Independent Statistics & Analysis
U.S. Energy Information Administration

Electric Power Annual 2012

December 2013

Independent Statistics & Analysis
www.eia.gov

U.S. Department of Energy
Washington, DC 20585

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Table of Contents

Chapter 4. Generation Capacity

Chapter 5. Consumption of Fossil Fuels

Chapter 6. Fossil Fuel Stocks for Electricity Generation

Chapter 7. Receipts, Cost, and Quality of Fossil Fuels

Chapter 8. Electric Power System Characteristics and Performance

Chapter 9. Environmental Data

Chapter 10. Demand-Side Management and Advanced Metering

Appendix

Chapter 1

National Summary Data

Table 1.1. Total Electric Power Industry Summary Statistics, 2012 and 2011

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 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
Net Generation (Thousand Megawatthours)											
Coal	1,514,043	1,733,430	-12.7%	1,146,480	1,301,107	354,076	416,783	883	1,049	12,603	14,490
Petroleum Liquids	13,403	16,086	-16.7%	9,892	11,688	2,757	3,655	191	86	563	657
Petroleum Coke	9,787	14,096	-30.6%	5,664	9,428	1,758	3,431	6	3	2,359	1,234
Natural Gas	1,225,894	1,013,689	20.9%	504,958	414,843	627,833	511,447	6,603	5,487	86,500	81,911
Other Gas	11,898	11,566	2.9%	0	29	2,984	2,911	0	3	8,913	8,624
Nuclear	769,331	790,204	-2.6%	394,823	415,298	374,509	374,906	0	0	0	0
Hydroelectric Conventional	276,240	319,355	-13.5%	252,936	291,413	20,923	26,117	28	26	2,353	1,799
Renewable Sources Excluding Hydroelectric	218,333	193,981	12.6%	28,017	21,933	160,064	141,954	2,545	2,476	27,707	27,619
... Wind	140,822	120,177	17.2%	22,926	17,140	117,822	102,981	54	51	19	5
... Solar Thermal and Photovoltaic	4,327	1,818	138.0%	639	216	3,525	1,511	148	84	14	7
... Wood and Wood-Derived Fuels	37,799	37,449	0.9%	1,836	2,023	9,214	8,709	24	26	26,725	26,691
... Other Biomass	19,823	19,222	3.1%	1,472	1,417	15,084	14,573	2,319	2,315	948	917
... Geothermal	15,562	15,316	1.6%	1,143	1,137	14,419	14,180	0	0	0	0
Hydroelectric Pumped Storage	-4,950	-6,421	-22.9%	-4,202	-5,492	-748	-928	0	0	0	0
Other Energy Sources	13,787	14,154	-2.6%	603	604	7,030	7,059	1,046	950	5,108	5,541
All Energy Sources	4,047,765	4,100,141	-1.3%	2,339,172	2,460,851	1,551,186	1,487,335	11,301	10,080	146,107	141,875
Consumption of Fossil Fuels for Electricity Generation											
Coal (1000 tons)	825,734	934,938	-11.7%	615,467	689,316	205,295	239,541	307	347	4,665	5,735
Petroleum Liquids (1000 barrels)	22,604	27,326	-17.3%	17,521	20,844	4,110	5,633	272	133	702	716
Petroleum Coke (1000 tons)	3,675	5,012	-26.7%	2,105	3,449	756	1,277	1	1	812	286
Natural Gas (1000 Mcf)	9,484,710	7,883,865	20.3%	4,101,927	3,446,087	4,686,260	3,819,107	63,116	47,170	633,407	571,501
Consumption of Fossil Fuels for Useful Thermal Output											
Coal (1000 tons)	19,333	21,532	-10.2%	0	0	2,790	3,628	1,143	1,321	15,400	16,584
Petroleum Liquids (1000 barrels)	3,097	3,826	-19.0%	0	0	992	1,004	122	168	1,984	2,654
Petroleum Coke (1000 tons)	1,346	1,080	24.7%	0	0	113	112	11	6	1,222	962
Natural Gas (1000 Mcf)	886,103	839,681	5.5%	0	0	322,607	308,669	47,883	39,856	515,613	491,155
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output											
Coal (1000 tons)	845,066	956,470	-11.6%	615,467	689,316	208,085	243,168	1,450	1,668	20,065	22,319
Petroleum Liquids (1000 barrels)	25,702	31,152	-17.5%	17,521	20,844	5,102	6,637	394	301	2,685	3,370
Petroleum Coke (1000 tons)	5,021	6,092	-17.6%	2,105	3,449	869	1,388	13	6	2,034	1,248
Natural Gas (1000 Mcf)	10,370,812	8,723,546	18.9%	4,101,927	3,446,087	5,008,867	4,127,777	110,999	87,026	1,149,020	1,062,657

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 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Percentage Change
Residential	1,374,515	1,422,801	-3.4%	163,280	166,714	-2.1%	11.88	11.72	1.4%
Commercial	1,327,101	1,328,057	-0.1%	133,898	135,926	-1.5%	10.09	10.23	-1.4%
Industrial	985,714	991,316	-0.6%	65,761	67,606	-2.7%	6.67	6.82	-2.2%
Transportation	7,320	7,672	-4.6%	747	803	-6.9%	10.21	10.46	-2.4%
All Sectors	3,694,650	3,749,846	-1.5%	363,687	371,049	-2.0%	9.84	9.90	-0.6%

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.
Sources: U.S. Energy Information Administration, Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report.'
U.S. Energy Information Administration, Form EIA-923, 'Power Plant Operations Report.'

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(From Table 2.1.) Number of Ultimate Customers

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2002	116,622,037	15,333,700	601,744	N/A	1,066,554	133,624,035
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	124,937,469	17,562,726	774,713	727	N/A	143,275,635
2009	125,177,175	17,561,661	757,519	705	N/A	143,497,060
2010	125,717,935	17,674,338	747,746	239	N/A	144,140,258
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

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

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2002	1,265,180	1,104,497	990,238	N/A	105,552	3,465,466
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	1,379,981	1,335,981	1,009,300	7,700	N/A	3,732,962
2009	1,364,474	1,307,168	917,442	7,781	N/A	3,596,865
2010	1,445,708	1,330,199	970,873	7,712	N/A	3,754,493
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

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

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2002	106,834	87,117	48,336	N/A	7,124	249,411
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	155,433	138,469	68,920	827	N/A	363,650
2009	157,008	132,940	62,504	828	N/A	353,280
2010	166,782	135,559	65,750	815	N/A	368,906
2011	166,714	135,926	67,606	803	N/A	371,049
2012	163,280	133,898	65,761	747	N/A	363,687

Table 1.2. Summary Statistics for the United States, 2002 - 2012

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

Year	Residential	Commer-cial	Industrial	Transpor-tation	Other	Total
2002	8.44	7.89	4.88	N/A	6.75	7.20
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	10.36	6.83	10.74	N/A	9.74
2009	11.51	10.17	6.81	10.65	N/A	9.82
2010	11.54	10.19	6.77	10.57	N/A	9.83
2011	11.72	10.23	6.82	10.46	N/A	9.90
2012	11.88	10.09	6.67	10.21	N/A	9.84

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

Year	Purchases	Sales for Resale	Imports	Exports
2002	8,754,807	8,568,678	36,779	15,796
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

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(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
2002	1,933,130	94,567	691,006	11,463	780,064	264,329	10,354
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

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2002	555	38,665	14,491	15,044	-8,743	13,527	3,858,452
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

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(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
2002	315,350	59,651	312,512	2,008	98,657	79,356	4,417
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

Year	Solar Thermal and Photo-voltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Hydro Pumped Storage	Other Energy Sources	All Energy Sources
2002	397	5,844	2,252	3,800	20,371	686	905,301
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

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(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)
2002	987,583	168,597	6,126,062	131,230	17,676	15,036	866,529	146,881
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

	Total			
Year	Coal (Thousand Tons)	Petroleum (Thousand Barrels)	Natural Gas (Millions of Cubic Feet)	Other Gas (Millions of BTU)
2002	1,005,144	183,408	6,986,081	278,111
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

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(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)
2002	141,714	52,490	884,287	120,851	5,607,737	1.25	3.34	3.56
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
2012	185,116	34,698	841,183	40,364	9,531,389	2.38	12.48	3.42

(From Tables 8.3. and 8.5.) Revenues And Expenses

(Million Dollars)

	Major U.S. Investor-Owned Electric Utilities			U.S. Cooperative Borrower Owned Electric Utilities		
Year	Operating Revenues	Operating Expenses	Net Operating Income	Operating Revenues	Operating Expenses	Net Operating Income
2002	219,609	189,062	30,548	27,458	24,561	2,897
2003	230,151	201,057	29,094	29,228	26,361	2,867
2004	238,759	206,960	31,799	30,650	27,828	2,822
2005	265,652	236,786	28,866	34,088	31,209	2,879
2006	275,501	245,589	29,912	36,723	33,550	3,173
2007	270,964	241,198	29,766	38,208	34,843	3,365
2008	298,962	267,263	31,699	42,087	38,511	3,576
2009	276,124	244,243	31,881	42,189	38,337	3,852
2010	285,512	253,022	32,490	45,264	41,138	4,126
2011	280,520	247,118	33,402	46,146	42,099	4,047
2012	270,912	235,694	35,218	N/A	N/A	N/A

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(From Table 8.8.A.)

Summer Demand and Capacity

Year	Summer Net Internal Demand	Summer Capacity	Summer Capacity Margin
2002	696,376	833,380	16.4%
2003	696,752	856,131	18.6%
2004	692,908	875,870	20.9%
2005	746,470	882,125	15.4%
2006	776,479	891,226	12.9%
2007	766,786	914,397	16.1%
2008	744,151	909,504	18.2%
2009	713,106	916,449	22.2%
2010	746,513	923,599	19.2%
2011	759,642	892,426	14.9%
2012	768,943	927,060	17.1%

(From Table 9.1.) Emissions

(Thousand Metric Tons)

Year	Carbon Dioxide (CO2)	Sulfur Dioxide (SO2)	Nitrogen Oxides (NOx)
2002	2,423,963	10,881	5,194
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

Table 1.2. Summary Statistics for the United States, 2002 - 2012

(From Tables 10.1. and 10.5.) Demand Side Management Savings and Costs

	Energy Efficiency		Load Management		Total DSM Cost
Year	Energy Savings: Thousand MWh	Actual Peak Load Reduction: MW	Energy Savings: Thousand MWh	Actual Peak Load Reduction: MW	Thousand Dollars
2002	50,328	13,457	1,700	9,256	1,649,403
2003	48,254	13,585	1,935	9,298	1,340,686
2004	52,663	14,272	1,966	9,263	1,560,578
2005	59,000	15,394	930	10,341	1,939,115
2006	63,076	16,006	790	11,268	2,072,962
2007	67,278	17,773	1,859	12,545	2,604,711
2008	74,871	19,708	1,822	12,064	3,186,742
2009	76,912	19,761	1,027	11,972	3,607,076
2010	86,914	20,828	447	12,536	4,230,420
2011	120,659	26,314	556	12,126	5,544,396
2012	138,525	28,924	712	13,200	6,000,466

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, 2002 - 2012

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, 2002 through 2012

(From Chapter 2.) Supply (Million Megawatthours)

	Generation						
Year	Electric Utilities	IPP (Non-CHP)	IPP (CHP)	Commercial Sector	Industrial Sector	Total Imports	Total Supply
2002	2,549	955	194	7	153	37	3,895
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

(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
2002	3,307	141	17	166	16	248	3,895
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	3,434	286	14	132	24	287	4,176
2009	3,289	295	13	127	18	261	4,003
2010	3,365	379	10	132	19	265	4,170
2011	3,273	467	10	133	15	255	4,152
2012	3,172	514	8	138	12	263	4,107

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, 2002 through 2012

Year	Residential	Commercial	Industrial	Transportation	Other	Total
Total Electric Industry						
2002	116,622,037	15,333,700	601,744	N/A	1,066,554	133,624,035
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	124,937,469	17,562,726	774,713	727	N/A	143,275,635
2009	125,177,175	17,561,661	757,519	705	N/A	143,497,060
2010	125,717,935	17,674,338	747,746	239	N/A	144,140,258
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
Full-Service Providers						
2002	113,790,812	14,899,747	586,217	N/A	1,035,604	130,312,380
2003	115,029,545	16,136,616	695,616	1,042	N/A	131,862,819
2004	116,325,747	16,161,269	733,809	941	N/A	133,221,766
2005	118,469,928	16,389,549	719,219	496	N/A	135,579,192
2006	120,677,627	16,673,766	745,645	764	N/A	138,097,802
2007	121,782,003	16,767,635	771,637	710	N/A	139,321,985
2008	122,595,644	16,952,660	756,294	664	N/A	140,305,262
2009	122,533,214	16,860,320	736,751	666	N/A	140,130,951
2010	121,555,089	16,675,341	718,651	198	N/A	138,949,279
2011	120,306,190	16,321,174	682,906	56	N/A	137,310,326
2012	118,650,233	16,111,883	681,074	48	N/A	135,443,238
Energy-Only Providers						
2002	2,831,225	433,953	15,527	N/A	30,950	3,311,655
2003	2,250,936	412,903	17,605	85	N/A	2,681,529
2004	2,438,021	445,514	13,791	84	N/A	2,897,410
2005	2,290,911	482,391	14,643	22	N/A	2,787,967
2006	1,793,444	498,733	13,959	27	N/A	2,306,163
2007	2,167,913	609,584	22,130	40	N/A	2,799,667
2008	2,341,825	610,066	18,419	63	N/A	2,970,373
2009	2,643,961	701,341	20,768	39	N/A	3,366,109
2010	4,162,846	998,997	29,095	41	N/A	5,190,979
2011	5,836,882	1,316,888	45,014	36	N/A	7,198,820
2012	8,182,110	1,617,146	51,311	35	N/A	9,850,602

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, 2002 through 2012 (Megawatthours)

Year	Residential	Commercial	Industrial	Transportation	Other	Total	Direct Use	Total End Use
Total Electric Industry								
2002	1,265,179,869	1,104,496,607	990,237,631	N/A	105,551,904	3,465,466,011	166,184,296	3,631,650,307
2003	1,275,823,910	1,198,727,601	1,012,373,247	6,809,728	N/A	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	N/A	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	N/A	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	N/A	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	N/A	3,764,560,712	125,670,185	3,890,230,897
2008	1,379,981,104	1,335,981,135	1,009,300,309	7,699,632	N/A	3,732,962,180	132,196,685	3,865,158,865
2009	1,364,474,417	1,307,167,813	917,442,063	7,780,573	N/A	3,596,864,866	126,937,958	3,723,802,824
2010	1,445,708,403	1,330,199,364	970,872,874	7,712,412	N/A	3,754,493,053	131,910,249	3,886,403,302
2011	1,422,801,093	1,328,057,439	991,315,564	7,672,084	N/A	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	N/A	3,694,649,786	137,656,510	3,832,306,296
Full-Service Providers								
2002	1,248,349,458	1,036,366,268	937,138,192	N/A	102,238,786	3,324,092,704	N/A	3,324,092,704
2003	1,257,766,998	1,112,206,121	931,661,404	3,315,043	N/A	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	N/A	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	N/A	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	N/A	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	N/A	3,482,022,697	N/A	3,482,022,697
2008	1,362,811,730	1,152,674,093	929,246,647	2,515,304	N/A	3,447,247,774	N/A	3,447,247,774
2009	1,345,125,375	1,140,767,357	813,292,567	2,453,843	N/A	3,301,639,142	N/A	3,301,639,142
2010	1,409,355,244	1,123,328,313	840,091,476	2,440,567	N/A	3,375,215,600	N/A	3,375,215,600
2011	1,368,453,770	1,090,292,969	822,404,124	1,730,820	N/A	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	N/A	3,180,359,687	N/A	3,180,359,687
Energy-Only Providers								
2002	16,830,411	68,130,339	53,099,439	N/A	3,313,118	141,373,307	N/A	141,373,307
2003	18,056,912	86,521,480	80,711,843	3,494,685	N/A	188,784,920	N/A	188,784,920
2004	19,744,153	113,927,314	84,320,030	4,035,176	N/A	222,026,673	N/A	222,026,673
2005	19,658,832	123,751,159	89,480,133	4,164,507	N/A	237,054,631	N/A	237,054,631
2006	13,682,043	129,082,296	72,102,918	4,317,481	N/A	219,184,738	N/A	219,184,738
2007	16,790,870	155,526,154	104,683,894	5,537,097	N/A	282,538,015	N/A	282,538,015
2008	17,169,374	183,307,042	80,053,662	5,184,328	N/A	285,714,406	N/A	285,714,406
2009	19,349,042	166,400,456	104,149,496	5,326,730	N/A	295,225,724	N/A	295,225,724
2010	36,353,159	206,871,051	130,781,398	5,271,845	N/A	379,277,453	N/A	379,277,453
2011	54,347,323	237,764,470	168,911,440	5,941,264	N/A	466,964,497	N/A	466,964,497
2012	76,696,267	253,754,430	177,908,714	5,930,688	N/A	514,290,099	N/A	514,290,099

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, 2002 through 2012 (Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Other	Total
Total Electric Industry						
2002	106,834	87,117	48,336	N/A	7,124	249,411
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	155,433	138,469	68,920	827	N/A	363,650
2009	157,008	132,940	62,504	828	N/A	353,280
2010	166,782	135,559	65,750	815	N/A	368,906
2011	166,714	135,926	67,606	803	N/A	371,049
2012	163,280	133,898	65,761	747	N/A	363,687
Full-Service Providers						
2002	104,814	80,573	44,826	N/A	6,803	237,014
2003	109,165	87,764	46,686	226	N/A	243,841
2004	113,306	89,597	47,993	238	N/A	251,134
2005	125,983	97,405	52,113	249	N/A	275,749
2006	138,608	107,432	56,385	257	N/A	302,683
2007	145,642	109,703	56,950	232	N/A	312,527
2008	152,429	115,062	61,286	250	N/A	329,027
2009	153,723	112,111	53,345	226	N/A	319,405
2010	161,221	110,298	54,561	233	N/A	326,312
2011	158,788	108,318	54,285	162	N/A	321,552
2012	152,817	106,012	52,667	132	N/A	311,628
Restructured Retail Service Providers						
2002	2,020	6,545	3,510	N/A	321	12,396
2003	2,084	8,499	5,055	288	N/A	15,926
2004	2,272	10,949	5,484	281	N/A	18,985
2005	2,410	13,117	6,333	394	N/A	22,254
2006	1,974	15,482	5,922	445	N/A	23,823
2007	2,653	19,200	8,762	560	N/A	31,176
2008	3,004	23,407	7,635	577	N/A	34,622
2009	3,286	20,828	9,159	602	N/A	33,875
2010	5,560	25,261	11,190	582	N/A	42,593
2011	7,926	27,609	13,321	641	N/A	49,497
2012	10,464	27,886	13,094	615	N/A	52,059
Energy-Only Providers						
2002	914	3,989	2,408	N/A	143	7,454
2003	980	5,210	3,605	215	N/A	10,011
2004	1,086	6,859	3,881	201	N/A	12,027
2005	1,285	8,844	4,749	308	N/A	15,186
2006	1,127	10,792	4,510	356	N/A	16,784
2007	1,646	13,553	7,197	458	N/A	22,854
2008	1,873	17,126	6,212	455	N/A	25,667
2009	1,877	14,271	7,205	460	N/A	23,813
2010	3,230	16,999	8,664	425	N/A	29,318
2011	4,578	18,085	10,392	463	N/A	33,519
2012	5,776	17,397	9,895	432	N/A	33,500
Delivery-Only Providers						
2002	1,106	2,556	1,102	N/A	178	4,942
2003	1,104	3,289	1,450	72	N/A	5,915
2004	1,186	4,090	1,603	79	N/A	6,958
2005	1,125	4,273	1,584	86	N/A	7,068
2006	847	4,690	1,412	90	N/A	7,040
2007	1,007	5,647	1,565	102	N/A	8,322
2008	1,131	6,281	1,422	121	N/A	8,956
2009	1,409	6,557	1,954	143	N/A	10,062
2010	2,330	8,262	2,526	157	N/A	13,276
2011	3,348	9,523	2,929	178	N/A	15,978
2012	4,687	10,489	3,199	183	N/A	18,559

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 Sector 2002 through 2012 (Cents per kilowatthour)

Year	Residential	Commercial	Industrial	Transportation	Other	Total
Total Electric Industry						
2002	8.44	7.89	4.88	N/A	6.75	7.20
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	10.36	6.83	10.74	N/A	9.74
2009	11.51	10.17	6.81	10.65	N/A	9.82
2010	11.54	10.19	6.77	10.57	N/A	9.83
2011	11.72	10.23	6.82	10.46	N/A	9.90
2012	11.88	10.09	6.67	10.21	N/A	9.84
Full-Service Providers						
2002	8.40	7.77	4.78	N/A	6.65	7.13
2003	8.68	7.89	5.01	6.82	N/A	7.38
2004	8.91	8.02	5.14	7.47	N/A	7.55
2005	9.40	8.46	5.61	7.45	N/A	8.05
2006	10.36	9.18	6.0	8.44	N/A	8.77
2007	10.59	9.29	6.17	8.82	N/A	8.98
2008	11.18	9.98	6.60	9.96	N/A	9.54
2009	11.43	9.83	6.56	9.20	N/A	9.67
2010	11.44	9.82	6.49	9.55	N/A	9.67
2011	11.60	9.93	6.60	9.35	N/A	9.79
2012	11.77	9.88	6.52	9.50	N/A	9.80
Restructured Retail Service Providers						
2002	12.0	9.61	6.61	N/A	9.69	8.77
2003	11.54	9.82	6.26	8.23	N/A	8.44
2004	11.51	9.61	6.50	6.95	N/A	8.55
2005	12.26	10.60	7.08	9.47	N/A	9.39
2006	14.43	11.99	8.21	10.32	N/A	10.87
2007	15.80	12.35	8.37	10.11	N/A	11.03
2008	17.49	12.77	9.54	11.12	N/A	12.12
2009	16.98	12.52	8.79	11.31	N/A	11.47
2010	15.30	12.21	8.56	11.04	N/A	11.23
2011	14.58	11.61	7.89	10.79	N/A	10.60
2012	13.64	10.99	7.36	10.38	N/A	10.12
Energy-Only Providers						
2002	5.43	5.86	4.53	N/A	4.30	5.27
2003	5.43	6.02	4.47	6.16	N/A	5.30
2004	5.50	6.02	4.60	4.99	N/A	5.42
2005	6.54	7.15	5.31	7.40	N/A	6.41
2006	8.23	8.36	6.25	8.24	N/A	7.66
2007	9.80	8.71	6.87	8.28	N/A	8.09
2008	10.91	9.34	7.76	8.79	N/A	8.98
2009	9.70	8.58	6.92	8.63	N/A	8.07
2010	8.88	8.22	6.62	8.06	N/A	7.73
2011	8.42	7.61	6.15	7.80	N/A	7.18
2012	7.53	6.86	5.56	7.29	N/A	6.51
Delivery-Only Providers						
2002	6.57	3.75	2.08	N/A	5.39	3.50
2003	6.11	3.80	1.80	2.07	N/A	3.13
2004	6.0	3.59	1.90	1.96	N/A	3.13
2005	5.72	3.45	1.77	2.07	N/A	2.98
2006	6.19	3.63	1.96	2.08	N/A	3.21
2007	6.0	3.63	1.50	1.84	N/A	2.95
2008	6.59	3.43	1.78	2.34	N/A	3.13
2009	7.28	3.94	1.88	2.68	N/A	3.41
2010	6.41	3.99	1.93	2.98	N/A	3.50
2011	6.16	4.01	1.73	2.99	N/A	3.42
2012	6.11	4.13	1.80	3.09	N/A	3.61

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."

Table 2.5. Retail Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2003 - December 2012 (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	1,379,981	1,335,981	1,009,300	7,700	3,732,962
2009	1,364,474	1,307,168	917,442	7,781	3,596,865
2010	1,445,708	1,330,199	970,873	7,712	3,754,493
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
2010					
January	147,500	108,120	75,506	715	331,841
February	122,840	100,747	74,164	689	298,440
March	111,790	101,756	78,303	656	292,505
April	88,046	99,791	78,597	600	267,034
May	94,843	106,176	82,088	606	283,712
June	127,496	119,388	83,347	658	330,889
July	154,688	127,925	85,725	667	369,006
August	154,053	129,143	87,904	628	371,728
September	124,582	119,137	83,353	639	327,711
October	96,688	108,461	82,046	615	287,811
November	93,166	101,524	79,575	607	274,871
December	130,015	108,031	80,264	633	318,943
2011					
January	145,054	108,243	80,077	710	334,084
February	120,121	99,789	76,332	637	296,879
March	104,921	104,263	82,196	664	292,044
April	93,700	100,505	80,356	629	275,190
May	97,688	107,624	82,095	619	288,026
June	125,983	118,169	83,941	643	328,736
July	154,729	128,063	87,245	650	370,686
August	153,739	129,371	89,014	625	372,749
September	122,720	117,951	84,959	634	326,263
October	94,585	108,655	84,287	616	288,144
November	93,220	100,552	80,858	590	275,220
December	116,341	104,873	79,956	656	301,826
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

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 2012 (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	155,433	138,469	68,920	827	363,650
2009	157,008	132,940	62,504	828	353,280
2010	166,782	135,559	65,750	815	368,906
2011	166,714	135,926	67,606	803	371,049
2012	163,280	133,898	65,761	747	363,687
2010					
January	15,476	10,328	4,910	73	30,787
February	13,375	9,960	4,861	72	28,268
March	12,415	10,126	5,114	67	27,722
April	10,309	9,934	5,147	63	25,453
May	11,296	10,776	5,453	64	27,589
June	15,189	12,605	5,805	73	33,673
July	18,620	13,713	6,196	73	38,601
August	18,529	13,714	6,344	68	38,656
September	14,890	12,533	5,831	67	33,321
October	11,471	11,118	5,576	65	28,230
November	10,828	10,144	5,219	64	26,254
December	14,384	10,608	5,295	66	30,353
2011					
January	15,770	10,590	5,228	73	31,662
February	13,286	9,968	5,058	67	28,380
March	12,090	10,354	5,369	68	27,881
April	10,936	10,015	5,243	63	26,257
May	11,656	10,962	5,481	66	28,166
June	15,079	12,592	5,993	71	33,736
July	18,709	13,661	6,381	73	38,824
August	18,582	13,874	6,583	68	39,107
September	14,934	12,494	6,076	68	33,572
October	11,427	11,142	5,706	63	28,338
November	10,982	10,034	5,281	59	26,355
December	13,262	10,241	5,205	64	28,772
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

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 2.7. Average Retail Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2003 - December 2012 (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	10.36	6.83	10.74	9.74
2009	11.51	10.17	6.81	10.65	9.82
2010	11.54	10.19	6.77	10.57	9.83
2011	11.72	10.23	6.82	10.46	9.90
2012	11.88	10.09	6.67	10.21	9.84
2010					
January	10.49	9.55	6.50	10.17	9.28
February	10.89	9.89	6.55	10.48	9.47
March	11.11	9.95	6.53	10.28	9.48
April	11.71	9.95	6.55	10.52	9.53
May	11.91	10.15	6.64	10.52	9.72
June	11.91	10.56	6.96	11.14	10.18
July	12.04	10.72	7.23	10.95	10.46
August	12.03	10.62	7.22	10.86	10.40
September	11.95	10.52	7.00	10.53	10.17
October	11.86	10.25	6.80	10.49	9.81
November	11.62	9.99	6.56	10.47	9.55
December	11.06	9.82	6.60	10.39	9.52
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	7.31	11.21	10.47
August	12.09	10.72	7.40	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
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

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;
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Table 2.8. Retail Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2012 and 2011 (Million Kilowatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	47,208	47,481	44,864	45,018	27,818	27,927	566	569	120,456	120,995
Connecticut	12,758	12,919	12,976	13,087	3,566	3,668	193	185	29,492	29,859
Maine	4,481	4,382	4,053	4,018	3,027	3,016	0	0	11,561	11,415
Massachusetts	20,313	20,473	17,723	17,767	16,927	16,974	350	357	55,313	55,570
New Hampshire	4,439	4,454	4,478	4,478	1,953	1,936	0	0	10,870	10,869
Rhode Island	3,121	3,129	3,640	3,660	923	916	24	27	7,708	7,732
Vermont	2,095	2,125	1,994	2,009	1,422	1,417	0	0	5,511	5,550
Middle Atlantic	132,231	135,434	157,278	159,059	69,507	71,039	3,910	4,131	362,925	369,664
New Jersey	28,663	29,399	38,340	39,118	7,762	8,033	287	310	75,053	76,860
New York	50,692	51,240	76,018	76,406	13,705	13,420	2,748	2,981	143,163	144,047
Pennsylvania	52,876	54,796	42,920	43,536	48,039	49,585	875	840	144,710	148,757
East North Central	188,641	191,617	183,333	183,359	202,221	201,563	614	576	574,809	577,115
Illinois	46,902	47,057	50,808	50,468	45,277	44,844	553	516	143,540	142,886
Indiana	32,964	33,912	24,022	24,111	48,168	47,774	20	21	105,173	105,818
Michigan	34,461	34,811	38,514	38,613	31,836	31,624	7	5	104,818	105,054
Ohio	52,288	53,687	46,756	47,112	53,379	53,913	34	34	152,457	154,746
Wisconsin	22,026	22,150	23,233	23,055	23,561	23,407	0	0	68,820	68,612
West North Central	102,799	106,281	99,542	99,483	91,325	88,491	39	41	293,706	294,296
Iowa	13,988	14,327	12,210	12,088	19,512	19,240	0	0	45,709	45,655
Kansas	13,797	14,344	15,456	15,609	11,041	10,807	0	0	40,293	40,760
Minnesota	22,060	22,524	22,496	22,371	23,416	23,619	17	19	67,989	68,533
Missouri	34,337	35,941	30,483	30,962	17,594	17,330	22	22	82,435	84,255
Nebraska	9,680	9,947	9,233	9,139	11,915	10,590	0	0	30,828	29,676
North Dakota	4,485	4,552	5,109	4,866	5,124	4,319	0	0	14,717	13,737
South Dakota	4,454	4,646	4,557	4,447	2,724	2,586	0	0	11,734	11,680
South Atlantic	336,757	354,455	303,319	305,563	139,354	139,809	1,293	1,321	780,723	801,147
Delaware	4,522	4,632	4,243	4,260	2,755	2,591	0	0	11,519	11,483
District of Columbia	2,003	2,061	8,713	8,966	218	216	325	319	11,259	11,562
Florida	112,127	116,341	92,038	91,778	16,426	16,886	84	86	220,674	225,090
Georgia	53,660	57,750	45,937	46,930	31,225	31,521	157	171	130,979	136,371
Maryland	26,678	27,296	30,108	30,750	4,500	5,007	528	547	61,814	63,600
North Carolina	54,672	58,056	46,510	46,467	26,896	26,555	7	7	128,085	131,085
South Carolina	28,366	30,802	21,251	21,593	28,164	28,094	0	0	77,781	80,489
Virginia	43,535	45,771	46,757	47,051	17,316	17,218	188	188	107,795	110,228
West Virginia	11,195	11,746	7,763	7,768	11,856	11,720	4	4	30,817	31,239
East South Central	114,475	122,605	82,290	83,741	123,233	122,257	2	2	320,000	328,605
Alabama	30,632	33,003	21,799	22,257	33,751	33,735	0	0	86,183	88,995
Kentucky	26,097	27,198	18,756	18,721	44,196	43,619	0	0	89,048	89,538
Mississippi	17,993	19,336	13,585	13,738	16,810	16,263	0	0	48,388	49,338
Tennessee	39,754	43,068	28,150	29,025	28,476	28,638	2	2	96,381	100,733
West South Central	208,157	220,886	189,413	184,254	158,384	164,990	81	80	556,035	570,209
Arkansas	17,909	18,787	12,102	12,146	16,848	16,994	0	0	46,860	47,928
Louisiana	30,027	32,019	24,245	24,281	30,449	30,058	11	11	84,731	86,369
Oklahoma	22,810	24,425	19,961	19,613	16,570	15,809	0	0	59,341	59,847
Texas	137,412	145,654	133,105	128,214	94,517	102,129	70	68	365,104	376,065
Mountain	94,872	94,775	94,114	93,413	82,292	80,414	99	93	271,377	268,697
Arizona	32,923	33,079	29,692	29,512	12,448	12,352	0	0	75,063	74,944
Colorado	18,220	18,277	19,997	19,889	15,415	15,242	52	50	53,685	53,458
Idaho	8,159	8,390	5,978	5,969	9,574	8,912	0	0	23,712	23,272
Montana	4,778	4,913	4,918	4,892	4,168	3,983	0	0	13,863	13,788
Nevada	12,123	11,493	9,315	8,995	13,734	13,420	8	8	35,180	33,916
New Mexico	6,764	6,874	9,166	9,258	7,249	6,910	0	0	23,179	23,042
Utah	9,188	8,947	10,803	10,544	9,694	9,333	38	35	29,723	28,859
Wyoming	2,717	2,803	4,245	4,353	10,009	10,262	0	0	16,971	17,418
Pacific Contiguous	144,476	144,204	166,835	167,944	86,536	89,832	717	859	398,563	402,838
California	90,110	88,398	121,792	122,781	46,952	49,936	685	827	259,538	261,942
Oregon	18,855	19,429	15,804	15,754	12,006	11,963	25	25	46,689	47,171
Washington	35,511	36,376	29,240	29,409	27,579	27,933	7	7	92,336	93,725
Pacific Noncontiguous	4,899	5,063	6,113	6,223	5,043	4,995	0	0	16,056	16,281
Alaska	2,160	2,134	2,875	2,854	1,381	1,331	0	0	6,416	6,320
Hawaii	2,739	2,929	3,238	3,368	3,662	3,665	0	0	9,639	9,962
U.S. Total	1,374,515	1,422,801	1,327,101	1,328,057	985,714	991,316	7,320	7,672	3,694,650	3,749,846

