkansas	W	W	W	22.06	22.99	W	W
Louisiana	W	W	W	21.99	22.37	W	W
Oklahoma	22.33	22.77	-1.9%	22.33	22.77	--	--
Texas	W	W	W	22.44	23.00	W	W
Mountain	23.80	23.32	2.1%	23.85	23.86	23.12	19.01
Arizona	24.29	23.41	3.8%	24.29	23.41	--	--
Colorado	23.60	W	W	23.60	16.94	--	W
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	24.32	25.23	W	W
New Mexico	24.42	25.77	-5.2%	24.42	25.77	--	--
Utah	W	W	W	22.43	23.55	W	W
Wyoming	23.33	22.40	4.2%	23.33	22.40	--	--
Pacific Contiguous	W	W	W	23.23	24.93	W	W
California	--	26.89	--	--	26.89	--	--
Oregon	22.05	22.68	-2.8%	22.05	22.68	--	--
Washington	W	W	W	23.60	24.73	W	W
Pacific Noncontiguous	W	W	W	20.74	22.12	W	W
Alaska	--	23.40	--	--	23.40	--	--
Hawaii	W	W	W	20.74	21.99	W	W
U.S. Total	20.61	22.16	-7.0%	21.09	22.11	19.71	22.34

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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, 2013 and 2012
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	W	W	W	1.48	4.10	W	W
Illinois	--	--	--	--	--	--	--
Indiana	--	4.56	--	--	4.56	--	--
Michigan	W	W	W	1.43	--	W	W
Ohio	--	--	--	--	--	--	--
Wisconsin	1.75	1.69	3.6%	1.75	1.69	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.58	2.58	0.0%	2.58	2.58	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.58	2.58	0.0%	2.58	2.58	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.81	1.83	-1.1%	1.81	1.83	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.81	1.83	-1.1%	1.81	1.83	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	1.95	W	W	1.95	1.99	--	W
Arkansas	--	--	--	--	--	--	--
Louisiana	1.95	1.99	-2.0%	1.95	1.99	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	W	W	--	--	--	W
Mountain	--	W	W	--	--	--	W
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	W	W	--	--	--	W
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	W	W	--	--	--	W
California	--	W	W	--	--	--	W
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	W	2.13	W	2.11	2.30	W	0.82

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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, 2013 and 2012
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2013	Year 2012	Percentage Change	Year 2013	Year 2012	Year 2013	Year 2012
New England	5.89	3.69	60.0%	7.29	4.73	5.88	3.68
Connecticut	6.06	3.88	56.0%	--	6.45	6.06	3.87
Maine	W	W	W	--	--	W	W
Massachusetts	5.75	3.55	62.0%	6.84	4.47	5.74	3.53
New Hampshire	W	W	W	8.85	5.54	W	W
Rhode Island	5.67	3.86	47.0%	--	--	5.67	3.86
Vermont	--	4.06	--	--	4.06	--	--
Middle Atlantic	4.53	3.52	29.0%	5.03	3.86	4.46	3.46
New Jersey	4.18	3.52	19.0%	--	--	4.18	3.52
New York	5.11	3.85	33.0%	5.03	3.86	5.15	3.84
Pennsylvania	4.02	3.06	31.0%	--	--	4.02	3.06
East North Central	4.12	3.10	33.0%	4.11	3.12	4.13	3.08
Illinois	W	W	W	4.82	3.25	W	W
Indiana	W	W	W	4.04	3.01	W	W
Michigan	4.49	3.16	42.0%	4.44	3.20	4.51	3.15
Ohio	3.82	2.98	28.0%	3.85	2.99	3.79	2.98
Wisconsin	4.37	3.20	37.0%	4.51	3.37	4.22	2.98
West North Central	4.54	W	W	4.55	3.56	4.45	W
Iowa	4.59	3.75	22.0%	4.59	3.75	--	--
Kansas	4.45	3.21	39.0%	4.45	3.21	--	--
Minnesota	W	W	W	4.66	3.71	W	W
Missouri	W	W	W	4.45	3.46	W	W
Nebraska	4.82	3.84	26.0%	4.82	3.84	--	--
North Dakota	5.23	5.70	-8.2%	5.23	5.70	--	--
South Dakota	4.21	3.43	23.0%	4.21	3.43	--	--
South Atlantic	4.78	4.23	13.0%	4.87	4.42	4.07	3.13
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	5.00	4.72	5.9%	5.06	4.82	3.22	2.56
Georgia	4.38	3.35	31.0%	4.34	3.38	4.52	3.29
Maryland	4.88	W	W	--	--	4.88	W
North Carolina	W	W	W	4.99	4.36	W	W
South Carolina	W	W	W	4.58	3.62	W	W
Virginia	4.13	3.27	26.0%	4.30	3.32	3.85	3.20
West Virginia	W	3.24	W	3.81	3.20	W	3.25
East South Central	4.01	2.98	35.0%	3.97	2.99	4.08	2.96
Alabama	W	3.04	W	4.02	3.12	W	3.00
Kentucky	W	W	W	5.74	3.52	W	W
Mississippi	W	W	W	3.88	2.91	W	W
Tennessee	3.78	2.87	32.0%	3.78	2.87	--	--
West South Central	3.89	2.95	32.0%	3.98	3.01	3.83	2.90
Arkansas	W	3.12	W	4.83	3.86	W	2.95
Louisiana	W	2.94	W	3.87	2.98	W	2.83
Oklahoma	3.99	2.96	35.0%	4.02	3.03	3.89	2.76
Texas	3.85	2.93	31.0%	3.95	2.97	3.82	2.92
Mountain	4.36	W	W	4.45	3.52	4.07	W
Arizona	4.48	3.43	31.0%	4.93	3.69	4.03	3.09
Colorado	W	W	W	4.70	4.01	W	W
Idaho	W	W	W	4.35	4.20	W	W
Montana	W	W	W	5.21	4.06	W	W
Nevada	W	3.39	W	4.27	3.41	W	3.28
New Mexico	4.21	W	W	4.21	3.35	--	W
Utah	3.95	2.93	35.0%	3.95	2.93	--	--
Wyoming	W	W	W	6.93	5.86	W	W
Pacific Contiguous	4.32	3.55	22.0%	4.57	3.92	4.10	3.27
California	4.40	3.59	23.0%	4.75	3.97	4.17	3.32
Oregon	W	W	W	3.81	3.09	W	W
Washington	W	W	W	4.50	4.35	W	W
Pacific Noncontiguous	4.70	4.29	9.6%	4.70	4.29	--	--
Alaska	4.70	4.29	9.6%	4.70	4.29	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	4.38	3.46	27.0%	4.49	3.74	4.25	3.17

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See the Instrument Design History section of the Form EIA-923 Technical Notes for a more detailed explanation of these changes.
See Glossary for definitions. Values for 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 7.21. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, 2013

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	2,597	1.13	9.1	320	0.09	2.0	0	--	--
Connecticut	0	--	--	320	0.09	2.0	0	--	--
Maine	66	0.95	7.9	0	--	--	0	--	--
Massachusetts	1,805	0.74	9.8	0	--	--	0	--	--
New Hampshire	726	2.04	7.7	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	35,064	2.94	10.8	780	0.25	5.2	0	--	--
New Jersey	1,105	1.60	8.9	0	--	--	0	--	--
New York	1,687	2.52	9.6	780	0.25	5.2	0	--	--
Pennsylvania	32,273	3.01	10.9	0	--	--	0	--	--
East North Central	83,996	2.97	9.9	101,717	0.25	4.9	0	--	--
Illinois	9,525	3.49	18.6	50,011	0.22	4.7	0	--	--
Indiana	33,254	2.78	9.0	3,133	0.29	5.1	0	--	--
Michigan	2,925	1.57	8.7	26,424	0.29	4.9	0	--	--
Ohio	36,425	3.20	9.2	1,414	0.33	5.5	0	--	--
Wisconsin	1,867	1.76	7.1	20,735	0.26	5.0	0	--	--
West North Central	1,087	3.16	9.6	110,270	0.28	5.0	21,971	0.79	9.9
Iowa	389	3.48	8.0	19,897	0.28	5.0	0	--	--
Kansas	224	3.22	14.0	18,200	0.33	5.0	0	--	--
Minnesota	3	0.86	8.9	13,263	0.35	5.6	0	--	--
Missouri	470	2.89	8.8	40,667	0.23	4.8	0	--	--
Nebraska	0	--	--	15,761	0.27	5.2	0	--	--
North Dakota	0	--	--	693	0.34	4.4	21,971	0.79	9.9
South Dakota	0	--	--	1,788	0.44	6.4	0	--	--
South Atlantic	96,665	2.03	10.3	12,449	0.28	4.7	0	--	--
Delaware	614	2.19	7.9	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	19,742	2.19	9.1	12	0.26	4.8	0	--	--
Georgia	6,932	1.29	9.5	12,083	0.28	4.7	0	--	--
Maryland	6,410	1.81	10.2	353	0.20	4.6	0	--	--
North Carolina	16,296	1.55	9.9	0	--	--	0	--	--
South Carolina	9,130	1.60	8.7	0	--	--	0	--	--
Virginia	7,889	1.08	11.6	0	--	--	0	--	--
West Virginia	29,651	2.81	11.8	0	--	--	0	--	--
East South Central	59,213	2.50	9.8	23,324	0.26	5.0	3,169	0.46	14.2
Alabama	10,670	1.68	10.3	11,912	0.25	5.0	0	--	--
Kentucky	36,723	2.91	9.9	2,438	0.30	5.3	0	--	--
Mississippi	2,572	1.93	9.5	42	0.19	4.7	3,169	0.46	14.2
Tennessee	9,249	2.00	8.6	8,932	0.27	5.0	0	--	--
West South Central	1,043	2.29	16.5	100,219	0.28	5.1	45,758	1.01	16.4
Arkansas	0	--	--	17,641	0.26	5.2	0	--	--
Louisiana	541	3.22	8.3	10,733	0.29	5.1	2,715	0.78	16.3
Oklahoma	502	1.16	26.3	16,970	0.24	4.9	0	--	--
Texas	0	--	--	54,874	0.29	5.2	43,043	1.02	16.5
Mountain	31,635	0.62	13.8	74,650	0.54	9.4	292	0.52	9.2
Arizona	7,903	0.60	10.7	13,686	0.71	10.6	0	--	--
Colorado	3,259	0.50	10.5	14,797	0.31	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	8,970	0.65	8.9	292	0.52	9.2
Nevada	482	0.34	12.3	1,787	0.36	7.2	0	--	--
New Mexico	6,116	0.81	25.9	8,037	0.73	22.4	0	--	--
Utah	13,875	0.61	11.8	738	1.12	9.0	0	--	--
Wyoming	0	--	--	26,637	0.47	7.3	0	--	--
Pacific Contiguous	793	0.61	10.4	5,554	0.38	7.7	0	--	--
California	793	0.61	10.4	0	--	--	0	--	--
Oregon	0	--	--	1,597	0.34	4.7	0	--	--
Washington	0	--	--	3,957	0.40	8.9	0	--	--
Pacific Noncontiguous	728	1.31	4.6	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	728	1.31	4.6	0	--	--	0	--	--
U.S. Total	312,821	2.33	10.5	429,283	0.32	5.8	71,191	0.92	14.3

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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 Utilties by State, 2013

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	726	2.04	7.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	726	2.04	7.7	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	68,367	2.93	9.1	53,763	0.28	5.0	0	--	--
Illinois	2,619	3.40	11.2	3,772	0.22	4.8	0	--	--
Indiana	30,669	2.74	8.9	3,133	0.29	5.1	0	--	--
Michigan	2,642	1.61	8.7	26,367	0.29	4.9	0	--	--
Ohio	30,933	3.26	9.2	0	--	--	0	--	--
Wisconsin	1,503	1.65	7.0	20,491	0.26	5.0	0	--	--
West North Central	607	2.90	10.6	107,221	0.28	5.1	21,971	0.79	9.9
Iowa	3	1.15	9.6	17,976	0.28	5.0	0	--	--
Kansas	224	3.22	14.0	18,200	0.33	5.0	0	--	--
Minnesota	3	0.86	8.9	12,905	0.35	5.6	0	--	--
Missouri	377	2.75	8.7	40,667	0.23	4.8	0	--	--
Nebraska	0	--	--	14,991	0.28	5.2	0	--	--
North Dakota	0	--	--	693	0.34	4.4	21,971	0.79	9.9
South Dakota	0	--	--	1,788	0.44	6.4	0	--	--
South Atlantic	73,759	1.89	10.1	12,095	0.28	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	18,754	2.26	9.1	12	0.26	4.8	0	--	--
Georgia	6,568	1.29	9.4	12,083	0.28	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	15,038	1.59	10.0	0	--	--	0	--	--
South Carolina	8,981	1.61	8.7	0	--	--	0	--	--
Virginia	6,676	1.04	12.1	0	--	--	0	--	--
West Virginia	17,742	2.46	11.4	0	--	--	0	--	--
East South Central	57,108	2.54	9.8	23,324	0.26	5.0	0	--	--
Alabama	10,670	1.68	10.3	11,912	0.25	5.0	0	--	--
Kentucky	36,723	2.91	9.9	2,438	0.30	5.3	0	--	--
Mississippi	2,056	1.67	9.8	42	0.19	4.7	0	--	--
Tennessee	7,659	2.25	8.7	8,932	0.27	5.0	0	--	--
West South Central	541	3.22	8.3	63,914	0.26	5.0	9,954	1.20	18.5
Arkansas	0	--	--	15,558	0.26	5.2	0	--	--
Louisiana	541	3.22	8.3	3,838	0.29	5.3	2,715	0.78	16.3
Oklahoma	0	--	--	15,889	0.25	4.9	0	--	--
Texas	0	--	--	28,629	0.26	5.0	7,239	1.38	19.4
Mountain	31,405	0.63	13.8	64,378	0.52	9.5	292	0.52	9.2
Arizona	7,903	0.60	10.7	13,686	0.71	10.6	0	--	--
Colorado	3,259	0.50	10.5	14,797	0.31	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	292	0.52	9.2
Nevada	482	0.34	12.3	1,000	0.40	8.6	0	--	--
New Mexico	6,116	0.81	25.9	8,037	0.73	22.4	0	--	--
Utah	13,645	0.61	11.9	738	1.12	9.0	0	--	--
Wyoming	0	--	--	26,121	0.47	7.3	0	--	--
Pacific Contiguous	0	--	--	1,597	0.34	4.7	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	1,597	0.34	4.7	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	232,512	2.21	10.2	326,291	0.32	5.9	32,218	0.91	12.5

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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, 2013

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	1,843	0.74	9.8	320	0.09	2.0	0	--	--
Connecticut	0	--	--	320	0.09	2.0	0	--	--
Maine	38	0.98	8.5	0	--	--	0	--	--
Massachusetts	1,805	0.74	9.8	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	34,364	2.97	10.8	780	0.25	5.2	0	--	--
New Jersey	1,105	1.60	8.9	0	--	--	0	--	--
New York	1,347	2.84	9.6	780	0.25	5.2	0	--	--
Pennsylvania	31,913	3.02	11.0	0	--	--	0	--	--
East North Central	13,207	3.15	15.2	47,130	0.22	4.7	0	--	--
Illinois	5,266	3.62	27.0	45,658	0.21	4.7	0	--	--
Indiana	2,585	3.24	10.8	0	--	--	0	--	--
Michigan	115	1.14	8.6	57	0.22	4.7	0	--	--
Ohio	5,242	2.84	9.2	1,414	0.33	5.5	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	20,671	2.59	11.1	353	0.20	4.6	0	--	--
Delaware	614	2.19	7.9	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	756	1.00	11.2	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	6,073	1.79	9.7	353	0.20	4.6	0	--	--
North Carolina	877	1.07	8.5	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	760	0.94	9.1	0	--	--	0	--	--
West Virginia	11,591	3.38	12.4	0	--	--	0	--	--
East South Central	516	2.95	8.4	0	--	--	3,169	0.46	14.2
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	516	2.95	8.4	0	--	--	3,169	0.46	14.2
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	502	1.16	26.3	35,823	0.31	5.2	35,804	0.96	15.9
Arkansas	0	--	--	2,083	0.28	5.2	0	--	--
Louisiana	0	--	--	6,896	0.30	5.0	0	--	--
Oklahoma	502	1.16	26.3	599	0.23	4.6	0	--	--
Texas	0	--	--	26,245	0.32	5.3	35,804	0.96	15.9
Mountain	0	--	--	10,272	0.61	8.4	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	8,970	0.65	8.9	0	--	--
Nevada	0	--	--	786	0.31	5.2	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	516	0.42	6.1	0	--	--
Pacific Contiguous	148	1.27	11.3	3,957	0.40	8.9	0	--	--
California	148	1.27	11.3	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	3,957	0.40	8.9	0	--	--
Pacific Noncontiguous	728	1.31	4.6	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	728	1.31	4.6	0	--	--	0	--	--
U.S. Total	71,979	2.80	11.6	98,636	0.30	5.4	38,973	0.93	15.8

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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, 2013

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	58	2.45	9.3	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	58	2.45	9.3	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	94	3.43	9.3	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	94	3.43	9.3	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	151	3.05	9.3	0	--	--	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.
W = Withheld to avoid disclosure of individual company data.

Notes:
Starting in January 2013, there may be a shift in the continuity of Chapter 4 Tables, due to changes in the sample design of Form EIA-923 and the imputation process.
See the Instrument Design History section of the Form EIA-923 Technical Notes for a more detailed explanation of these changes.
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, 2013

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	28	0.91	7.0	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	28	0.91	7.0	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	700	1.85	9.3	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	341	1.32	9.6	0	--	--	0	--	--
Pennsylvania	360	2.34	9.0	0	--	--	0	--	--
East North Central	2,364	3.00	8.6	825	0.49	5.8	0	--	--
Illinois	1,641	3.28	8.7	581	0.58	6.1	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	110	0.52	7.8	0	--	--	0	--	--
Ohio	250	3.62	10.9	0	--	--	0	--	--
Wisconsin	364	2.20	7.3	244	0.27	5.1	0	--	--
West North Central	386	3.50	8.0	3,049	0.21	4.5	0	--	--
Iowa	386	3.50	8.0	1,922	0.21	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	358	0.22	5.3	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	769	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	2,235	1.33	10.6	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	232	0.76	6.0	0	--	--	0	--	--
Georgia	364	1.25	10.2	0	--	--	0	--	--
Maryland	337	2.11	21.1	0	--	--	0	--	--
North Carolina	381	0.92	7.5	0	--	--	0	--	--
South Carolina	149	0.80	8.3	0	--	--	0	--	--
Virginia	454	1.87	8.8	0	--	--	0	--	--
West Virginia	318	1.07	12.2	0	--	--	0	--	--
East South Central	1,589	0.89	8.1	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	1,589	0.89	8.1	0	--	--	0	--	--
West South Central	0	--	--	482	0.20	4.6	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	482	0.20	4.6	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	230	0.35	9.4	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	230	0.35	9.4	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	646	0.45	10.2	0	--	--	0	--	--
California	646	0.45	10.2	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	8,178	1.73	9.2	4,356	0.26	4.8	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.
W = Withheld to avoid disclosure of individual company data.