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

Table 2.9. Revenue from Retail Sales of Electricity to Ultimate Customers by End-Use Sector, by State, 2012 and 2011 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	7,418	7,546	6,137	6,441	3,292	3,504	38	45	16,885	17,536
Connecticut	2,213	2,339	1,901	2,038	452	486	19	19	4,584	4,882
Maine	657	674	467	494	242	268	0	0	1,366	1,436
Massachusetts	3,029	3,003	2,453	2,547	2,127	2,270	17	22	7,627	7,842
New Hampshire	713	736	598	629	231	238	0	0	1,543	1,602
Rhode Island	450	449	432	453	99	103	2	4	982	1,008
Vermont	356	346	285	281	142	139	0	0	784	766
Middle Atlantic	20,195	21,395	20,395	21,712	5,206	5,803	489	509	46,285	49,419
New Jersey	4,524	4,773	4,899	5,268	816	918	28	33	10,267	10,991
New York	8,930	9,357	11,446	12,079	918	1,051	390	401	21,683	22,889
Pennsylvania	6,742	7,265	4,050	4,365	3,472	3,834	71	75	14,335	15,540
East North Central	22,730	22,595	17,336	17,404	13,164	13,153	39	40	53,269	53,191
Illinois	5,335	5,545	4,058	4,361	2,625	2,879	34	35	12,053	12,821
Indiana	3,470	3,410	2,196	2,116	3,053	2,946	2	2	8,721	8,474
Michigan	4,871	4,621	4,211	3,989	2,427	2,315	1	0	11,510	10,926
Ohio	6,148	6,133	4,429	4,535	3,328	3,298	2	2	13,908	13,969
Wisconsin	2,905	2,885	2,442	2,403	1,731	1,715	0	0	7,078	7,003
West North Central	10,888	10,751	8,446	8,185	5,733	5,380	3	3	25,069	24,319
Iowa	1,513	1,499	978	949	1,033	1,003	0	0	3,524	3,451
Kansas	1,551	1,527	1,427	1,370	783	725	0	0	3,761	3,623
Minnesota	2,504	2,469	1,989	1,930	1,531	1,528	2	2	6,025	5,929
Missouri	3,492	3,503	2,499	2,491	1,037	1,013	2	2	7,029	7,008
Nebraska	972	927	774	730	835	681	0	0	2,581	2,338
North Dakota	406	391	410	370	336	269	0	0	1,152	1,030
South Dakota	448	435	369	345	179	160	0	0	996	940
South Atlantic	38,314	39,652	28,421	28,912	9,129	9,317	109	119	75,973	78,000
Delaware	614	635	430	453	230	231	0	0	1,274	1,319
District of Columbia	246	276	1,048	1,157	12	15	29	32	1,335	1,481
Florida	12,807	13,389	8,895	9,040	1,320	1,444	7	8	23,029	23,880
Georgia	5,996	6,384	4,400	4,631	1,866	2,080	12	14	12,275	13,109
Maryland	3,425	3,634	3,141	3,468	364	439	44	49	6,974	7,590
North Carolina	5,963	5,955	4,030	3,780	1,727	1,597	1	1	11,721	11,332
South Carolina	3,338	3,405	2,046	2,008	1,696	1,669	0	0	7,080	7,081
Virginia	4,823	4,871	3,778	3,743	1,163	1,118	16	15	9,780	9,748
West Virginia	1,103	1,103	654	632	750	724	0	0	2,507	2,460
East South Central	11,814	12,429	8,124	8,203	7,530	7,566	0	0	27,468	28,197
Alabama	3,491	3,661	2,318	2,331	2,101	2,107	0	0	7,910	8,100
Kentucky	2,461	2,503	1,637	1,589	2,365	2,326	0	0	6,462	6,418
Mississippi	1,847	1,966	1,267	1,302	1,049	1,062	0	0	4,163	4,331
Tennessee	4,016	4,298	2,902	2,980	2,015	2,070	0	0	8,933	9,348
West South Central	21,435	23,019	15,131	15,767	8,529	9,899	8	8	45,104	48,692
Arkansas	1,665	1,694	934	911	971	957	0	0	3,570	3,562
Louisiana	2,514	2,870	1,880	2,050	1,449	1,711	1	1	5,844	6,632
Oklahoma	2,168	2,313	1,461	1,490	843	863	0	0	4,472	4,666
Texas	15,088	16,142	10,857	11,315	5,266	6,368	7	7	31,218	33,832
Mountain	10,378	10,012	8,464	8,275	5,083	4,892	10	9	23,935	23,189
Arizona	3,718	3,666	2,830	2,803	813	810	0	0	7,361	7,279
Colorado	2,088	2,059	1,878	1,878	1,071	1,076	5	5	5,042	5,018
Idaho	707	661	410	383	525	455	0	0	1,642	1,498
Montana	482	479	449	446	213	210	0	0	1,143	1,135
Nevada	1,434	1,334	822	814	891	892	1	1	3,148	3,041
New Mexico	769	756	855	840	423	419	0	0	2,047	2,015
Utah	912	802	870	775	545	476	4	3	2,331	2,057
Wyoming	268	255	350	336	603	555	0	0	1,221	1,146
Pacific Contiguous	18,699	17,924	19,885	19,506	6,735	6,842	52	70	45,370	44,342
California	13,822	13,061	16,327	16,018	4,925	5,046	49	67	35,123	34,193
Oregon	1,849	1,853	1,314	1,284	671	654	2	2	3,835	3,793
Washington	3,028	3,010	2,244	2,203	1,139	1,142	1	1	6,412	6,356
Pacific Noncontiguous	1,409	1,392	1,559	1,521	1,361	1,250	0	0	4,329	4,163
Alaska	386	376	429	431	232	209	0	0	1,048	1,016
Hawaii	1,023	1,016	1,130	1,090	1,129	1,041	0	0	3,281	3,147
U.S. Total	163,280	166,714	133,898	135,926	65,761	67,606	747	803	363,687	371,049

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Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

Table 2.10. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, 2012 and 2011 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	15.71	15.89	13.68	14.31	11.83	12.55	6.68	7.85	14.02	14.49
Connecticut	17.34	18.11	14.65	15.57	12.67	13.24	9.69	10.25	15.54	16.35
Maine	14.66	15.38	11.53	12.29	7.98	8.88	--	--	11.81	12.58
Massachusetts	14.91	14.67	13.84	14.33	12.57	13.38	4.91	6.14	13.79	14.11
New Hampshire	16.07	16.52	13.36	14.04	11.83	12.27	--	--	14.19	14.74
Rhode Island	14.40	14.33	11.87	12.37	10.68	11.27	8.28	14.11	12.74	13.04
Vermont	17.01	16.26	14.32	14.00	9.98	9.83	--	--	14.22	13.80
Middle Atlantic	15.27	15.80	12.97	13.65	7.49	8.17	12.50	12.32	12.75	13.37
New Jersey	15.78	16.23	12.78	13.47	10.52	11.43	9.77	10.69	13.68	14.30
New York	17.62	18.26	15.06	15.81	6.70	7.83	14.20	13.45	15.15	15.89
Pennsylvania	12.75	13.26	9.44	10.03	7.23	7.73	8.07	8.93	9.91	10.45
East North Central	12.05	11.79	9.46	9.49	6.51	6.53	6.33	6.92	9.27	9.22
Illinois	11.37	11.78	7.99	8.64	5.80	6.42	6.15	6.81	8.40	8.97
Indiana	10.53	10.06	9.14	8.77	6.34	6.17	9.56	9.74	8.29	8.01
Michigan	14.13	13.27	10.93	10.33	7.62	7.32	8.08	8.53	10.98	10.40
Ohio	11.76	11.42	9.47	9.63	6.24	6.12	6.98	6.64	9.12	9.03
Wisconsin	13.19	13.02	10.51	10.42	7.34	7.33	--	--	10.28	10.21
West North Central	10.59	10.12	8.48	8.23	6.28	6.08	7.72	7.52	8.54	8.26
Iowa	10.82	10.46	8.01	7.85	5.30	5.21	--	--	7.71	7.56
Kansas	11.24	10.65	9.24	8.78	7.09	6.71	--	--	9.33	8.89
Minnesota	11.35	10.96	8.84	8.63	6.54	6.47	8.67	8.23	8.86	8.65
Missouri	10.17	9.75	8.20	8.04	5.89	5.85	6.97	6.90	8.53	8.32
Nebraska	10.04	9.32	8.38	7.99	7.01	6.43	--	--	8.37	7.88
North Dakota	9.06	8.58	8.02	7.61	6.55	6.24	--	--	7.83	7.50
South Dakota	10.07	9.35	8.10	7.76	6.57	6.20	--	--	8.49	8.05
South Atlantic	11.38	11.19	9.37	9.46	6.55	6.66	8.44	9.03	9.73	9.74
Delaware	13.58	13.70	10.13	10.64	8.36	8.91	--	--	11.06	11.48
District of Columbia	12.28	13.40	12.02	12.90	5.46	6.89	9.01	10.19	11.85	12.81
Florida	11.42	11.51	9.66	9.85	8.04	8.55	8.45	8.81	10.44	10.61
Georgia	11.17	11.05	9.58	9.87	5.98	6.60	7.65	7.94	9.37	9.61
Maryland	12.84	13.31	10.43	11.28	8.09	8.76	8.29	9.03	11.28	11.93
North Carolina	10.91	10.26	8.66	8.13	6.42	6.01	7.88	7.04	9.15	8.64
South Carolina	11.77	11.05	9.63	9.30	6.02	5.94	--	--	9.10	8.80
Virginia	11.08	10.64	8.08	7.95	6.72	6.49	8.51	8.24	9.07	8.84
West Virginia	9.85	9.39	8.42	8.14	6.33	6.18	8.66	8.60	8.14	7.88
East South Central	10.32	10.14	9.87	9.80	6.11	6.19	11.28	12.07	8.58	8.58
Alabama	11.40	11.09	10.63	10.47	6.22	6.25	--	--	9.18	9.10
Kentucky	9.43	9.20	8.73	8.49	5.35	5.33	--	--	7.26	7.17
Mississippi	10.26	10.17	9.33	9.48	6.24	6.53	--	--	8.60	8.78
Tennessee	10.10	9.98	10.31	10.27	7.08	7.23	11.28	12.07	9.27	9.28
West South Central	10.30	10.42	7.99	8.56	5.39	6.00	10.30	9.85	8.11	8.54
Arkansas	9.30	9.02	7.71	7.50	5.76	5.63	11.23	11.10	7.62	7.43
Louisiana	8.37	8.96	7.75	8.44	4.76	5.69	8.72	8.33	6.90	7.68
Oklahoma	9.51	9.47	7.32	7.60	5.09	5.46	--	--	7.54	7.80
Texas	10.98	11.08	8.16	8.83	5.57	6.24	10.54	10.08	8.55	9.00
Mountain	10.94	10.56	8.99	8.86	6.18	6.08	9.62	9.48	8.82	8.63
Arizona	11.29	11.08	9.53	9.50	6.53	6.55	--	--	9.81	9.71
Colorado	11.46	11.27	9.39	9.44	6.95	7.06	9.69	9.79	9.39	9.39
Idaho	8.67	7.87	6.86	6.41	5.48	5.10	--	--	6.92	6.44
Montana	10.08	9.75	9.13	9.12	5.10	5.27	--	--	8.25	8.23
Nevada	11.83	11.61	8.83	9.05	6.48	6.65	8.40	8.58	8.95	8.97
New Mexico	11.37	11.00	9.32	9.07	5.83	6.06	--	--	8.83	8.74
Utah	9.93	8.96	8.06	7.35	5.62	5.10	9.79	9.24	7.84	7.13
Wyoming	9.85	9.11	8.24	7.72	6.03	5.41	--	--	7.19	6.58
Pacific Contiguous	12.94	12.43	11.92	11.61	7.78	7.62	7.21	8.13	11.38	11.01
California	15.34	14.78	13.41	13.05	10.49	10.11	7.17	8.14	13.53	13.05
Oregon	9.80	9.54	8.31	8.15	5.59	5.47	8.24	7.89	8.21	8.04
Washington	8.53	8.28	7.68	7.49	4.13	4.09	8.06	8.54	6.94	6.78
Pacific Noncontiguous	28.76	27.49	25.50	24.45	26.99	25.02	--	--	26.96	25.57
Alaska	17.88	17.62	14.93	15.10	16.82	15.71	--	--	16.33	16.08
Hawaii	37.34	34.68	34.88	32.37	30.82	28.40	--	--	34.04	31.59
U.S. Total	11.88	11.72	10.09	10.23	6.67	6.82	10.21	10.46	9.84	9.90

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Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.

Table 2.11. Electric Power Industry - Electricity Purchases, 2002 through 2012 (Thousand Megawatthours)

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2003	2,610,525	4,264,102	37,921	67,122	6,979,669
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

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, 2002 through 2012 (Thousand Megawatthours)

Year	Electric Utilities	Energy-Only Providers	Independent Power Producers	Combined Heat and Power	U.S. Total
2002	1,838,901	5,757,283	943,531	28,963	8,568,678
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

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, 2002-2012 (Megawatthours)

	Canada		Mexico		U.S. Total	
Year	Imports from	Exports to	Imports from	Exports to	Imports	Exports
2002	36,536,479	15,231,079	242,598	564,602	36,779,077	15,795,681
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

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, 2003 through 2012

Year	Residential	Commercial	Industrial	Transportation	Total
2003	819,579	56,423	1,124	--	877,126
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

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), 2002 - 2012

(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											
2002	1,933,130	78,701	15,867	691,006	11,463	780,064	264,329	79,109	-8,743	13,527	3,858,452
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
2010											
January	173,320	3,187	1,161	74,173	909	72,569	22,383	12,805	-565	1,014	360,957
February	153,044	1,251	1,122	66,198	825	65,245	20,590	10,901	-351	909	319,735
March	144,406	1,272	1,198	63,431	1,010	64,635	20,886	14,654	-325	1,002	312,168
April	126,952	1,220	1,067	64,644	943	57,611	19,097	15,607	-335	996	287,800
May	143,272	1,851	1,143	73,665	1,017	66,658	25,079	14,631	-441	1,060	327,936
June	165,491	2,656	1,333	92,268	964	68,301	29,854	14,209	-472	1,153	375,759
July	179,600	2,970	1,441	114,624	963	71,913	24,517	13,107	-557	1,146	409,725
August	177,745	2,419	1,157	121,151	1,061	71,574	20,119	13,100	-600	1,158	408,884
September	148,746	1,675	1,108	93,004	954	69,371	17,265	13,227	-421	1,116	346,045
October	132,270	1,221	1,007	77,738	808	62,751	17,683	13,791	-438	1,090	307,921
November	135,185	1,220	860	69,227	907	62,655	19,562	15,782	-467	1,079	306,010
December	167,258	2,395	1,128	77,573	952	73,683	23,169	15,359	-530	1,131	362,119
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

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 3.1.B. Net Generation from Renewable Sources: Total (All Sectors), 2002 - 2012

(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										
2002	10,354	N/A	N/A	38,665	N/A	N/A	N/A	14,491	264,329	N/A
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
2010										
January	6,854	6	4	3,126	671	632	200	1,312	22,383	35,188
February	5,432	11	22	2,895	623	557	203	1,159	20,590	31,490
March	8,589	21	55	3,090	728	660	204	1,307	20,886	35,539
April	9,764	34	78	2,932	693	667	198	1,240	19,097	34,704
May	8,698	43	110	2,893	690	696	191	1,311	25,079	39,710
June	8,049	52	124	3,094	720	691	215	1,264	29,854	44,063
July	6,724	47	114	3,308	713	684	243	1,274	24,517	37,624
August	6,686	49	107	3,319	716	682	243	1,297	20,119	33,219
September	7,106	49	89	3,157	707	664	204	1,253	17,265	30,493
October	7,944	36	40	3,003	670	645	232	1,222	17,683	31,474
November	9,748	43	34	3,080	713	668	244	1,252	19,562	35,344
December	9,059	32	12	3,275	731	682	236	1,330	23,169	38,528
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

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.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 3.2.A. Net Generation by Energy Source: Electric Utilities, 2002 - 2012

(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											
2002	1,514,670	52,838	6,286	229,639	206	507,380	242,302	3,089	-7,434	480	2,549,457
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
2010											
January	129,279	2,418	736	29,332	6	39,345	20,298	1,338	-427	36	222,362
February	113,856	890	696	25,880	6	34,945	18,752	1,087	-246	29	195,895
March	107,626	1,009	816	25,683	6	33,460	18,546	1,540	-232	37	188,491
April	95,791	923	675	25,721	5	30,946	16,812	1,777	-245	36	172,441
May	108,550	1,443	690	30,549	6	34,506	22,803	1,602	-356	42	199,835
June	124,451	2,132	837	36,530	6	35,835	27,661	1,449	-392	42	228,551
July	134,219	1,986	910	44,597	5	38,536	22,611	1,331	-474	34	243,756
August	132,743	1,785	758	47,474	5	38,021	18,465	1,431	-543	46	240,185
September	110,642	1,207	803	36,692	2	37,188	15,854	1,441	-353	45	203,521
October	97,612	877	645	31,613	1	31,226	15,718	1,542	-361	43	178,917
November	99,803	835	511	27,567	1	32,112	17,612	1,778	-397	34	179,858
December	123,456	1,752	730	30,978	2	38,722	20,970	1,610	-439	39	217,820
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

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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Table 3.2.B. Net Generation from Renewable Sources: Electric Utilities, 2002 - 2012

(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										
2002	213	N/A	N/A	709	N/A	N/A	N/A	1,402	242,302	N/A
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
2010										
January	918	4	0	216	74	11	14	101	20,298	21,636
February	706	5	0	185	73	9	19	90	18,752	19,839
March	1,145	7	0	167	96	13	22	90	18,546	20,086
April	1,406	10	0	166	75	14	20	85	16,812	18,589
May	1,229	11	0	168	74	13	20	88	22,803	24,405
June	1,043	11	0	191	74	14	22	93	27,661	29,110
July	910	10	0	206	71	14	25	96	22,611	23,943
August	1,002	10	0	214	70	14	27	94	18,465	19,896
September	1,036	10	0	198	70	11	22	94	15,854	17,295
October	1,146	9	0	181	69	15	24	98	15,718	17,260
November	1,354	8	0	218	67	13	24	93	17,612	19,391
December	1,194	7	0	217	65	12	18	96	20,970	22,580
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

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, 2002 - 2012

(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											
2002	395,943	22,241	8,368	378,044	1,763	272,684	18,189	44,466	-1,309	8,612	1,149,001
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
2010											
January	42,381	655	302	37,515	269	33,224	1,909	9,142	-138	507	125,766
February	37,605	266	314	33,676	241	30,300	1,669	7,669	-105	463	112,099
March	35,039	192	281	30,809	269	31,174	2,145	10,760	-93	502	111,080
April	29,824	228	283	32,403	268	26,666	2,087	11,509	-91	505	103,681
May	33,119	333	335	36,313	273	32,152	2,100	10,747	-84	533	115,821
June	39,461	459	364	48,503	259	32,466	2,050	10,402	-80	550	134,434
July	43,559	900	403	62,363	262	33,377	1,794	9,305	-83	558	152,439
August	43,105	568	265	65,487	244	33,553	1,554	9,193	-57	553	154,465
September	36,515	401	197	48,806	238	32,183	1,334	9,391	-68	540	129,537
October	33,051	267	248	39,263	169	31,525	1,843	9,914	-77	527	116,729
November	34,012	310	224	34,738	218	30,543	1,813	11,642	-70	545	113,975
December	42,038	540	280	38,897	205	34,962	2,054	11,282	-91	562	130,729
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

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 3.3.B. Net Generation from Renewable Sources: Independent Power Producers, 2002 - 2012
(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										
2002	10,141	N/A	N/A	8,300	N/A	N/A	N/A	13,089	18,189	N/A
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
2010										
January	5,936	2	4	795	574	538	82	1,211	1,909	11,051
February	4,725	6	22	741	530	484	91	1,069	1,669	9,337
March	7,443	14	55	772	610	564	86	1,217	2,145	12,905
April	8,356	23	78	671	596	562	68	1,155	2,087	13,596
May	7,468	32	110	662	595	583	74	1,223	2,100	12,847
June	7,005	40	124	764	623	582	94	1,171	2,050	12,452
July	5,812	36	114	855	619	582	108	1,178	1,794	11,099
August	5,683	39	107	861	623	574	105	1,203	1,554	10,747
September	6,068	38	89	776	614	557	89	1,159	1,334	10,724
October	6,796	26	40	706	578	550	94	1,124	1,843	11,757
November	8,392	35	34	716	622	576	109	1,159	1,813	13,455
December	7,864	24	12	801	643	589	116	1,233	2,054	13,335
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

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, 2002 - 2012

(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											
2002	992	426	6	4,310	0	0	13	1,065	0	603	7,415
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
2010											
January	116	12	1	367	0	0	6	140	0	66	709
February	102	10	1	339	0	0	6	114	0	51	623
March	91	7	1	351	0	0	7	137	0	66	661
April	80	8	1	326	0	0	11	147	0	73	645
May	84	12	0	326	0	0	12	152	0	79	666
June	97	10	0	350	0	0	11	153	0	77	699
July	110	18	0	459	0	0	4	149	0	72	812
August	105	11	1	490	0	0	1	155	0	77	838
September	89	9	1	421	0	0	2	152	0	77	750
October	80	6	1	419	0	0	4	137	0	66	712
November	69	3	1	401	0	0	6	138	0	64	683
December	88	11	1	476	0	0	11	141	0	66	793
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

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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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 3.4.B. Net Generation from Renewable Sources: Commerical Sector, 2002 - 2012

(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										
2002	0	N/A	N/A	13	N/A	N/A	N/A	0	13	N/A
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
2010										
January	1	0	0	2	21	83	33	0	6	146
February	1	0	0	2	18	63	30	0	6	120
March	2	0	0	2	20	83	31	0	7	144
April	2	0	0	2	22	91	31	0	11	158
May	2	0	0	2	20	99	30	0	12	164
June	1	1	0	2	22	95	33	0	11	164
July	1	1	0	2	23	88	35	0	4	153
August		1	0	2	23	94	35	0	1	156
September	1	1	0	2	21	96	32	0	2	153
October	2	0	0	2	22	80	31	0	4	141
November	2	0	0	2	23	78	33	0	6	144
December		1	0	2	22	81	33	0	11	151
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

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.
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.A. Net Generation by Energy Source: Industrial Sector, 2002 - 2012

(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											
2002	21,525	3,196	1,207	79,013	9,493	0	3,825	30,489	0	3,832	152,580
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
2010											
January	1,544	102	123	6,959	634	0	169	2,185	0	404	12,120
February	1,481	86	111	6,303	578	0	162	2,031	0	366	11,118
March	1,649	63	100	6,588	735	0	188	2,217	0	397	11,936
April	1,258	61	108	6,194	669	0	187	2,174	0	382	11,034
May	1,519	63	118	6,477	738	0	164	2,130	0	406	11,614
June	1,482	55	132	6,885	700	0	132	2,205	0	485	12,075
July	1,713	67	128	7,205	696	0	107	2,321	0	482	12,718
August	1,792	55	133	7,701	812	0	99	2,321	0	482	13,395
September	1,499	58	107	7,085	713	0	76	2,244	0	455	12,238
October	1,527	71	113	6,443	637	0	117	2,199	0	455	11,562
November	1,301	72	124	6,520	688	0	130	2,224	0	436	11,493
December	1,677	92	118	7,223	744	0	134	2,326	0	464	12,777
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

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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Table 3.5.B. Net Generation from Renewable Sources: Industrial Sector, 2002 - 2012

(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										
2002	0	N/A	N/A	29,643	N/A	N/A	N/A	0	3,825	N/A
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
2010										
January	0	0	0	2,114	1	0	71	0	169	2,355
February	0	0	0	1,967	1	0	63	0	162	2,193
March	0	0	0	2,149	2	0	66	0	188	2,404
April	0	0	0	2,094	2	0	79	0	187	2,362
May	0	0	0	2,061	2	0	67	0	164	2,294
June	0	0	0	2,137	1	0	66	0	132	2,337
July	0	0	0	2,246	1	0	74	0	107	2,429
August	0	0	0	2,243	1	0	77	0	99	2,420
September	0	0	0	2,182	1	0	60	0	76	2,320
October	0	0	0	2,114	1	0	83	0	117	2,316
November	0	0	0	2,145	1	0	78	0	130	2,353
December	0	0	0	2,255	1	0	70	0	134	2,460
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

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.
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 3.6. Net Generation
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	120,887	123,338	-2.0%	3,278	4,408	111,191	112,613	1,178	949	5,240	5,368
Connecticut	36,118	33,745	7.0%	37	93	35,347	33,208	397	211	337	233
Maine	14,429	15,974	-9.7%	0	1	10,186	10,890	208	176	4,035	4,907
Massachusetts	36,198	38,055	-4.9%	591	610	34,321	36,783	469	490	817	172
New Hampshire	19,264	20,066	-4.0%	2,017	2,994	17,170	17,020	49	20	29	31
Rhode Island	8,309	8,722	-4.7%	11	10	8,246	8,664	52	48	0	0
Vermont	6,570	6,776	-3.0%	623	700	5,920	6,049	3	4	23	24
Middle Atlantic	424,451	429,489	-1.2%	35,091	37,522	383,441	386,021	1,957	1,518	3,962	4,428
New Jersey	65,263	64,694	0.9%	-88	-173	64,043	63,548	534	509	774	811
New York	135,768	137,480	-1.2%	34,142	35,936	99,621	99,807	1,061	732	945	1,005
Pennsylvania	223,420	227,315	-1.7%	1,038	1,760	219,777	222,666	362	277	2,243	2,612
East North Central	613,916	629,676	-2.5%	308,307	334,633	292,989	283,163	2,046	1,747	10,573	10,133
Illinois	197,565	199,500	-1.0%	12,424	12,242	182,021	183,947	492	447	2,628	2,863
Indiana	114,696	122,131	-6.1%	99,681	104,840	11,522	14,049	232	224	3,261	3,019
Michigan	108,166	109,170	-0.9%	80,483	87,609	25,352	19,532	968	789	1,363	1,240
Ohio	129,746	135,586	-4.3%	75,184	85,007	52,962	49,445	283	172	1,317	962
Wisconsin	63,743	63,289	0.7%	40,535	44,934	21,132	16,191	72	115	2,004	2,050
West North Central	327,475	332,902	-1.6%	288,973	298,430	33,973	29,881	554	556	3,975	4,034
Iowa	56,675	56,372	0.5%	43,386	43,305	11,018	10,896	204	227	2,067	1,944
Kansas	44,425	45,360	-2.1%	39,949	42,583	4,411	2,776	0	0	65	1
Minnesota	52,194	53,120	-1.7%	42,338	44,311	8,358	7,072	173	167	1,324	1,570
Missouri	91,804	94,876	-3.2%	88,747	92,621	2,846	2,039	160	146	52	71
Nebraska	34,217	36,095	-5.2%	32,783	34,978	1,072	822	18	17	345	278
North Dakota	36,125	35,080	3.0%	31,983	30,795	4,019	4,116	0	0	123	169
South Dakota	12,034	11,999	0.3%	9,786	9,839	2,248	2,160	0	0	0	0
South Atlantic	747,508	762,286	-1.9%	603,305	625,341	124,669	117,707	701	782	18,833	18,456
Delaware	8,634	6,590	31.0%	12	20	7,846	6,169	4	5	771	397
District of Columbia	72	201	-64.3%	0	71	9	130	62	0	0	0
Florida	221,096	221,895	-0.4%	198,199	200,023	17,418	16,115	65	67	5,414	5,689
Georgia	122,306	124,749	-2.0%	100,995	106,662	16,512	13,327	31	25	4,769	4,736
Maryland	37,810	41,818	-9.6%	9	8	37,021	40,960	235	236	545	614
North Carolina	116,682	118,390	-1.4%	107,716	110,370	6,542	5,832	50	62	2,374	2,126
South Carolina	96,756	102,973	-6.0%	92,822	99,328	1,970	1,592	0	0	1,964	2,053
Virginia	70,739	66,671	6.1%	56,188	53,329	12,309	11,150	253	387	1,989	1,805
West Virginia	73,413	79,000	-7.1%	47,363	55,530	25,043	22,434	0	0	1,007	1,036
East South Central	375,137	387,365	-3.2%	313,555	336,824	51,152	41,317	186	150	10,244	9,074
Alabama	152,879	156,339	-2.2%	108,425	118,835	40,206	33,198	0	0	4,247	4,306
Kentucky	89,950	98,351	-8.5%	89,156	97,617	326	154	0	0	468	579
Mississippi	54,584	51,571	5.8%	41,077	41,831	10,505	7,884	22	24	2,980	1,831
Tennessee	77,724	81,104	-4.2%	74,897	78,540	114	81	164	126	2,548	2,356
West South Central	676,122	676,881	-0.1%	248,120	257,463	355,233	349,653	768	572	72,002	69,192
Arkansas	65,006	61,308	6.0%	44,190	44,715	18,867	14,657	6	6	1,942	1,930
Louisiana	103,408	105,491	-2.0%	52,048	54,924	23,325	22,195	45	47	27,990	28,325
Oklahoma	77,897	74,606	4.4%	56,746	58,374	20,286	15,411	10	23	855	798
Texas	429,813	435,477	-1.3%	95,135	99,451	292,756	297,390	707	497	41,215	38,138
Mountain	367,566	364,847	0.7%	289,964	295,901	73,862	65,460	357	262	3,383	3,224
Arizona	110,905	108,125	2.6%	92,800	94,062	17,791	13,699	121	68	193	296
Colorado	52,557	51,433	2.2%	41,539	44,123	10,920	7,224	25	22	72	64
Idaho	15,499	16,569	-6.5%	10,633	12,616	4,274	3,330	0	0	592	623
Montana	27,805	30,129	-7.7%	8,486	9,548	19,310	20,572	0	0	9	9
Nevada	35,173	31,936	10.1%	24,186	21,673	10,631	10,002	92	92	264	169
New Mexico	36,636	38,181	-4.0%	30,705	32,292	5,850	5,767	81	80	0	43
Utah	39,403	40,836	-3.5%	36,386	38,393	1,957	1,638	38	0	1,022	806
Wyoming	49,589	47,638	4.1%	45,228	43,195	3,128	3,228	0	0	1,232	1,215
Pacific Contiguous	377,287	375,763	0.4%	236,204	257,680	120,728	97,673	2,974	2,950	17,380	17,460
California	199,519	200,805	-0.6%	82,486	105,360	98,738	76,912	2,894	2,880	15,400	15,653
Oregon	60,933	59,695	2.1%	47,144	48,985	13,102	10,188	73	63	613	459
Washington	116,835	115,263	1.4%	106,574	103,334	8,888	10,573	7	7	1,366	1,349
Pacific Noncontiguous	17,416	17,594	-1.0%	12,375	12,650	3,949	3,846	579	593	513	506
Alaska	6,946	6,871	1.1%	6,362	6,274	220	209	278	275	87	113
Hawaii	10,469	10,723	-2.4%	6,013	6,376	3,729	3,636	301	318	426	393
U.S. Total	4,047,765	4,100,141	-1.3%	2,339,172	2,460,851	1,551,186	1,487,335	11,301	10,080	146,107	141,875