Notes:
Starting in January 2013, there may be a shift in the continuity of Chapter 4 Tables, due to changes in the sample design of Form EIA-923 and the imputation process.
See the Instrument Design History section of the Form EIA-923 Technical Notes for a more detailed explanation of these changes.
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, 2003 through 2013 (Btu per Kilowatthour)

Year	Coal	Petroleum	Natural Gas	Nuclear
2003	10,297	10,610	9,207	10,422
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

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 - 2013

(Btu per Kilowatthour)

Prime Mover	Coal	Petroluem	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	--

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 8.6.A. Noncoincident Peak Load by North American Electric Reliability Corporation Assessment Area, 2003 - 2013, Actual

Summer Peak Load (Megawatts)

	Eastern Interconnection													ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	ECAR	MAAC	MAIN	MAPP	MISO	MRO	PJM	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
2003	**40,475**	**55,018**	**431,349**	98,487	53,566	56,988	--	--	28,831	--	--	153,110	40,367	**59,996**	**122,537**	**709,375**
2004	**42,383**	**52,549**	**427,860**	95,300	52,049	53,439	--	--	29,351	--	--	157,615	40,106	**58,531**	**123,136**	**704,459**
2005	**46,396**	**58,960**	**462,550**	--	--	--	--	--	39,918	--	190,200	190,705	41,727	**60,210**	**130,760**	**758,876**
2006	**45,751**	**63,241**	**476,048**	--	--	--	--	--	42,194	--	191,920	199,052	42,882	**62,339**	**142,096**	**789,475**
2007	**46,676**	**58,314**	**475,660**	--	--	--	--	--	41,684	--	181,700	209,109	43,167	**62,188**	**139,389**	**782,227**
2008	**44,836**	**58,543**	**452,087**	--	--	--	--	--	39,677	--	169,155	199,779	43,476	**62,174**	**134,829**	**752,470**
2009	**46,550**	**55,944**	**431,701**	--	--	--	--	--	37,963	--	161,241	191,032	41,465	**63,518**	**128,245**	**725,958**
2010	**45,722**	**60,554**	**466,543**	--	--	--	4,598	108,346	--	136,465	--	164,058	53,077	**65,776**	**129,352**	**767,948**
2011	**44,968**	**63,390**	**486,131**	--	--	--	4,726	102,819	--	158,043	--	164,726	55,817	**68,416**	**119,565**	**782,469**
2012	**44,338**	**58,319**	**468,092**	--	--	--	5,051	96,769	--	154,339	--	161,687	50,246	**66,548**	**130,465**	**767,762**
2013	**44,653**	**61,335**	**452,846**	--	--	--	4,755	121,124	--	157,509	--	121,810	47,647	**67,245**	**132,875**	**758,953**

Winter Peak Load (Megawatts)

	Eastern Interconnection													ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	ECAR	MAAC	MAIN	MAPP	MISO	MRO	PJM	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
2003 / 2004	**36,841**	**48,079**	**364,232**	86,332	45,625	41,719	--	--	24,134	--	--	137,972	28,450	**42,702**	**102,020**	**593,874**
2004 / 2005	**44,839**	**48,176**	**378,987**	91,800	45,905	42,929	--	--	24,526	--	--	144,337	29,490	**44,010**	**102,689**	**618,701**
2005 / 2006	**42,657**	**46,828**	**381,246**	--	--	--	--	--	33,748	--	151,600	164,638	31,260	**48,141**	**107,493**	**626,365**
2006 / 2007	**42,526**	**46,697**	**390,263**	--	--	--	--	--	34,677	--	149,631	175,163	30,792	**50,402**	**111,093**	**640,981**
2007 / 2008	**41,701**	**46,795**	**386,301**	--	--	--	--	--	33,191	--	141,900	179,888	31,322	**50,408**	**112,700**	**637,905**
2008 / 2009	**45,275**	**46,043**	**390,829**	--	--	--	--	--	36,029	--	142,395	179,596	32,809	**47,806**	**113,605**	**643,557**
2009 / 2010	**53,022**	**44,864**	**405,176**	--	--	--	--	--	35,351	--	143,827	193,135	32,863	**56,191**	**109,565**	**668,818**
2010 / 2011	**46,135**	**45,712**	**400,589**	--	--	--	5,069	86,728	--	115,535	--	152,030	41,226	**57,315**	**101,668**	**651,418**
2011 / 2012	**40,117**	**45,234**	**404,280**	--	--	--	4,803	86,844	--	122,563	--	150,850	39,220	**50,100**	**108,459**	**648,190**
2012 / 2013	**36,409**	**45,545**	**390,818**	--	--	--	5,168	74,430	--	122,566	--	153,738	34,916	**46,909**	**101,706**	**621,387**
2013 / 2014	**38,701**	**47,186**	**419,610**	--	--	--	5,304	109,400	--	140,510	--	125,229	39,168	**57,256**	**110,765**	**673,518**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Peak load represents an hour of a day during the associated peak period.
The Summer peak period begins on June 1 and extends through September 30.
The Winter peak period begins October 1 and extends through May 31.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
N/A - Not Available
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.6.B. Noncoincident Peak Load by North American Electric Reliability Corporation Assessment Area, 2013 Actual, 2014-2018 Projected

Summer Peak Load (Megawatts)											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014	**45,759**	**60,324**	**470,798**	4,852	127,248	157,279	131,833	49,587	**68,096**	**132,409**	**777,386**
Projected 2015	**46,719**	**60,996**	**476,870**	5,028	128,571	160,259	133,302	49,710	**69,057**	**134,351**	**787,992**
Projected 2016	**47,615**	**61,703**	**484,413**	5,374	130,101	162,470	135,476	50,993	**70,014**	**136,128**	**799,873**
Projected 2017	**48,501**	**62,287**	**489,882**	5,500	131,242	164,195	137,246	51,700	**70,871**	**137,654**	**809,196**
Projected 2018	**49,147**	**62,788**	**494,529**	5,690	132,376	165,479	138,717	52,267	**71,806**	**139,169**	**817,438**

Winter Peak Load (Megawatts)											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014 / 2015	**44,636**	**45,823**	**404,510**	5,324	102,787	133,509	126,392	36,498	**52,837**	**110,644**	**658,449**
Projected 2015 / 2016	**45,668**	**47,550**	**409,546**	5,457	104,414	135,526	127,446	36,702	**53,719**	**112,163**	**668,646**
Projected 2016 / 2017	**46,415**	**46,130**	**417,475**	5,818	107,352	137,308	128,874	38,123	**53,719**	**112,988**	**676,727**
Projected 2017 / 2018	**47,165**	**46,144**	**421,426**	5,949	108,414	138,314	130,201	38,549	**54,579**	**113,948**	**683,263**
Projected 2018 / 2019	**47,692**	**46,119**	**425,522**	6,176	109,506	139,213	131,447	39,181	**55,441**	**114,846**	**689,620**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Projected data are updated annually.
Peak load represents an hour of a day during the associated peak period.
The Summer peak period begins on June 1 and extends through September 30.
The Winter peak period begins October 1 and extends through May 31.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.7.A. Net Energy for Load by North American Electric Reliability Corporation Assessment Area, 2003 - 2013, Actual

Net Energy (Thousands of Megawatthours)																
	Eastern Interconnection													ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	ECAR	MAAC	MAIN	MAPP	MISO	MRO	PJM	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
2003	**219,021**	**288,791**	**2,255,233**	545,109	276,600	267,068	--	--	153,918	--	--	826,964	185,574	**283,868**	**664,754**	**3,711,667**
2004	**220,335**	**292,725**	**2,313,180**	553,236	283,646	274,760	--	--	152,975	--	--	856,734	191,829	**289,146**	**682,053**	**3,797,439**
2005	**226,544**	**303,607**	**2,385,461**	--	--	--	--	--	216,633	--	1,005,226	962,054	201,548	**299,225**	**685,624**	**3,900,461**
2006	**230,115**	**294,319**	**2,361,721**	--	--	--	--	--	222,748	--	926,279	1,011,173	201,521	**305,672**	**720,087**	**3,911,914**
2007	**232,405**	**301,766**	**2,432,475**	--	--	--	--	--	217,602	--	954,700	1,049,298	210,875	**307,064**	**739,018**	**4,012,728**
2008	**226,874**	**297,362**	**2,406,730**	--	--	--	--	--	227,536	--	936,201	1,035,390	207,603	**312,401**	**745,691**	**3,989,058**
2009	**225,966**	**285,625**	**2,293,617**	--	--	--	--	--	213,797	--	880,377	997,142	202,301	**308,278**	**718,694**	**3,832,180**
2010	**233,034**	**294,276**	**2,456,553**	--	--	--	30,691	585,274	--	712,731	--	870,367	257,491	**319,097**	**713,177**	**4,016,137**
2011	**224,064**	**292,482**	**2,401,810**	--	--	--	29,233	521,692	--	739,754	--	852,843	258,288	**335,000**	**727,793**	**3,981,149**
2012	**220,943**	**290,914**	**2,391,745**	--	--	--	29,362	497,906	--	781,247	--	824,640	258,590	**324,860**	**726,862**	**3,955,323**
2013	**221,534**	**292,882**	**2,394,268**	--	--	--	29,798	662,636	--	791,151	--	661,124	249,559	**331,624**	**737,458**	**3,977,766**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Net Energy for Load represents net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to other Balancing Authority Areas through interchange.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
N/A - Not Available
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.7.B. Net Energy for Load by North American Electric Reliability Corporation Assessment Area, 2013 Actual, 2014-2018 Projected

Net Energy (Thousands of Megawatthours)											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014	**226,583**	**300,524**	**2,445,975**	34,258	663,498	832,247	670,957	245,016	**336,339**	**729,832**	**4,039,254**
Projected 2015	**231,393**	**303,642**	**2,485,243**	35,227	678,295	847,743	678,264	245,714	**342,899**	**740,377**	**4,103,554**
Projected 2016	**235,297**	**306,242**	**2,517,276**	37,625	678,759	863,762	687,569	249,560	**349,440**	**746,310**	**4,154,565**
Projected 2017	**237,807**	**307,589**	**2,545,542**	39,157	687,728	870,847	695,714	252,096	**355,922**	**753,350**	**4,200,210**
Projected 2018	**240,665**	**309,138**	**2,567,849**	40,426	693,234	878,209	702,210	253,770	**362,338**	**760,614**	**4,240,604**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Projected data are updated annually.
Net Energy for Load represents net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to other Balancing Authority Areas through interchange.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.8.B. Summer Net Internal Demand, Capacity Resources, and Capacity Margins

by North American Electric Reliability Corporation Assessment Area, 2013 Actual, 2014-2018 Projected

Net Internal Demand (Megawatts) -- Summer											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014	**43,579**	**58,640**	**449,894**	4,932	123,828	145,447	127,262	48,426	**67,140**	**130,564**	**749,817**
Projected 2015	**44,442**	**59,570**	**459,619**	5,276	125,345	150,068	129,243	49,687	**68,097**	**132,301**	**764,029**
Projected 2016	**45,259**	**60,104**	**464,908**	5,406	126,475	151,793	130,850	50,384	**68,954**	**133,768**	**772,994**
Projected 2017	**45,859**	**60,605**	**469,373**	5,594	127,598	153,077	132,161	50,944	**69,889**	**135,303**	**781,029**
Projected 2018	**46,479**	**61,053**	**474,178**	5,712	128,679	154,498	133,766	51,523	**70,942**	**136,759**	**789,412**

Capacity Resources (Megawatts) -- Summer											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014	**52,380**	**67,835**	**534,496**	6,283	140,150	168,351	155,055	64,657	**74,834**	**162,042**	**891,586**
Projected 2015	**52,685**	**69,248**	**541,840**	6,407	137,803	180,448	153,949	63,233	**75,756**	**164,201**	**903,731**
Projected 2016	**52,780**	**67,327**	**542,289**	6,504	139,952	178,095	153,807	63,932	**76,561**	**164,566**	**903,522**
Projected 2017	**52,793**	**67,327**	**539,647**	6,511	139,495	173,502	156,205	63,935	**77,443**	**164,308**	**901,517**
Projected 2018	**53,939**	**67,331**	**541,313**	6,501	139,111	173,526	158,108	64,068	**76,843**	**164,603**	**904,028**

Capacity Margin (Percent) -- Summer											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014	**16.8%**	**13.6%**	**15.8%**	21.5%	11.6%	13.6%	17.9%	25.1%	**10.3%**	**19.4%**	**15.9%**
Projected 2015	**15.6%**	**14.0%**	**15.2%**	17.7%	9.0%	16.8%	16.0%	21.4%	**10.1%**	**19.4%**	**15.5%**
Projected 2016	**14.2%**	**10.7%**	**14.3%**	16.9%	9.6%	14.8%	14.9%	21.2%	**9.9%**	**18.7%**	**14.4%**
Projected 2017	**13.1%**	**10.0%**	**13.0%**	14.1%	8.5%	11.8%	15.4%	20.3%	**9.8%**	**17.7%**	**13.4%**
Projected 2018	**13.8%**	**9.3%**	**12.4%**	12.1%	7.5%	11.0%	15.4%	19.6%	**7.7%**	**16.9%**	**12.7%**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Net Internal Demand represent the system demand that is planned for by the electric power industry`s reliability authority and is equal to Internal Demand less Direct Control Load Management and Interruptible Demand.
Capacity Resources: Utility and nonutility-owned generating capacity that is existing or in various stages of planning or construction, less inoperable capacity, plus planned capacity purchases from other resources, less planned capacity sales.
Capacity Margin is the amount of unused available capability of an electric power system at peak load as a percentage of capacity resources.
The Summer peak period begins on June 1 and extends through September 30.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.9.B. Winter Net Internal Demand, Capacity Resources, and Capacity Margins

by North American Electric Reliability Corporation Assessment Area, 2013 Actual, 2014-2018 Projected

Net Internal Demand (Megawatts) -- Winter											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014 / 2015	**42,668**	**45,578**	**400,305**	5,071	99,671	135,526	124,395	35,642	**52,057**	**110,172**	**650,781**
Projected 2015 / 2016	**43,370**	**44,357**	**407,766**	5,433	102,597	137,308	125,361	37,067	**52,057**	**110,977**	**658,528**
Projected 2016 / 2017	**44,089**	**44,323**	**411,844**	5,559	103,648	138,314	126,826	37,498	**52,917**	**111,896**	**665,069**
Projected 2017 / 2018	**44,547**	**44,298**	**415,770**	5,781	104,727	139,213	127,920	38,129	**53,779**	**112,765**	**671,158**
Projected 2018 / 2019	**45,051**	**44,345**	**419,510**	5,911	105,667	139,975	129,464	38,493	**54,619**	**113,860**	**677,384**

Capacity Resources (Megawatts) -- Winter											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014 / 2015	**55,546**	**72,236**	**558,497**	6,777	136,278	183,163	168,116	64,164	**76,615**	**154,203**	**917,097**
Projected 2015 / 2016	**57,291**	**73,376**	**562,037**	6,727	134,124	192,850	165,419	62,917	**77,492**	**158,375**	**928,571**
Projected 2016 / 2017	**56,916**	**71,463**	**564,990**	6,687	136,690	190,497	167,577	63,539	**78,475**	**156,580**	**928,425**
Projected 2017 / 2018	**57,376**	**71,474**	**561,663**	6,671	136,233	185,904	169,163	63,691	**78,475**	**157,302**	**926,289**
Projected 2018 / 2019	**58,327**	**71,474**	**562,016**	6,679	135,849	185,928	170,129	63,431	**77,865**	**155,603**	**925,284**

Capacity Margin (Percent) -- Winter											
	Eastern Interconnection								ERCOT	Western Interconnection	All Interconnections
Period	FRCC	NPCC	Balance of Eastern Region	MAPP	MISO	PJM	SERC	SPP	TRE	WECC	Contiguous U.S.
Projected 2014 / 2015	**23.2%**	**36.9%**	**28.3%**	25.2%	26.9%	26.0%	26.0%	44.5%	**32.1%**	**28.6%**	**29.0%**
Projected 2015 / 2016	**24.3%**	**39.5%**	**27.4%**	19.2%	23.5%	28.8%	24.2%	41.1%	**32.8%**	**29.9%**	**29.1%**
Projected 2016 / 2017	**22.5%**	**38.0%**	**27.1%**	16.9%	24.2%	27.4%	24.3%	41.0%	**32.6%**	**28.5%**	**28.4%**
Projected 2017 / 2018	**22.4%**	**38.0%**	**26.0%**	13.3%	23.1%	25.1%	24.4%	40.1%	**31.5%**	**28.3%**	**27.5%**
Projected 2018 / 2019	**22.8%**	**38.0%**	**25.4%**	11.5%	22.2%	24.7%	23.9%	39.3%	**29.9%**	**26.8%**	**26.8%**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Net Internal Demand represent the system demand that is planned for by the electric power industry`s reliability authority and is equal to Internal Demand less Direct Control Load Management and Interruptible Demand.
Capacity Resources: Utility and nonutility-owned generating capacity that is existing or in various stages of planning or construction, less inoperable capacity, plus planned capacity purchases from other resources, less planned capacity sales.
Capacity Margin is the amount of unused available capability of an electric power system at peak load as a percentage of capacity resources.
The Winter peak period begins October 1 and extends through May 31.
Historically the MRO, RFC, SERC, and SPP regional boundaries were altered as utilities changed reliability organizations. The historical data series for these regions have not been adjusted. Instead, the Balance of Eastern Region category was introduced to provide a consistent trend of the Eastern interconnection.
ECAR, MAAC, and MAIN dissolved at the end of 2005. Many of the former utility members joined RFC. Reliability First Corporation (RFC) came into existence on January 1, 2006. RFC submitted a consolidated filing covering the historical NERC regions of ECAR, MAAC, and MAIN.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.10.A. Existing Transmission Capacity by High-Voltage Size, 2013

Voltage		Circuit Miles								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	100-199	--	--	--	--	--	--	--	--	--
AC	200-299	5,454	7,304	1,502	6,848	22,061	3,205	--	37,947	84,321
AC	300-399	--	7,034	4,968	13,461	3,488	5,295	12,141	10,901	57,287
AC	400-599	1,201	475	--	2,578	8,841	94	--	12,968	26,156
AC	600-799	--	--	190	2,164	--	--	--	--	2,354
AC Multi-Circuit Structure	200-299	612	1,190	36	1,320	2,775	9	--	4,916	10,856
AC Multi-Circuit Structure	300-399	--	994	284	2,334	310	155	1,116	435	5,627
AC Multi-Circuit Structure	400-599	--	--	--	90	855	--	--	126	1,071
AC Multi-Circuit Structure	600-799	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	Mixed	--	57	26	--	38	--	--	179	299
AC Total	**US Total**	**7,267**	**17,052**	**7,005**	**28,794**	**38,367**	**8,757**	**13,257**	**67,472**	**187,971**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	176	--	--	--	--	--	53	229
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	872	--	--	--	--	--	--	872
DC	500-599	--	--	--	66	--	--	--	2,137	2,203
DC	600-799	--	--	--	--	--	--	--	--	--
DC Total	**US Total**	**--**	**1,048**	**--**	**66**	**--**	**--**	**--**	**2,190**	**3,304**
Grand Total	**Grand Total**	**7,267**	**18,100**	**7,005**	**28,860**	**38,367**	**8,757**	**13,257**	**69,662**	**191,275**

Voltage		Circuit Counts								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	100-199	--	--	--	--	--	--	--	--	--
AC	200-299	437	180	61	571	1,317	137	--	1,491	4,195
AC	300-399	--	190	231	481	113	123	352	152	1,643
AC	400-599	20	2	--	82	236	1	--	237	578
AC	600-799	--	--	2	31	--	--	--	--	33
AC Multi-Circuit Structure	200-299	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	300-399	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	400-599	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	600-799	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	Mixed	--	--	--	--	--	--	--	--	--
AC Total	**US Total**	**457**	**373**	**294**	**1,165**	**1,666**	**261**	**352**	**1,880**	**6,448**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	*	--	--	--	--	--	1	1
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	2	--	--	--	--	--	--	2
DC	500-599	--	--	--	1	--	--	--	4	5
DC	600-799	--	--	--	--	--	--	--	--	--
DC Total	**US Total**	**--**	**2**	**--**	**1**	**--**	**--**	**--**	**5**	**8**
Grand Total	**Grand Total**	**457**	**375**	**294**	**1,166**	**1,666**	**261**	**352**	**1,885**	**6,457**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Circuit miles do not equal physical miles on the ground; the reference terminology for that concept is structural mile.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.10.B. Proposed Transmission Capacity Additions by High-Voltage Size, 2014 - 2020
(Circuit Miles of Transmission)

Voltage		Circuit Miles							
Type	Operating (kV)	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	All Years
AC	100-199	918	1,516	519	313	358	187	129	3,940
AC	200-299	667	827	180	409	69	68	178	2,400
AC	300-399	1,184	954	653	450	1,003	124	159	4,528
AC	400-599	6	292	--	60	19	--	--	377
AC	600+	--	14	--	--	--	--	499	513
AC Total		**2,775**	**3,603**	**1,353**	**1,232**	**1,450**	**380**	**965**	**11,758**
DC	100-199	--	--	--	--	--	--	--	--
DC	200-299	--	--	--	--	--	--	--	--
DC	300-399	--	--	--	188	72	--	--	260
DC	400-599	--	--	--	--	--	--	--	--
DC	600+	--	--	--	--	--	--	--	--
DC Total		**--**	**--**	**--**	**188**	**72**	**--**	**--**	**260**
Grand Total		**2,775**	**3,603**	**1,353**	**1,420**	**1,522**	**380**	**965**	**12,018**

Notes:
NERC region and reliability assessment area maps are provided on EIA's Electricity Reliability web page: http://www.eia.gov/cneaf/electricity/page/eia411/eia411.html
Circuit miles do not equal physical miles on the ground; the reference terminology for that concept is structural mile.
Some structures were designed and then built to carry future transmission circuits in order to handle expected growth in new capability requirements.
Lines are taken out of service for a variety of reasons including intentional changes to the right-of-way to better useavailable land for different levels of voltage and types of poles and towers.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply and Demand Program Report."