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Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.7. Net Generation from Coal
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	4,103	6,848	-40.1%	1,268	2,208	2,793	4,592	0	0	42	47
Connecticut	653	526	24.2%	0	0	653	526	0	0	0	0
Maine	45	55	-18.0%	0	0	30	38	0	0	15	18
Massachusetts	2,137	4,059	-47.4%	0	0	2,110	4,029	0	0	27	30
New Hampshire	1,268	2,208	-42.6%	1,268	2,208	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	93,597	114,184	-18.0%	36	25	92,867	112,953	11	4	683	1,202
New Jersey	1,897	4,155	-54.3%	0	0	1,897	4,155	0	0	0	0
New York	4,551	9,426	-51.7%	36	25	4,200	9,037	0	1	315	363
Pennsylvania	87,148	100,603	-13.4%	0	0	86,769	99,761	11	3	368	839
East North Central	344,771	398,389	-13.5%	250,318	285,135	91,071	109,458	308	401	3,075	3,395
Illinois	80,827	90,013	-10.2%	10,887	11,093	68,154	77,020	52	46	1,734	1,854
Indiana	92,461	104,153	-11.2%	86,532	95,404	5,747	8,570	133	132	49	46
Michigan	53,136	58,948	-9.9%	52,471	58,183	343	318	118	202	204	246
Ohio	85,589	105,337	-18.7%	68,519	81,470	16,827	23,551	2	1	240	315
Wisconsin	32,758	39,938	-18.0%	31,909	38,984	0	0	2	20	848	934
West North Central	214,964	232,119	-7.4%	211,689	228,675	0	0	228	275	3,048	3,170
Iowa	35,331	38,229	-7.6%	33,179	36,122	0	0	159	183	1,993	1,925
Kansas	27,983	31,656	-11.6%	27,983	31,656	0	0	0	0	0	0
Minnesota	22,723	28,259	-19.6%	22,107	27,429	0	0	0	5	616	824
Missouri	72,775	78,316	-7.1%	72,661	78,164	0	0	68	87	46	65
Nebraska	25,019	25,965	-3.6%	24,686	25,708	0	0	0	0	334	257
North Dakota	28,214	27,109	4.1%	28,155	27,011	0	0	0	0	60	98
South Dakota	2,919	2,586	12.9%	2,919	2,586	0	0	0	0	0	0
South Atlantic	266,385	324,436	-17.9%	219,174	272,063	44,770	49,415	48	77	2,393	2,882
Delaware	1,423	1,455	-2.2%	0	0	1,423	1,455	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	44,286	51,991	-14.8%	42,603	49,487	1,451	2,186	0	0	233	317
Georgia	40,715	60,159	-32.3%	40,197	59,452	0	0	0	0	518	707
Maryland	16,185	21,059	-23.1%	0	0	16,005	20,860	10	0	169	199
North Carolina	50,932	59,758	-14.8%	48,888	57,250	1,745	2,156	29	51	270	301
South Carolina	28,396	34,169	-16.9%	28,208	33,772	26	135	0	0	161	262
Virginia	14,181	19,881	-28.7%	12,573	17,243	970	1,959	9	26	628	653
West Virginia	70,267	75,964	-7.5%	46,704	54,859	23,150	20,664	0	0	413	441
East South Central	171,000	198,964	-14.1%	166,844	194,873	2,789	2,533	20	23	1,347	1,535
Alabama	45,607	56,807	-19.7%	45,378	56,539	32	58	0	0	197	211
Kentucky	82,762	91,656	-9.7%	82,762	91,656	0	0	0	0	0	0
Mississippi	7,212	9,723	-25.8%	4,455	7,248	2,757	2,476	0	0	0	0
Tennessee	35,419	40,777	-13.1%	34,249	39,430	0	0	20	23	1,150	1,324
West South Central	217,243	246,421	-11.8%	119,496	133,827	97,271	112,074	0	0	476	520
Arkansas	28,431	29,418	-3.4%	23,979	25,158	4,353	4,159	0	0	99	101
Louisiana	21,422	24,628	-13.0%	11,163	11,860	10,258	12,749	0	0	0	19
Oklahoma	29,302	34,479	-15.0%	27,142	32,204	1,783	1,882	0	0	377	393
Texas	138,088	157,897	-12.5%	57,211	64,604	80,877	93,285	0	0	0	7
Mountain	191,985	199,443	-3.7%	174,807	180,790	16,083	17,363	0	0	1,095	1,290
Arizona	40,116	43,702	-8.2%	39,930	43,412	0	0	0	0	185	291
Colorado	34,521	33,955	1.7%	34,371	33,792	142	163	0	0	8	0
Idaho	77	83	-8.0%	0	0	0	0	0	0	77	83
Montana	13,987	15,056	-7.1%	253	300	13,726	14,747	0	0	9	9
Nevada	4,079	5,407	-24.6%	2,964	4,093	1,115	1,315	0	0	0	0
New Mexico	24,994	27,141	-7.9%	24,994	27,141	0	0	0	0	0	0
Utah	30,799	33,138	-7.1%	29,976	32,277	418	419	0	0	405	441
Wyoming	43,412	40,961	6.0%	42,317	39,775	684	719	0	0	411	467
Pacific Contiguous	7,772	10,544	-26.3%	2,634	3,334	4,733	6,808	0	0	405	403
California	1,375	1,982	-30.6%	0	0	1,005	1,608	0	0	371	374
Oregon	2,634	3,334	-21.0%	2,634	3,334	0	0	0	0	0	0
Washington	3,763	5,229	-28.0%	0	0	3,728	5,200	0	0	35	29
Pacific Noncontiguous	2,222	2,080	6.8%	215	178	1,699	1,586	268	269	40	47
Alaska	685	656	4.4%	215	178	201	209	268	269	0	0
Hawaii	1,537	1,424	8.0%	0	0	1,498	1,377	0	0	40	47
U.S. Total	1,514,043	1,733,430	-12.7%	1,146,480	1,301,107	354,076	416,783	883	1,049	12,603	14,490

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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	413	639	-35.4%	52	120	267	374	49	55	45	90
Connecticut	112	166	-32.6%	4	5	104	155	0	0	4	5
Maine	84	178	-52.8%	0	1	65	89	2	3	16	85
Massachusetts	174	197	-11.2%	15	40	98	128	37	28	25	NM
New Hampshire	22	78	-72.1%	20	57	0	1	2	20	0	0
Rhode Island	18	14	31.0%	11	10	0	1	7	2	0	0
Vermont	3	8	-58.1%	2	6	0	0	1	2	0	0
Middle Atlantic	859	1,452	-40.9%	324	479	438	860	24	13	73	100
New Jersey	30	107	-71.7%	4	4	24	101	1	1	2	1
New York	580	926	-37.4%	319	475	169	345	22	11	70	96
Pennsylvania	248	419	-40.7%	0	0	245	414	2	2	2	3
East North Central	621	784	-20.8%	516	650	90	110	3	5	13	19
Illinois	71	84	-15.3%	24	28	47	56	0	0	0	0
Indiana	114	172	-33.3%	108	157	0	0	0	2	6	13
Michigan	138	179	-22.8%	134	174	0	0	2	3	3	2
Ohio	258	313	-17.5%	215	264	41	48	0	0	2	2
Wisconsin	39	36	9.0%	35	28	2	6	0	0	1	1
West North Central	292	311	-6.0%	282	301	7	4	1	2	3	4
Iowa	89	69	29.4%	87	68	2	1	0	0	0	0
Kansas	35	38	-8.1%	35	38	0	0	0	0	0	0
Minnesota	30	38	-21.9%	23	33	4	2	1	2	1	1
Missouri	78	80	-2.6%	78	79	0	0	0	0	0	1
Nebraska	23	37	-39.3%	23	37	0	0	0	0	0	0
North Dakota	33	42	-21.3%	32	40	0	0	0	0	1	2
South Dakota	6	8	-24.2%	5	7	1	1	0	0	0	0
South Atlantic	1,756	2,936	-40.2%	1,340	2,266	257	485	19	3	141	182
Delaware	22	38	-42.7%	1	2	21	36	0	0	0	0
District of Columbia	9	130	-92.8%	0	0	9	130	0	0	0	0
Florida	720	1,383	-47.9%	670	1,326	9	12	0	0	41	44
Georgia	73	137	-46.3%	27	71	2	4	1	2	43	59
Maryland	137	229	-40.0%	6	7	108	218	16	0	8	3
North Carolina	178	218	-18.1%	160	186	6	4	0	0	12	27
South Carolina	108	112	-2.8%	99	101	2	0	0	0	8	11
Virginia	364	503	-27.6%	234	394	100	69	1	1	29	37
West Virginia	143	188	-23.9%	143	178	1	10	0	0	0	0
East South Central	378	491	-23.0%	339	461	1	5	0	0	38	25
Alabama	110	120	-9.0%	74	96	1	5	0	0	34	19
Kentucky	107	139	-22.9%	107	139	0	0	0	0	0	0
Mississippi	17	36	-53.0%	13	33	0	0	0	0	4	3
Tennessee	144	195	-26.0%	144	193	0	0	0	0	0	2
West South Central	173	257	-32.8%	66	133	94	110	1	2	12	13
Arkansas	33	56	-41.7%	18	32	13	21	0	0	1	2
Louisiana	38	49	-22.7%	10	23	19	19	0	0	9	8
Oklahoma	11	16	-29.6%	11	15	0	0	0	1	0	0
Texas	91	137	-33.1%	27	63	62	70	1	1	2	3
Mountain	222	255	-12.6%	197	230	20	22	0	0	6	2
Arizona	42	53	-21.3%	41	52	0	0	0	0	1	2
Colorado	11	22	-50.3%	11	22	0	0	0	0	0	0
Idaho	0	0	-26.9%	0	0	0	0	0	0	0	0
Montana	13	18	-27.5%	0	2	13	16	0	0	0	0
Nevada	19	14	32.8%	13	10	6	4	0	0	0	0
New Mexico	46	38	22.1%	46	35	1	2	0	0	0	0
Utah	40	54	-26.3%	39	54	1	0	0	0	0	0
Wyoming	52	55	-6.5%	48	55	0	0	0	0	4	0
Pacific Contiguous	167	92	81.7%	45	49	21	17	86	1	14	24
California	134	47	187.5%	34	37	13	7	86	1	2	3
Oregon	6	8	-25.5%	6	7	0	0	0	0	0	1
Washington	27	37	-28.1%	5	6	9	11	0	0	13	20
Pacific Noncontiguous	8,521	8,869	-3.9%	6,732	6,999	1,561	1,667	8	4	219	199
Alaska	1,038	945	9.8%	986	892	0	0	7	3	45	50
Hawaii	7,483	7,924	-5.6%	5,746	6,107	1,561	1,667	1	1	174	149
U.S. Total	13,403	16,086	-16.7%	9,892	11,688	2,757	3,655	191	86	563	657

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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
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	76	344	-78.0%	0	0	0	263	0	0	76	81
New Jersey	40	58	-30.6%	0	0	0	0	0	0	40	58
New York	0	263	-100.0%	0	0	0	263	0	0	0	0
Pennsylvania	35	23	53.8%	0	0	0	0	0	0	35	23
East North Central	2,320	2,946	-21.3%	887	1,490	1,093	1,141	0	0	340	314
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	831	1,161	-28.4%	831	1,161	0	0	0	0	0	0
Michigan	187	163	14.2%	0	0	73	67	0	0	114	97
Ohio	1,023	1,075	-4.9%	0	0	1,020	1,075	0	0	3	0
Wisconsin	279	547	-49.0%	55	329	0	0	0	0	223	217
West North Central	17	91	-80.9%	12	88	0	0	6	3	0	0
Iowa	18	72	-75.7%	12	69	0	0	6	3	0	0
Kansas	0	19	-100.7%	0	19	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	950	2,313	-58.9%	646	1,898	0	0	0	0	305	415
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	646	1,898	-66.0%	646	1,898	0	0	0	0	0	0
Georgia	305	415	-26.5%	0	0	0	0	0	0	305	415
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	1,429	1,596	-10.4%	1,429	1,596	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	1,429	1,596	-10.4%	1,429	1,596	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	4,385	5,498	-20.3%	2,691	4,355	55	719	0	0	1,639	424
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	2,992	4,658	-35.8%	2,691	4,355	0	0	0	0	301	303
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	1,393	840	65.8%	0	0	55	719	0	0	1,337	121
Mountain	454	443	2.5%	0	0	454	443	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	454	443	2.5%	0	0	454	443	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	156	864	-82.0%	0	0	156	864	0	0	0	0
California	156	864	-82.0%	0	0	156	864	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	9,787	14,096	-30.6%	5,664	9,428	1,758	3,431	6	3	2,359	1,234

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.10. Net Generation from Natural Gas
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	62,490	63,236	-1.2%	345	357	58,757	59,763	901	700	2,488	2,416
Connecticut	16,537	15,188	8.9%	6	NM	15,801	14,715	397	211	333	227
Maine	6,044	6,877	-12.1%	0	0	4,057	4,850	26	0	1,960	2,026
Massachusetts	24,672	25,940	-4.9%	278	240	23,812	25,120	416	443	166	136
New Hampshire	7,050	6,658	5.9%	58	80	6,947	6,552	16	0	29	26
Rhode Island	8,185	8,571	-4.5%	0	0	8,140	8,525	45	46	0	0
Vermont	3	3	-22.5%	3	3	0	0	0	0	0	0
Middle Atlantic	140,809	117,798	19.5%	13,508	13,073	124,893	102,605	909	671	1,500	1,448
New Jersey	28,285	25,201	12.2%	33	0	27,578	24,587	192	121	481	493
New York	59,462	50,805	17.0%	13,472	13,068	45,132	36,993	605	499	253	246
Pennsylvania	53,062	41,792	27.0%	3	5	52,182	41,026	112	52	765	709
East North Central	81,616	47,583	71.5%	29,266	16,805	49,915	28,608	1,292	981	1,143	1,188
Illinois	11,189	5,956	87.9%	1,450	1,063	8,993	4,094	437	401	309	398
Indiana	14,471	10,064	43.8%	11,432	7,338	2,565	2,195	56	49	417	482
Michigan	21,748	12,982	67.5%	4,401	2,688	16,697	9,866	468	279	183	149
Ohio	22,665	12,338	83.7%	6,015	2,873	16,270	9,230	280	171	100	63
Wisconsin	11,542	6,243	84.9%	5,968	2,842	5,390	3,223	51	81	134	97
West North Central	19,062	12,000	58.8%	15,878	10,228	2,737	1,485	208	175	239	111
Iowa	1,941	991	95.8%	1,868	980	0	0	11	7	62	4
Kansas	2,860	2,535	12.8%	2,795	2,534	0	0	0	0	65	1
Minnesota	7,088	3,351	111.5%	5,746	2,533	1,157	648	105	107	79	64
Missouri	6,167	4,548	35.6%	4,495	3,651	1,580	838	91	58	1	1
Nebraska	770	426	80.8%	758	402	0	0	1	3	11	21
North Dakota	22	20	9.0%	0	0	0	0	0	0	22	20
South Dakota	214	129	65.6%	214	129	0	0	0	0	0	0
South Atlantic	262,975	212,696	23.6%	204,630	168,055	54,865	42,097	269	210	3,212	2,333
Delaware	6,815	4,731	44.0%	9	18	6,277	4,525	0	0	528	188
District of Columbia	62	71	-12.4%	0	71	0	0	62	0	0	0
Florida	149,700	136,364	9.8%	136,017	124,926	12,279	10,060	28	29	1,376	1,349
Georgia	42,539	26,544	60.3%	25,455	12,886	16,285	13,151	0	0	799	507
Maryland	4,945	2,311	114.0%	0	0	4,658	2,022	172	181	114	107
North Carolina	19,302	11,155	73.0%	15,966	8,539	3,258	2,556	6	1	72	60
South Carolina	14,332	12,936	10.8%	12,441	11,522	1,801	1,392	0	0	91	22
Virginia	25,038	18,332	36.6%	14,709	10,062	10,112	8,176	0	0	217	94
West Virginia	243	251	-3.4%	33	31	194	215	0	0	15	6
East South Central	105,279	82,452	27.7%	54,302	42,418	48,046	38,458	163	127	2,768	1,448
Alabama	55,705	47,681	16.8%	14,696	13,959	39,983	32,905	0	0	1,026	818
Kentucky	2,949	1,546	90.8%	2,401	1,163	317	144	0	0	231	238
Mississippi	38,550	29,966	28.6%	29,313	24,213	7,746	5,409	22	24	1,470	320
Tennessee	8,075	3,259	147.8%	7,892	3,083	0	0	142	103	41	73
West South Central	328,607	300,606	9.3%	89,027	82,714	177,322	157,723	726	528	61,532	59,641
Arkansas	17,117	12,947	32.2%	2,502	2,376	14,392	10,362	1	0	222	208
Louisiana	58,564	54,322	7.8%	22,525	22,071	12,042	8,058	45	47	23,952	24,147
Oklahoma	39,024	32,837	18.8%	26,971	24,140	11,939	8,585	10	22	105	90
Texas	213,901	200,500	6.7%	37,029	34,127	138,948	130,718	671	458	37,253	35,197
Mountain	84,720	71,090	19.2%	50,390	43,981	32,753	26,045	293	202	1,284	862
Arizona	30,295	23,253	30.3%	13,911	9,960	16,265	13,227	113	61	7	4
Colorado	10,524	10,186	3.3%	5,898	8,564	4,607	1,606	4	4	16	12
Idaho	1,898	1,111	70.9%	558	146	1,291	923	0	0	49	42
Montana	464	418	11.0%	439	406	25	12	0	0	0	0
Nevada	25,647	21,841	17.4%	18,798	15,389	6,527	6,225	60	60	262	168
New Mexico	8,799	8,566	2.7%	5,394	4,921	3,327	3,526	78	76	0	43
Utah	6,580	5,256	25.2%	5,363	4,566	695	518	38	0	484	172
Wyoming	513	459	11.8%	30	30	16	8	0	0	467	422
Pacific Contiguous	136,731	102,321	33.6%	44,048	33,363	78,546	54,662	1,839	1,890	12,298	12,406
California	119,668	88,974	34.5%	35,717	26,905	70,066	47,960	1,782	1,844	12,104	12,264
Oregon	11,625	8,498	36.8%	4,025	2,839	7,416	5,534	51	39	133	86
Washington	5,438	4,850	12.1%	4,307	3,620	1,064	1,168	7	6	61	56
Pacific Noncontiguous	3,606	3,906	-7.7%	3,566	3,846	0	0	3	3	37	57
Alaska	3,606	3,906	-7.7%	3,566	3,846	0	0	3	3	37	57
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,225,894	1,013,689	20.9%	504,958	414,843	627,833	511,447	6,603	5,487	86,500	81,911

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.11. Net Generation from Other Gases
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
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	740	755	-2.0%	0	0	0	41	0	3	740	711
New Jersey	142	139	2.2%	0	0	0	0	0	3	142	136
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	598	616	-3.0%	0	0	0	41	0	0	598	575
East North Central	4,059	3,075	32.0%	0	0	673	386	0	0	3,386	2,689
Illinois	294	319	-7.8%	0	0	8	0	0	0	286	318
Indiana	2,491	2,183	14.1%	0	0	0	0	0	0	2,491	2,183
Michigan	315	269	16.9%	0	0	315	269	0	0	0	0
Ohio	959	304	215.7%	0	0	350	116	0	0	609	188
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	35	39	-10.9%	0	0	0	0	0	0	35	39
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	35	39	-10.9%	0	0	0	0	0	0	35	39
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	394	400	-1.5%	0	0	0	0	0	0	394	400
Delaware	244	208	17.0%	0	0	0	0	0	0	244	208
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6	6	-2.2%	0	0	0	0	0	0	6	6
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	112	155	-27.4%	0	0	0	0	0	0	112	155
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	32	30	3.8%	0	0	0	0	0	0	32	30
East South Central	191	308	-38.0%	0	0	0	0	0	0	191	308
Alabama	178	292	-39.1%	0	0	0	0	0	0	178	292
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	13	17	-19.2%	0	0	0	0	0	0	13	17
West South Central	4,246	4,682	-9.3%	0	0	1,899	2,180	0	0	2,348	2,503
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,247	1,292	-3.5%	0	0	266	255	0	0	982	1,037
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,999	3,390	-11.5%	0	0	1,633	1,925	0	0	1,366	1,465
Mountain	294	305	-3.6%	0	0	7	7	0	0	286	298
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	-30.0%	0	0	0	0	0	0	0	0
Nevada	7	7	0.9%	0	0	7	7	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	4	33	-88.0%	0	0	0	0	0	0	4	33
Wyoming	282	265	6.6%	0	0	0	0	0	0	282	265
Pacific Contiguous	1,890	1,964	-3.8%	0	29	405	297	0	0	1,484	1,638
California	1,484	1,667	-11.0%	0	29	0	0	0	0	1,484	1,638
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	405	297	36.4%	0	0	405	297	0	0	0	0
Pacific Noncontiguous	50	38	30.8%	0	0	0	0	0	0	50	38
Alaska	3	3	-2.9%	0	0	0	0	0	0	3	3
Hawaii	47	35	33.4%	0	0	0	0	0	0	47	35
U.S. Total	11,898	11,566	2.9%	0	29	2,984	2,911	0	3	8,913	8,624

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	36,116	34,283	5.3%	0	0	36,116	34,283	0	0	0	0
Connecticut	17,078	15,928	7.2%	0	0	17,078	15,928	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	5,860	5,085	15.2%	0	0	5,860	5,085	0	0	0	0
New Hampshire	8,189	8,363	-2.1%	0	0	8,189	8,363	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	4,989	4,907	1.7%	0	0	4,989	4,907	0	0	0	0
Middle Atlantic	149,059	152,448	-2.2%	0	0	149,059	152,448	0	0	0	0
New Jersey	33,110	33,606	-1.5%	0	0	33,110	33,606	0	0	0	0
New York	40,775	42,695	-4.5%	0	0	40,775	42,695	0	0	0	0
Pennsylvania	75,174	76,147	-1.3%	0	0	75,174	76,147	0	0	0	0
East North Central	155,808	155,162	0.4%	22,842	26,248	132,966	128,914	0	0	0	0
Illinois	96,401	95,823	0.6%	0	0	96,401	95,823	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	28,020	32,889	-14.8%	22,842	26,248	5,178	6,641	0	0	0	0
Ohio	17,087	14,890	14.8%	0	0	17,087	14,890	0	0	0	0
Wisconsin	14,300	11,560	23.7%	0	0	14,300	11,560	0	0	0	0
West North Central	41,096	40,797	0.7%	36,749	35,582	4,347	5,215	0	0	0	0
Iowa	4,347	5,215	-16.6%	0	0	4,347	5,215	0	0	0	0
Kansas	8,285	7,319	13.2%	8,285	7,319	0	0	0	0	0	0
Minnesota	11,944	11,959	-0.1%	11,944	11,959	0	0	0	0	0	0
Missouri	10,718	9,371	14.4%	10,718	9,371	0	0	0	0	0	0
Nebraska	5,802	6,933	-16.3%	5,802	6,933	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	184,645	187,696	-1.6%	171,066	173,299	13,579	14,397	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	17,870	22,015	-18.8%	17,870	22,015	0	0	0	0	0	0
Georgia	33,942	32,306	5.1%	33,942	32,306	0	0	0	0	0	0
Maryland	13,579	14,397	-5.7%	0	0	13,579	14,397	0	0	0	0
North Carolina	39,386	40,527	-2.8%	39,386	40,527	0	0	0	0	0	0
South Carolina	51,145	52,903	-3.3%	51,145	52,903	0	0	0	0	0	0
Virginia	28,723	25,548	12.4%	28,723	25,548	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	73,239	76,612	-4.4%	73,239	76,612	0	0	0	0	0	0
Alabama	40,841	39,356	3.8%	40,841	39,356	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	7,296	10,337	-29.4%	7,296	10,337	0	0	0	0	0	0
Tennessee	25,102	26,919	-6.8%	25,102	26,919	0	0	0	0	0	0
West South Central	69,593	70,458	-1.2%	31,152	30,809	38,441	39,648	0	0	0	0
Arkansas	15,493	14,194	9.1%	15,493	14,194	0	0	0	0	0	0
Louisiana	15,659	16,615	-5.8%	15,659	16,615	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	38,441	39,648	-3.0%	0	0	38,441	39,648	0	0	0	0
Mountain	31,934	31,278	2.1%	31,934	31,278	0	0	0	0	0	0
Arizona	31,934	31,278	2.1%	31,934	31,278	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	27,841	41,470	-32.9%	27,841	41,470	0	0	0	0	0	0
California	18,507	36,663	-49.5%	18,507	36,663	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	9,334	4,806	94.2%	9,334	4,806	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	769,331	790,204	-2.6%	394,823	415,298	374,509	374,906	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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	7,360	8,732	-15.7%	950	1,148	5,966	6,795	5	6	440	783
Connecticut	312	567	-45.0%	27	53	286	514	0	0	0	0
Maine	3,733	3,979	-6.2%	0	0	3,320	3,231	0	0	412	748
Massachusetts	912	1,149	-20.6%	230	281	673	856	5	6	4	6
New Hampshire	1,289	1,605	-19.7%	324	359	965	1,241	0	0	0	5
Rhode Island	4	7	-42.4%	0	0	4	7	0	0	0	0
Vermont	1,109	1,425	-22.1%	369	455	717	945	0	0	23	24
Middle Atlantic	26,905	31,239	-13.9%	21,762	24,556	5,079	6,603	4	6	61	75
New Jersey	11	24	-55.9%	0	0	11	24	0	0	0	0
New York	24,652	27,997	-11.9%	20,728	22,801	3,860	5,116	4	6	61	75
Pennsylvania	2,242	3,217	-30.3%	1,035	1,755	1,207	1,462	0	0	0	0
East North Central	3,696	4,437	-16.7%	3,340	3,979	208	276	4	0	143	183
Illinois	111	140	-20.8%	50	47	59	93	2	0	0	0
Indiana	434	409	6.0%	434	409	0	0	0	0	0	0
Michigan	1,215	1,357	-10.5%	1,111	1,231	78	97	0	0	26	29
Ohio	414	384	8.0%	414	384	0	0	0	0	0	0
Wisconsin	1,522	2,147	-29.1%	1,332	1,909	71	85	2	0	117	153
West North Central	11,767	13,677	-14.0%	11,529	13,377	164	183	0	0	74	117
Iowa	766	925	-17.2%	761	917	6	8	0	0	0	0
Kansas	10	15	-29.5%	0	0	10	15	0	0	0	0
Minnesota	561	746	-24.8%	339	469	148	160	0	0	74	117
Missouri	714	1,185	-39.7%	714	1,185	0	0	0	0	0	0
Nebraska	1,257	1,617	-22.3%	1,257	1,617	0	0	0	0	0	0
North Dakota	2,477	2,580	-4.0%	2,477	2,580	0	0	0	0	0	0
South Dakota	5,981	6,608	-9.5%	5,981	6,608	0	0	0	0	0	0
South Atlantic	11,667	13,545	-13.9%	8,493	9,825	2,209	3,121	12	10	953	590
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	151	182	-17.3%	151	182	0	0	0	0	0	0
Georgia	2,236	2,705	-17.3%	2,212	2,679	6	7	0	0	19	19
Maryland	1,657	2,547	-35.0%	0	0	1,657	2,547	0	0	0	0
North Carolina	3,728	3,893	-4.2%	3,311	3,859	30	24	11	10	375	1
South Carolina	1,420	1,554	-8.6%	1,367	1,511	53	43	0	0	0	0
Virginia	1,044	1,210	-13.8%	969	1,132	62	68	0	0	12	11
West Virginia	1,431	1,453	-1.5%	483	462	401	433	0	0	547	559
East South Central	18,093	21,429	-15.6%	17,461	21,419	8	10	0	0	623	0
Alabama	7,435	8,884	-16.3%	7,435	8,884	0	0	0	0	0	0
Kentucky	2,362	2,969	-20.5%	2,353	2,960	8	10	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	8,296	9,576	-13.4%	7,673	9,576	0	0	0	0	623	0
West South Central	4,608	6,072	-24.1%	3,850	4,949	758	1,123	0	0	0	0
Arkansas	2,198	2,958	-25.7%	2,156	2,919	43	39	0	0	0	0
Louisiana	680	1,044	-34.9%	0	0	680	1,044	0	0	0	0
Oklahoma	1,146	1,507	-24.0%	1,146	1,507	0	0	0	0	0	0
Texas	584	563	3.8%	549	523	36	40	0	0	0	0
Mountain	34,743	42,097	-17.5%	30,089	37,070	4,653	5,026	0	0	0	0
Arizona	6,717	9,174	-26.8%	6,717	9,174	0	0	0	0	0	0
Colorado	1,497	2,083	-28.1%	1,430	1,915	68	167	0	0	0	0
Idaho	10,940	13,405	-18.4%	10,005	12,470	935	934	0	0	0	0
Montana	11,283	12,596	-10.4%	7,693	8,740	3,590	3,856	0	0	0	0
Nevada	2,440	2,191	11.4%	2,399	2,144	42	46	0	0	0	0
New Mexico	223	195	14.4%	223	195	0	0	0	0	0	0
Utah	748	1,230	-39.2%	740	1,217	8	13	0	0	0	0
Wyoming	893	1,224	-27.0%	883	1,214	10	10	0	0	0	0
Pacific Contiguous	155,712	176,690	-11.9%	153,857	173,726	1,851	2,956	3	5	1	3
California	26,837	42,557	-36.9%	25,548	40,157	1,286	2,396	3	5	0	0
Oregon	39,410	42,315	-6.9%	39,111	42,017	299	298	0	0	0	0
Washington	89,464	91,818	-2.6%	89,197	91,552	265	263	0	0	1	3
Pacific Noncontiguous	1,690	1,438	17.5%	1,604	1,365	27	25	0	0	59	49
Alaska	1,575	1,345	17.1%	1,575	1,345	0	0	0	0	0	0
Hawaii	115	93	23.0%	29	20	27	25	0	0	59	49
U.S. Total	276,240	319,355	-13.5%	252,936	291,413	20,923	26,117	28	26	2,353	1,799

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.14. Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	8,557	8,015	6.8%	664	574	5,652	5,352	136	104	2,105	1,985
Connecticut	667	660	1.0%	0	0	667	660	0	0	0	0
Maine	4,099	4,495	-8.8%	0	0	2,468	2,421	92	89	1,539	1,985
Massachusetts	1,843	1,207	52.8%	68	48	1,198	1,145	11	13	566	0
New Hampshire	1,381	1,091	26.6%	347	291	1,003	800	31	0	0	0
Rhode Island	102	130	-21.8%	0	0	102	130	0	0	0	0
Vermont	465	433	7.5%	249	235	214	196	2	2	0	0
Middle Atlantic	10,932	9,950	9.9%	41	19	9,625	8,766	544	476	722	689
New Jersey	1,281	956	34.0%	41	19	1,044	690	194	246	1	0
New York	5,192	4,896	6.1%	0	0	4,727	4,559	220	110	246	226
Pennsylvania	4,459	4,099	8.8%	0	0	3,854	3,516	130	120	475	463
East North Central	20,666	17,149	20.5%	1,791	1,137	16,813	14,107	235	194	1,828	1,711
Illinois	8,373	6,865	22.0%	14	11	8,358	6,854	0	0	0	1
Indiana	3,546	3,621	-2.1%	286	295	3,209	3,284	22	21	29	20
Michigan	3,785	2,962	27.8%	274	5	2,510	2,116	196	158	806	683
Ohio	1,739	936	85.8%	20	16	1,367	536	0	0	352	384
Wisconsin	3,223	2,765	16.6%	1,197	810	1,370	1,317	16	15	641	624
West North Central	39,730	33,325	19.2%	12,555	9,852	26,570	22,844	83	78	521	552
Iowa	14,183	10,870	30.5%	7,479	5,149	6,664	5,671	28	34	12	15
Kansas	5,253	3,779	39.0%	852	1,018	4,401	2,761	0	0	0	0
Minnesota	9,454	8,406	12.5%	2,016	1,741	6,901	6,113	38	30	499	522
Missouri	1,299	1,240	4.7%	28	35	1,266	1,201	0	0	5	4
Nebraska	1,347	1,116	20.6%	258	280	1,072	822	17	14	0	0
North Dakota	5,280	5,245	0.7%	1,256	1,120	4,019	4,116	0	0	6	10
South Dakota	2,915	2,668	9.2%	667	509	2,248	2,160	0	0	0	0
South Atlantic	17,334	16,621	4.3%	1,056	1,027	6,784	6,008	241	305	9,253	9,281
Delaware	131	158	-17.0%	2	0	125	153	4	5	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,524	4,670	-3.1%	243	188	2,243	2,371	37	39	2,001	2,073
Georgia	3,279	3,190	2.8%	0	0	219	165	29	23	3,030	3,001
Maryland	898	822	9.3%	3	0	717	616	36	55	141	150
North Carolina	2,704	2,345	15.3%	4	10	1,362	986	4	0	1,334	1,350
South Carolina	2,143	2,129	0.7%	458	410	40	22	0	0	1,646	1,698
Virginia	2,358	2,196	7.4%	345	419	782	585	130	183	1,101	1,009
West Virginia	1,297	1,112	16.6%	0	0	1,297	1,112	0	0	0	0
East South Central	5,455	5,779	-5.6%	96	96	307	312	NM	0	5,050	5,371
Alabama	2,777	2,817	-1.4%	1	1	190	231	0	0	2,586	2,585
Kentucky	333	436	-23.7%	95	95	0	0	0	0	238	342
Mississippi	1,509	1,506	0.2%	0	0	3	0	0	0	1,506	1,506
Tennessee	836	1,020	-18.0%	0	0	114	81	NM	0	720	939
West South Central	46,628	42,213	10.5%	1,912	794	39,392	36,075	41	43	5,282	5,300
Arkansas	1,660	1,668	-0.4%	0	0	65	76	6	5	1,590	1,587
Louisiana	2,430	2,443	-0.5%	0	0	60	70	0	0	2,370	2,372
Oklahoma	8,521	5,919	43.9%	1,594	660	6,564	4,945	0	0	363	314
Texas	34,017	32,183	5.7%	319	134	32,704	30,984	36	38	958	1,027
Mountain	22,677	19,305	17.5%	2,700	2,636	19,510	16,185	64	60	403	424
Arizona	1,698	529	220.7%	188	65	1,502	457	8	7	0	0
Colorado	6,192	5,367	15.4%	74	73	6,093	5,273	21	18	3	3
Idaho	2,515	1,892	32.9%	70	0	2,048	1,472	0	0	397	420
Montana	1,262	1,265	-0.3%	101	99	1,161	1,166	0	0	0	0
Nevada	2,969	2,437	21.8%	0	0	2,934	2,404	32	32	3	1
New Mexico	2,574	2,242	14.8%	48	0	2,522	2,238	4	3	0	0
Utah	1,100	961	14.4%	269	278	831	683	0	0	0	0
Wyoming	4,369	4,612	-5.3%	1,951	2,120	2,418	2,491	0	0	0	0
Pacific Contiguous	45,388	40,727	11.4%	7,160	5,746	34,748	31,737	1,046	1,054	2,434	2,190
California	29,967	27,222	10.1%	2,105	1,658	26,055	23,858	1,024	1,031	783	675
Oregon	7,207	5,490	31.3%	1,369	789	5,344	4,314	22	24	472	363
Washington	8,214	8,014	2.5%	3,687	3,298	3,348	3,565	0	0	1,179	1,151
Pacific Noncontiguous	965	897	7.6%	41	51	662	568	153	161	109	116
Alaska	40	16	154.0%	19	12	18	0	0	0	3	3
Hawaii	925	881	5.0%	22	39	644	568	153	161	106	112
U.S. Total	218,333	193,981	12.6%	28,017	21,933	160,064	141,954	2,545	2,476	27,707	27,619

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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	-305	-435	-29.9%	0	0	-305	-435	0	0	0	0
Connecticut	3	6	-51.5%	0	0	3	6	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-308	-440	-30.1%	0	0	-308	-440	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	-1,022	-1,124	-9.0%	-579	-630	-443	-494	0	0	0	0
New Jersey	-166	-197	-15.6%	-166	-197	0	0	0	0	0	0
New York	-413	-433	-4.6%	-413	-433	0	0	0	0	0	0
Pennsylvania	-443	-494	-10.2%	0	0	-443	-494	0	0	0	0
East North Central	-773	-945	-18.2%	-773	-945	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	-773	-945	-18.2%	-773	-945	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	33	114	-70.7%	33	114	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	33	114	-70.7%	33	114	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	-3,099	-3,093	0.2%	-3,099	-3,093	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	-838	-734	14.2%	-838	-734	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	-896	-890	0.7%	-896	-890	0	0	0	0	0	0
Virginia	-1,366	-1,470	-7.1%	-1,366	-1,470	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-163	-660	-75.3%	-163	-660	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	-163	-660	-75.3%	-163	-660	0	0	0	0	0	0
West South Central	-74	-119	-37.4%	-74	-119	0	0	0	0	0	0
Arkansas	42	34	23.2%	42	34	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-117	-153	-23.8%	-117	-153	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-165	-122	34.9%	-165	-122	0	0	0	0	0	0
Arizona	79	121	-34.4%	79	121	0	0	0	0	0	0
Colorado	-244	-243	0.4%	-244	-243	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	618	-37	NM	618	-37	0	0	0	0	0	0
California	575	-89	-747.4%	575	-89	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	44	52	-16.1%	44	52	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	-4,950	-6,421	-22.9%	-4,202	-5,492	-748	-928	0	0	0	0

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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	2,153	2,019	6.7%	0	0	1,944	1,888	88	84	121	46
Connecticut	756	705	7.3%	0	0	756	704	0	0	0	1
Maine	424	390	8.7%	0	0	245	261	88	84	92	45
Massachusetts	906	860	5.5%	0	0	877	860	0	0	29	0
New Hampshire	66	64	2.6%	0	0	66	64	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	2,497	2,441	2.3%	0	0	1,924	1,975	465	344	107	122
New Jersey	633	644	-1.7%	0	0	378	383	147	138	107	122
New York	968	905	7.0%	0	0	757	799	211	106	0	0
Pennsylvania	896	893	0.4%	0	0	789	792	107	100	0	0
East North Central	1,133	1,095	3.4%	121	133	159	163	205	166	648	633
Illinois	299	299	0.2%	0	0	0	6	0	0	299	293
Indiana	347	369	-6.1%	57	76	0	0	20	19	269	274
Michigan	395	363	8.7%	25	26	159	157	185	146	27	34
Ohio	12	10	19.2%	0	0	0	0	0	0	12	10
Wisconsin	80	54	47.4%	39	31	0	0	0	0	41	23
West North Central	478	428	11.7%	246	213	149	150	28	24	55	41
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	394	362	9.0%	163	148	149	150	28	23	55	41
Missouri	20	21	-7.6%	20	21	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	64	44	44.0%	64	44	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,501	4,735	-4.9%	0	0	2,205	2,183	113	177	2,183	2,375
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	3,194	3,385	-5.7%	0	0	1,436	1,486	0	0	1,757	1,899
Georgia	56	28	101.1%	0	0	0	0	0	0	56	28
Maryland	296	299	-0.7%	0	0	296	298	1	0	0	0
North Carolina	452	493	-8.3%	0	0	141	106	0	0	311	387
South Carolina	106	60	76.1%	0	0	48	0	0	0	58	60
Virginia	397	470	-15.6%	0	0	284	293	113	176	1	1
West Virginia	0	0	-100.0%	0	0	0	0	0	0	0	0
East South Central	235	396	-40.5%	8	9	0	0	0	0	227	387
Alabama	227	383	-40.8%	0	0	0	0	0	0	227	383
Kentucky	8	9	-9.8%	8	9	0	0	0	0	0	0
Mississippi	0	3	-99.2%	0	0	0	0	0	0	0	3
Tennessee	1	1	-50.1%	0	0	0	0	0	0	1	1
West South Central	714	792	-9.9%	0	0	0	0	0	0	714	792
Arkansas	30	32	-6.2%	0	0	0	0	0	0	30	32
Louisiana	376	440	-14.5%	0	0	0	0	0	0	376	440
Oklahoma	10	2	552.9%	0	0	0	0	0	0	10	2
Texas	298	319	-6.6%	0	0	0	0	0	0	298	319
Mountain	702	753	-6.8%	12	38	381	367	0	0	309	348
Arizona	24	15	65.8%	0	0	24	15	0	0	0	0
Colorado	55	63	-12.7%	0	0	11	15	0	0	45	48
Idaho	69	78	-10.8%	0	0	0	0	0	0	69	78
Montana	341	333	2.5%	0	0	341	333	0	0	0	0
Nevada	12	38	-68.5%	12	38	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	133	165	-19.2%	0	0	5	5	0	0	128	160
Wyoming	67	62	7.9%	0	0	0	0	0	0	67	62
Pacific Contiguous	1,012	1,128	-10.3%	0	0	268	332	0	0	744	796
California	815	917	-11.2%	0	0	158	219	0	0	657	698
Oregon	50	51	-1.9%	0	0	42	43	0	0	8	9
Washington	147	160	-8.1%	0	0	69	70	0	0	78	90
Pacific Noncontiguous	363	366	-0.9%	216	211	0	0	147	155	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	363	366	-0.9%	216	211	0	0	147	155	0	0
U.S. Total	13,787	14,154	-2.6%	603	604	7,030	7,059	1,046	950	5,108	5,541

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 3.17. Net Generation from Wind
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	1,294	870	48.6%	85	55	1,199	806	9	9	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	887	707	25.5%	0	0	887	707	0	0	0	0
Massachusetts	90	61	46.1%	59	44	21	8	9	9	0	0
New Hampshire	209	66	215.8%	0	0	209	66	0	0	0	0
Rhode Island	1	3	-52.6%	0	0	1	3	0	0	0	0
Vermont	107	33	222.1%	26	11	81	22	0	0	0	0
Middle Atlantic	5,132	4,633	10.8%	0	0	5,128	4,633	0	0	4	0
New Jersey	12	11	9.9%	0	0	12	11	0	0	0	0
New York	2,992	2,828	5.8%	0	0	2,988	2,828	0	0	4	0
Pennsylvania	2,129	1,794	18.6%	0	0	2,129	1,794	0	0	0	0
East North Central	14,612	11,341	28.8%	1,242	602	13,357	10,736	1	1	12	2
Illinois	7,727	6,213	24.4%	14	11	7,713	6,202	0	0	0	0
Indiana	3,210	3,285	-2.3%	0	0	3,209	3,284	1	1	0	0
Michigan	1,132	456	147.9%	274	3	858	454	0	0	0	0
Ohio	985	198	396.6%	14	14	959	182	0	0	12	2
Wisconsin	1,558	1,188	31.1%	939	574	618	614	0	0	0	0
West North Central	37,561	31,288	20.0%	12,051	9,376	25,479	21,885	31	26	0	0
Iowa	14,032	10,709	31.0%	7,452	5,122	6,578	5,583	3	4	0	0
Kansas	5,195	3,720	39.7%	852	1,018	4,343	2,702	0	0	0	0
Minnesota	7,615	6,726	13.2%	1,613	1,379	5,975	5,324	28	23	0	0
Missouri	1,245	1,178	5.6%	0	0	1,245	1,178	0	0	0	0
Nebraska	1,284	1,051	22.1%	212	229	1,072	822	0	0	0	0
North Dakota	5,275	5,236	0.7%	1,256	1,120	4,019	4,116	0	0	0	0
South Dakota	2,915	2,668	9.2%	667	509	2,248	2,160	0	0	0	0
South Atlantic	1,611	1,378	16.9%	0	0	1,608	1,373	4	5	0	0
Delaware	4	5	-24.6%	0	0	0	0	4	5	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	271	18.8%	0	0	322	271	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	1,286	1,103	16.6%	0	0	1,286	1,103	0	0	0	0
East South Central	47	53	-10.6%	0	0	47	53	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	53	-10.6%	0	0	47	53	0	0	0	0
West South Central	40,372	36,153	11.7%	1,912	794	38,459	35,359	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	8,158	5,605	45.5%	1,594	660	6,564	4,945	0	0	0	0
Texas	32,214	30,548	5.5%	319	134	31,895	30,414	0	0	0	0
Mountain	17,080	15,317	11.5%	2,186	2,292	14,882	13,013	9	9	3	3
Arizona	532	256	108.0%	0	0	532	256	0	0	0	0
Colorado	5,969	5,200	14.8%	74	73	5,886	5,119	5	6	3	3
Idaho	1,891	1,307	44.7%	60	0	1,830	1,307	0	0	0	0
Montana	1,262	1,265	-0.3%	101	99	1,161	1,166	0	0	0	0
Nevada	129	0	--	0	0	129	0	0	0	0	0
New Mexico	2,226	2,104	5.8%	0	0	2,222	2,101	4	3	0	0
Utah	704	573	22.9%	0	0	704	573	0	0	0	0
Wyoming	4,369	4,612	-5.3%	1,951	2,120	2,418	2,491	0	0	0	0
Pacific Contiguous	22,697	18,790	20.8%	5,431	4,008	17,266	14,781	0	0	0	0
California	9,754	7,752	25.8%	797	507	8,957	7,245	0	0	0	0
Oregon	6,343	4,775	32.8%	1,299	721	5,044	4,054	0	0	0	0
Washington	6,600	6,262	5.4%	3,335	2,780	3,265	3,482	0	0	0	0
Pacific Noncontiguous	416	353	17.7%	19	12	396	341	0	0	0	0
Alaska	37	12	200.4%	19	12	18	0	0	0	0	0
Hawaii	378	341	11.0%	0	0	378	341	0	0	0	0
U.S. Total	140,822	120,177	17.2%	22,926	17,140	117,822	102,981	54	51	19	5

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Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.18. Net Generation from Biomass
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	7,229	7,138	1.3%	570	515	4,428	4,544	125	94	2,105	1,985
Connecticut	667	660	1.0%	0	0	667	660	0	0	0	0
Maine	3,212	3,788	-15.2%	0	0	1,581	1,714	92	89	1,539	1,985
Massachusetts	1,724	1,140	51.2%	0	0	1,157	1,137	1	3	566	0
New Hampshire	1,173	1,025	14.4%	347	291	795	734	31	0	0	0
Rhode Island	101	127	-21.1%	0	0	101	127	0	0	0	0
Vermont	353	398	-11.2%	223	224	128	172	2	2	0	0
Middle Atlantic	5,411	5,219	3.7%	0	0	4,194	4,067	506	467	711	684
New Jersey	965	876	10.1%	0	0	808	639	157	237	0	0
New York	2,148	2,061	4.2%	0	0	1,687	1,725	220	110	242	226
Pennsylvania	2,298	2,281	0.7%	0	0	1,699	1,704	130	120	469	458
East North Central	5,987	5,779	3.6%	544	534	3,395	3,342	233	193	1,816	1,709
Illinois	615	638	-3.6%	0	0	615	638	0	0	0	1
Indiana	336	336	0.2%	286	295	0	0	21	20	29	20
Michigan	2,654	2,506	5.9%	0	2	1,652	1,663	196	158	806	683
Ohio	717	722	-0.7%	0	0	377	340	0	0	340	382
Wisconsin	1,666	1,577	5.6%	258	237	751	702	16	15	641	624
West North Central	2,169	2,037	6.5%	504	476	1,091	959	53	51	521	552
Iowa	151	161	-6.0%	27	27	86	88	25	30	12	15
Kansas	57	59	-2.4%	0	0	57	59	0	0	0	0
Minnesota	1,838	1,680	9.4%	403	362	926	789	10	7	499	522
Missouri	54	62	-13.5%	28	35	21	23	0	0	5	4
Nebraska	63	65	-3.5%	46	52	0	0	17	14	0	0
North Dakota	6	10	-43.8%	0	0	0	0	0	0	6	10
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	15,342	15,089	1.7%	888	924	4,968	4,584	233	300	9,253	9,281
Delaware	105	145	-27.6%	0	0	105	145	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,330	4,544	-4.7%	85	88	2,209	2,345	36	39	2,001	2,073
Georgia	3,276	3,190	2.7%	0	0	218	165	28	23	3,030	3,001
Maryland	554	548	1.0%	0	0	378	343	35	55	141	150
North Carolina	2,564	2,328	10.2%	1	8	1,227	971	3	0	1,334	1,350
South Carolina	2,143	2,129	0.7%	458	410	40	22	0	0	1,646	1,698
Virginia	2,358	2,196	7.4%	345	419	782	585	130	183	1,101	1,009
West Virginia	11	9	11.8%	0	0	11	9	0	0	0	0
East South Central	5,395	5,726	-5.8%	96	96	250	258	0	0	5,050	5,371
Alabama	2,777	2,817	-1.4%	1	1	190	231	0	0	2,586	2,585
Kentucky	333	436	-23.7%	95	95	0	0	0	0	238	342
Mississippi	1,509	1,506	0.2%	0	0	3	0	0	0	1,506	1,506
Tennessee	777	967	-19.6%	0	0	57	28	0	0	720	939
West South Central	6,138	6,031	1.8%	0	0	815	688	41	43	5,282	5,300
Arkansas	1,660	1,668	-0.4%	0	0	65	76	6	5	1,590	1,587
Louisiana	2,430	2,443	-0.5%	0	0	60	70	0	0	2,370	2,372
Oklahoma	363	314	15.7%	0	0	0	0	0	0	363	314
Texas	1,684	1,606	4.8%	0	0	691	542	35	38	958	1,027
Mountain	911	842	8.2%	36	24	475	392	3	5	397	420
Arizona	211	190	10.6%	26	24	181	161	3	5	0	0
Colorado	58	62	-6.0%	0	0	58	62	0	0	0	0
Idaho	549	522	5.2%	10	0	143	102	0	0	397	420
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	19	0	--	0	0	19	0	0	0	0	0
New Mexico	14	9	51.3%	0	0	14	9	0	0	0	0
Utah	60	58	2.7%	0	0	60	58	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8,757	8,495	3.1%	648	831	4,682	4,447	996	1,026	2,431	2,190
California	6,311	6,029	4.7%	231	246	4,328	4,105	974	1,003	779	675
Oregon	832	714	16.4%	67	68	271	260	22	24	472	363
Washington	1,614	1,751	-7.8%	351	518	83	82	0	0	1,179	1,151
Pacific Noncontiguous	284	316	-10.2%	22	39	0	0	153	161	109	116
Alaska	3	3	-21.9%	0	0	0	0	0	0	3	3
Hawaii	281	313	-10.1%	22	39	0	0	153	161	106	112
U.S. Total	57,622	56,671	1.7%	3,308	3,440	24,298	23,282	2,343	2,341	27,674	27,607

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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, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
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	2,757	2,540	8.5%	269	278	2,488	2,262	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	75	63	17.6%	0	0	75	63	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,347	2,146	9.4%	0	0	2,347	2,146	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	335	330	1.3%	269	278	66	52	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	12,545	12,552	-0.1%	875	858	11,670	11,694	0	0	0	0
California	12,519	12,552	-0.3%	875	858	11,644	11,694	0	0	0	0
Oregon	26	0	--	0	0	26	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	261	224	16.6%	0	0	261	224	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	261	224	16.6%	0	0	261	224	0	0	0	0
U.S. Total	15,562	15,316	1.6%	1,143	1,137	14,419	14,180	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 3.20. Net Generation from Solar
by State, by Sector, 2012 and 2011 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	35	7	427.1%	9	4	25	2	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	30	5	521.6%	9	4	20	0	1	1	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	5	2	179.0%	0	0	5	2	0	0	0	0
Middle Atlantic	389	98	295.3%	41	19	303	65	37	8	8	5
New Jersey	304	69	341.8%	41	19	225	41	37	8	1	0
New York	53	6	718.1%	0	0	53	6	0	0	0	0
Pennsylvania	32	23	38.9%	0	0	26	18	0	0	6	5
East North Central	67	30	128.3%	6	1	61	28	0	0	0	0
Illinois	31	14	118.0%	0	0	31	14	0	0	0	0
Indiana	NM	0	--	0	0	NM	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	37	15	136.4%	6	1	31	14	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	381	154	147.3%	168	103	209	51	5	0	0	0
Delaware	23	8	172.5%	2	0	20	8	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	194	126	54.0%	159	100	34	26	1	0	0	0
Georgia	3	0	--	0	0	NM	0	2	0	0	0
Maryland	22	3	730.5%	3	0	18	3	1	0	0	0
North Carolina	139	17	702.6%	4	2	135	15	1	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	12	0	--	0	0	10	0	NM	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	12	0	--	0	0	10	0	NM	0	0	0
West South Central	118	29	313.0%	0	0	118	29	1	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	118	29	313.0%	0	0	118	29	1	0	0	0
Mountain	1,930	607	217.9%	210	41	1,665	518	52	47	3	1
Arizona	955	83	NM	162	41	789	40	4	2	0	0
Colorado	165	105	58.1%	0	0	150	92	16	12	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	473	291	62.6%	0	0	438	258	32	32	3	1
New Mexico	334	128	161.2%	48	0	286	128	0	0	0	0
Utah	2	0	--	0	0	2	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,390	890	56.2%	205	48	1,130	814	51	28	4	0
California	1,382	889	55.5%	202	47	1,126	814	51	28	4	0
Oregon	6	0	NM	3	0	4	0	0	0	0	0
Washington	1	1	-5.5%	1	1	0	0	0	0	0	0
Pacific Noncontiguous	5	4	28.2%	0	0	5	4	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	5	4	28.2%	0	0	5	4	0	0	0	0
U.S. Total	4,327	1,818	138.0%	639	216	3,525	1,511	148	84	14	7

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 3.21. Useful Thermal Output by Energy Source: Total Combined Heat and Power (All Sectors), 2002 - 2012

(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2002	336,848	61,313	11,513	708,738	117,513	571,509	48,263	1,855,697
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
2010								
January	27,238	2,420	1,809	46,343	7,527	49,564	1,834	136,735
February	24,966	1,988	1,887	40,962	6,706	45,274	2,142	123,926
March	25,445	1,345	1,610	43,478	7,940	50,043	2,413	132,275
April	32,199	1,472	1,556	39,957	7,688	47,082	2,356	132,311
May	22,885	1,390	1,702	41,049	7,682	46,789	2,572	124,070
June	22,929	1,265	1,861	41,350	7,880	47,068	2,598	124,950
July	24,483	1,631	1,791	47,085	7,573	48,956	2,503	134,022
August	24,539	1,417	1,788	47,723	8,061	49,145	2,653	135,328
September	22,849	1,303	1,782	43,318	7,552	47,918	2,379	127,101
October	22,502	1,647	1,867	43,166	7,379	49,005	2,434	128,000
November	23,552	1,756	1,948	42,425	7,513	48,714	2,311	128,220
December	26,714	2,278	1,846	47,638	7,938	51,751	2,560	140,725
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

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 3.22. Useful Thermal Output by Energy Source: Electric Power Sector Combined Heat and Power, 2002 - 2012

(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2002	40,020	1,319	2,550	214,137	5,961	12,550	4,732	281,269
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
2010								
January	3,790	443	116	16,624	1,717	1,660	394	24,745
February	3,505	271	121	14,780	1,598	1,574	367	22,215
March	3,469	202	137	15,718	1,738	1,595	391	23,250
April	2,859	382	94	14,056	1,735	1,274	407	20,807
May	2,828	421	105	14,931	1,709	1,183	333	21,510
June	3,017	403	83	15,064	1,639	1,434	450	22,090
July	3,306	404	87	17,574	1,671	1,390	455	24,888
August	3,215	411	19	17,185	1,669	1,421	465	24,384
September	2,966	398	27	15,517	1,631	1,292	429	22,259
October	2,881	417	100	14,262	1,302	1,514	408	20,885
November	3,049	522	125	14,761	1,615	1,560	420	22,053
December	3,440	427	95	16,301	1,682	1,692	522	24,159
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

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, 2002 - 2012

(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2002	18,477	2,600	143	36,265	0	6,902	4,801	69,188
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
2010								
January	2,144	116	24	2,600	1	657	398	5,940
February	1,894	100	21	2,372	1	641	340	5,369
March	1,658	25	27	2,320	1	752	403	5,186
April	1,278	36	16	2,114	1	760	456	4,661
May	1,318	50	0	1,949	1	947	644	4,909
June	1,531	51	0	2,060	1	715	501	4,859
July	1,628	152	0	2,866	1	682	505	5,833
August	1,727	110	21	3,226	1	711	532	6,327
September	1,476	37	20	2,623	1	601	431	5,189
October	1,320	17	23	2,583	1	489	455	4,887
November	1,418	30	30	2,436	1	446	342	4,704
December	1,825	123	34	2,642	1	516	327	5,467
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

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
Beginning with the collection of Form EIA-923 in January 2008, the methodology for separating the fuel used for electricity generation and useful thermal output from combined heat and power plants changed. The new methodology was retroactively applied to 2004-2007. See the Technical Notes (Appendix C) for further information.
See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 3.24. Useful Thermal Output by Energy Source: Industrial Sector Combined Heat and Power, 2002 - 2012

(Billion Btus)

Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Renewable Sources	Other	Total
Annual Totals								
2002	278,351	57,394	8,820	458,336	111,552	552,056	38,731	1,505,240
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
2010								
January	21,304	1,860	1,668	27,119	5,810	47,247	1,042	106,050
February	19,567	1,618	1,746	23,811	5,107	43,059	1,435	96,343
March	20,319	1,118	1,447	25,439	6,201	47,696	1,619	103,839
April	28,063	1,054	1,446	23,787	5,951	45,048	1,493	106,843
May	18,739	919	1,597	24,169	5,972	44,659	1,595	97,652
June	18,381	811	1,778	24,226	6,239	44,919	1,648	98,002
July	19,550	1,076	1,704	26,645	5,901	46,884	1,543	103,302
August	19,597	897	1,749	27,312	6,391	47,013	1,656	104,616
September	18,407	868	1,735	25,178	5,920	46,025	1,519	99,653
October	18,301	1,213	1,744	26,321	6,076	47,002	1,571	102,228
November	19,085	1,204	1,793	25,228	5,896	46,708	1,549	101,464
December	21,449	1,728	1,717	28,696	6,254	49,543	1,711	111,098
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

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, and solar thermal.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
Beginning with the collection of Form EIA-923 in January 2008, the methodology for separating the fuel used for electricity generation and useful thermal output from combined heat and power plants changed. The new methodology was retroactively applied to 2004-2007. See the Technical Notes (Appendix C) for further information.
See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Chapter 4

Generation Capacity

Table 4.1. Count of Electric Power Industry Power Plants, by Sector, by Predominant Energy Sources within Plant, 2002 through 2012

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources
Total (All Sectors)									
2002	633	1,147	1,649	40	66	1,426	682	38	28
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
Electric Utilities									
2002	363	811	699	1	37	913	57	33	--
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
Independent Power Producers, Non-Combined Heat and Power Plants									
2002	106	180	326	1	29	455	430	5	4
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
Independent Power Producers, Combined Heat and Power Plants									
2002	44	15	169	2	--	--	28	--	--
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	--	--
Commercial Sector									
2002	22	63	122	--	--	9	41	--	--
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
Industrial Sector									
2002	98	71	317	36	--	49	125	--	24
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

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, 2002 through 2012 (Megawatts)

Year	Coal	Petroleum	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional	Other Renewable Sources	Hydroelectric Pumped Storage	Other Energy Sources	Total
Total (All Sectors)										
2002	315,350	59,651	312,512	2,008	98,657	79,356	16,710	20,371	686	905,301
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
Electric Utilities										
2002	244,056	33,876	127,692	61	63,202	73,391	989	17,807	--	561,074
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
Independent Power Producers, Non-Combined Heat and Power Plants										
2002	61,770	23,664	140,404	9	35,455	4,911	10,390	2,564	80	279,246
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
Independent Power Producers, Combined Heat and Power Plants										
2002	5,222	1,084	28,455	182	--	--	555	--	--	35,499
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
Commercial Sector										
2002	292	301	1,216	--	--	22	357	--	--	2,188
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
Industrial Sector										
2002	4,010	726	14,745	1,756	--	1,033	4,419	--	607	27,295
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

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, 2002 through 2012 (Megawatts) (Page 1)

Year	Wind	Solar Thermal and Photovoltaic	Wood and Wood-Derived Fuels	Geothermal	Other Biomass	Total (Other Renewable Sources)
Total (All Sectors)						
2002	4,417	397	5,844	2,252	3,800	16,710
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
Electric Utilities						
2002	111	9	248	271	350	989
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
Independent Power Producers, Non-Combined Heat and Power Plants						
2002	4,305	388	1,162	1,981	2,553	10,390
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

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, 2002 through 2012 (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						
2002	--	--	144	--	411	555
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
Commercial Sector						
2002	--	--	6	--	351	357
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
Industrial Sector						
2002	--	--	4,285	--	134	4,419
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

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, 2012 (Megawatts)

Energy Source	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal	1,309	336,341	309,680	312,293
Petroleum	3,702	53,789	47,167	51,239
Natural Gas	5,726	485,957	422,364	455,214
Other Gases	94	2,253	1,946	1,933
Nuclear	104	107,938	101,885	104,182
Hydroelectric Conventional	4,023	78,241	78,738	78,215
Wind	947	59,629	59,075	59,082
Solar Thermal and Photovoltaic	553	3,215	3,170	3,053
Wood and Wood-Derived Fuels	351	8,520	7,508	7,570
Geothermal	197	3,724	2,592	2,782
Other Biomass	1,766	5,527	4,811	4,885
Hydroelectric Pumped Storage	156	20,858	22,368	22,271
Other Energy Sources	95	2,005	1,729	1,739
Total	19,023	1,167,995	1,063,033	1,104,459

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, 2012 (Megawatts)

Producer Type	Number of Generators	Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Electric Power Sector				
Electric Utilities	9,624	680,592	621,785	644,358
Independent Power Producers, Non-Combined Heat and Power Plants	6,148	412,045	374,964	389,349
Independent Power Producers, Combined Heat and Power Plants	609	39,916	35,266	38,023
Total	16,381	1,132,554	1,032,015	1,071,729
Commercial and Industrial Sectors				
Commercial Sector	962	3,610	3,223	3,349
Industrial Sector	1,680	31,832	27,795	29,381
Total	2,642	35,442	31,018	32,730
All Sectors				
Total	19,023	1,167,995	1,063,033	1,104,459

Notes: 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.
See Glossary reference for definitions.
Totals may not equal sum of components because of independent rounding.
In the case of some wind, solar and wave energy sites, the capacity for multiple generators is reported in a single generator record and is presented as a single generator in the generator count.
Capacity by energy source is based on the capacity associated with the energy source reported as the most predominant (primary) one, where more than one energy source is associated with a generator.
Source: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report.'