Table 8.11.A. U.S. Transmission Circuit Outages by Type and NERC region, 2013

Outage Type	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Circuit Outage Counts									
Automatic Outages (Sustained)	117	195	122	214	315	116	80	739	1,898
Non-Automatic Outages (Operational)	72	36	101	156	177	10	32	566	1,150
Non-Automatic Outages (Planned)	2,350	396	459	1,532	2,268	288	691	2,893	10,877
Circuit Outage Hours									
Automatic Outages (Sustained)	803	4,315	19,584	21,108	4,937	2,477	1,937	6,173	61,333
Non-Automatic Outages (Operational)	132	242	30	76	232	2	22	52	787
Non-Automatic Outages (Planned)	301	10,525	1,230	1,667	839	400	162	1,052	16,177
Circuit Outage Counts per 1,000 Circuit Miles									
Automatic Outages (Sustained)	16.10	10.77	17.42	7.42	8.21	13.25	6.03	10.61	9.92
Non-Automatic Outages (Operational)	9.91	1.99	14.42	5.41	4.61	1.14	2.41	8.12	6.01
Non-Automatic Outages (Planned)	323.40	21.88	65.52	53.08	59.11	32.89	52.12	41.53	56.87
Circuit Outage Hours per Outage Incident									
Automatic Outages (Sustained)	6.86	22.13	160.52	98.63	15.67	21.35	24.21	8.35	32.31
Non-Automatic Outages (Operational)	1.83	6.72	0.29	0.49	1.31	0.23	0.70	0.09	0.68
Non-Automatic Outages (Planned)	0.13	26.58	2.68	1.09	0.37	1.39	0.23	0.36	1.49

Notes:
Circuit Miles for each region is displayed in Table 8.10.A.
An Automatic Outage is an outage which results from the automatic operation of a switching device, causing an Element to change from an In-Service State to a not In-Service State.
A Sustained Outage is an automatic outage with an outage duration of a minute or greater.
A Non-Automatic Outage is an outage which results from the manual operation (including supervisory control) of a switching device, causing an element to change from an In-Service State to a not In-Service State.
An Operational Outage is a Non-Automatic Outage for the purpose of avoiding an emergency (i.e., risk to human life, damage to equipment, damage to property) or to maintain the system within operational limits and that cannot be deferred.
A Planned Outage is a Non-Automatic Outage with advance notice for the purpose of maintenance, construction, inspection, testing, or planned activities by third parties that may be deferred.
Detailed information on the Transmission Availability Data System outage definitions is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf

Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.11.B. U.S. Transformer Outages by Type and NERC region, 2013

Outage Type	Eastern Interconnection	TRE	WECC	Contiguous U.S.
Circuit Outage Counts				
Automatic Outages (Sustained)	59	--	33	92
Non-Automatic Outages (Operational)	24	--	142	166
Non-Automatic Outages (Planned)	263	--	236	499
Circuit Outage Hours				
Automatic Outages (Sustained)	19,271	--	1,322	20,592
Non-Automatic Outages (Operational)	101	--	16	117
Non-Automatic Outages (Planned)	2,812	--	419	3,231
Circuit Outage Hours per Outage Incident				
Automatic Outages (Sustained)	326.62	--	40.05	223.83
Non-Automatic Outages (Operational)	4.20	--	0.11	0.70
Non-Automatic Outages (Planned)	10.69	--	1.78	6.48

Notes:
An Automatic Outage is an outage which results from the automatic operation of a switching device, causing an Element to change from an In-Service State to a not In-Service State.
A Sustained Outage is an automatic outage with an outage duration of a minute or greater.
A Non-Automatic Outage is an outage which results from the manual operation (including supervisory control) of a switching device, causing an element to change from an In-Service State to a not In-Service State.
An Operational Outage is a Non-Automatic Outage for the purpose of avoiding an emergency (i.e., risk to human life, damage to equipment, damage to property) or to maintain the system within operational limits and that cannot be deferred.
A Planned Outage is a Non-Automatic Outage with advance notice for the purpose of maintenance, construction, inspection, testing, or planned activities by third parties that may be deferred.
Detailed information on the Transmission Availability Data System outage definitions is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf

Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.12.A. U.S. Transmission Circuit Sustained Automatic Outage Counts and Hours by High-Voltage Size and NERC Region, 2013

Sustained Automatic Outage Counts										
Voltage		Region								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	0-99	--	--	--	--	--	--	--	--	--
AC	200-299	113	96	25	90	194	56	--	406	980
AC	300-399	--	89	93	85	37	60	80	174	618
AC	400-599	4	1	--	23	84	--	--	143	255
AC	600+	--	--	4	11	--	--	--	--	15
AC Total		**117**	**186**	**122**	**209**	**315**	**116**	**80**	**723**	**1,868**
DC	0-99	--	--	--	--	--	--	--	--	--
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	6	--	--	--	--	--	--	6
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	3	--	--	--	--	--	--	3
DC	500-599	--	--	--	5	--	--	--	16	21
DC	600+	--	--	--	--	--	--	--	--	--
DC Total		**--**	**9**	**--**	**5**	**--**	**--**	**--**	**16**	**30**
Grand Total		**117**	**195**	**122**	**214**	**315**	**116**	**80**	**739**	**1,898**

Total Outages per 1,000 Circuit Miles										
		Region								
		FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Rate		**16.21**	**11.13**	**16.10**	**8.47**	**9.19**	**13.90**	**8.40**	**11.49**	**10.90**

Sustained Automatic Outage Hours										
Voltage		Region								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	0-99	--	--	--	--	--	--	--	--	--
AC	200-299	778	1,288	9,072	3,052	2,194	366	--	3,316	20,067
AC	300-399	--	2,889	10,497	9,302	424	2,111	1,937	370	27,528
AC	400-599	25	4	--	8,067	2,320	--	--	2,438	12,853
AC	600+	--	--	15	663	--	--	--	--	678
AC Total		**803**	**4,181**	**19,584**	**21,084**	**4,937**	**2,477**	**1,937**	**6,125**	**61,127**
DC	0-99	--	--	--	--	--	--	--	--	--
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	125	--	--	--	--	--	--	125
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	10	--	--	--	--	--	--	10
DC	500-599	--	--	--	23	--	--	--	49	72
DC	600+	--	--	--	--	--	--	--	--	--
DC Total		**--**	**134**	**--**	**23**	**--**	**--**	**--**	**49**	**206**
Grand Total		**803**	**4,315**	**19,584**	**21,108**	**4,937**	**2,477**	**1,937**	**6,173**	**61,333**

Outage Hours per Outage Incident										
		Region								
		FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Rate		**6.86**	**22.13**	**160.52**	**98.63**	**15.67**	**21.35**	**24.21**	**8.35**	**32.31**

Notes:
* = 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 *.)
Circuit Miles for each region is displayed in Table 8.10.A.
An Automatic Outage is an outage which results from the automatic operation of a switching device, causing an Element to change from an In-Service State to a not In-Service State.
A Sustained Outage is an automatic outage with an outage duration of a minute or greater.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.12.B. U.S. Transformer Sustained Automatic Outage Counts and Hours by High-Voltage Size and NERC Region, 2013

Sustained Automatic Outage Counts				
High-Side Voltage (kV)	**Eastern Interconnection**	**TRE**	**WECC**	**Contiguous U.S.**
100-199	--	--	--	--
200-299	3	--	7	10
300-399	17	--	10	27
400-599	30	--	16	46
600+	9	--	--	9
Grand Total	**59**	**--**	**33**	**92**

Sustained Automatic Outage Hours				
High-Side Voltage (kV)	**Eastern Interconnection**	**TRE**	**WECC**	**Contiguous U.S.**
100-199	--	--	--	--
200-299	32	--	45	77
300-399	303	--	261	565
400-599	11,948	--	1,015	12,964
600+	6,987	--	--	6,987
Grand Total	**19,271**	**--**	**1,322**	**20,592**

Outage Hours per Outage Incident				
	Eastern Interconnection	**TRE**	**WECC**	**Contiguous U.S.**
Rate	**326.62**	**--**	**40.05**	**223.83**

Notes:
* = 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 *.)
Eastern NERC Regions are aggregated to preserve confidentiality.
An Automatic Outage is an outage which results from the automatic operation of a switching device, causing an Element to change from an In-Service State to a not In-Service State.
A Sustained Outage is an automatic outage with an outage duration of a minute or greater.
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.13.A. U.S. Transmission Circuit Sustained Automatic Outage Counts and

Hours by Cause Code and by NERC Region, 2013 (Page 1)

	AC & DC Circuit Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	3	60	24	17	14	25	4	50	**197**
Lightning	6	11	6	4	21	14	11	54	**127**
Environmental	--	--	--	--	--	2	--	5	**7**
Contamination	4	4	--	1	15	--	6	16	**46**
Foreign Interference	21	--	1	12	28	2	2	23	**89**
Fire	1	--	1	1	3	--	--	50	**56**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	7	--	--	--	**7**
Failed AC Substation Equipment	8	24	21	46	42	18	14	59	**232**
Failed AC/DC Terminal Equipment	--	3	--	4	--	--	--	1	**8**
Failed Protection System Equipment	9	16	17	23	42	3	10	39	**159**
Failed AC Circuit Equipment	39	15	17	23	53	12	11	63	**233**
Failed DC Circuit Equipment	--	2	--	--	--	--	--	--	**2**
Vegetation	1	--	3	2	14	1	--	4	**25**
Power System Condition	1	1	3	11	3	14	3	60	**96**
Human Error	8	22	15	39	36	12	6	86	**224**
Unknown	15	27	7	15	26	7	9	156	**262**
Other	1	10	7	6	11	6	4	73	**118**
TOTAL	**117**	**195**	**122**	**214**	**315**	**116**	**80**	**739**	**1,898**