Table 4.5. Planned Generating Capacity Changes, by Energy Source, 2013-2017 (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
2013						
U.S. Total	513	15,144	179	12,604	334	2,540
Coal	4	1,482	28	4,465	-24	-2,983
Petroleum	21	45	41	1,401	-20	-1,356
Natural Gas	87	6,818	55	2,950	32	3,868
Other Gases	--	--	1	4	-1	-4
Nuclear	--	--	4	3,576	-4	-3,576
Hydroelectric Conventional	17	385	36	185	-19	201
Wind	25	2,225	--	--	25	2,225
Solar Thermal and Photovoltaic	277	3,460	1	1	276	3,459
Wood and Wood-Derived Fuels	10	489	--	--	10	489
Geothermal	5	50	1	11	4	39
Other Biomass	65	132	12	12	53	119
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	2	60	--	--	2	60
2014						
U.S. Total	179	13,321	77	7,515	102	5,806
Coal	4	655	45	5,593	-41	-4,938
Petroleum	--	--	9	725	-9	-725
Natural Gas	54	6,871	13	444	41	6,427
Other Gases	--	--	4	40	-4	-40
Nuclear	--	--	1	604	-1	-604
Hydroelectric Conventional	10	318	5	109	5	209
Wind	28	2,509	--	--	28	2,509
Solar Thermal and Photovoltaic	44	2,678	--	--	44	2,678
Wood and Wood-Derived Fuels	3	85	--	--	3	85
Geothermal	2	48	--	--	2	48
Other Biomass	30	131	--	--	30	131
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	4	27	--	--	4	27
2015						
U.S. Total	97	13,319	153	15,328	-56	-2,009
Coal	--	--	79	11,993	-79	-11,993
Petroleum	--	--	21	808	-21	-808
Natural Gas	59	9,044	49	2,377	10	6,667
Other Gases	--	--	--	--	--	--
Nuclear	1	1,122	--	--	1	1,122
Hydroelectric Conventional	8	252	4	150	4	103
Wind	10	1,041	--	--	10	1,041
Solar Thermal and Photovoltaic	11	1,677	--	--	11	1,677
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	2	62	--	--	2	62
Other Biomass	6	121	--	--	6	121
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	--	--	--	--	--	--

Notes: These data reflect plans as of December 31, 2012
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.
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, 2013-2017 (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
2016						
U.S. Total	49	11,658	61	4,054	-12	7,604
Coal	3	757	24	3,178	-21	-2,421
Petroleum	2	3	19	217	-17	-214
Natural Gas	26	7,568	17	556	9	7,012
Other Gases	1	3	--	--	1	3
Nuclear	1	1,100	--	--	1	1,100
Hydroelectric Conventional	4	190	1	104	3	86
Wind	1	99	--	--	1	99
Solar Thermal and Photovoltaic	10	1,937	--	--	10	1,937
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	--	--	--	--	--	--
Other Biomass	1	2	--	--	1	2
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	--	--	--	--	--	--
2017						
U.S. Total	23	6,452	37	3,579	-14	2,873
Coal	--	--	15	2,066	-15	-2,066
Petroleum	--	--	--	--	--	--
Natural Gas	16	3,718	19	1,304	-3	2,414
Other Gases	--	--	--	--	--	--
Nuclear	2	2,200	--	--	2	2,200
Hydroelectric Conventional	2	244	2	208	--	36
Wind	--	--	--	--	--	--
Solar Thermal and Photovoltaic	1	200	--	--	1	200
Wood and Wood-Derived Fuels	--	--	--	--	--	--
Geothermal	2	90	--	--	2	90
Other Biomass	--	--	1	1	-1	-1
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	--	--	--	--	--	--
2013-2017						
U.S. Total	861	59,894	507	43,080	354	16,815
Coal	11	2,894	191	27,294	-180	-24,401
Petroleum	23	48	90	3,151	-67	-3,103
Natural Gas	242	34,019	153	7,631	89	26,389
Other Gases	1	3	5	44	-4	-41
Nuclear	4	4,422	5	4,180	-1	242
Hydroelectric Conventional	41	1,389	48	755	-7	634
Wind	64	5,874	--	--	64	5,874
Solar Thermal and Photovoltaic	343	9,953	1	1	342	9,952
Wood and Wood-Derived Fuels	13	574	--	--	13	574
Geothermal	11	249	1	11	10	238
Other Biomass	102	385	13	13	89	371
Hydroelectric Pumped Storage	--	--	--	--	--	--
Other Energy Sources	6	87	--	--	6	87

Notes: These data reflect plans as of December 31, 2012
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.
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, 2012 (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	5	3,953	3,663	3,677	86	11,273	10,308	10,420
Petroleum	40	580	508	365	96	2,417	2,121	2,168
Natural Gas	111	10,128	9,210	9,721	80	3,001	2,267	2,431
Other Gases	1	*	*	*	4	120	152	152
Nuclear	--	--	--	--	--	--	--	--
Hydroelectric Conventional	15	345	344	342	28	317	315	314
Wind	149	12,953	12,885	12,885	1	13	12	12
Solar Thermal and Photovoltaic	210	1,616	1,595	1,585	--	--	--	--
Wood and Wood-Derived Fuels	5	186	162	155	3	36	32	33
Geothermal	12	192	146	172	1	1	1	1
Other Biomass	103	202	188	189	25	49	43	43
Hydroelectric Pumped Storage	2	42	42	42	--	--	--	--
Other Energy Sources	6	62	59	59	--	--	--	--
Total	659	30,257	28,801	29,192	324	17,226	15,251	15,575

	Other Changes to Existing Capacity			
Energy Source		Generator Nameplate Capacity	Net Summer Capacity	Net Winter Capacity
Coal		-96	-1,315	-1,149
Petroleum		-2,215	-2,701	-2,427
Natural Gas		1,443	230	-532
Other Gases		170	163	167
Nuclear		936	466	675
Hydroelectric Conventional		19	57	81
Wind		707	526	521
Solar Thermal and Photovoltaic		35	52	58
Wood and Wood-Derived Fuels		356	302	298
Geothermal		34	38	15
Other Biomass		181	130	138
Hydroelectric Pumped Storage		--	34	-39
Other Energy Sources		246	251	257
Total		1,816	-1,768	-1,938

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 and other manufactured and waste gases derived from fossil fuels. 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).
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, 2012 and 2011 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	4,157.7	3,805.2	24,619.1	24,153.6	1,753.4	1,709.4	3.0	3.0	4,630.3	4,653.7	48.0	26.0	35,211.5	34,350.9
Connecticut	294.7	299.9	6,607.7	6,674.5	29.4	29.4	0.0	0.0	2,102.5	2,102.5	26.0	26.0	9,060.3	9,132.3
Maine	1,704.5	1,640.8	2,764.9	2,737.4	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	4,491.4	4,378.2
Massachusetts	761.5	710.9	11,155.2	10,637.8	1,724.0	1,680.0	3.0	3.0	677.3	684.7	0.0	0.0	14,321.0	13,716.4
New Hampshire	838.4	675.2	2,238.7	2,252.3	0.0	0.0	0.0	0.0	1,246.2	1,246.2	0.0	0.0	4,323.3	4,173.7
Rhode Island	27.9	27.9	1,752.8	1,751.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,780.7	1,778.9
Vermont	530.7	450.5	99.8	100.6	0.0	0.0	0.0	0.0	604.3	620.3	0.0	0.0	1,234.8	1,171.4
Middle Atlantic	9,621.4	8,679.9	71,813.3	72,805.6	3,321.0	3,321.0	28.0	28.0	19,055.4	18,973.7	11.2	11.2	103,850.3	103,819.4
New Jersey	464.5	375.2	13,933.9	13,474.8	400.0	400.0	0.0	0.0	4,114.5	4,112.7	11.2	11.2	18,924.1	18,373.9
New York	6,436.4	6,198.9	26,392.2	26,782.9	1,400.0	1,400.0	28.0	28.0	5,263.3	5,219.0	0.0	0.0	39,519.9	39,628.8
Pennsylvania	2,720.5	2,105.8	31,487.2	32,547.9	1,521.0	1,521.0	0.0	0.0	9,677.6	9,642.0	0.0	0.0	45,406.3	45,816.7
East North Central	8,761.8	7,139.5	123,094.3	124,168.6	1,871.0	1,872.0	0.0	0.0	19,359.2	19,327.4	114.1	209.1	153,200.4	152,716.6
Illinois	3,715.1	2,904.8	29,884.7	29,439.0	0.0	0.0	0.0	0.0	11,541.0	11,486.0	5.0	0.0	45,145.8	43,829.8
Indiana	1,661.7	1,452.7	25,087.6	25,863.3	0.0	0.0	0.0	0.0	0.0	0.0	88.0	88.0	26,837.3	27,404.0
Michigan	1,571.1	1,058.9	22,953.5	23,013.6	1,871.0	1,872.0	0.0	0.0	3,936.2	3,957.4	0.0	0.0	30,331.8	29,901.9
Ohio	738.0	404.3	29,982.3	30,641.8	0.0	0.0	0.0	0.0	2,134.0	2,134.0	0.0	100.0	32,854.3	33,280.1
Wisconsin	1,075.9	1,318.8	15,186.2	15,210.9	0.0	0.0	0.0	0.0	1,748.0	1,750.0	21.1	21.1	18,031.2	18,300.8
West North Central	17,735.7	14,763.1	62,162.0	62,126.7	657.0	667.0	0.0	0.0	5,805.0	5,804.9	23.7	23.7	86,383.4	83,385.4
Iowa	5,167.4	4,362.0	10,249.8	10,324.2	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	16,018.6	15,287.6
Kansas	2,733.2	1,281.5	10,185.1	10,301.3	0.0	0.0	0.0	0.0	1,175.0	1,175.0	0.0	0.0	14,093.3	12,757.8
Minnesota	3,389.9	3,146.8	10,444.8	10,402.6	0.0	0.0	0.0	0.0	1,594.0	1,594.0	18.4	18.4	15,447.1	15,161.8
Missouri	1,038.1	1,036.5	19,118.6	19,167.7	657.0	667.0	0.0	0.0	1,190.0	1,190.0	0.0	0.0	22,003.7	22,061.2
Nebraska	741.6	621.6	6,286.9	6,307.7	0.0	0.0	0.0	0.0	1,244.6	1,244.5	0.0	0.0	8,273.1	8,173.8
North Dakota	2,277.0	1,940.7	4,208.1	4,237.7	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	6,490.4	6,183.7
South Dakota	2,388.5	2,374.0	1,668.7	1,385.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,057.2	3,759.5
South Atlantic	11,516.0	11,206.5	162,937.3	163,819.7	7,905.2	7,904.5	32.0	32.0	25,020.0	24,685.0	406.0	402.0	207,816.5	208,049.7
Delaware	34.3	22.5	3,322.2	3,336.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,356.5	3,359.3
District of Columbia	0.0	0.0	10.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	800.0
Florida	1,156.4	1,143.5	53,455.8	54,207.2	0.0	0.0	0.0	0.0	4,175.0	3,924.0	352.0	352.0	59,139.2	59,626.7
Georgia	2,699.9	2,689.9	29,865.0	28,501.8	1,862.2	1,861.5	0.0	0.0	4,061.0	4,061.0	0.0	0.0	38,488.1	37,114.2
Maryland	880.9	853.9	9,618.4	10,023.7	0.0	0.0	0.0	0.0	1,716.0	1,705.0	0.0	0.0	12,215.3	12,582.6
North Carolina	2,614.2	2,531.8	22,638.5	20,820.8	86.0	86.0	0.0	0.0	4,998.0	4,970.0	54.0	50.0	30,390.7	28,458.6
South Carolina	1,725.1	1,625.5	12,133.7	13,253.5	2,716.0	2,716.0	0.0	0.0	6,508.0	6,486.0	0.0	0.0	23,082.8	24,081.0
Virginia	1,533.0	1,524.2	16,512.6	16,380.7	3,241.0	3,241.0	0.0	0.0	3,562.0	3,539.0	0.0	0.0	24,848.6	24,684.9
West Virginia	872.2	815.2	15,381.1	16,495.2	0.0	0.0	32.0	32.0	0.0	0.0	0.0	0.0	16,285.3	17,342.4
East South Central	7,936.7	7,824.6	71,173.3	71,286.1	1,616.3	1,616.3	0.0	0.0	9,634.1	9,634.1	1.4	1.4	90,361.8	90,362.5
Alabama	3,948.9	3,861.8	23,555.1	23,671.6	0.0	0.0	0.0	0.0	5,043.4	5,043.4	0.0	0.0	32,547.4	32,576.8
Kentucky	896.7	890.7	20,192.1	20,223.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21,088.8	21,113.9
Mississippi	236.7	235.1	13,975.5	14,116.9	0.0	0.0	0.0	0.0	1,190.0	1,190.0	1.4	1.4	15,403.6	15,543.4
Tennessee	2,854.4	2,837.0	13,450.6	13,274.4	1,616.3	1,616.3	0.0	0.0	3,400.7	3,400.7	0.0	0.0	21,322.0	21,128.4
West South Central	19,687.0	16,361.5	145,586.8	147,155.1	288.0	288.0	37.0	1.0	8,922.0	8,916.0	435.9	435.3	174,956.7	173,156.9
Arkansas	1,666.5	1,666.5	12,832.8	12,439.1	28.0	28.0	0.0	0.0	1,828.0	1,823.0	0.0	0.0	16,355.3	15,956.6
Louisiana	571.5	516.5	22,634.8	23,341.2	0.0	0.0	0.0	0.0	2,134.0	2,133.0	207.6	207.6	25,547.9	26,198.3
Oklahoma	4,064.5	2,742.4	19,160.6	18,821.1	260.0	260.0	0.0	0.0	0.0	0.0	0.0	0.0	23,485.1	21,823.5
Texas	13,384.5	11,436.1	90,958.6	92,553.7	0.0	0.0	37.0	1.0	4,960.0	4,960.0	228.3	227.7	109,568.4	109,178.5
Mountain	19,102.2	16,916.1	64,689.6	65,700.9	778.8	778.8	1.8	0.0	3,937.0	3,937.0	111.4	111.4	88,620.8	87,444.2
Arizona	3,628.9	3,023.9	19,804.3	19,865.3	216.3	216.3	0.0	0.0	3,937.0	3,937.0	0.0	0.0	27,586.5	27,042.5
Colorado	3,055.1	2,553.3	11,319.9	11,057.0	562.5	562.5	0.0	0.0	0.0	0.0	9.3	9.3	14,946.8	14,182.1
Idaho	3,762.9	3,405.7	1,133.1	834.4	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	4,910.8	4,254.9
Montana	3,359.4	3,102.8	2,913.7	2,873.2	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,317.1	6,020.0
Nevada	1,916.0	1,506.6	8,559.7	10,139.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,475.7	11,646.3
New Mexico	1,027.4	969.0	7,344.0	7,285.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	8,373.2	8,254.1
Utah	638.1	635.3	6,960.7	6,945.9	0.0	0.0	0.0	0.0	0.0	0.0	31.8	31.8	7,630.6	7,613.0
Wyoming	1,714.4	1,719.5	6,654.2	6,700.3	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,380.1	8,431.3
Pacific Contiguous	56,418.4	52,383.5	51,279.1	51,222.4	4,177.6	4,135.6	0.0	0.0	5,522.0	5,487.0	385.8	108.5	117,782.9	113,337.0
California	20,165.1	17,572.2	42,534.2	42,412.5	3,863.6	3,821.6	0.0	0.0	4,390.0	4,390.0	375.8	99.1	71,328.7	68,295.4
Oregon	11,949.0	10,907.4	3,595.2	3,627.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15,544.2	14,534.6
Washington	24,304.3	23,903.9	5,149.7	5,182.7	314.0	314.0	0.0	0.0	1,132.0	1,097.0	10.0	9.4	30,910.0	30,507.0
Pacific Noncontiguous	956.3	792.7	3,802.8	3,808.7	0.0	0.0	63.0	27.0	0.0	0.0	26.6	0.0	4,848.7	4,628.4
Alaska	453.9	422.6	1,637.6	1,616.9	0.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	2,118.5	2,066.5
Hawaii	502.4	370.1	2,165.2	2,191.8	0.0	0.0	36.0	0.0	0.0	0.0	26.6	0.0	2,730.2	2,561.9
U.S. Total	155,893.2	139,872.6	781,157.6	786,247.4	22,368.3	22,292.6	164.8	91.0	101,885.0	101,418.8	1,564.1	1,328.6	1,063,033.0	1,051,251.0

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, 2012 and 2011 (Megawatts)

Census Division and State	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	784.1	422.8	49.2	13.9	0.0	0.0	1,956.9	1,946.9	1,367.5	1,421.6	0.0	0.0	4,157.7	3,805.2
Connecticut	0.0	0.0	0.0	0.0	0.0	0.0	122.2	121.7	172.5	178.2	0.0	0.0	294.7	299.9
Maine	427.6	322.5	0.0	0.0	0.0	0.0	742.3	742.3	534.6	576.0	0.0	0.0	1,704.5	1,640.8
Massachusetts	63.8	29.6	41.2	11.7	0.0	0.0	261.1	262.7	395.4	406.9	0.0	0.0	761.5	710.9
New Hampshire	171.0	24.0	0.0	0.0	0.0	0.0	505.0	493.3	162.4	157.9	0.0	0.0	838.4	675.2
Rhode Island	1.5	1.5	0.0	0.0	0.0	0.0	2.7	2.7	23.7	23.7	0.0	0.0	27.9	27.9
Vermont	120.2	45.2	8.0	2.2	0.0	0.0	323.6	324.2	78.9	78.9	0.0	0.0	530.7	450.5
Middle Atlantic	2,987.8	2,195.7	304.6	203.0	0.0	0.0	5,076.7	5,084.5	1,252.3	1,196.7	0.0	0.0	9,621.4	8,679.9
New Jersey	7.5	7.5	236.1	152.7	0.0	0.0	3.3	5.4	217.6	209.6	0.0	0.0	464.5	375.2
New York	1,636.4	1,398.9	31.5	31.5	0.0	0.0	4,311.9	4,319.1	456.6	449.4	0.0	0.0	6,436.4	6,198.9
Pennsylvania	1,343.9	789.3	37.0	18.8	0.0	0.0	761.5	760.0	578.1	537.7	0.0	0.0	2,720.5	2,105.8
East North Central	6,765.9	5,222.8	60.8	31.4	0.0	0.0	817.0	820.6	1,118.1	1,064.7	0.0	0.0	8,761.8	7,139.5
Illinois	3,520.1	2,737.3	29.0	9.0	0.0	0.0	34.1	34.1	131.9	124.4	0.0	0.0	3,715.1	2,904.8
Indiana	1,539.7	1,339.7	3.5	0.0	0.0	0.0	59.5	59.5	59.0	53.5	0.0	0.0	1,661.7	1,452.7
Michigan	874.8	374.6	0.0	0.0	0.0	0.0	237.0	237.8	459.3	446.5	0.0	0.0	1,571.1	1,058.9
Ohio	461.7	159.7	28.3	22.4	0.0	0.0	101.6	101.5	146.4	120.7	0.0	0.0	738.0	404.3
Wisconsin	369.6	611.5	0.0	0.0	0.0	0.0	384.8	387.7	321.5	319.6	0.0	0.0	1,075.9	1,318.8
West North Central	14,030.0	11,045.2	0.0	0.0	0.0	0.0	3,282.1	3,294.1	423.6	423.8	0.0	0.0	17,735.7	14,763.1
Iowa	5,005.0	4,203.2	0.0	0.0	0.0	0.0	147.8	144.2	14.6	14.6	0.0	0.0	5,167.4	4,362.0
Kansas	2,719.1	1,271.8	0.0	0.0	0.0	0.0	7.0	2.6	7.1	7.1	0.0	0.0	2,733.2	1,281.5
Minnesota	2,842.3	2,576.3	0.0	0.0	0.0	0.0	175.7	196.8	371.9	373.7	0.0	0.0	3,389.9	3,146.8
Missouri	458.5	458.5	0.0	0.0	0.0	0.0	570.3	570.3	9.3	7.7	0.0	0.0	1,038.1	1,036.5
Nebraska	455.4	332.5	0.0	0.0	0.0	0.0	275.3	278.2	10.9	10.9	0.0	0.0	741.6	621.6
North Dakota	1,759.2	1,422.9	0.0	0.0	0.0	0.0	508.0	508.0	9.8	9.8	0.0	0.0	2,277.0	1,940.7
South Dakota	790.5	780.0	0.0	0.0	0.0	0.0	1,598.0	1,594.0	0.0	0.0	0.0	0.0	2,388.5	2,374.0
South Atlantic	705.3	650.1	234.9	126.2	0.0	0.0	7,145.5	7,145.8	3,430.3	3,284.4	0.0	0.0	11,516.0	11,206.5
Delaware	2.0	2.0	24.3	12.5	0.0	0.0	0.0	0.0	8.0	8.0	0.0	0.0	34.3	22.5
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	65.2	64.6	0.0	0.0	54.5	54.5	1,036.7	1,024.4	0.0	0.0	1,156.4	1,143.5
Georgia	0.0	0.0	3.2	0.0	0.0	0.0	2,047.9	2,048.7	648.8	641.2	0.0	0.0	2,699.9	2,689.9
Maryland	120.0	120.0	27.6	4.4	0.0	0.0	590.0	590.0	143.3	139.5	0.0	0.0	880.9	853.9
North Carolina	0.0	0.0	114.6	44.7	0.0	0.0	1,964.2	1,964.3	535.4	522.8	0.0	0.0	2,614.2	2,531.8
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0	1,336.0	1,337.2	389.1	288.3	0.0	0.0	1,725.1	1,625.5
Virginia	0.0	0.0	0.0	0.0	0.0	0.0	866.2	866.2	666.8	658.0	0.0	0.0	1,533.0	1,524.2
West Virginia	583.3	528.1	0.0	0.0	0.0	0.0	286.7	284.9	2.2	2.2	0.0	0.0	872.2	815.2
East South Central	29.1	29.1	12.8	0.0	0.0	0.0	6,715.9	6,709.9	1,178.9	1,085.6	0.0	0.0	7,936.7	7,824.6
Alabama	0.0	0.0	0.0	0.0	0.0	0.0	3,272.2	3,272.2	676.7	589.6	0.0	0.0	3,948.9	3,861.8
Kentucky	0.0	0.0	0.0	0.0	0.0	0.0	827.6	821.6	69.1	69.1	0.0	0.0	896.7	890.7
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	236.7	235.1	0.0	0.0	236.7	235.1
Tennessee	29.1	29.1	12.8	0.0	0.0	0.0	2,616.1	2,616.1	196.4	191.8	0.0	0.0	2,854.4	2,837.0
West South Central	15,311.8	12,172.1	75.2	43.5	0.0	0.0	3,080.2	3,080.2	1,219.8	1,065.7	0.0	0.0	19,687.0	16,361.5
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	1,340.7	1,340.7	325.8	325.8	0.0	0.0	1,666.5	1,666.5
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0	192.0	379.5	324.5	0.0	0.0	571.5	516.5
Oklahoma	3,132.9	1,810.8	0.0	0.0	0.0	0.0	858.2	858.2	73.4	73.4	0.0	0.0	4,064.5	2,742.4
Texas	12,178.9	10,361.3	75.2	43.5	0.0	0.0	689.3	689.3	441.1	342.0	0.0	0.0	13,384.5	11,436.1
Mountain	6,758.1	5,407.5	1,167.8	417.2	69.5	65.0	10,507.8	10,507.5	159.9	144.2	439.1	374.7	19,102.2	16,916.1
Arizona	237.3	138.1	631.7	129.1	1.0	1.0	2,720.4	2,720.4	38.5	35.3	0.0	0.0	3,628.9	3,023.9
Colorado	2,271.1	1,792.9	115.4	85.6	0.0	0.0	655.6	661.8	13.0	13.0	0.0	0.0	3,055.1	2,553.3
Idaho	962.7	611.3	0.0	0.0	0.0	0.0	2,703.4	2,703.9	86.8	80.5	10.0	10.0	3,762.9	3,405.7
Montana	627.8	378.2	0.0	0.0	0.0	0.0	2,731.6	2,724.6	0.0	0.0	0.0	0.0	3,359.4	3,102.8
Nevada	150.0	0.0	258.8	73.0	68.5	64.0	1,051.4	1,051.4	3.2	0.0	384.1	318.2	1,916.0	1,506.6
New Mexico	777.5	750.2	160.6	129.5	0.0	0.0	82.9	82.9	6.4	6.4	0.0	0.0	1,027.4	969.0
Utah	324.4	324.4	1.3	0.0	0.0	0.0	255.4	255.4	12.0	9.0	45.0	46.5	638.1	635.3
Wyoming	1,407.3	1,412.4	0.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,714.4	1,719.5
Pacific Contiguous	11,464.4	8,431.6	781.6	214.6	406.5	406.5	39,715.3	39,623.2	1,940.6	1,704.1	2,110.0	2,003.5	56,418.4	52,383.5
California	5,506.3	3,770.1	770.4	211.5	406.5	406.5	10,145.7	10,136.1	1,243.9	1,044.5	2,092.3	2,003.5	20,165.1	17,572.2
Oregon	3,151.9	2,208.0	10.7	2.6	0.0	0.0	8,454.7	8,419.8	314.0	277.0	17.7	0.0	11,949.0	10,907.4
Washington	2,806.2	2,453.5	0.5	0.5	0.0	0.0	21,114.9	21,067.3	382.7	382.6	0.0	0.0	24,304.3	23,903.9
Pacific Noncontiguous	238.3	99.0	7.2	2.2	0.0	0.0	440.6	438.9	227.2	221.6	43.0	31.0	956.3	792.7
Alaska	32.7	7.4	0.0	0.0	0.0	0.0	415.6	415.2	5.6	0.0	0.0	0.0	453.9	422.6
Hawaii	205.6	91.6	7.2	2.2	0.0	0.0	25.0	23.7	221.6	221.6	43.0	31.0	502.4	370.1
U.S. Total	59,074.8	45,675.9	2,694.1	1,052.0	476.0	471.5	78,738.0	78,651.6	12,318.2	11,612.4	2,592.1	2,409.2	155,893.2	139,872.6

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 4.7.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, 2012 and 2011 (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 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	12,190.5	11,593.8	1,090.0	1,058.9	876.4	830.1	2,546.1	2,755.5	0.0	0.0	7,916.1	7,915.3	0.0	0.0	24,619.1	24,153.6
Connecticut	2,513.4	2,447.7	458.1	432.7	61.0	44.7	389.1	564.4	0.0	0.0	3,186.1	3,185.0	0.0	0.0	6,607.7	6,674.5
Maine	1,250.0	1,250.0	306.0	302.2	119.0	93.0	85.0	85.0	0.0	0.0	1,004.9	1,007.2	0.0	0.0	2,764.9	2,737.4
Massachusetts	5,498.9	4,967.9	322.1	320.2	686.0	683.0	1,538.1	1,559.8	0.0	0.0	3,110.1	3,106.9	0.0	0.0	11,155.2	10,637.8
New Hampshire	1,203.0	1,203.0	3.8	3.8	0.0	0.0	533.9	546.3	0.0	0.0	498.0	499.2	0.0	0.0	2,238.7	2,252.3
Rhode Island	1,725.2	1,725.2	0.0	0.0	10.4	9.4	0.0	0.0	0.0	0.0	17.2	16.4	0.0	0.0	1,752.8	1,751.0
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.8	100.6	0.0	0.0	99.8	100.6
Middle Atlantic	22,470.6	22,596.3	8,708.5	8,288.0	9,616.3	8,072.2	21,966.2	22,881.6	11.6	0.0	8,939.7	10,867.1	100.4	100.4	71,813.3	72,805.6
New Jersey	5,871.3	5,869.4	4,099.2	3,593.2	642.9	630.4	2,006.6	2,000.9	11.6	0.0	1,302.3	1,380.9	0.0	0.0	13,933.9	13,474.8
New York	8,338.6	8,352.1	3,011.4	3,093.4	7,194.6	7,363.0	2,703.7	2,813.1	0.0	0.0	5,143.9	5,161.3	0.0	0.0	26,392.2	26,782.9
Pennsylvania	8,260.7	8,374.8	1,597.9	1,601.4	1,778.8	78.8	17,255.9	18,067.6	0.0	0.0	2,493.5	4,324.9	100.4	100.4	31,487.2	32,547.9
East North Central	16,834.9	15,615.6	25,669.0	25,680.3	3,419.7	3,282.7	72,502.6	74,808.6	570.1	570.1	3,191.9	3,432.5	906.1	778.8	123,094.3	124,168.6
Illinois	2,976.6	2,976.0	10,314.6	10,354.6	238.7	246.9	15,574.0	14,857.2	0.0	0.0	663.1	886.6	117.7	117.7	29,884.7	29,439.0
Indiana	2,451.9	2,451.9	3,189.6	3,189.6	4.0	4.0	18,140.4	18,949.4	274.0	274.0	456.4	450.4	571.3	544.0	25,087.6	25,863.3
Michigan	4,777.0	4,762.3	3,319.3	3,313.9	2,979.3	2,951.4	11,261.8	11,346.6	47.2	47.2	568.9	592.2	0.0	0.0	22,953.5	23,013.6
Ohio	3,960.3	2,763.0	5,443.1	5,434.9	57.4	46.2	19,267.5	21,250.7	142.0	142.0	894.9	887.9	217.1	117.1	29,982.3	30,641.8
Wisconsin	2,669.1	2,662.4	3,402.4	3,387.3	140.3	34.2	8,258.9	8,404.7	106.9	106.9	608.6	615.4	0.0	0.0	15,186.2	15,210.9
West North Central	5,714.1	5,429.2	11,201.8	11,206.3	3,257.3	3,135.0	37,843.8	38,061.2	32.0	32.0	4,104.6	4,254.6	8.4	8.4	62,162.0	62,126.7
Iowa	1,161.5	1,152.6	1,113.9	1,102.6	261.4	87.6	6,683.4	6,934.7	32.0	32.0	997.6	1,014.7	0.0	0.0	10,249.8	10,324.2
Kansas	0.0	0.0	2,377.8	2,435.4	2,043.0	2,132.8	5,223.0	5,188.2	0.0	0.0	541.3	544.9	0.0	0.0	10,185.1	10,301.3
Minnesota	2,107.2	2,073.2	2,558.4	2,569.1	278.7	237.4	4,696.5	4,709.5	0.0	0.0	804.0	813.4	0.0	0.0	10,444.8	10,402.6
Missouri	1,834.8	1,842.1	3,397.5	3,415.8	267.4	267.4	12,457.5	12,424.7	0.0	0.0	1,161.4	1,217.7	0.0	0.0	19,118.6	19,167.7
Nebraska	320.6	361.3	1,111.6	1,025.8	394.2	397.2	4,145.7	4,160.2	0.0	0.0	314.8	363.2	0.0	0.0	6,286.9	6,307.7
North Dakota	0.0	0.0	0.0	9.6	0.0	0.0	4,141.1	4,147.3	0.0	0.0	58.6	72.4	8.4	8.4	4,208.1	4,237.7
South Dakota	290.0	0.0	642.6	648.0	12.6	12.6	496.6	496.6	0.0	0.0	226.9	228.3	0.0	0.0	1,668.7	1,385.5
South Atlantic	43,584.2	40,397.4	31,464.5	31,075.0	3,497.9	3,030.5	67,099.3	69,679.1	633.8	633.8	16,522.6	18,716.6	135.0	287.3	162,937.3	163,819.7
Delaware	1,130.0	1,130.0	355.0	301.0	854.8	864.0	742.0	794.0	0.0	0.0	105.4	112.8	135.0	135.0	3,322.2	3,336.8
District of Columbia	0.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	790.0	0.0	0.0	10.0	800.0
Florida	23,942.6	23,982.2	7,958.9	7,957.2	1,755.5	1,392.1	10,266.0	10,204.0	550.0	550.0	8,982.8	10,121.7	0.0	0.0	53,455.8	54,207.2
Georgia	7,956.0	6,280.0	7,836.9	7,867.7	115.0	115.0	12,737.1	12,988.1	83.8	83.8	1,136.2	1,167.2	0.0	0.0	29,865.0	28,501.8
Maryland	230.0	230.0	1,488.3	1,482.9	335.5	329.8	4,757.0	4,896.0	0.0	0.0	2,807.6	2,932.7	0.0	152.3	9,618.4	10,023.7
North Carolina	4,074.6	2,516.6	6,011.7	5,509.7	0.0	0.0	12,104.8	12,250.8	0.0	0.0	447.4	543.7	0.0	0.0	22,638.5	20,820.8
South Carolina	2,281.7	2,295.7	2,852.2	3,029.5	110.8	3.3	6,225.5	7,257.5	0.0	0.0	663.5	667.5	0.0	0.0	12,133.7	13,253.5
Virginia	3,969.3	3,962.9	3,877.6	3,879.0	320.7	320.7	5,976.3	5,848.1	0.0	0.0	2,368.7	2,370.0	0.0	0.0	16,512.6	16,380.7
West Virginia	0.0	0.0	1,073.9	1,038.0	5.6	5.6	14,290.6	15,440.6	0.0	0.0	11.0	11.0	0.0	0.0	15,381.1	16,495.2
East South Central	17,725.9	16,616.1	12,865.8	13,292.3	2,865.5	3,234.1	37,415.2	37,852.7	0.0	0.0	197.1	187.1	103.8	103.8	71,173.3	71,286.1
Alabama	9,325.7	9,325.7	2,550.6	2,577.8	169.1	169.1	11,367.3	11,456.6	0.0	0.0	42.6	42.6	99.8	99.8	23,555.1	23,671.6
Kentucky	0.0	0.0	4,828.9	4,863.8	0.0	0.0	15,293.3	15,289.5	0.0	0.0	69.9	69.9	0.0	0.0	20,192.1	20,223.2
Mississippi	6,997.2	6,750.4	1,716.9	1,736.5	2,696.4	3,065.0	2,526.0	2,526.0	0.0	0.0	35.0	35.0	4.0	4.0	13,975.5	14,116.9
Tennessee	1,403.0	540.0	3,769.4	4,114.2	0.0	0.0	8,228.6	8,580.6	0.0	0.0	49.6	39.6	0.0	0.0	13,450.6	13,274.4
West South Central	56,430.9	56,965.2	11,725.5	11,430.0	38,460.0	40,681.3	36,984.8	36,445.9	1,409.8	1,092.6	195.9	200.2	379.9	339.9	145,586.8	147,155.1
Arkansas	4,660.5	4,875.5	753.1	749.6	2,258.0	2,257.0	5,144.0	4,535.0	0.0	0.0	17.2	22.0	0.0	0.0	12,832.8	12,439.1
Louisiana	7,324.2	7,864.6	2,406.2	1,966.1	8,434.2	9,058.3	3,414.0	3,424.0	975.0	947.0	46.9	46.9	34.3	34.3	22,634.8	23,341.2
Oklahoma	7,512.5	7,027.4	1,191.9	1,245.0	5,092.5	5,172.9	5,294.4	5,306.5	0.0	0.0	69.3	69.3	0.0	0.0	19,160.6	18,821.1
Texas	36,933.7	37,197.7	7,374.3	7,469.3	22,675.3	24,193.1	23,132.4	23,180.4	434.8	145.6	62.5	62.0	345.6	305.6	90,958.6	92,553.7
Mountain	21,136.7	20,650.4	8,778.6	8,515.4	3,545.8	3,533.6	30,756.4	32,528.8	52.0	52.0	325.2	327.4	94.9	93.3	64,689.6	65,700.9
Arizona	9,882.4	9,873.2	2,353.6	2,353.6	1,320.8	1,320.8	6,157.0	6,225.0	0.0	0.0	90.5	92.7	0.0	0.0	19,804.3	19,865.3
Colorado	2,733.2	2,533.2	2,545.5	2,364.2	381.0	386.0	5,482.3	5,595.7	0.0	0.0	177.9	177.9	0.0	0.0	11,319.9	11,057.0
Idaho	567.5	268.8	543.0	543.0	0.0	0.0	17.2	17.2	0.0	0.0	5.4	5.4	0.0	0.0	1,133.1	834.4
Montana	0.0	0.0	362.1	321.6	54.0	54.0	2,442.1	2,442.1	52.0	52.0	2.0	2.0	1.5	1.5	2,913.7	2,873.2
Nevada	5,287.2	5,287.2	1,380.6	1,380.6	587.1	587.1	1,293.4	2,873.4	0.0	0.0	11.4	11.4	0.0	0.0	8,559.7	10,139.7
New Mexico	1,465.4	1,461.0	947.2	949.2	896.0	880.5	4,031.0	3,990.0	0.0	0.0	4.4	4.4	0.0	0.0	7,344.0	7,285.1
Utah	1,201.0	1,227.0	530.0	486.6	300.9	301.5	4,901.0	4,903.0	0.0	0.0	27.8	27.8	0.0	0.0	6,960.7	6,945.9
Wyoming	0.0	0.0	116.6	116.6	6.0	3.7	6,432.4	6,482.4	0.0	0.0	5.8	5.8	93.4	91.8	6,654.2	6,700.3
Pacific Contiguous	24,264.9	23,859.9	9,042.1	8,774.2	15,073.4	15,510.0	2,275.5	2,336.4	0.0	123.6	412.1	408.2	211.1	210.1	51,279.1	51,222.4
California	18,322.8	17,852.8	8,207.1	7,939.2	15,045.8	15,482.4	350.5	411.4	0.0	123.6	396.9	393.0	211.1	210.1	42,534.2	42,412.5
Oregon	2,876.4	2,908.4	133.8	133.8	0.0	0.0	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	3,595.2	3,627.2
Washington	3,065.7	3,098.7	701.2	701.2	27.6	27.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	5,149.7	5,182.7
Pacific Noncontiguous	329.4	329.4	510.0	502.6	14.2	5.5	290.5	290.5	0.0	0.0	2,652.7	2,668.5	6.0	12.2	3,802.8	3,808.7
Alaska	329.4	329.4	510.0	502.6	14.2	5.5	110.5	110.5	0.0	0.0	673.5	668.9	0.0	0.0	1,637.6	1,616.9
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,979.2	1,999.6	6.0	12.2	2,165.2	2,191.8
U.S. Total	220,682.1	214,053.3	121,055.8	119,823.0	80,626.5	81,315.0	309,680.4	317,640.3	2,709.3	2,504.1	44,457.9	48,977.5	1,945.6	1,934.2	781,157.6	786,247.4