	Percentage of Total AC & DC Circuit Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	2.6%	30.8%	19.7%	7.9%	4.4%	21.6%	5.0%	6.8%	**10.4%**
Lightning	5.1%	5.6%	4.9%	1.9%	6.7%	12.1%	13.8%	7.3%	**6.7%**
Environmental	--	--	--	--	--	1.7%	--	0.7%	**0.4%**
Contamination	3.4%	2.1%	--	0.5%	4.8%	--	7.5%	2.2%	**2.4%**
Foreign Interference	18.0%	--	0.8%	5.6%	8.9%	1.7%	2.5%	3.1%	**4.7%**
Fire	0.9%	--	0.8%	0.5%	1.0%	--	--	6.8%	**3.0%**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	2.2%	--	--	--	**0.4%**
Failed AC Substation Equipment	6.8%	12.3%	17.2%	21.5%	13.3%	15.5%	17.5%	8.0%	**12.2%**
Failed AC/DC Terminal Equipment	--	1.5%	--	1.9%	--	--	--	0.1%	**0.4%**
Failed Protection System Equipment	7.7%	8.2%	13.9%	10.8%	13.3%	2.6%	12.5%	5.3%	**8.4%**
Failed AC Circuit Equipment	33.3%	7.7%	13.9%	10.8%	16.8%	10.3%	13.8%	8.5%	**12.3%**
Failed DC Circuit Equipment	--	1.0%	--	--	--	--	--	--	**0.1%**
Vegetation	0.9%	--	2.5%	0.9%	4.4%	0.9%	--	0.5%	**1.3%**
Power System Condition	0.9%	0.5%	2.5%	5.1%	1.0%	12.1%	3.8%	8.1%	**5.1%**
Human Error	6.8%	11.3%	12.3%	18.2%	11.4%	10.3%	7.5%	11.6%	**11.8%**
Unknown	12.8%	13.9%	5.7%	7.0%	8.3%	6.0%	11.3%	21.1%	**13.8%**
Other	0.9%	5.1%	5.7%	2.8%	3.5%	5.2%	5.0%	9.9%	**6.2%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Notes:
Detailed information on the Transmission Availability Data System outage causes is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.13.A. U.S. Transmission Circuit Sustained Automatic Outage Counts and Hours by Cause Code and by NERC Region, 2013 (Page 2)

	AC & DC Circuit Outage Hours								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	11	483	279	7,599	686	1,652	51	164	**10,925**
Lightning	8	3	4	42	84	12	51	101	**306**
Environmental	--	--	--	2,065	--	2	--	27	**2,094**
Contamination	6	0	--	0	422	--	19	113	**561**
Foreign Interference	77	--	11	27	220	0	237	152	**725**
Fire	0	--	65	2	69	--	--	782	**918**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	637	--	--	--	**637**
Failed AC Substation Equipment	255	2,103	13,975	9,163	658	85	234	1,734	**28,206**
Failed AC/DC Terminal Equipment	--	33	--	23	--	--	--	3	**59**
Failed Protection System Equipment	5	42	81	117	457	115	129	88	**1,035**
Failed AC Circuit Equipment	367	1,507	3,676	1,579	1,257	411	1,145	1,436	**11,378**
Failed DC Circuit Equipment	--	69	--	--	--	--	--	--	**69**
Vegetation	22	--	69	51	124	17	--	48	**330**
Power System Condition	13	0	27	61	13	125	0	591	**830**
Human Error	13	24	26	193	99	8	22	445	**830**
Unknown	21	35	1,347	74	148	35	37	286	**1,981**
Other	6	14	27	111	62	14	13	203	**449**
TOTAL	**803**	**4,315**	**19,584**	**21,108**	**4,937**	**2,477**	**1,937**	**6,173**	**61,333**

	Percentage of Total AC & DC Circuit Outage Hours								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	1.3%	11.2%	1.4%	36.0%	13.9%	66.7%	2.6%	2.7%	**17.8%**
Lightning	1.0%	0.1%	0.0%	0.2%	1.7%	0.5%	2.6%	1.6%	**0.5%**
Environmental	--	--	--	9.8%	--	0.1%	--	0.4%	**3.4%**
Contamination	0.7%	0.0%	--	0.0%	8.6%	--	1.0%	1.8%	**0.9%**
Foreign Interference	9.6%	--	0.1%	0.1%	4.5%	0.0%	12.3%	2.5%	**1.2%**
Fire	0.0%	--	0.3%	0.0%	1.4%	--	--	12.7%	**1.5%**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	12.9%	--	--	--	**1.0%**
Failed AC Substation Equipment	31.8%	48.8%	71.4%	43.4%	13.3%	3.4%	12.1%	28.1%	**46.0%**
Failed AC/DC Terminal Equipment	--	0.8%	--	0.1%	--	--	--	0.1%	**0.1%**
Failed Protection System Equipment	0.6%	1.0%	0.4%	0.6%	9.3%	4.7%	6.7%	1.4%	**1.7%**
Failed AC Circuit Equipment	45.7%	34.9%	18.8%	7.5%	25.5%	16.6%	59.1%	23.3%	**18.6%**
Failed DC Circuit Equipment	--	1.6%	--	--	--	--	--	--	**0.1%**
Vegetation	2.8%	--	0.4%	0.2%	2.5%	0.7%	--	0.8%	**0.5%**
Power System Condition	1.6%	0.0%	0.1%	0.3%	0.3%	5.1%	0.0%	9.6%	**1.4%**
Human Error	1.6%	0.6%	0.1%	0.9%	2.0%	0.3%	1.1%	7.2%	**1.4%**
Unknown	2.6%	0.8%	6.9%	0.4%	3.0%	1.4%	1.9%	4.6%	**3.2%**
Other	0.7%	0.3%	0.1%	0.5%	1.3%	0.6%	0.7%	3.3%	**0.7%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Notes:
Detailed information on the Transmission Availability Data System outage causes is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.13.B. U.S. Transformer Sustained Automatic Outage Counts and

Hours by Cause Code and by NERC Region, 2013 (Page 1)

	Transformer Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	2	1	--	--	--	--	**3**
Lightning	--	--	--	1	--	--	--	--	**1**
Environmental	--	--	--	--	2	--	--	--	**2**
Contamination	--	--	--	1	--	--	--	--	**1**
Foreign Interference	--	--	--	--	--	--	--	1	**1**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	2	--	--	--	**2**
Failed AC Substation Equipment	--	--	2	13	8	1	--	7	**31**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	1	--	--	3	1	--	--	5	**10**
Failed AC Circuit Equipment	--	--	--	1	1	--	--	2	**4**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	3	**3**
Human Error	1	7	--	4	1	--	--	6	**19**
Unknown	--	2	--	1	--	--	--	6	**9**
Other	--	--	--	1	--	1	--	3	**5**
TOTAL	**2**	**9**	**4**	**27**	**15**	**2**	**--**	**33**	**92**

	Percentage of Total Transformer Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	50.0%	3.7%	--	--	--	--	**3.3%**
Lightning	--	--	--	3.7%	--	--	--	--	**1.1%**
Environmental	--	--	--	--	13.3%	--	--	--	**2.2%**
Contamination	--	--	--	3.7%	--	--	--	--	**1.1%**
Foreign Interference	--	--	--	--	--	--	--	3.0%	**1.1%**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	13.3%	--	--	--	**2.2%**
Failed AC Substation Equipment	--	--	50.0%	48.2%	53.3%	50.0%	--	21.2%	**33.7%**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	50.0%	--	--	11.1%	6.7%	--	--	15.2%	**10.9%**
Failed AC Circuit Equipment	--	--	--	3.7%	6.7%	--	--	6.1%	**4.4%**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	9.1%	**3.3%**
Human Error	50.0%	77.8%	--	14.8%	6.7%	--	--	18.2%	**20.7%**
Unknown	--	22.2%	--	3.7%	--	--	--	18.2%	**9.8%**
Other	--	--	--	3.7%	--	50.0%	--	9.1%	**5.4%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**--**	**100.0%**	**100.0%**

Notes:
Detailed information on the Transmission Availability Data System outage causes is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Table 8.13.B. U.S. Transformer Sustained Automatic Outage Counts and

Hours by Cause Code and by NERC Region, 2013 (Page 2)

	Transformer Outage Hours								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	9	4	--	--	--	--	**14**
Lightning	--	--	--	64	--	--	--	--	**64**
Environmental	--	--	--	--	36	--	--	--	**36**
Contamination	--	--	--	4	--	--	--	--	**4**
Foreign Interference	--	--	--	--	--	--	--	8	**8**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	118	--	--	--	**118**
Failed AC Substation Equipment	--	--	6,647	11,370	614	190	--	1,121	**19,942**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	0	--	--	5	49	--	--	4	**58**
Failed AC Circuit Equipment	--	--	--	13	6	--	--	81	**99**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	27	**27**
Human Error	1	14	--	6	1	--	--	2	**24**
Unknown	--	1	--	14	--	--	--	77	**92**
Other	--	--	--	15	--	89	--	0	**104**
TOTAL	**1**	**15**	**6,657**	**11,495**	**824**	**279**	**--**	**1,322**	**20,592**

	Percentage of Total Transformer Outage Hours								
OUTAGE_CAUSE	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	0.1%	0.0%	--	--	--	--	**0.1%**
Lightning	--	--	--	0.6%	--	--	--	--	**0.3%**
Environmental	--	--	--	--	4.3%	--	--	--	**0.2%**
Contamination	--	--	--	0.0%	--	--	--	--	**0.0%**
Foreign Interference	--	--	--	--	--	--	--	0.6%	**0.0%**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	14.4%	--	--	--	**0.6%**
Failed AC Substation Equipment	--	--	99.9%	98.9%	74.5%	68.0%	--	84.9%	**96.8%**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	6.4%	--	--	0.0%	6.0%	--	--	0.3%	**0.3%**
Failed AC Circuit Equipment	--	--	--	0.1%	0.7%	--	--	6.1%	**0.5%**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	2.1%	**0.1%**
Human Error	93.6%	95.2%	--	0.1%	0.1%	--	--	0.2%	**0.1%**
Unknown	--	4.8%	--	0.1%	--	--	--	5.9%	**0.5%**
Other	--	--	--	0.1%	--	32.1%	--	0.0%	**0.5%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**--**	**100.0%**	**100.0%**

Notes:
Detailed information on the Transmission Availability Data System outage causes is available at:
http://www.nerc.com/docs/pc/tadswg/Appendix%207%2020101202a%20clean.pdf
Source: U.S. Energy Information Administration, Form EIA-411, "Coordinated Bulk Power Supply Program Report."

Chapter 9

Environmental Data

Table 9.1. Emissions from Energy Consumption at Conventional Power Plants and Combined-Heat-and-Power Plants 2003 through 2013 (Thousand Metric Tons)

Year	Carbon Dioxide (CO2)	Sulfur Dioxide (SO2)	Nitrogen Oxides (NOx)
2003	2,445,094	10,646	4,532
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

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, 2003 - 2013

	Flue Gas Desulfurization Systems		Electrostatic Precipitators		Baghouses		Select Catalytic and Non-Catalytic Reduction Systems		Activated Carbon Injection Systems		Direct Sorbent Injection Systems	
Year	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)
2003	532	110,437	1,564	325,721	523	54,454	867	174,357	27	1,254	23	1,606
2004	535	112,874	1,554	324,690	527	57,745	969	212,664	123	4,435	23	1,606
2005	539	112,372	1,541	324,489	527	57,948	1,049	232,146	128	4,693	23	1,606
2006	538	115,698	1,491	316,068	538	60,556	1,126	250,855	139	6,859	31	2,175
2007	565	129,555	1,491	315,956	555	65,587	1,161	259,783	141	7,735	32	2,249
2008	611	149,557	1,466	315,016	575	68,357	1,209	270,859	169	17,391	35	2,348
2009	651	172,812	1,452	312,655	597	73,787	1,272	289,631	227	39,546	35	2,349
2010	690	199,090	1,406	308,784	608	83,073	1,311	305,323	262	54,183	34	2,707
2011	703	209,600	1,359	305,107	632	98,422	1,359	319,876	274	59,057	43	2,962
2012	698	217,007	1,283	296,497	630	101,542	1,399	333,336	287	63,709	53	4,638
2013	673	219,001	1,199	287,121	632	104,077	1,393	336,768	256	59,974	64	6,920

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, 2003 - 2013

	Once-Through Cooling Systems		Recirculating Cooling Systems		Cooling Ponds		Dry Cooling Systems		Hybrid Wet and Dry Cooling Systems		Other Cooling System Types	
Energy Source	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)
2003												
Coal	489	136,510	342	151,899	102	49,385	--	--	--	--	15	6,136
Natural Gas	211	52,574	394	68,046	77	30,433	27	6,877	--	--	7	1,911
Petroleum	101	25,061	22	6,838	4	3,610	--	--	--	--	2	2,004
Other	16	1,079	24	1,919	--	--	1	26	--	--	4	420
2004												
Coal	479	134,761	350	153,804	103	50,067	--	--	--	--	14	5,911
Natural Gas	212	53,260	412	74,156	72	27,937	32	7,768	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
2005												
Coal	473	134,241	348	153,451	103	50,113	--	--	--	--	14	6,002
Natural Gas	210	53,669	415	77,708	65	27,571	32	7,768	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
2006												
Coal	464	132,638	349	153,824	101	49,609	--	--	--	--	13	5,828
Natural Gas	203	51,742	411	78,258	67	28,323	34	8,244	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
2007												
Coal	459	131,763	351	155,178	101	49,609	--	--	--	--	13	5,828
Natural Gas	203	51,906	417	79,193	66	27,563	34	8,244	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
2008												
Coal	454	131,980	356	157,262	100	48,787	--	--	--	--	8	3,912
Natural Gas	199	51,228	418	80,065	59	25,261	35	8,507	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
2009												
Coal	447	129,505	364	160,205	100	47,960	1	335	--	--	6	2,582
Natural Gas	195	49,541	422	81,664	57	23,022	44	10,636	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
2010												
Coal	438	129,557	364	161,429	101	48,929	2	435	1	766	7	2,632
Natural Gas	182	49,154	417	80,826	57	22,746	47	11,375	3	542	3	1,172
Nuclear	48	50,867	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
2011												
Coal	416	127,415	362	164,435	104	50,476	3	840	1	766	7	2,636
Natural Gas	177	48,431	432	84,874	58	21,944	52	12,242	3	542	2	870
Nuclear	48	51,044	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
2012												
Coal	373	124,592	359	165,391	88	39,933	4	1,412	1	766	13	6,463
Natural Gas	173	52,090	436	89,618	54	18,533	54	12,584	4	637	2	499
Nuclear	48	51,248	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
2013												
Coal	346	120,303	351	163,302	78	39,482	4	1,422	1	750	10	4,385
Natural Gas	162	52,015	422	86,590	57	18,843	56	12,918	4	637	4	2,481
Nuclear	44	50,266	38	40,013	13	15,251	--	--	--	--	8	11,181
Petroleum	44	11,439	11	3,481	4	4,692	--	--	--	--	--	--
Solar Thermal	--	--	2	591	--	--	3	391	--	--	--	--
Other	15	1,301	31	2,561	--	--	--	--	--	--	2	242

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, 2003 - 2013

Year	Average Operation and Maintenance Costs (Dollars per Megawatthour)	Average Installed Capital Costs (Dollars per Kilowatt)
2003	1.23	81.98
2004	1.25	43.25
2005	1.37	142.67
2006	--	149.57
2007	1.26	240.66
2008	1.44	257.50
2009	1.44	355.25
2010	1.52	353.65
2011	1.79	396.90
2012	1.87	260.28
2013	1.74	237.58

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, 2012 and 2013 (Thousand Metric Tons)

Census Division and State	Carbon Dioxide (CO2)		Sulfur Dioxide (SO2)		Nitrogen Oxides (NOx)	
	Year 2013	Year 2012	Year 2013	Year 2012	Year 2013	Year 2012
New England	33,437	34,766	31	33	37	39
Connecticut	8,726	8,987	3	7	9	12
Maine	3,675	3,722	12	8	9	7
Massachusetts	14,735	14,346	11	15	14	14
New Hampshire	3,447	4,295	3	2	5	4
Rhode Island	2,838	3,403	1	0	1	2
Vermont	15	12	0	0	1	1
Middle Atlantic	157,974	161,786	282	275	192	187
New Jersey	15,789	16,120	3	4	14	14
New York	33,456	35,669	28	31	41	40
Pennsylvania	108,729	109,997	251	240	137	133
East North Central	414,052	398,780	1,061	1,099	379	379
Illinois	97,812	94,411	185	172	57	61
Indiana	98,895	99,773	248	260	110	107
Michigan	67,193	67,877	215	215	78	81
Ohio	102,466	95,523	315	355	93	91
Wisconsin	47,686	41,196	98	98	40	39
West North Central	241,445	237,669	426	443	256	262
Iowa	39,175	41,267	97	96	41	42
Kansas	33,125	31,693	27	30	28	33
Minnesota	29,255	28,494	32	33	34	36
Missouri	78,344	75,545	143	136	71	66
Nebraska	28,043	26,467	61	58	29	29
North Dakota	30,274	30,934	52	79	44	46
South Dakota	3,228	3,269	14	12	10	11
South Atlantic	378,260	384,603	514	570	317	318
Delaware	4,722	4,981	2	2	2	3
District of Columbia	49	66	0	0	0	0
Florida	108,431	111,236	107	101	80	84
Georgia	56,812	59,035	112	149	50	50
Maryland	18,950	20,697	38	40	20	22
North Carolina	56,940	57,924	65	74	57	53
South Carolina	28,809	34,238	43	65	17	22
Virginia	34,686	29,223	62	56	36	36
West Virginia	68,862	67,203	85	83	55	48
East South Central	213,041	220,815	462	450	174	175
Alabama	66,986	69,107	131	148	52	51
Kentucky	85,304	85,683	173	171	79	75
Mississippi	22,633	24,285	80	43	22	23
Tennessee	38,118	41,741	78	88	21	25
West South Central	399,352	399,292	613	616	375	370
Arkansas	37,346	36,234	81	84	42	38
Louisiana	58,274	60,182	111	108	75	75
Oklahoma	46,268	49,186	73	74	52	63
Texas	257,465	253,689	348	350	207	194
Mountain	244,232	233,511	168	161	301	277
Arizona	55,342	52,350	22	19	54	46
Colorado	39,387	39,926	36	39	45	45
Idaho	1,942	1,172	6	5	7	4
Montana	16,951	16,024	15	15	20	16
Nevada	15,690	14,929	7	4	15	12
New Mexico	28,535	29,163	16	15	54	55
Utah	35,699	32,484	21	20	57	49
Wyoming	50,687	47,463	45	44	50	49
Pacific Contiguous	79,366	73,724	30	39	117	105
California	57,323	59,369	2	6	88	84
Oregon	9,500	7,365	16	13	13	9
Washington	12,543	6,990	12	20	16	12
Pacific Noncontiguous	11,196	11,930	23	17	39	36
Alaska	3,768	4,305	4	3	16	17
Hawaii	7,428	7,625	19	15	23	19
U.S. Total	2,172,355	2,156,875	3,609	3,704	2,188	2,148

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

Chapter 10

Demand-Side Management and Advanced Metering

Table 10.1. Demand-Side Management Program Annual Effects by Program Category, 2003 through 2012 (Table Discontinued)

	Energy Efficiency		Load Management			Total	
Year	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)
2003	48,254	13,585	1,935	25,261	9,298	50,189	22,883
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, 2003 through 2012 (Table Discontinued)

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2003	12,914	24,758	10,031	551	48,254
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)					
2003	5,909	4,911	2,671	94	13,585
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)					
2003	559	335	1,041	--	1,935
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)					
2003	6,618	4,033	14,599	11	25,261
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)					
2003	3,524	1,864	3,899	11	9,298
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, 2003 through 2012 (Table Discontinued)