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 2012

	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
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
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

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 2012

	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
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
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
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

N/A = Not Available.
Capacity and customer count was not collected by technology type before 2010.
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, 2012
(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	206,774	78,346	37.9	74,835	23,624
Independent Power Producers, Non-Combined Heat and Power Plants	170,654	42,509	24.9	40,788	12,216
Independent Power Producers, Combined Heat and Power Plants	29,129	6,716	23.1	6,455	1,238
Electric Power Sector Subtotal	406,557	127,570	31.4	122,078	37,078
Commercial Sector	1,545	762	49.3	732	154
Industrial Sector	14,263	1,272	8.9	1,233	278
All Sectors	422,364	129,604	30.7	124,043	37,510

Notes: 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.
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 4.12. Fuel-Switching Capacity of Operable Generators Reporting Petroleum Liquids as the Primary Fuel, by Producer Type, 2012 (Megawatts, Percent)

		Fuel-Switchable Part of Total		
Producer Type	Total Net Summer Capacity of All Generators Reporting Petroleum as the Primary Fuel	Net Summer Capacity of Petroleum-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	26,732	7,640	28.6	7,224
Independent Power Producers, Non-Combined Heat and Power Plants	18,644	7,867	42.2	6,628
Independent Power Producers, Combined Heat and Power Plants	317	--	--	--
Electric Power Sector Subtotal	45,693	15,507	33.9	13,852
Commercial Sector	443	21	4.8	21
Industrial Sector	1,032	44	4.2	35
All Sectors	47,167	15,572	33.0	13,908

Notes: 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.
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 4.13. Fuel-Switching Capacity of Operable Generators: From Natural Gas to Petroleum Liquids, by Type of Prime Mover, 2012 (Megawatts, Percent)

Prime Mover Type	Number of Generators	Net Summer Capacity	Fuel Switchable Net Summer Capacity Reported to Have No Factors that Limit the Ability to Switch to Petroleum Liquids
Steam Generator	183	26,382	17,932
Combined Cycle	433	45,267	6,370
Internal Combustion	324	1,056	328
Gas Turbine	940	56,900	12,880
All Fuel Switchable Prime Movers	1,880	129,604	37,510

Notes: 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.
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 4.14. Fuel-Switching Capacity of Operable Generators: From Natural Gas to Petroleum Liquids, by Year of Initial Commercial Operation, 2012 (Megawatts, Percent)

Year of Initial Commercial Operation	Number of Generators	Net Summer Capacity	Fuel Switchable Net Summer Capacity Reported to Have No Factors that Limit the Ability to Switch to Petroleum Liquids
Pre-1970	318	11,735	7,535
1970-1974	376	18,210	11,033
1975-1979	105	11,031	7,283
1980-1984	46	945	211
1985-1989	107	3,155	413
1990-1994	208	11,738	1,453
1995-1999	134	9,680	2,099
2000-2004	392	39,841	5,098
2005-2009	116	14,791	2,066
2010-2012	78	8,479	320
Total	1,880	129,604	37,510

Notes: 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.
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."

Chapter 5

Consumption of Fossil Fuels

Table 5.1.A. Coal: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	987,583	767,803	207,448	477	11,855
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
2010					
January	90,767	67,211	22,869	32	654
February	80,209	59,279	20,258	28	643
March	76,544	56,252	19,520	26	746
April	67,037	49,997	16,562	23	456
May	76,061	56,847	18,464	23	727
June	87,395	64,891	21,833	27	643
July	94,993	69,933	24,261	30	769
August	94,786	69,860	24,061	29	835
September	79,573	58,199	20,682	26	666
October	70,918	51,353	18,851	23	690
November	72,756	52,962	19,244	21	529
December	88,645	64,645	23,208	26	765
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.1.B. Coal: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	17,561	0	2,255	929	14,377
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
2010					
January	1,972	0	371	160	1,440
February	1,820	0	347	139	1,334
March	1,839	0	338	123	1,378
April	2,142	0	284	95	1,764
May	1,664	0	285	95	1,283
June	1,668	0	306	108	1,255
July	1,790	0	325	112	1,354
August	1,807	0	326	123	1,359
September	1,677	0	296	107	1,275
October	1,653	0	287	98	1,267
November	1,740	0	308	107	1,325
December	1,955	0	336	139	1,481
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

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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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, 2002 - 2012 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	1,005,144	767,803	209,703	1,405	26,232
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
2010					
January	92,738	67,211	23,240	193	2,094
February	82,029	59,279	20,605	167	1,978
March	78,383	56,252	19,858	149	2,124
April	69,179	49,997	16,845	117	2,220
May	77,725	56,847	18,750	118	2,010
June	89,063	64,891	22,139	135	1,898
July	96,783	69,933	24,586	142	2,122
August	96,593	69,860	24,387	152	2,194
September	81,250	58,199	20,977	133	1,941
October	72,571	51,353	19,139	121	1,958
November	74,496	52,962	19,552	128	1,854
December	90,600	64,645	23,544	165	2,246
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

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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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, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	19,996,890	15,517,857	4,215,043	9,168	254,821
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
2010					
January	1,792,455	1,341,522	438,461	703	11,769
February	1,584,519	1,181,007	391,557	621	11,334
March	1,493,927	1,114,613	365,639	559	13,115
April	1,316,582	995,633	311,079	481	9,389
May	1,489,806	1,129,893	346,590	514	12,809
June	1,722,718	1,294,123	416,294	601	11,699
July	1,876,586	1,401,288	460,903	676	13,719
August	1,865,192	1,393,687	456,226	644	14,636
September	1,550,912	1,153,963	384,143	556	12,251
October	1,371,705	1,012,350	346,400	487	12,467
November	1,401,177	1,036,324	354,510	432	9,911
December	1,730,737	1,279,092	437,884	541	13,218
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
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Table 5.1.E. Coal: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	421,084	0	50,041	23,099	347,944
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
2010					
January	44,514	0	8,627	3,445	32,442
February	40,887	0	8,041	3,024	29,823
March	41,529	0	7,926	2,646	30,957
April	49,876	0	6,822	2,048	41,006
May	37,678	0	6,843	2,099	28,736
June	37,546	0	7,185	2,461	27,900
July	40,421	0	7,799	2,604	30,018
August	40,523	0	7,634	2,767	30,121
September	37,922	0	7,172	2,350	28,401
October	37,289	0	6,993	2,099	28,197
November	38,881	0	7,182	2,263	29,436
December	43,865	0	7,959	2,919	32,987
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
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Table 5.1.F. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	20,417,974	15,517,857	4,265,084	32,267	602,765
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
2010					
January	1,836,969	1,341,522	447,089	4,148	44,210
February	1,625,407	1,181,007	399,597	3,645	41,158
March	1,535,456	1,114,613	373,565	3,205	44,072
April	1,366,458	995,633	317,902	2,528	50,395
May	1,527,484	1,129,893	353,433	2,613	41,544
June	1,760,264	1,294,123	423,479	3,063	39,599
July	1,917,007	1,401,288	468,702	3,280	43,738
August	1,905,714	1,393,687	463,860	3,411	44,757
September	1,588,834	1,153,963	391,314	2,906	40,652
October	1,408,993	1,012,350	353,393	2,585	40,664
November	1,440,058	1,036,324	361,692	2,695	39,346
December	1,774,601	1,279,092	445,843	3,460	46,205
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

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, 2002 - 2012 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	134,415	88,595	39,035	826	5,959
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
2010					
January	5,587	4,381	1,083	17	106
February	2,156	1,599	454	15	88
March	2,178	1,775	325	11	66
April	2,013	1,633	306	10	63
May	3,168	2,593	496	14	65
June	4,485	3,667	750	13	55
July	5,228	3,545	1,589	26	68
August	4,245	3,232	944	15	54
September	2,844	2,154	622	13	56
October	2,029	1,581	369	10	69
November	2,001	1,487	436	5	73
December	4,170	3,161	903	14	91
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

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, 2002 - 2012 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	12,228	0	286	384	11,558
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
2010					
January	606	0	105	31	470
February	504	0	78	26	401
March	335	0	46	7	281
April	355	0	86	9	260
May	340	0	93	14	232
June	304	0	89	13	202
July	392	0	90	34	268
August	337	0	91	26	220
September	313	0	88	9	215
October	398	0	95	5	298
November	431	0	128	8	296
December	552	0	97	31	424
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

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, 2002 - 2012 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	146,643	88,595	39,320	1,210	17,517
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
2010					
January	6,193	4,381	1,188	48	576
February	2,660	1,599	532	41	489
March	2,512	1,775	371	18	348
April	2,367	1,633	392	19	323
May	3,507	2,593	589	28	297
June	4,789	3,667	839	26	257
July	5,620	3,545	1,679	59	336
August	4,582	3,232	1,035	40	274
September	3,157	2,154	711	22	271
October	2,427	1,581	463	15	367
November	2,433	1,487	564	13	369
December	4,722	3,161	1,000	46	515
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.2.D. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	835,481	553,390	241,892	3,953	36,243
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
2010					
January	33,737	26,715	6,282	100	639
February	12,882	9,681	2,578	89	534
March	13,180	10,815	1,900	68	397
April	12,156	9,948	1,773	61	375
May	19,351	15,956	2,926	84	386
June	27,665	22,803	4,455	77	329
July	32,279	22,030	9,689	153	406
August	26,126	20,015	5,703	88	319
September	17,357	13,250	3,699	75	333
October	12,267	9,642	2,154	58	412
November	12,024	8,970	2,587	32	435
December	25,091	19,162	5,295	84	549
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

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, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	76,737	0	1,669	3,276	71,788
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
2010					
January	3,648	0	614	190	2,843
February	3,027	0	422	157	2,447
March	2,015	0	272	43	1,699
April	2,113	0	506	55	1,552
May	2,043	0	554	85	1,404
June	1,826	0	531	78	1,217
July	2,357	0	534	209	1,613
August	2,022	0	541	159	1,322
September	1,886	0	526	55	1,304
October	2,401	0	565	30	1,806
November	2,589	0	765	46	1,778
December	3,316	0	572	187	2,557
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.2.F. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	912,218	553,390	243,561	7,229	108,031
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
2010					
January	37,385	26,715	6,896	291	3,483
February	15,909	9,681	3,000	247	2,981
March	15,196	10,815	2,172	111	2,097
April	14,269	9,948	2,279	116	1,927
May	21,394	15,956	3,480	169	1,790
June	29,491	22,803	4,986	155	1,546
July	34,635	22,030	10,223	363	2,019
August	28,148	20,015	6,244	247	1,641
September	19,243	13,250	4,225	130	1,637
October	14,668	9,642	2,719	88	2,219
November	14,613	8,970	3,352	78	2,213
December	28,407	19,162	5,867	271	3,107
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2002	6,836	2,125	3,580	2	1,130
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
2010					
January	433	283	121	0	29
February	404	258	120	0	25
March	438	308	108	0	23
April	382	253	107	0	22
May	415	261	129	0	25
June	493	319	144	0	30
July	524	340	155	0	29
August	423	286	106	0	31
September	394	296	75	0	23
October	362	245	92	0	25
November	317	201	89	0	27
December	408	274	108	0	25
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

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, 2002 - 2012 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	517	0	111	6	399
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
2010					
January	92	0	10	1	81
February	93	0	10	1	82
March	84	0	12	1	71
April	76	0	9	1	66
May	84	0	10	0	75
June	93	0	8	0	86
July	89	0	8	0	80
August	87	0	2	1	84
September	82	0	2	1	79
October	91	0	9	1	81
November	97	0	11	1	84
December	91	0	9	2	81
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

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, 2002 - 2012 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	7,353	2,125	3,691	8	1,529
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
2010					
January	525	283	130	1	110
February	497	258	131	1	106
March	522	308	119	1	94
April	458	253	116	1	88
May	500	261	139	0	100
June	586	319	151	0	116
July	613	340	163	0	109
August	510	286	108	1	115
September	475	296	76	1	102
October	453	245	101	1	106
November	414	201	100	2	111
December	499	274	117	2	106
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

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, 2002 - 2012 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2002	178,725	57,296	102,224	48	19,158
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
2010					
January	12,265	7,995	3,431	5	835
February	11,386	7,244	3,415	4	723
March	12,395	8,660	3,054	6	676
April	10,813	7,146	3,029	4	635
May	11,779	7,415	3,630	0	733
June	13,964	9,060	4,043	0	861
July	14,869	9,661	4,362	0	845
August	12,020	8,153	2,979	4	884
September	11,265	8,455	2,112	4	693
October	10,338	6,953	2,628	5	753
November	9,051	5,728	2,519	6	798
December	11,628	7,861	3,031	7	729
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

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, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	14,395	0	3,192	179	11,024
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
2010					
January	2,683	0	285	33	2,365
February	2,770	0	302	29	2,439
March	2,424	0	338	36	2,050
April	2,257	0	255	22	1,980
May	2,498	0	280	0	2,217
June	2,716	0	222	0	2,493
July	2,620	0	242	0	2,377
August	2,525	0	52	29	2,445
September	2,534	0	54	28	2,452
October	2,721	0	252	32	2,437
November	2,868	0	324	41	2,503
December	2,688	0	250	46	2,393
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

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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 5.3.F. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	193,120	57,296	105,416	227	30,182
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
2010					
January	14,949	7,995	3,716	38	3,199
February	14,156	7,244	3,717	33	3,162
March	14,819	8,660	3,392	42	2,726
April	13,070	7,146	3,284	26	2,615
May	14,277	7,415	3,911	0	2,951
June	16,680	9,060	4,266	0	3,354
July	17,489	9,661	4,604	0	3,223
August	14,546	8,153	3,031	33	3,329
September	13,799	8,455	2,166	32	3,145
October	13,059	6,953	2,880	37	3,190
November	11,919	5,728	2,843	47	3,301
December	14,316	7,861	3,281	53	3,122
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

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.
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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 5.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	6,126,062	2,259,684	3,148,595	32,545	685,239
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
2010					
January	570,204	244,970	274,050	3,162	48,023
February	501,790	211,934	244,016	2,894	42,945
March	478,851	207,974	223,630	2,972	44,275
April	493,588	210,270	238,616	2,709	41,994
May	582,287	261,882	273,632	2,661	44,111
June	731,357	314,471	366,984	2,931	46,970
July	922,648	387,996	480,611	3,659	50,382
August	971,855	411,663	503,418	3,847	52,927
September	723,230	306,156	365,331	3,447	48,295
October	594,338	260,110	287,180	3,471	43,576
November	519,375	219,357	253,331	3,345	43,341
December	590,663	254,209	283,622	4,364	48,467
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

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Table 5.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	860,024	0	263,619	41,435	554,970
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
2010					
January	72,867	0	26,791	4,086	41,990
February	64,030	0	23,665	3,731	36,634
March	68,097	0	25,259	3,612	39,225
April	62,604	0	22,596	3,279	36,729
May	64,675	0	24,150	3,079	37,446
June	64,855	0	24,210	3,254	37,391
July	74,050	0	28,575	4,452	41,023
August	74,748	0	27,921	4,955	41,872
September	67,954	0	25,235	4,034	38,685
October	67,393	0	23,073	3,960	40,361
November	66,220	0	23,851	3,786	38,583
December	74,282	0	26,442	4,096	43,744
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

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 5.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	6,986,087	2,259,684	3,412,213	73,980	1,240,209
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
2010					
January	643,072	244,970	300,842	7,248	90,013
February	565,820	211,934	267,681	6,626	79,580
March	546,948	207,974	248,889	6,584	83,501
April	556,192	210,270	261,212	5,988	78,722
May	646,962	261,882	297,782	5,740	81,557
June	796,212	314,471	391,194	6,185	84,362
July	996,697	387,996	509,185	8,111	91,405
August	1,046,602	411,663	531,340	8,801	94,799
September	791,184	306,156	390,566	7,481	86,980
October	661,732	260,110	310,253	7,431	83,937
November	585,595	219,357	277,182	7,131	81,924
December	664,945	254,209	310,065	8,461	92,210
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

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 5.4.D. Natural Gas: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	6,249,585	2,307,358	3,214,286	30,626	697,315
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
2010					
January	582,992	249,924	280,499	3,235	49,335
February	513,087	216,353	249,652	2,960	44,121
March	489,636	212,288	228,811	3,036	45,501
April	504,598	214,384	244,312	2,767	43,135
May	595,320	267,066	280,193	2,712	45,348
June	747,778	320,923	375,608	2,994	48,253
July	943,538	396,426	491,656	3,742	51,714
August	993,608	420,430	514,923	3,937	54,318
September	740,053	312,993	373,945	3,526	49,589
October	608,011	265,734	294,030	3,549	44,699
November	530,776	223,630	259,174	3,423	44,549
December	603,269	258,885	290,192	4,476	49,717
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

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 5.4.E. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	885,987	0	267,675	45,359	572,953
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
2010					
January	74,586	0	27,368	4,148	43,070
February	65,539	0	24,180	3,786	37,573
March	69,750	0	25,816	3,663	40,270
April	64,065	0	23,082	3,330	37,653
May	66,246	0	24,669	3,123	38,454
June	66,468	0	24,772	3,299	38,397
July	75,860	0	29,233	4,514	42,113
August	76,582	0	28,502	5,026	43,054
September	69,610	0	25,767	4,098	39,745
October	68,953	0	23,523	4,017	41,413
November	67,772	0	24,329	3,839	39,604
December	76,091	0	27,005	4,158	44,928
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

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, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	7,135,572	2,307,358	3,481,961	75,985	1,270,268
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
2010					
January	657,578	249,924	307,867	7,383	92,404
February	578,625	216,353	273,832	6,746	81,695
March	559,386	212,288	254,627	6,700	85,771
April	568,662	214,384	267,394	6,096	80,788
May	661,566	267,066	304,862	5,835	83,803
June	814,246	320,923	400,380	6,293	86,650
July	1,019,398	396,426	520,890	8,255	93,827
August	1,070,189	420,430	543,425	8,963	97,372
September	809,663	312,993	399,713	7,624	89,334
October	676,965	265,734	317,553	7,566	86,112
November	598,548	223,630	283,503	7,262	84,153
December	679,360	258,885	317,197	8,634	94,645
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

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 5.5.D. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	605,054	10,659	129,947	469	463,980
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
2010					
January	29,578	3,731	11,954	23	13,870
February	27,768	3,305	11,335	21	13,107
March	28,852	2,991	11,797	22	14,041
April	27,499	3,043	10,463	22	13,971
May	26,790	2,867	10,173	22	13,728
June	29,061	3,304	11,354	23	14,380
July	30,802	3,533	12,297	24	14,948
August	31,578	3,630	12,793	24	15,131
September	29,522	3,322	11,298	23	14,879
October	27,669	2,857	10,511	22	14,279
November	29,313	3,793	11,044	23	14,452
December	31,099	3,790	12,052	25	15,231
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.5.E. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	682,060	0	9,585	727	671,747
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
2010					
January	73,418	0	1,677	91	71,651
February	67,994	0	1,689	81	66,224
March	74,187	0	1,656	86	72,446
April	70,163	0	1,371	85	68,707
May	70,816	0	1,230	87	69,499
June	71,919	0	1,547	88	70,284
July	74,173	0	1,444	95	72,634
August	74,762	0	1,573	93	73,096
September	73,935	0	1,447	86	72,402
October	73,817	0	1,617	85	72,115
November	73,041	0	1,460	91	71,490
December	77,815	0	1,647	96	76,072
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

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 5.5.F. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2002	1,287,114	10,659	139,532	1,196	1,135,727
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
2010					
January	102,997	3,731	13,630	114	85,521
February	95,763	3,305	13,024	101	79,332
March	103,039	2,991	13,453	108	86,487
April	97,662	3,043	11,834	107	82,678
May	97,606	2,867	11,403	110	83,227
June	100,980	3,304	12,901	111	84,664
July	104,975	3,533	13,741	119	87,582
August	106,340	3,630	14,366	117	88,226
September	103,457	3,322	12,745	109	87,280
October	101,485	2,857	12,128	106	86,394
November	102,353	3,793	12,504	114	85,942
December	108,914	3,790	13,700	120	91,303
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

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.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
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
2010					
January	17,531	1,715	15,323	461	32
February	16,189	1,653	14,120	384	33
March	18,642	1,988	16,174	439	40
April	17,885	1,673	15,706	467	40
May	17,830	1,675	15,684	432	39
June	18,745	1,676	16,564	471	35
July	18,666	1,633	16,516	486	31
August	18,811	1,626	16,659	493	33
September	18,537	1,602	16,446	455	35
October	17,561	1,582	15,479	475	25
November	18,710	1,558	16,632	496	23
December	19,224	1,596	17,125	477	26
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

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, 2002 - 2012 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
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
2010					
January	118	0	83	30	5
February	110	0	79	27	5
March	132	0	94	32	6
April	131	0	93	33	6
May	132	0	92	34	6
June	139	0	104	30	5
July	140	0	102	33	5
August	132	0	95	32	5
September	148	0	113	30	5
October	143	0	111	29	4
November	136	0	101	32	3
December	162	0	130	28	4
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

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 5.6.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	17,649	1,715	15,406	491	37
February	16,300	1,653	14,198	410	38
March	18,774	1,988	16,268	471	46
April	18,017	1,673	15,798	499	46
May	17,961	1,675	15,776	466	44
June	18,884	1,676	16,667	501	40
July	18,805	1,633	16,618	519	36
August	18,943	1,626	16,754	525	38
September	18,686	1,602	16,559	485	40
October	17,705	1,582	15,590	504	29
November	18,846	1,558	16,733	528	27
December	19,386	1,596	17,255	505	30
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

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.D. Landfill Gas: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
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
2010					
January	8,441	853	7,335	236	17
February	7,824	830	6,781	197	17
March	9,056	1,013	7,796	226	21
April	8,689	848	7,581	239	21
May	8,694	850	7,603	220	20
June	9,137	849	8,028	241	18
July	9,028	814	7,949	249	16
August	9,117	809	8,039	252	17
September	8,989	800	7,938	233	18
October	8,494	793	7,444	244	13
November	9,054	780	8,007	255	12
December	9,312	790	8,263	245	14
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

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, 2002 - 2012 (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
2010					
January	61	0	44	14	3
February	58	0	42	13	3
March	67	0	49	15	3
April	67	0	49	15	3
May	68	0	49	16	3
June	73	0	56	14	3
July	73	0	55	16	2
August	69	0	52	15	3
September	79	0	62	14	3
October	75	0	59	14	2
November	71	0	55	15	2
December	87	0	71	13	2
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.6.F. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	8,502	853	7,379	251	19
February	7,882	830	6,823	209	20
March	9,123	1,013	7,845	241	24
April	8,756	848	7,630	254	24
May	8,762	850	7,652	236	23
June	9,210	849	8,084	255	21
July	9,101	814	8,004	264	19
August	9,186	809	8,090	268	20
September	9,068	800	8,000	247	21
October	8,568	793	7,503	258	15
November	9,126	780	8,062	270	14
December	9,399	790	8,334	258	16
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

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.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2002 - 2012 (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
2010					
January	1,546	30	1,332	184	0
February	1,384	25	1,215	144	0
March	1,650	36	1,434	180	0
April	1,655	33	1,426	196	0
May	1,692	33	1,454	204	0
June	1,674	36	1,442	196	0
July	1,697	37	1,472	188	0
August	1,689	37	1,452	201	0
September	1,609	32	1,383	194	0
October	1,602	35	1,388	179	0
November	1,599	34	1,383	182	0
December	1,639	33	1,421	185	0
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

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.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	191	0	69	107	14
February	178	0	61	106	11
March	204	0	66	126	12
April	207	0	67	127	13
May	249	0	67	167	15
June	204	0	69	120	14
July	194	0	68	115	11
August	198	0	66	118	14
September	177	0	67	99	11
October	163	0	69	83	11
November	155	0	74	68	14
December	167	0	76	80	11
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

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, 2002 - 2012 (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
2010					
January	1,737	30	1,402	291	14
February	1,562	25	1,276	250	11
March	1,854	36	1,500	306	12
April	1,862	33	1,492	323	13
May	1,940	33	1,521	371	15
June	1,878	36	1,512	316	14
July	1,891	37	1,540	303	11
August	1,887	37	1,518	318	14
September	1,787	32	1,451	293	11
October	1,765	35	1,456	262	11
November	1,755	34	1,457	250	14
December	1,807	33	1,497	265	11
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

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, 2002 - 2012 (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
2010					
January	11,540	244	9,886	1,410	0
February	10,313	190	9,030	1,094	0
March	12,214	293	10,555	1,366	0
April	12,384	276	10,586	1,522	0
May	12,645	278	10,780	1,587	0
June	12,471	297	10,668	1,506	0
July	12,593	308	10,840	1,444	0
August	12,572	309	10,730	1,534	0
September	11,988	261	10,229	1,498	0
October	11,979	297	10,297	1,385	0
November	11,964	294	10,268	1,403	0
December	12,269	275	10,567	1,428	0
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

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, 2002 - 2012 (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
2010					
January	1,476	0	518	851	107
February	1,365	0	444	835	86
March	1,572	0	486	992	93
April	1,598	0	495	1,003	100
May	1,961	0	492	1,358	111
June	1,559	0	509	945	105
July	1,481	0	498	900	82
August	1,519	0	489	928	102
September	1,338	0	492	763	83
October	1,218	0	502	632	84
November	1,163	0	543	518	102
December	1,254	0	562	609	83
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

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.F. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	13,015	244	10,405	2,260	107
February	11,678	190	9,473	1,929	86
March	13,786	293	11,042	2,359	93
April	13,982	276	11,081	2,525	100
May	14,605	278	11,272	2,945	111
June	14,030	297	11,177	2,451	105
July	14,073	308	11,339	2,345	82
August	14,091	309	11,220	2,461	102
September	13,326	261	10,721	2,261	83
October	13,197	297	10,799	2,017	84
November	13,127	294	10,811	1,920	102
December	13,523	275	11,129	2,037	83
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

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 5.8.D. Other Waste Biomass: Consumption for Electricity Generation, by Sector, 2002 - 2012 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
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
2010					
January	2,223	189	1,078	321	635
February	2,336	275	1,208	291	561
March	2,287	311	1,079	302	594
April	2,223	298	911	304	710
May	2,237	307	985	294	650
June	2,561	331	1,220	321	690
July	2,763	350	1,383	341	689
August	2,781	362	1,359	340	719
September	2,425	312	1,189	313	611
October	2,588	338	1,180	310	760
November	2,852	353	1,391	329	779
December	2,721	240	1,466	323	693
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

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 5.8.E. Other Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	4,885	0	1,088	137	3,661
February	4,105	0	943	137	3,025
March	4,398	0	845	136	3,417
April	4,224	0	399	138	3,688
May	2,986	0	365	123	2,498
June	2,935	0	562	148	2,226
July	3,327	0	552	149	2,626
August	3,219	0	544	160	2,515
September	2,642	0	439	126	2,077
October	4,526	0	703	109	3,714
November	5,099	0	1,023	130	3,946
December	4,807	0	974	155	3,678
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

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 5.8.F. Other Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2002 - 2012 (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
2010					
January	7,109	189	2,166	458	4,295
February	6,441	275	2,151	429	3,586
March	6,685	311	1,924	439	4,011
April	6,447	298	1,309	442	4,397
May	5,223	307	1,351	417	3,148
June	5,496	331	1,782	469	2,915
July	6,089	350	1,935	490	3,315
August	6,000	362	1,903	500	3,235
September	5,067	312	1,628	440	2,687
October	7,114	338	1,883	419	4,474
November	7,951	353	2,413	459	4,725
December	7,528	240	2,440	478	4,370
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

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, 2012 and 2011 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	1,787	2,998	-40.0%	520	898	1,257	2,087	0	0	10	12
Connecticut	297	317	-6.5%	0	0	297	317	0	0	0	0
Maine	11	14	-18.0%	0	0	6	7	0	0	5	6
Massachusetts	959	1,769	-46.0%	0	0	954	1,763	0	0	5	6
New Hampshire	520	898	-42.0%	520	898	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	44,000	53,658	-18.0%	6	16	43,734	53,052	4	1	256	589
New Jersey	833	1,805	-54.0%	0	0	833	1,805	0	0	0	0
New York	2,158	4,528	-52.0%	6	16	2,083	4,432	0	1	70	80
Pennsylvania	41,009	47,325	-13.0%	0	0	40,819	46,815	4	1	186	509
East North Central	182,280	210,082	-13.0%	128,058	145,150	53,050	63,646	97	112	1,076	1,174
Illinois	49,162	54,381	-9.6%	6,377	6,478	42,132	47,204	30	14	623	685
Indiana	46,587	52,590	-11.0%	43,475	47,863	3,062	4,678	36	36	14	13
Michigan	29,796	32,451	-8.2%	29,449	32,132	212	193	28	46	107	81
Ohio	37,242	47,611	-22.0%	29,475	35,865	7,645	11,570	2	13	121	162
Wisconsin	19,494	23,049	-15.0%	19,283	22,812	0	0	1	3	210	233
West North Central	135,575	146,881	-7.7%	133,859	145,208	0	0	64	97	1,651	1,576
Iowa	21,638	23,535	-8.1%	20,747	22,677	0	0	43	47	848	811
Kansas	17,759	20,129	-12.0%	17,759	20,129	0	0	0	0	0	0
Minnesota	13,704	17,003	-19.0%	13,384	16,515	0	0	1	24	319	464
Missouri	42,386	46,408	-8.7%	42,340	46,353	0	0	21	26	26	29
Nebraska	15,274	15,908	-4.0%	14,884	15,711	0	0	0	0	390	197
North Dakota	22,862	22,130	3.3%	22,795	22,056	0	0	0	0	68	74
South Dakota	1,950	1,768	10.0%	1,950	1,768	0	0	0	0	0	0
South Atlantic	116,543	140,060	-17.0%	96,679	118,044	19,242	21,139	31	26	591	851
Delaware	677	712	-5.0%	0	0	677	712	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	19,699	22,455	-12.0%	19,080	21,529	567	860	0	0	52	66
Georgia	20,985	29,092	-28.0%	20,836	28,894	0	0	0	0	149	198
Maryland	6,981	8,949	-22.0%	0	0	6,919	8,898	19	0	43	51
North Carolina	20,761	24,452	-15.0%	20,040	23,569	661	811	8	14	52	58
South Carolina	11,706	13,994	-16.0%	11,622	13,807	17	80	0	0	67	107
Virginia	6,213	8,414	-26.0%	5,634	7,453	451	820	4	11	124	130
West Virginia	29,521	31,993	-7.7%	19,468	22,793	9,950	8,959	0	0	103	241
East South Central	84,979	97,157	-13.0%	81,613	94,110	3,081	2,729	4	5	281	314
Alabama	23,056	28,180	-18.0%	22,993	28,098	15	27	0	0	47	54
Kentucky	38,978	42,543	-8.4%	38,978	42,543	0	0	0	0	0	0
Mississippi	5,240	6,203	-16.0%	2,175	3,502	3,066	2,701	0	0	0	0
Tennessee	17,705	20,232	-12.0%	17,466	19,967	0	0	4	5	234	260
West South Central	147,598	166,132	-11.0%	76,768	84,931	70,624	80,650	0	0	207	551
Arkansas	17,048	17,491	-2.5%	14,571	15,123	2,451	2,343	0	0	25	26
Louisiana	14,747	16,717	-12.0%	8,106	8,421	6,640	8,292	0	0	0	4
Oklahoma	18,499	21,497	-14.0%	17,115	19,993	1,201	1,311	0	0	182	193
Texas	97,305	110,426	-12.0%	36,974	41,394	60,331	68,705	0	0	0	328
Mountain	107,089	110,554	-3.1%	96,176	98,799	10,421	11,195	0	0	493	560
Arizona	21,519	23,307	-7.7%	21,461	23,217	0	0	0	0	58	90
Colorado	19,025	18,541	2.6%	18,983	18,500	36	41	0	0	5	0
Idaho	18	19	-8.2%	0	0	0	0	0	0	18	19
Montana	9,064	9,772	-7.2%	248	298	8,809	9,460	0	0	7	14
Nevada	2,258	2,863	-21.0%	1,630	2,136	628	727	0	0	0	0
New Mexico	14,452	15,496	-6.7%	14,452	15,496	0	0	0	0	0	0
Utah	14,304	15,242	-6.2%	13,639	14,582	445	422	0	0	220	237
Wyoming	26,449	25,313	4.5%	25,763	24,570	502	545	0	0	184	199
Pacific Contiguous	4,596	6,196	-26.0%	1,583	1,985	2,930	4,124	0	0	83	87
California	502	779	-36.0%	0	0	428	699	0	0	74	80
Oregon	1,583	1,985	-20.0%	1,583	1,985	0	0	0	0	0	0
Washington	2,511	3,432	-27.0%	0	0	2,502	3,425	0	0	9	7
Pacific Noncontiguous	1,287	1,221	5.4%	206	175	958	919	105	106	17	21
Alaska	530	512	3.6%	206	175	219	231	105	106	0	0
Hawaii	757	709	6.7%	0	0	739	688	0	0	17	21
U.S. Total	825,734	934,938	-12.0%	615,467	689,316	205,295	239,541	307	347	4,665	5,735

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,. 2012 and 2011 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	891	1,267	-30.0%	119	249	650	860	80	81	41	77
Connecticut	259	369	-30.0%	8	10	247	355	0	0	4	4
Maine	197	320	-39.0%	0	1	176	237	6	9	14	73
Massachusetts	325	361	-10.0%	30	73	226	265	46	23	22	NM
New Hampshire	58	143	-60.0%	46	126	0	1	11	16	0	0
Rhode Island	31	28	8.0%	29	21	0	2	1	5	0	0
Vermont	22	46	-53.0%	6	19	0	0	15	27	0	0
Middle Atlantic	1,720	2,823	-39.0%	642	916	986	1,785	22	24	71	97
New Jersey	77	233	-67.0%	9	10	67	221	1	1	1	2
New York	1,053	1,672	-37.0%	633	906	338	658	17	18	65	90
Pennsylvania	590	918	-36.0%	0	0	582	906	4	5	4	6
East North Central	1,262	1,519	-17.0%	1,058	1,269	182	215	3	7	18	28
Illinois	137	161	-15.0%	49	56	88	105	0	0	0	0
Indiana	217	310	-30.0%	208	289	0	0	1	2	8	19
Michigan	281	374	-25.0%	273	365	0	0	2	4	6	5
Ohio	526	589	-11.0%	433	486	90	101	0	0	3	2
Wisconsin	100	85	18.0%	95	74	4	10	0	0	1	1
West North Central	634	639	-0.7%	617	624	11	8	2	3	3	4
Iowa	204	158	29.0%	199	155	4	3	0	0	0	0
Kansas	78	86	-9.3%	78	86	0	0	0	0	0	0
Minnesota	62	56	12.0%	53	48	6	4	2	2	2	2
Missouri	163	165	-1.1%	163	164	0	0	0	0	0	1
Nebraska	43	70	-39.0%	43	70	0	0	0	0	0	0
North Dakota	66	83	-20.0%	64	81	0	0	0	0	1	2
South Dakota	18	21	-16.0%	17	20	1	1	0	0	0	0
South Atlantic	3,416	5,304	-36.0%	2,539	4,140	535	985	149	7	194	172
Delaware	46	75	-39.0%	1	3	44	72	0	0	0	0
District of Columbia	26	275	-91.0%	0	0	26	275	0	0	0	0
Florida	1,262	2,441	-48.0%	1,206	2,375	20	27	0	0	36	39
Georgia	232	233	-0.4%	126	167	3	7	3	3	99	56
Maryland	409	467	-13.0%	15	17	243	447	143	0	7	3
North Carolina	352	406	-13.0%	330	372	10	8	0	0	12	25
South Carolina	216	213	1.6%	196	192	4	0	0	1	16	20
Virginia	624	867	-28.0%	417	706	182	129	2	3	23	30
West Virginia	250	327	-24.0%	249	308	2	19	0	0	0	0
East South Central	757	927	-18.0%	691	869	4	11	0	0	62	47
Alabama	198	228	-13.0%	138	176	4	11	0	0	57	41
Kentucky	232	256	-9.4%	232	256	0	0	0	0	0	0
Mississippi	29	68	-57.0%	26	65	0	0	0	0	3	4
Tennessee	297	374	-21.0%	295	372	0	0	0	0	2	2
West South Central	415	494	-16.0%	126	261	268	211	1	3	20	20
Arkansas	56	96	-41.0%	32	58	23	36	0	0	2	3
Louisiana	73	97	-24.0%	23	49	35	33	0	0	16	14
Oklahoma	22	31	-30.0%	21	30	0	0	0	0	1	0
Texas	264	271	-2.4%	51	124	210	141	1	2	2	3
Mountain	433	488	-11.0%	382	439	45	46	0	0	6	2
Arizona	77	98	-22.0%	76	96	0	0	0	0	1	2
Colorado	31	56	-44.0%	31	56	0	0	0	0	0	0
Idaho	0	0	-25.0%	0	0	0	0	0	0	0	0
Montana	31	38	-18.0%	0	5	31	34	0	0	0	0
Nevada	41	28	45.0%	30	20	11	8	0	0	0	0
New Mexico	88	72	22.0%	86	67	1	5	0	0	0	0
Utah	71	88	-20.0%	67	88	2	0	0	0	2	0
Wyoming	95	107	-12.0%	92	107	0	0	0	0	3	0
Pacific Contiguous	166	163	2.3%	85	87	47	37	2	2	33	37
California	97	88	11.0%	61	64	32	18	1	1	3	5
Oregon	12	13	-3.1%	12	12	0	0	0	0	0	1
Washington	57	62	-8.5%	12	12	15	19	0	0	30	31
Pacific Noncontiguous	12,910	13,703	-5.8%	11,261	11,989	1,382	1,475	12	8	254	232
Alaska	1,710	1,613	6.0%	1,615	1,517	0	0	9	4	86	92
Hawaii	11,200	12,090	-7.4%	9,646	10,472	1,382	1,475	4	4	168	140
U.S. Total	22,604	27,326	-17.0%	17,521	20,844	4,110	5,633	272	133	702	716

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 5.11. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, 2012 and 2011 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
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	56	121	-54.0%	0	0	0	94	0	0	56	27
New Jersey	11	6	69.0%	0	0	0	0	0	0	11	6
New York	0	94	-100.0%	0	0	0	94	0	0	0	0
Pennsylvania	46	21	116.0%	0	0	0	0	0	0	46	21
East North Central	801	933	-14.0%	236	438	502	435	0	0	64	60
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	204	286	-29.0%	204	286	0	0	0	0	0	0
Michigan	53	47	12.0%	0	0	34	31	0	0	19	16
Ohio	468	403	16.0%	0	0	468	403	0	0	0	0
Wisconsin	76	196	-61.0%	31	152	0	0	0	0	45	44
West North Central	6	42	-85.0%	5	41	0	0	1	1	0	0
Iowa	6	28	-79.0%	5	28	0	0	1	1	0	0
Kansas	0	13	-100.0%	0	13	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	298	766	-61.0%	246	695	0	0	0	0	52	71
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	246	695	-65.0%	246	695	0	0	0	0	0	0
Georgia	52	71	-26.0%	0	0	0	0	0	0	52	71
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	542	608	-11.0%	542	608	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	542	608	-11.0%	542	608	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	1,741	2,019	-14.0%	1,076	1,667	25	225	0	0	640	128
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,155	1,750	-34.0%	1,076	1,667	0	0	0	0	79	83
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	586	269	118.0%	0	0	25	225	0	0	561	44
Mountain	172	168	2.2%	0	0	172	168	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	168	2.2%	0	0	172	168	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	58	356	-84.0%	0	0	58	356	0	0	0	0
California	58	356	-84.0%	0	0	58	356	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	3,675	5,012	-27.0%	2,105	3,449	756	1,277	1	1	812	286

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 5.12. Consumption of Nautral Gas for Electricity Generation by State, by Sector, 2012 and 2011 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	460,887	461,590	-0.2%	3,652	4,218	428,781	432,350	8,630	6,287	19,824	18,735
Connecticut	120,380	110,546	8.9%	69	730	113,620	105,965	3,952	2,061	2,739	1,790
Maine	44,424	49,352	-10.0%	0	0	28,456	33,555	307	12	15,662	15,785
Massachusetts	184,330	190,063	-3.0%	2,792	2,393	176,497	182,865	3,749	3,761	1,293	1,045
New Hampshire	50,678	46,927	8.0%	754	1,046	49,655	45,765	139	0	131	115
Rhode Island	61,037	64,652	-5.6%	0	0	60,553	64,198	483	453	0	0
Vermont	38	49	-24.0%	38	49	0	0	0	0	0	0
Middle Atlantic	1,096,021	919,372	19.0%	131,110	128,822	946,544	773,751	8,003	6,385	10,364	10,414
New Jersey	219,175	188,343	16.0%	320	0	213,482	183,312	1,380	744	3,993	4,287
New York	491,430	426,610	15.0%	130,766	128,772	353,376	290,943	5,443	5,122	1,845	1,772
Pennsylvania	385,415	304,420	27.0%	24	50	379,686	299,495	1,180	519	4,525	4,356
East North Central	638,823	371,576	72.0%	232,311	138,800	379,014	216,434	14,395	7,745	13,103	8,597
Illinois	95,068	49,876	91.0%	12,659	10,104	72,451	33,739	7,729	3,580	2,228	2,453
Indiana	113,236	80,758	40.0%	85,667	56,214	24,183	20,711	318	277	3,068	3,556
Michigan	169,806	99,748	70.0%	41,177	25,010	119,531	71,784	2,874	1,415	6,224	1,539
Ohio	173,754	93,220	86.0%	45,449	23,897	124,273	66,884	3,159	1,979	872	460
Wisconsin	86,961	47,975	81.0%	47,358	23,575	38,576	23,317	315	493	711	590
West North Central	170,587	113,993	50.0%	144,889	99,437	20,583	11,622	3,050	2,111	2,066	823
Iowa	17,124	9,963	72.0%	16,508	9,893	0	0	55	35	560	35
Kansas	33,262	30,508	9.0%	32,520	30,501	0	0	0	0	742	7
Minnesota	58,725	29,484	99.0%	47,262	22,369	9,074	5,419	1,901	1,345	488	352
Missouri	51,047	37,796	35.0%	38,436	30,862	11,508	6,203	1,090	714	13	17
Nebraska	7,867	4,563	72.0%	7,696	4,223	0	0	4	17	167	324
North Dakota	97	89	9.7%	1	0	0	0	0	0	97	88
South Dakota	2,465	1,589	55.0%	2,465	1,589	0	0	0	0	0	0
South Atlantic	2,027,116	1,647,571	23.0%	1,556,238	1,289,259	444,508	341,903	3,250	2,315	23,120	14,093
Delaware	60,033	40,908	47.0%	87	172	53,163	38,620	0	0	6,783	2,115
District of Columbia	1,019	1,003	1.6%	0	1,003	0	0	1,019	0	0	0
Florida	1,143,253	1,050,028	8.9%	1,036,033	956,166	97,848	85,329	166	181	9,207	8,352
Georgia	311,419	197,831	57.0%	182,391	96,581	125,140	99,567	0	0	3,888	1,682
Maryland	51,189	23,084	122.0%	0	0	48,313	20,026	2,023	2,124	852	934
North Carolina	151,311	90,156	68.0%	127,498	71,379	23,368	18,420	42	5	403	352
South Carolina	116,711	100,013	17.0%	98,325	86,623	17,592	13,227	0	5	794	158
Virginia	189,760	141,946	34.0%	111,469	76,938	77,159	64,532	0	0	1,132	477
West Virginia	2,421	2,603	-7.0%	435	398	1,925	2,181	0	0	62	24
East South Central	813,127	640,447	27.0%	439,019	349,841	346,672	278,444	1,454	949	25,982	11,214
Alabama	409,036	349,641	17.0%	114,320	106,303	285,876	236,041	0	0	8,840	7,296
Kentucky	33,068	17,343	91.0%	27,707	13,927	3,487	1,647	0	0	1,874	1,769
Mississippi	306,475	245,953	25.0%	234,031	203,296	57,309	40,755	103	115	15,031	1,787
Tennessee	64,548	27,510	135.0%	62,961	26,314	0	0	1,351	834	236	362
West South Central	2,572,269	2,384,064	7.9%	824,116	786,526	1,293,055	1,162,264	6,077	3,851	449,020	431,422
Arkansas	123,878	101,960	21.0%	24,399	29,389	98,125	71,364	7	5	1,348	1,202
Louisiana	498,772	462,060	7.9%	225,881	225,596	79,084	50,678	255	262	193,552	185,523
Oklahoma	318,424	264,642	20.0%	232,526	202,132	85,234	61,912	60	138	605	460
Texas	1,631,194	1,555,402	4.9%	341,311	329,409	1,030,613	978,309	5,755	3,447	253,516	244,237
Mountain	654,440	556,922	18.0%	394,561	350,199	242,649	198,247	3,086	2,016	14,144	6,460
Arizona	229,825	181,309	27.0%	111,256	80,898	117,416	99,878	1,115	511	38	23
Colorado	84,984	84,305	0.8%	48,631	68,541	36,116	15,571	28	28	210	164
Idaho	13,685	8,376	63.0%	4,394	1,615	8,827	6,293	0	0	464	467
Montana	5,370	4,681	15.0%	5,145	4,571	224	110	0	0	0	0
Nevada	188,769	161,699	17.0%	136,828	113,552	48,990	46,006	629	606	2,322	1,535
New Mexico	72,592	72,235	0.5%	48,015	45,308	23,734	25,548	839	871	4	509
Utah	55,880	41,389	35.0%	39,975	35,377	7,163	4,761	476	0	8,266	1,250
Wyoming	3,335	2,929	14.0%	317	338	179	80	0	0	2,840	2,511
Pacific Contiguous	1,011,056	745,740	36.0%	336,272	257,246	584,454	404,093	15,153	15,492	75,178	68,909
California	889,837	650,871	37.0%	276,436	210,336	524,909	357,290	14,552	15,054	73,940	68,190
Oregon	81,995	60,164	36.0%	27,956	19,864	52,659	39,474	570	403	810	423
Washington	39,224	34,705	13.0%	31,880	27,046	6,885	7,329	31	34	428	297
Pacific Noncontiguous	40,383	42,591	-5.2%	39,758	41,738	0	0	18	19	606	834
Alaska	40,383	42,591	-5.2%	39,758	41,738	0	0	18	19	606	834
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	9,484,710	7,883,865	20.0%	4,101,927	3,446,087	4,686,260	3,819,107	63,116	47,170	633,407	571,501

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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, 2012 and 2011 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	9,595	9,945	-3.5%	0	0	9,074	9,945	520	0	0	0
Connecticut	595	624	-4.6%	0	0	595	624	0	0	0	0
Maine	518	524	-1.0%	0	0	518	524	0	0	0	0
Massachusetts	3,603	3,623	-0.6%	0	0	3,603	3,623	0	0	0	0
New Hampshire	1,790	1,485	21.0%	0	0	1,270	1,485	520	0	0	0
Rhode Island	2,409	3,037	-21.0%	0	0	2,409	3,037	0	0	0	0
Vermont	679	653	4.0%	0	0	679	653	0	0	0	0
Middle Atlantic	51,169	47,289	8.2%	0	0	50,867	44,820	302	2,469	0	0
New Jersey	9,691	8,192	18.0%	0	0	9,691	5,993	0	2,199	0	0
New York	16,418	15,564	5.5%	0	0	16,418	15,564	0	0	0	0
Pennsylvania	25,060	23,533	6.5%	0	0	24,758	23,263	302	270	0	0
East North Central	63,904	58,219	9.8%	6,497	6,693	56,893	50,865	210	277	303	384
Illinois	16,204	15,856	2.2%	0	0	16,204	15,856	0	0	0	0
Indiana	6,601	6,953	-5.1%	6,297	6,569	0	0	0	0	303	384
Michigan	18,536	16,711	11.0%	0	0	18,536	16,711	0	0	0	0
Ohio	9,784	5,780	69.0%	0	0	9,784	5,780	0	0	0	0
Wisconsin	12,780	12,918	-1.1%	200	124	12,369	12,518	210	277	0	0
West North Central	9,301	8,395	11.0%	2,903	2,011	6,398	6,384	0	0	0	0
Iowa	2,021	2,096	-3.6%	0	0	2,021	2,096	0	0	0	0
Kansas	1,205	1,338	-10.0%	0	0	1,205	1,338	0	0	0	0
Minnesota	3,489	2,482	41.0%	768	0	2,720	2,482	0	0	0	0
Missouri	1,488	1,209	23.0%	1,037	742	452	468	0	0	0	0
Nebraska	1,098	1,269	-13.0%	1,098	1,269	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	41,593	32,175	29.0%	4,763	5,156	32,235	25,258	2,353	1,761	2,242	0
Delaware	2,426	3,510	-31.0%	0	0	2,426	3,510	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	7,839	8,307	-5.6%	1,718	1,708	6,122	6,598	0	0	0	0
Georgia	2,924	1,866	57.0%	0	0	2,452	1,378	472	488	0	0
Maryland	3,374	2,015	67.0%	0	0	1,797	742	1,577	1,273	0	0
North Carolina	6,497	4,931	32.0%	0	0	6,461	4,931	36	0	0	0
South Carolina	5,490	3,749	46.0%	2,953	3,189	295	560	0	0	2,242	0
Virginia	12,779	7,528	70.0%	92	259	12,420	7,269	267	0	0	0
West Virginia	262	270	-2.8%	0	0	262	270	0	0	0	0
East South Central	3,898	1,912	104.0%	2,398	1,162	1,500	750	0	0	0	0
Alabama	226	0	--	0	0	226	0	0	0	0	0
Kentucky	2,398	1,162	106.0%	2,398	1,162	0	0	0	0	0	0
Mississippi	48	0	--	0	0	48	0	0	0	0	0
Tennessee	1,226	750	63.0%	0	0	1,226	750	0	0	0	0
West South Central	15,086	14,334	5.2%	0	0	14,429	13,704	657	630	0	0
Arkansas	1,193	1,256	-5.0%	0	0	1,193	1,256	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	13,893	13,078	6.2%	0	0	13,237	12,448	657	630	0	0
Mountain	4,328	3,548	22.0%	948	708	3,380	2,840	0	0	0	0
Arizona	1,367	1,222	12.0%	728	708	639	514	0	0	0	0
Colorado	565	606	-6.8%	0	0	565	606	0	0	0	0
Idaho	741	523	42.0%	220	0	521	523	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	402	0	--	0	0	402	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1,253	1,197	4.7%	0	0	1,253	1,197	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	57,502	56,978	0.9%	7,684	6,356	27,187	26,290	22,630	24,332	0	0
California	50,347	51,408	-2.1%	3,549	3,452	24,663	24,148	22,134	23,808	0	0
Oregon	4,165	3,932	5.9%	1,360	1,412	2,309	1,997	496	524	0	0
Washington	2,990	1,638	83.0%	2,775	1,493	215	145	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	256,376	232,795	10.0%	25,193	22,086	201,965	180,856	26,672	29,469	2,545	384

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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 5.14. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, 2012 and 2011 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	4,041	4,122	-2.0%	0	0	3,838	3,922	203	200	0	0
Connecticut	1,415	1,442	-1.9%	0	0	1,415	1,442	0	0	0	0
Maine	440	445	-1.3%	0	0	237	246	203	200	0	0
Massachusetts	2,017	2,063	-2.2%	0	0	2,017	2,063	0	0	0	0
New Hampshire	169	172	-2.0%	0	0	169	172	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	5,512	5,308	3.8%	0	0	4,315	4,485	1,198	823	0	0
New Jersey	1,367	1,388	-1.6%	0	0	1,015	1,039	351	349	0	0
New York	2,077	2,011	3.3%	0	0	1,505	1,799	572	212	0	0
Pennsylvania	2,069	1,909	8.4%	0	0	1,795	1,647	274	263	0	0
East North Central	272	252	7.9%	37	35	0	0	234	216	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	12	11	11.0%	0	0	0	0	12	11	0	0
Michigan	222	205	8.1%	0	0	0	0	222	205	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	37	35	5.7%	37	35	0	0	0	0	0	0
West North Central	630	600	5.1%	380	353	229	233	21	14	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	630	600	5.1%	380	353	229	233	21	14	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	5,429	5,545	-2.1%	0	0	5,041	5,170	388	375	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	3,654	3,708	-1.5%	0	0	3,654	3,708	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	737	752	-2.0%	0	0	737	752	0	0	0	0
North Carolina	0	27	-100.0%	0	0	0	27	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	1,038	1,058	-1.9%	0	0	650	684	388	375	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	12	4	189.0%	0	0	0	0	0	0	12	4
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	12	4	189.0%	0	0	0	0	0	0	12	4
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	3	3	-0.1%	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	-0.1%	0	0	3	3	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	810	811	-0.1%	0	0	810	811	0	0	0	0
California	515	517	-0.3%	0	0	515	517	0	0	0	0
Oregon	120	119	1.3%	0	0	120	119	0	0	0	0
Washington	175	175	-0.4%	0	0	175	175	0	0	0	0
Pacific Noncontiguous	260	327	-21.0%	0	0	0	0	260	327	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	260	327	-21.0%	0	0	0	0	260	327	0	0
U.S. Total	16,968	16,972	0.0%	418	388	14,235	14,625	2,304	1,955	12	4

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Chapter 6

Fossil Fuel Stocks for Electricity Generation

Table 6.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2002 - 2012

	Electric Power Sector			Electric Utilities			Independent Power Producers		
Period	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
2002	141,714	43,935	1,711	116,952	29,601	328	24,761	14,334	1,383
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
2010, End of Month Stocks									
January	178,091	37,426	1,406	146,174	24,732	1,178	31,917	12,693	228
February	171,026	38,163	1,280	140,533	25,561	1,045	30,493	12,602	235
March	177,742	38,137	1,240	145,182	25,578	983	32,559	12,558	258
April	189,260	37,875	1,243	152,253	25,360	1,022	37,007	12,516	221
May	191,669	37,355	1,188	153,295	25,019	986	38,374	12,336	202
June	181,490	36,623	1,117	146,130	24,305	943	35,359	12,318	174
July	169,504	35,627	1,046	138,240	23,858	907	31,265	11,769	139
August	159,987	35,317	1,112	131,072	23,887	976	28,915	11,430	136
September	163,776	36,208	1,158	133,943	24,857	1,017	29,833	11,350	141
October	175,686	36,857	1,197	143,363	25,309	1,006	32,323	11,548	191
November	183,389	36,926	1,098	149,066	25,660	894	34,323	11,266	204
December	174,917	35,706	1,019	143,744	24,798	850	31,173	10,908	168
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

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, 2012 and 2011

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	December 2012	December 2011	Percentage Change	December 2012	December 2011	Percentage Change	December 2012	December 2011	Percentage Change
New England	1,030	1,389	-26.0%	2,483	2,680	-7.3%	0	0	--
Connecticut	W	W	W	1,300	954	36.0%	0	0	--
Maine	0	0	--	W	W	W	0	0	--
Massachusetts	W	675	W	837	990	-15.0%	0	0	--
New Hampshire	W	W	W	W	W	W	0	0	--
Rhode Island	0	0	--	W	W	W	0	0	--
Vermont	0	0	--	51	49	3.0%	0	0	--
Middle Atlantic	7,553	7,800	-3.2%	5,496	6,591	-17.0%	W	W	W
New Jersey	926	871	6.3%	1,084	1,113	-2.6%	0	0	--
New York	556	898	-38.0%	3,498	4,276	-18.0%	0	0	--
Pennsylvania	6,070	6,031	0.6%	914	1,201	-24.0%	W	W	W
East North Central	36,139	37,262	-3.0%	1,223	1,581	-23.0%	56	W	W
Illinois	8,931	8,905	0.3%	118	139	-15.0%	0	0	--
Indiana	9,127	9,094	0.4%	117	128	-9.0%	0	0	--
Michigan	6,729	6,512	3.3%	439	666	-34.0%	W	W	W
Ohio	6,340	7,331	-14.0%	316	364	-13.0%	W	W	W
Wisconsin	5,012	5,420	-7.5%	234	285	-18.0%	W	W	W
West North Central	30,554	28,544	7.0%	1,052	1,297	-19.0%	0	W	W
Iowa	8,580	7,199	19.0%	152	161	-5.8%	0	W	W
Kansas	3,741	3,669	2.0%	165	272	-39.0%	0	0	--
Minnesota	2,691	3,247	-17.0%	168	195	-14.0%	0	0	--
Missouri	10,230	8,210	25.0%	316	327	-3.1%	0	0	--
Nebraska	3,321	3,607	-7.9%	132	210	-37.0%	0	0	--
North Dakota	W	W	W	36	37	-3.3%	0	0	--
South Dakota	W	W	W	83	95	-13.0%	0	0	--
South Atlantic	38,859	36,920	5.3%	13,603	14,316	-5.0%	W	W	W
Delaware	W	W	W	392	402	-2.5%	0	0	--
District of Columbia	0	0	--	0	93	-100.0%	0	0	--
Florida	W	6,374	W	7,128	7,789	-8.5%	W	W	W
Georgia	9,970	7,885	26.0%	908	895	1.5%	0	0	--
Maryland	1,544	1,860	-17.0%	826	833	-0.8%	0	0	--
North Carolina	7,164	6,642	7.9%	1,110	1,033	7.4%	0	0	--
South Carolina	W	6,527	W	650	597	9.0%	W	W	W
Virginia	2,118	2,480	-15.0%	2,440	2,530	-3.6%	0	0	--
West Virginia	5,643	W	W	150	145	3.2%	W	W	W
East South Central	19,657	17,185	14.0%	1,928	2,064	-6.6%	W	W	W
Alabama	6,123	4,499	36.0%	279	318	-12.0%	0	0	--
Kentucky	8,417	7,357	14.0%	257	264	-2.5%	W	W	W
Mississippi	1,964	1,450	36.0%	559	562	-0.5%	0	0	--
Tennessee	3,153	3,879	-19.0%	832	921	-9.6%	0	0	--
West South Central	28,807	22,910	26.0%	2,548	2,560	-0.5%	W	W	W
Arkansas	4,181	3,590	16.0%	245	157	56.0%	0	0	--
Louisiana	3,342	2,331	43.0%	662	605	9.5%	W	W	W
Oklahoma	4,739	3,872	22.0%	209	196	6.6%	0	0	--
Texas	16,545	13,117	26.0%	1,432	1,602	-11.0%	W	0	W
Mountain	20,385	18,543	9.9%	654	677	-3.3%	W	W	W
Arizona	4,235	2,750	54.0%	209	229	-8.6%	0	0	--
Colorado	4,131	4,342	-4.9%	129	139	-7.3%	0	0	--
Idaho	0	0	--	W	W	W	0	0	--
Montana	W	W	W	W	W	W	W	W	W
Nevada	W	W	W	179	180	-0.6%	0	0	--
New Mexico	W	W	W	49	34	41.0%	0	0	--
Utah	4,737	4,947	-4.2%	NM	39	NM	0	0	--
Wyoming	3,962	3,275	21.0%	29	38	-24.0%	0	0	--
Pacific Contiguous	W	W	W	395	424	-7.0%	W	5	W
California	W	W	W	NM	199	NM	W	5	W
Oregon	W	W	W	W	W	W	0	0	--
Washington	W	W	W	W	W	W	0	0	--
Pacific Noncontiguous	W	W	W	2,842	2,656	7.0%	0	0	--
Alaska	W	W	W	279	283	-1.3%	0	0	--
Hawaii	W	W	W	2,562	2,373	8.0%	0	0	--
U.S. Total	185,116	172,387	7.4%	32,224	34,847	-7.5%	495	508	-2.6%

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, 2012 and 2011

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	December 2012	December 2011	Percentage Change	December 2012	December 2011	December 2012	December 2011
Coal (Thousand Tons)							
New England	1,030	1,389	-25.9%	W	W	W	W
Middle Atlantic	7,553	7,800	-3.2%	W	W	W	W
East North Central	36,139	37,262	-3.0%	27,069	27,316	9,070	9,946
West North Central	30,554	28,544	7.0%	30,554	28,544	0	0
South Atlantic	38,859	36,920	5.3%	35,527	33,163	3,331	3,757
East South Central	19,657	17,185	14.4%	19,657	17,185	0	0
West South Central	28,807	22,910	25.7%	17,047	15,125	11,760	7,785
Mountain	20,385	18,543	9.9%	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	**185,116**	**172,387**	**7.4%**	**150,942**	**142,103**	**34,174**	**30,284**
Petroleum Liquids (Thousand Barrels)							
New England	2,483	2,680	-7.3%	464	703	2,020	1,978
Middle Atlantic	5,496	6,591	-16.6%	2,482	2,931	3,014	3,660
East North Central	1,223	1,581	-22.6%	1,007	1,313	217	268
West North Central	1,052	1,297	-18.9%	1,020	1,260	31	37
South Atlantic	13,603	14,316	-5.0%	11,314	11,933	2,289	2,383
East South Central	1,928	2,064	-6.6%	W	W	W	W
West South Central	2,548	2,560	-0.5%	1,953	1,901	595	659
Mountain	654	677	-3.3%	W	W	W	W
Pacific Contiguous	395	424	-7.0%	W	331	W	93
Pacific Noncontiguous	2,842	2,656	7.0%	W	W	W	W
U.S. Total	**32,224**	**34,847**	**-7.5%**	**23,875**	**25,648**	**8,349**	**9,198**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	W	W	W	0	0	W	W
East North Central	56	W	W	W	W	W	W
West North Central	0	W	W	0	W	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	W	0
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	W	5	W	0	0	W	5
Pacific Noncontiguous	0	0	--	0	0	0	0
U.S. Total	**495**	**508**	**-2.6%**	**414**	**404**	**81**	**104**

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, 2002 - 2012

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2002	70,704	66,593	4,417	141,714
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
2010, End of Month Stocks				
January	86,354	86,893	4,845	178,091
February	82,469	83,721	4,836	171,026
March	86,698	86,014	5,030	177,742
April	92,621	89,545	7,095	189,260
May	93,069	91,514	7,085	191,669
June	87,123	87,299	7,068	181,490
July	80,465	81,933	7,107	169,504
August	76,303	77,081	6,604	159,987
September	78,201	78,906	6,669	163,776
October	84,103	84,992	6,592	175,686
November	87,548	88,880	6,961	183,389
December	81,108	86,915	6,894	174,917
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

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, 2002 through 2012

	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)
2002	884,287	0.94	1.25	25.52	120,851	1.64	3.34	20.77	5,607,737	3.56	1.86
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

* = 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 7.2. Receipts and Quality of Coal Delivered for the Electric Power Industry, 2002 through 2012

	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
2002	423,128	1.47	10.1	391,785	0.36	6.2	65,555	0.93	13.3
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

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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.
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 7.3. Average Quality of Fossil Fuel Receipts for the Electric Power Industry, 2002 through 2012

	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
2002	10,168	0.94	8.7	147,903	1.64	0.2	1,025
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

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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, 2002 through 2012

	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)
2002	10,198	1.41	6,878	1.05	851	1.04	17,982	1.25	751	3.34	5,750	3.56	24,483	1.86
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