	Energy Efficiency		Load Management			Total	
Year	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)
2003	2,948	1,035	33	2,112	1,165	2,981	2,200
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, 2003 through 2012 (Table Discontinued)

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2003	855	1,352	729	12	2,948
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)					
2003	511	351	171	2	1,035
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)					
2003	19	10	3	--	33
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)					
2003	357	324	1,412	19	2,112
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)					
2003	217	235	703	10	1,165
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,

2003 through 2012 (Thousand Dollars) (Table Discontinued)

Year	Energy Efficiency	Load Management	Direct Cost	Indirect Cost	Total Cost
2003	807,403	352,137	1,159,540	137,670	1,340,686
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

Year	Residential	Commercial	Industrial	Transportation	Total
Incremental Annual Savings - Energy Savings (MWh)					
2013	11,031,426	10,478,999	3,141,409	29,894	24,681,728
Incremental Annual Savings - Peak Demand Savings (MW)					
2013	6,814	11,320	1,484	5	19,622
Incremental Costs - Customer Incentive (thousand dollars)					
2013	1,252,225	1,274,421	346,256	5	2,872,906
Incremental Costs - All Other Costs (thousand dollars)					
2013	1,015,882	750,499	179,758	33	1,946,156

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

Year	Residential	Commercial	Industrial	Transportation	Total
Life Cycle Savings - Energy Savings (MWh)					
2013	84,525,522	128,027,635	38,502,166	448,421	251,466,857
Life Cycle Savings - Peak Demand Savings (MW)					
2013	44,353	71,059	19,774	6	135,192
Life Cycle Costs - Customer Incentive (thousand dollars)					
2013	2,698,881	2,875,980	461,157	5	6,035,867
Life Cycle Costs - All Other Costs (thousand dollars)					
2013	2,135,019	1,627,658	234,977	33	3,997,670

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

Year	Residential	Commercial	Industrial	Transportation	Total
Number of Customers Enrolled					
2013	8,419,233	611,826	155,893	398	9,187,350
Energy Savings (MWh)					
2013	799,743	486,348	115,895	1	1,401,987
Potential Peak Demand Savings (MW)					
2013	7,003	5,124	14,800	168	27,095
Actual Peak Demand Savings (MW)					
2013	3,381	2,548	5,805	149	11,883

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

Year	Residential	Commercial	Industrial	Transportation	Total
Customer Incentives (thousand dollars)					
2013	398,598	286,057	421,208	6,919	1,112,782
All Other Costs (thousand dollars)					
2013	338,353	95,748	50,982	50	485,133

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 2013

Year	Residential	Commercial	Industrial	Transportation	Total
Automated Meter Reading (AMR)					
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	43,728,325	4,805,138	201,873	1,202	48,736,538
Advanced Metering Infrastructure (AMI)					
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	46,083,727	5,597,147	242,783	845	51,924,502

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

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.[1]

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:

$$\text{Percent Change} = \left(\frac{x\,(t_2) - x\,(t_1)}{x\,(t_1)} \right) x\,100,$$

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 included 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=4|61.

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[2] 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 retail sales 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 retail sales of electricity to ultimate customers and revenue from retail 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[3].

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)
	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)
Natural Gas and Other Gases	BFG	Blast Furnace Gas
	NG	Natural Gas
	OG	Other Gas
Nuclear	NUC	Nuclear (including Uranium, Plutonium, and Thorium)
Hydroelectric Conventional	WAT (Prime Mover = HY)	Water at a Conventional Hydroelectric Turbine, and water used in Wave Buoy Hydrokinetic Technology, Current Hydrokinetic Technology, and Tidal Hydrokinetic Technology
Hydroelectric Pumped Storage	WAT (Prime Mover = PS)	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
Wood and Wood-Derived Fuels	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)
	BLQ	Black Liquor
Other Biomass	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
	LFG	Landfill Gas
	SLW	Sludge Waste
Other Renewable Energy Sources	SUN	Solar (including solar thermal)
	WND	Wind
	GEO	Geothermal
Other Energy Sources	PUR	Purchased Steam
	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 retail sales volumes (megawatthours) 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 retail sales 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 by 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, are 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
Prime Movers:
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
Environmental Equipment:
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. **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:[4] 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).[5]

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:

$$capacity\ factor = \frac{\sum_{x,m} generation_{x,m}}{\sum_{x,m} capacity_x * available\ time_{x,m}}$$

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_2) from electric generating plants for 1989 through the present, as well as the estimated emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) 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_2 and NOx 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:

Emissions = Quantity of Fuel Consumed x 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_x and SO_2 emissions. As discussed below, physical quantities are converted to millions of Btus for calculating CO_2 emissions.

For some fuels, the calculation of SO_2 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:

Emissions = Quantity of Fuel Consumed x Emission Factor x 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_2 emission factors used for this report.

In the case of SO_2 and NO_x 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_x 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.[6] These distinctions are shown in Tables A.1. and A.2.

For SO_2 and NO_x, 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_2 is the fluidized bed boiler, in which the sulfur removal process is integral with the operation of the boiler. The SO_2 emission factors shown in Table A.1. for fluidized bed boilers already account for 90 percent removal of SO_2 since, in effect, the plant has no uncontrolled emissions of this pollutant.

Although SO_2 and NO_x 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_2 are incomplete and are not used in this report.) The CEMS data account for the bulk of SO_2 and NO_x emissions from the electric power industry. For those plants for which CEMS data are available, the EIA estimates of SO_2 and NO_x 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_2 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_2 Emissions: CO_2 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_2 emissions, the fuel-specific emission factor from Table A.3. is multiplied by the fuel consumption in MMBtu.

The estimation procedure calculates uncontrolled CO_2 emissions. CO_2 control technologies are currently in the early stages of research and there are no commercial systems installed. Therefore, no estimates of controlled CO_2 emissions are made.

SO_2 and NO_x Emissions: To comply with environmental regulations controlling SO_2 emissions, many coal-fired generating plants have installed flue gas desulfurization (FGD) units. Similarly, NO_x control regulations require many fossil-fueled plants to install low-NO_x burners, selective catalytic reduction systems, or other technologies to reduce emissions. It is common for power plants to employ two or even three NO_x control technologies; accordingly, the NO_x 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[7] 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_2 and NO_x 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_2, the reported efficiency of the plant's FGD units is used to convert uncontrolled to controlled emission estimates. For NO_x, 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.[8]

      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_2 or NO_x 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.

	Agriculture, Forestry, Fishing and Hunting
111	Crop Production
112	Animal Production
113	Forestry and Logging
114	Fishing, Hunting and Trapping
115	Support Activities for Agriculture and Forestry
	Mining, Quarrying, and Oil and Gas Extraction
211	Oil and Gas Extraction
2121	Coal Mining
2122	Metal Ore Mining
2123	Nonmetallic Mineral Mining and Quarrying
	Utilities
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
	Manufacturing
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	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**

	Administrative and Support and Waste Management and Remediation Services
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	**Educational Services**
	Health Care and Social Assistance
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities
624	Social Assistance
	Arts, Entertainment, and Recreation
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
	Accommodation and Food Services
721	Accommodation
722	Food Services and Drinking Places
	Other Services (except Public Administration)
811	Repair and Maintenance
812	Personal and Laundry Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
814	Private Households
92	**Public Administration (other than 921, 922, 92214 or 928)**
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)

[1] 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/.

[2] 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.

[3] 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/.

[4] See the following sources: Bahillo, A. et al. Journal of Energy Resources Technology, "NOx and N2O 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

[5] 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.

[6] 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*, 41st Edition, 2005.

[7] 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.

[8] 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.

Table A.1. Sulfur Dioxide 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	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 combusition 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 combusition 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								
							Tangential Boiler		All Other Boiler Types			
Fuel	EIA Fuel Code	Source and Tables (As Appropriate)	Emissions Units Lbs = Pounds MMCF = Million Cubic Feet MG = Thousand Gallons	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 & 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	Source and Tables (As Appropriate)	Factor (Pounds of CO2 Per Million Btu)***
Bituminous Coal	BIT	Source: 1	205.60000
Distillate Fuel Oil	DFO	Source: 1	161.30000
Geothermal	GEO	Estimate from EIA, Office of Integrated Analysis and Forecasting	16.59983
Jet Fuel	JF	Source: 1	156.30000
Kerosene	KER	Source: 1	159.40000
Lignite Coal	LIG	Source: 1	215.40000
Municipal Solid Waste	MSW	Source: 1 (including footnote 2 within source)	91.90000
Natural Gas	NG	Source: 1	117.00000
Petroleum Coke	PC	Source: 1	225.10000
Propane Gas	PG	Source: 1	139.00000
Residual Fuel Oil	RFO	Source: 1	173.70000
Coal-Derived Synthesis Gas	SGC	Assumed to have emissions similar to Natural Gas	117.00000
Synthesis Gas from Petroleum Coke	SGP	Assumed to have emissions similar to Natural Gas	117.00000
Subbituminous Coal	SUB	Source: 1	214.20000
Tire-Derived Fuel	TDF	Source: 1	189.50000
Waste Coal	WC	Assumed to have emissions similar to Bituminous Coal.	205.60000
Waste Oil	WO	Source: 2, Table 1.11-3 (assumes typical heat content of 4.4 MMBtus per barrel)	210.00000

Notes:
*** CO2 factors do not vary by combustion system type or boiler firing configuration.

Sources:
1. Energy Information Administration, Office of Integrated Analysis and Forecasting, Voluntary Reporting of Greenhouse Gases Program, Table of Fuel and Energy Source: Codes and Emission Coefficients; available at: http://www.eia.doe.gov/oiaf/1605/coefficients.html
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.4. Nitrogen Oxides Control Technology Emissions Reduction Factors

		Reduction Factor							
Nitrogen Oxides Control Technology	**EIA Code**	**Coal**	**Residual Fuel Oil and Distallate 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%

		Source of Selected Reduction Factor							
Nitrogen Oxides Control Technology	**EIA Code**	**Coal**	**Residual Fuel Oil and Distallate 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 Reductiona 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 Distallate 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, Mincipal Solid Waste, Tire-Derived Fuels, Sludge Waste, Agricultural Biproducts, 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

Unit	Equivalent
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