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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.
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.
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 7.5. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2002 - 2012

	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												
2002	13,967,326	687,747	1.22	24.74	0.87	89.6	407,442	63,809	3.74	23.88	0.99	72.0
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
2010												
January	1,101,993	55,521	2.21	43.89	1.09	82.6	23,632	3,860	13.16	80.54	0.54	88.1
February	1,073,034	53,695	2.26	45.26	1.16	90.6	13,223	2,179	13.59	82.50	0.40	136.3
March	1,231,470	61,038	2.32	46.85	1.16	108.5	11,782	1,943	14.11	85.52	0.28	109.5
April	1,168,587	57,821	2.30	46.45	1.17	115.7	8,388	1,398	14.96	89.76	0.24	85.6
May	1,168,195	58,565	2.27	45.27	1.12	103.0	16,261	2,649	13.61	83.58	0.62	102.2
June	1,169,040	58,803	2.24	44.62	1.13	90.6	18,097	2,937	13.16	81.08	0.62	80.1
July	1,209,770	60,990	2.27	44.95	1.07	87.2	21,588	3,497	13.29	82.07	0.47	98.6
August	1,294,681	64,603	2.30	46.16	1.13	92.5	20,667	3,331	13.08	81.14	0.60	103.1
September	1,208,559	60,693	2.28	45.47	1.11	104.3	18,501	2,988	13.35	82.68	0.62	138.8
October	1,235,011	61,883	2.29	45.68	1.15	120.5	11,210	1,858	14.98	90.39	0.35	117.5
November	1,172,469	58,841	2.27	45.29	1.19	111.1	12,889	2,191	15.82	93.06	0.35	147.4
December	1,194,186	60,641	2.23	43.90	1.14	93.8	13,552	2,267	16.79	100.36	0.25	71.7
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

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 and predecessor forms.
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 7.6. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2002 - 2012 (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												
2002	75,711	2,677	0.63	17.68	4.98	126.0	1,680,518	1,634,734	3.68	3.78	72.3	1.53
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
2010												
January	9,040	317	1.76	50.18	5.38	112.1	254,841	249,848	6.93	7.07	102.0	3.26
February	5,337	188	1.96	55.49	5.09	72.9	217,554	213,267	6.39	6.52	100.6	3.06
March	8,021	284	2.24	63.36	4.99	92.2	214,554	210,587	5.72	5.83	101.3	2.91
April	9,899	347	2.30	65.45	5.03	137.3	218,064	213,690	5.20	5.30	101.6	2.82
May	7,673	269	2.32	66.03	4.99	103.1	270,661	265,218	5.20	5.30	101.3	2.94
June	8,998	317	2.22	63.05	5.32	99.2	324,142	317,528	5.42	5.54	101.0	3.05
July	9,979	354	2.50	70.63	4.71	103.9	399,566	391,191	5.47	5.58	100.8	3.19
August	11,742	410	2.69	76.96	4.91	143.5	421,843	413,154	5.24	5.35	100.4	3.14
September	10,150	355	2.71	77.34	4.93	120.0	315,571	308,882	4.81	4.92	100.9	2.93
October	8,639	301	2.51	72.03	4.90	123.2	269,281	263,756	4.77	4.87	101.4	2.82
November	5,740	208	2.28	62.94	5.22	103.3	226,257	222,019	4.73	4.83	101.2	2.79
December	7,933	277	2.75	78.60	5.05	101.0	263,628	258,780	5.64	5.75	101.8	2.97
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

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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 7.7 Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2002 - 2012

	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												
2002	3,710,847	182,482	1.37	27.96	1.15	87.0	186,271	30,043	4.19	25.98	0.61	76.4
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
2010												
January	376,680	19,830	2.21	42.01	1.20	85.3	5,186	895	14.92	86.41	0.30	75.4
February	343,015	18,198	2.21	41.75	1.18	88.3	2,397	416	14.78	85.23	0.30	78.2
March	401,656	21,348	2.23	41.96	1.20	107.5	4,487	747	13.69	82.23	0.55	201.3
April	359,489	19,062	2.23	41.96	1.25	113.2	2,017	354	15.12	86.17	0.30	90.2
May	374,626	19,964	2.19	41.15	1.28	106.5	2,963	508	15.27	89.08	0.36	86.2
June	342,601	18,471	2.19	40.68	1.22	83.4	4,357	738	14.22	83.97	0.33	87.9
July	370,780	20,113	2.23	41.09	1.12	81.8	6,753	1,125	13.66	81.95	0.41	67.0
August	414,300	21,970	2.23	42.11	1.25	90.1	4,622	777	14.55	86.52	0.27	75.1
September	404,409	21,646	2.20	41.04	1.23	103.2	4,031	678	13.97	83.02	0.31	95.5
October	412,301	22,106	2.15	40.10	1.23	115.5	3,720	626	15.45	91.85	0.35	135.1
November	387,870	20,899	2.15	39.94	1.19	106.9	3,898	679	16.19	92.92	0.36	120.4
December	368,173	19,977	2.18	40.13	1.18	84.9	5,167	876	16.62	97.98	0.31	87.6
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

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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 7.8. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2002 - 2012 (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												
2002	47,805	1,639	1.03	29.98	4.85	44.4	3,198,108	3,126,308	3.55	3.63	91.6	2.42
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
2010												
January	3,804	133	1.44	41.35	3.37	101.7	308,109	301,125	6.75	6.90	100.1	4.32
February	2,918	101	1.48	42.64	3.46	77.2	274,889	268,803	5.95	6.08	100.4	3.91
March	3,499	121	1.63	47.30	3.33	101.4	256,384	250,712	5.06	5.17	100.7	3.39
April	1,376	47	1.08	31.18	4.33	40.8	267,989	261,844	4.48	4.58	100.2	3.22
May	2,468	86	1.78	50.77	3.83	62.4	306,425	299,565	4.55	4.65	100.6	3.30
June	2,619	91	1.75	50.31	4.00	60.0	401,342	392,478	5.01	5.12	100.3	3.77
July	2,705	95	1.94	55.02	4.47	58.5	522,419	510,999	5.04	5.15	100.4	3.94
August	1,779	64	2.26	63.33	3.98	59.1	546,215	534,075	4.72	4.82	100.5	3.70
September	1,349	47	2.36	67.67	3.01	61.5	401,881	393,000	4.27	4.36	100.6	3.28
October	3,342	117	2.01	57.26	3.88	116.1	321,547	314,248	4.00	4.09	101.3	3.02
November	2,286	80	1.76	50.12	4.24	80.2	285,549	279,359	4.23	4.33	100.8	3.10
December	1,933	67	1.63	46.81	4.67	57.6	319,863	312,895	5.49	5.62	100.9	3.81
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

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Table 7.9. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2002 - 2012

	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												
2002	9,580	399	2.10	50.44	2.59	28.4	503	91	5.38	29.73	0.02	7.5
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
2010												
January	3,452	162	2.79	59.44	1.73	83.9	NM	NM	NM	NM	0.43	77.6
February	3,364	156	2.87	61.93	1.78	93.2	NM	NM	NM	NM	0.38	73.4
March	3,478	161	2.90	62.65	1.64	107.7	NM	NM	NM	NM	0.45	330.9
April	2,983	137	2.80	61.12	1.47	116.7	NM	NM	NM	NM	0.23	81.8
May	2,820	132	2.71	58.00	1.41	111.4	NM	NM	NM	NM	0.48	106.2
June	2,874	132	2.99	65.29	1.97	97.6	NM	NM	NM	NM	0.42	116.2
July	2,933	132	2.83	62.64	2.07	93.4	NM	NM	NM	NM	0.35	72.4
August	3,381	157	2.79	60.14	1.87	103.2	NM	NM	NM	NM	0.41	58.4
September	3,045	141	2.85	61.82	1.84	105.8	NM	NM	NM	NM	0.35	122.5
October	2,864	133	2.82	60.52	1.71	109.9	NM	NM	NM	NM	0.31	283.6
November	3,365	155	2.86	62.19	1.75	121.1	NM	NM	NM	NM	0.35	145.5
December	3,217	151	2.69	57.30	1.96	91.5	NM	NM	NM	NM	0.31	89.2
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

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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 7.10. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2002 - 2012 (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												
2002	0	0	--	--	--	--	18,671	18,256	3.44	3.52	24.7	3.03
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
2010												
January	38	1	NM	NM	5.45	100.4	7,928	7,757	6.92	7.07	107.0	5.82
February	NM	NM	NM	NM	5.45	99.4	7,189	7,040	6.55	6.69	106.3	5.51
March	41	2	NM	NM	5.45	104.6	7,062	6,916	5.83	5.96	105.1	5.19
April	20	1	NM	NM	5.45	81.3	6,394	6,258	5.09	5.20	104.5	4.48
May	NM	NM	NM	NM	5.45	0.0	6,102	5,980	5.10	5.21	104.2	4.55
June	NM	NM	NM	NM	5.45	0.0	6,583	6,449	5.25	5.36	104.3	4.74
July	NM	NM	NM	NM	5.83	0.0	8,579	8,397	5.24	5.36	103.5	4.83
August	NM	NM	NM	NM	5.83	98.0	9,335	9,139	5.09	5.20	103.8	4.58
September	NM	NM	NM	NM	5.83	83.1	7,936	7,765	4.65	4.75	103.8	4.30
October	42	2	NM	NM	5.83	120.6	7,954	7,785	4.69	4.80	104.8	4.47
November	NM	NM	NM	NM	5.83	93.1	7,758	7,601	4.67	4.76	106.6	4.24
December	58	2	NM	NM	5.83	110.3	9,235	9,043	5.63	5.75	106.9	5.09
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

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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, 2002 - 2012

	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												
2002	294,234	13,659	1.45	31.29	1.56	52.1	29,137	4,638	3.55	22.33	1.24	26.5
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
2010												
January	34,732	1,580	2.79	61.38	1.32	75.5	4,869	811	12.80	76.83	0.94	140.8
February	35,539	1,606	2.83	62.50	1.28	81.2	2,888	477	12.58	76.17	1.19	97.5
March	41,435	1,865	2.80	62.26	1.30	87.8	2,546	422	12.80	77.21	1.06	121.4
April	37,998	1,713	2.76	61.15	1.25	77.2	1,616	271	13.57	80.84	1.03	84.1
May	38,477	1,743	2.72	59.95	1.20	86.7	2,427	406	12.92	77.32	0.86	136.6
June	42,012	2,008	2.71	56.76	1.14	105.8	2,655	444	12.67	75.80	0.83	172.6
July	39,484	1,797	2.75	60.33	1.24	84.7	2,876	482	12.77	76.20	0.77	143.4
August	45,083	2,150	2.68	56.26	1.25	98.0	2,922	487	12.69	76.05	0.93	177.9
September	39,511	1,795	2.80	61.55	1.23	92.5	2,454	412	12.85	76.49	0.84	152.2
October	39,628	1,808	2.74	60.11	1.27	92.4	NM	NM	NM	NM	0.92	99.6
November	38,003	1,732	2.74	60.17	1.31	93.4	2,347	396	14.71	87.06	0.90	107.5
December	37,089	1,694	2.74	60.05	1.36	75.4	3,487	579	14.82	89.26	0.91	112.4
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

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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 7.12. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2002 - 2012 (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												
2002	3,846	138	0.76	21.20	5.91	9.1	852,547	828,439	3.36	3.46	66.8	2.88
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
2010												
January	NM	NM	1.98	55.72	4.49	85.0	103,441	100,700	6.06	6.23	111.9	5.43
February	NM	NM	1.89	53.71	4.80	53.5	92,052	89,617	5.62	5.77	112.6	4.97
March	NM	NM	2.28	64.61	4.83	80.7	96,305	93,754	4.89	5.02	112.3	4.38
April	3,134	110	2.31	65.60	5.05	125.6	89,012	86,651	4.19	4.31	110.1	3.85
May	2,812	99	2.36	67.00	4.99	99.2	93,846	91,314	4.37	4.49	112.0	4.02
June	NM	NM	2.29	64.41	4.96	84.4	95,210	92,629	4.58	4.71	109.8	4.14
July	3,445	123	2.54	71.36	4.65	112.3	103,153	100,425	4.82	4.95	109.9	4.37
August	4,313	153	2.71	76.26	4.73	133.3	106,486	103,638	4.69	4.82	109.3	4.22
September	3,742	133	2.68	75.58	5.01	130.2	96,833	94,214	4.02	4.13	108.3	3.79
October	NM	NM	2.66	75.62	4.87	99.7	95,174	92,702	3.92	4.03	110.4	3.71
November	2,862	101	2.47	69.84	5.18	91.0	93,589	91,184	3.74	3.84	111.3	3.62
December	3,383	120	2.71	76.42	5.17	113.3	101,666	99,087	4.65	4.77	107.5	4.36
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

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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 7.13. Receipts of Coal Delivered for Electricity Generation by State, 2012 and 2011
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	1,146	3,628	-68.0%	353	1,070	773	2,477	0	0	19	81
Connecticut	41	349	-88.0%	0	0	41	349	0	0	0	0
Maine	51	61	-16.0%	0	0	32	38	0	0	19	23
Massachusetts	700	2,147	-67.0%	0	0	700	2,089	0	0	0	58
New Hampshire	353	1,070	-67.0%	353	1,070	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	43,998	55,880	-21.0%	0	8,884	43,082	45,453	0	28	916	1,515
New Jersey	1,059	2,050	-48.0%	0	0	1,059	2,050	0	0	0	0
New York	2,218	5,367	-59.0%	0	17	1,884	4,939	0	NM	333	404
Pennsylvania	40,721	48,463	-16.0%	0	8,867	40,138	38,464	0	21	583	1,111
East North Central	182,345	213,663	-15.0%	117,309	143,301	61,732	64,427	111	527	3,193	5,409
Illinois	61,119	66,839	-8.6%	6,163	15,736	52,682	47,824	42	94	2,232	3,186
Indiana	36,672	43,919	-17.0%	33,943	38,728	2,729	4,888	0	193	0	112
Michigan	29,547	33,779	-13.0%	29,218	33,021	214	194	69	162	46	402
Ohio	35,005	45,038	-22.0%	28,628	32,975	6,108	11,521	0	NM	269	529
Wisconsin	20,003	24,087	-17.0%	19,357	22,841	0	0	0	65	646	1,181
West North Central	139,220	151,975	-8.4%	135,816	146,666	0	0	81	368	3,323	4,941
Iowa	24,436	26,839	-9.0%	22,264	23,826	0	0	0	242	2,172	2,771
Kansas	17,919	20,216	-11.0%	17,919	20,216	0	0	0	0	0	0
Minnesota	13,125	18,304	-28.0%	12,729	17,159	0	0	0	NM	396	1,121
Missouri	43,850	45,756	-4.2%	43,768	45,502	0	0	81	101	0	153
Nebraska	15,368	15,620	-1.6%	14,613	14,994	0	0	0	0	755	626
North Dakota	22,708	23,445	-3.1%	22,708	23,174	0	0	0	0	0	271
South Dakota	1,813	1,795	1.0%	1,813	1,795	0	0	0	0	0	0
South Atlantic	118,709	148,091	-20.0%	94,956	120,867	21,351	22,922	0	147	2,402	4,156
Delaware	645	562	15.0%	0	0	645	562	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	18,400	22,722	-19.0%	17,388	21,041	770	1,368	0	0	242	313
Georgia	23,258	31,251	-26.0%	22,863	30,411	0	0	0	0	395	840
Maryland	7,025	9,683	-27.0%	0	0	6,634	9,257	0	0	390	426
North Carolina	19,811	26,540	-25.0%	18,726	24,894	699	1,054	0	94	386	498
South Carolina	11,606	14,574	-20.0%	11,400	14,035	27	156	0	0	179	382
Virginia	6,528	11,020	-41.0%	5,327	8,194	728	1,564	0	53	473	1,207
West Virginia	31,436	31,740	-1.0%	19,252	22,292	11,847	8,960	0	0	337	488
East South Central	89,288	97,759	-8.7%	83,677	92,719	3,940	2,752	0	51	1,670	2,236
Alabama	24,639	27,411	-10.0%	24,544	26,947	0	51	0	0	94	413
Kentucky	39,483	41,473	-4.8%	39,483	41,473	0	0	0	0	0	0
Mississippi	6,590	6,643	-0.8%	2,651	3,942	3,940	2,701	0	0	0	0
Tennessee	18,576	22,231	-16.0%	16,999	20,358	0	0	0	51	1,576	1,822
West South Central	152,230	162,157	-6.1%	77,882	82,949	73,848	78,256	0	0	500	952
Arkansas	16,969	17,631	-3.8%	14,503	15,220	2,466	2,278	0	0	0	133
Louisiana	15,586	15,775	-1.2%	8,073	8,571	7,513	7,180	0	0	0	24
Oklahoma	19,605	19,836	-1.2%	17,871	17,970	1,233	1,341	0	0	500	525
Texas	100,071	108,916	-8.1%	37,435	41,188	62,636	67,458	0	0	0	269
Mountain	108,207	113,801	-4.9%	97,626	100,235	10,142	11,581	0	0	438	1,986
Arizona	23,238	23,218	0.1%	23,029	22,848	0	0	0	0	208	370
Colorado	18,687	19,754	-5.4%	18,687	19,510	0	244	0	0	0	0
Idaho	0	134	-100.0%	0	0	0	0	0	0	0	134
Montana	8,808	9,984	-12.0%	248	297	8,560	9,641	0	0	0	NM
Nevada	2,215	3,105	-29.0%	1,580	2,376	635	729	0	0	0	0
New Mexico	14,604	16,318	-11.0%	14,604	16,318	0	0	0	0	0	0
Utah	13,834	15,214	-9.1%	13,159	14,527	445	422	0	0	230	264
Wyoming	26,821	26,075	2.9%	26,319	24,357	502	545	0	0	0	1,173
Pacific Contiguous	5,375	7,542	-29.0%	1,826	2,352	2,806	4,361	0	0	743	829
California	935	1,573	-41.0%	0	0	292	838	0	0	643	736
Oregon	1,826	2,352	-22.0%	1,826	2,352	0	0	0	0	0	0
Washington	2,615	3,617	-28.0%	0	0	2,514	3,523	0	0	100	94
Pacific Noncontiguous	667	2,040	-67.0%	0	310	667	1,065	0	564	0	100
Alaska	0	1,111	-100.0%	0	310	0	236	0	564	0	0
Hawaii	667	929	-28.0%	0	0	667	829	0	0	0	100
U.S. Total	841,183	956,538	-12.0%	609,445	699,353	218,341	233,295	192	1,686	13,206	22,204

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

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

Table 7.14. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, 2012 and 2011
(Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	560	2,334	-76.0%	20	NM	365	1,182	39	219	138	822
Connecticut	161	264	-39.0%	3	NM	158	216	0	0	0	NM
Maine	151	1,334	-89.0%	0	NM	13	543	0	NM	138	780
Massachusetts	238	476	-50.0%	6	NM	193	421	39	NM	0	NM
New Hampshire	9	160	-94.0%	9	NM	0	NM	0	119	0	NM
Rhode Island	0	NM	NM	0	NM	0	1	0	NM	0	0
Vermont	1	NM	NM	1	NM	0	0	0	NM	0	0
Middle Atlantic	1,562	3,418	-54.0%	548	1,071	1,002	2,042	0	NM	11	NM
New Jersey	124	516	-76.0%	0	NM	124	269	0	NM	0	NM
New York	1,022	1,988	-49.0%	548	840	471	908	0	NM	4	NM
Pennsylvania	415	914	-55.0%	0	NM	407	865	0	NM	8	NM
East North Central	1,149	1,557	-26.0%	926	1,267	174	197	0	NM	49	67
Illinois	131	174	-25.0%	36	64	95	110	0	NM	0	NM
Indiana	230	350	-34.0%	207	306	0	NM	0	NM	23	39
Michigan	215	366	-41.0%	201	335	0	0	0	NM	13	10
Ohio	518	570	-9.2%	432	479	75	83	0	NM	11	8
Wisconsin	56	97	-42.0%	51	83	4	NM	0	NM	1	NM
West North Central	542	726	-25.0%	541	664	0	NM	0	NM	1	NM
Iowa	187	160	17.0%	187	156	0	NM	0	NM	0	NM
Kansas	73	96	-24.0%	73	96	0	0	0	0	0	0
Minnesota	27	70	-62.0%	26	43	0	7	0	NM	1	NM
Missouri	158	209	-25.0%	158	206	0	NM	0	NM	0	NM
Nebraska	29	63	-54.0%	29	63	0	0	0	0	0	0
North Dakota	63	109	-42.0%	63	82	0	0	0	NM	0	NM
South Dakota	5	19	-74.0%	5	18	0	NM	0	NM	0	0
South Atlantic	3,217	9,843	-67.0%	1,960	6,979	371	925	5	NM	881	1,923
Delaware	34	106	-68.0%	0	NM	34	102	0	0	0	0
District of Columbia	7	215	-97.0%	0	0	7	215	0	0	0	0
Florida	948	5,266	-82.0%	699	4,684	14	NM	0	0	234	515
Georgia	398	737	-46.0%	228	301	8	NM	0	NM	162	424
Maryland	218	400	-46.0%	0	NM	142	349	0	NM	77	28
North Carolina	432	684	-37.0%	274	315	7	NM	0	NM	150	NM
South Carolina	469	539	-13.0%	246	225	0	0	0	NM	223	313
Virginia	455	1,566	-71.0%	266	1,132	149	143	5	8	35	NM
West Virginia	257	330	-22.0%	247	295	10	35	0	0	0	0
East South Central	471	1,311	-64.0%	466	942	1	17	0	0	4	352
Alabama	107	499	-79.0%	102	187	1	17	0	0	4	295
Kentucky	211	244	-14.0%	211	244	0	0	0	0	0	0
Mississippi	22	111	-80.0%	22	NM	0	0	0	0	0	15
Tennessee	132	456	-71.0%	132	414	0	0	0	0	0	NM
West South Central	293	452	-35.0%	122	172	171	177	0	NM	0	NM
Arkansas	74	91	-19.0%	47	28	26	38	0	0	0	NM
Louisiana	50	116	-57.0%	17	35	33	34	0	0	0	NM
Oklahoma	14	NM	NM	14	NM	0	0	0	NM	0	0
Texas	156	229	-32.0%	44	92	111	106	0	NM	0	NM
Mountain	396	509	-22.0%	347	439	48	61	0	NM	2	NM
Arizona	77	120	-36.0%	76	114	0	0	0	NM	2	6
Colorado	10	66	-85.0%	10	65	0	0	0	NM	0	NM
Idaho	0	NM	NM	0	NM	0	0	0	0	0	0
Montana	36	50	-29.0%	0	8	36	42	0	0	0	0
Nevada	40	29	40.0%	30	21	10	8	0	0	0	0
New Mexico	95	56	69.0%	95	46	0	10	0	0	0	NM
Utah	53	88	-40.0%	52	87	1	NM	0	0	0	0
Wyoming	85	100	-15.0%	85	98	0	0	0	0	0	NM
Pacific Contiguous	96	550	-82.0%	43	81	44	NM	0	NM	9	435
California	50	NM	NM	17	59	30	NM	0	NM	2	NM
Oregon	14	NM	NM	14	12	0	0	0	NM	0	NM
Washington	33	446	-93.0%	12	9	14	17	0	NM	7	418
Pacific Noncontiguous	11,176	15,456	-28.0%	9,278	12,133	1,898	2,457	0	NM	0	850
Alaska	965	1,658	-42.0%	965	1,543	0	0	0	NM	0	103
Hawaii	10,211	13,798	-26.0%	8,313	10,590	1,898	2,457	0	NM	0	747
U.S. Total	19,464	36,158	-46.0%	14,252	23,859	4,073	7,096	43	325	1,095	4,878

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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, 2012 and 2011
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
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	106	79	35.0%	0	0	0	23	0	0	106	56
New Jersey	0	NM	NM	0	0	0	0	0	0	0	NM
New York	0	23	-100.0%	0	0	0	23	0	0	0	0
Pennsylvania	106	50	112.0%	0	0	0	0	0	0	106	50
East North Central	893	1,416	-37.0%	248	401	507	485	0	0	138	530
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	204	287	-29.0%	204	287	0	0	0	0	0	0
Michigan	36	188	-81.0%	0	0	36	32	0	0	0	156
Ohio	471	662	-29.0%	0	0	471	453	0	0	0	209
Wisconsin	182	279	-35.0%	44	114	0	0	0	0	138	165
West North Central	0	27	-100.0%	0	18	0	0	0	9	0	0
Iowa	0	25	-100.0%	0	15	0	0	0	9	0	0
Kansas	0	3	-100.0%	0	3	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	741	1,448	-49.0%	563	1,119	0	0	0	0	178	329
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	563	1,119	-50.0%	563	1,119	0	0	0	0	0	0
Georgia	178	329	-46.0%	0	0	0	0	0	0	178	329
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	532	463	15.0%	532	463	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	532	463	15.0%	532	463	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	1,649	1,772	-6.9%	1,178	1,445	35	NM	0	0	436	315
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,178	1,728	-32.0%	1,178	1,445	0	0	0	0	0	284
Oklahoma	0	5	-100.0%	0	0	0	0	0	0	0	5
Texas	471	38	NM	0	0	35	NM	0	0	436	26
Mountain	251	274	-8.2%	0	0	251	274	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	251	274	-8.2%	0	0	251	274	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8	503	-98.0%	0	0	8	381	0	0	0	121
California	8	503	-98.0%	0	0	8	381	0	0	0	121
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	4,180	5,980	-30.0%	2,521	3,445	801	1,175	0	9	858	1,351

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

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

Table 7.16. Receipts of Natural Gas Delivered for Electricity Generation by State, 2012 and 2011
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	440,421	484,260	-9.1%	3,652	4,226	419,062	434,504	3,636	13,156	14,072	32,373
Connecticut	112,084	116,563	-3.8%	71	738	112,012	107,121	0	3,210	0	5,494
Maine	42,374	56,230	-25.0%	0	0	28,302	33,578	0	NM	14,072	22,639
Massachusetts	175,314	198,295	-12.0%	2,789	2,393	168,890	184,156	3,636	7,872	0	3,875
New Hampshire	50,408	47,137	6.9%	754	1,046	49,655	45,725	0	0	0	NM
Rhode Island	60,203	65,984	-8.8%	0	0	60,203	63,925	0	2,060	0	0
Vermont	37	49	-24.0%	37	49	0	0	0	0	0	0
Middle Atlantic	1,024,559	983,951	4.1%	109,942	128,984	912,518	809,805	0	10,433	2,099	34,729
New Jersey	200,570	218,548	-8.2%	0	0	200,570	199,866	0	2,139	0	16,542
New York	447,049	446,583	0.1%	109,942	128,934	336,374	304,592	0	7,616	734	5,440
Pennsylvania	376,940	318,821	18.0%	0	NM	375,574	305,346	0	NM	1,366	12,746
East North Central	621,882	459,563	35.0%	225,621	139,051	374,934	249,959	9,274	19,654	12,054	50,900
Illinois	78,693	67,266	17.0%	12,147	10,051	61,024	38,614	5,479	6,553	42	12,047
Indiana	117,031	101,358	15.0%	83,545	56,417	25,956	29,554	0	1,890	7,530	13,497
Michigan	175,163	124,100	41.0%	39,101	24,739	129,602	87,627	3,795	6,434	2,665	5,299
Ohio	163,870	111,716	47.0%	45,366	24,129	118,387	69,403	0	2,278	117	15,907
Wisconsin	87,126	55,124	58.0%	45,462	23,714	39,964	24,761	0	2,499	1,699	4,150
West North Central	157,891	125,986	25.0%	133,673	100,589	20,546	14,392	1,217	4,113	2,455	6,891
Iowa	18,348	10,751	71.0%	18,302	10,351	0	NM	0	313	46	86
Kansas	26,639	30,590	-13.0%	26,639	30,562	0	0	0	0	0	NM
Minnesota	56,036	37,920	48.0%	44,549	22,560	9,571	7,760	0	3,033	1,916	4,568
Missouri	47,085	38,707	22.0%	34,892	31,275	10,976	6,631	1,217	730	0	NM
Nebraska	8,141	5,311	53.0%	7,648	4,251	0	0	0	37	493	1,023
North Dakota	1	1,117	-100.0%	1	0	0	0	0	0	0	1,116
South Dakota	1,642	1,590	3.3%	1,642	1,590	0	0	0	0	0	0
South Atlantic	2,020,211	1,706,965	18.0%	1,562,634	1,293,449	410,674	347,656	0	2,883	46,903	62,977
Delaware	65,059	49,063	33.0%	0	174	52,550	38,818	0	0	12,508	10,071
District of Columbia	0	1,012	-100.0%	0	1,012	0	0	0	0	0	0
Florida	1,122,939	1,069,608	5.0%	1,034,639	956,933	74,051	87,907	0	NM	14,249	24,309
Georgia	328,446	208,798	57.0%	190,029	96,573	124,927	100,159	0	0	13,491	12,067
Maryland	47,231	28,079	68.0%	0	0	45,325	21,397	0	2,376	1,906	4,306
North Carolina	150,372	93,618	61.0%	126,867	71,816	23,368	18,420	0	NM	138	3,342
South Carolina	109,809	101,302	8.4%	97,550	86,739	11,902	13,143	0	NM	357	1,413
Virginia	193,993	151,657	28.0%	113,146	79,749	76,593	65,571	0	0	4,254	6,337
West Virginia	2,362	3,827	-38.0%	403	454	1,959	2,241	0	0	0	1,133
East South Central	807,339	682,990	18.0%	432,604	364,544	348,415	278,074	0	2,235	26,321	38,137
Alabama	395,377	368,618	7.3%	100,108	107,537	282,985	236,931	0	0	12,284	24,150
Kentucky	31,026	20,789	49.0%	27,812	14,023	3,214	1,578	0	0	0	5,188
Mississippi	317,211	261,588	21.0%	241,231	215,684	62,216	39,565	0	NM	13,764	5,913
Tennessee	63,726	31,994	99.0%	63,453	27,299	0	0	0	1,810	272	2,885
West South Central	2,896,365	3,043,534	-4.8%	812,628	798,424	1,445,605	1,342,974	3,881	8,485	634,252	893,651
Arkansas	128,030	111,262	15.0%	23,235	23,302	104,796	78,049	0	NM	0	9,906
Louisiana	531,471	567,240	-6.3%	223,287	226,417	96,745	67,644	0	NM	211,438	272,533
Oklahoma	313,960	284,687	10.0%	229,849	215,637	83,441	62,761	0	1,844	671	4,444
Texas	1,922,904	2,080,345	-7.6%	336,257	333,069	1,160,623	1,134,520	3,881	5,989	422,143	606,768
Mountain	611,904	578,209	5.8%	382,271	353,800	223,404	206,526	0	NM	6,229	15,439
Arizona	227,210	184,970	23.0%	111,161	83,036	115,891	101,035	0	NM	159	95
Colorado	80,575	85,134	-5.4%	46,149	68,364	34,427	16,465	0	NM	0	NM
Idaho	12,738	10,177	25.0%	4,395	1,615	8,343	6,701	0	0	0	1,860
Montana	19	4,681	-100.0%	8	4,569	10	112	0	0	0	0
Nevada	177,682	165,896	7.1%	138,470	114,443	39,212	49,286	0	NM	0	1,535
New Mexico	64,840	75,416	-14.0%	43,108	45,904	21,732	28,083	0	NM	0	509
Utah	43,553	42,436	2.6%	38,681	35,545	3,776	4,762	0	NM	1,096	NM
Wyoming	5,287	9,501	-44.0%	301	323	12	81	0	0	4,974	9,096
Pacific Contiguous	917,681	946,362	-3.0%	307,298	281,116	541,480	474,727	0	NM	68,903	160,680
California	793,427	838,613	-5.4%	250,913	234,353	477,250	421,165	0	NM	65,265	155,535
Oregon	81,111	64,290	26.0%	28,231	20,090	52,846	41,490	0	726	34	1,985
Washington	43,143	43,459	-0.7%	28,155	26,674	11,384	12,072	0	1,553	3,604	3,160
Pacific Noncontiguous	33,135	44,344	-25.0%	33,135	43,429	0	0	0	65	0	850
Alaska	33,135	44,344	-25.0%	33,135	43,429	0	0	0	65	0	850
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	9,531,389	9,056,164	5.2%	4,003,457	3,507,613	4,696,637	4,158,617	18,008	93,306	813,288	1,296,628

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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, 2012 and 2011

(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011
New England	3.59	3.68	-2.4%	4.07	3.55	3.34	3.74
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.07	3.55	15.0%	4.07	3.55	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.50	2.68	-6.7%	--	2.92	2.50	2.63
New Jersey	4.05	4.18	-3.1%	--	--	4.05	4.18
New York	3.12	3.27	-4.6%	--	3.88	3.12	3.27
Pennsylvania	2.43	2.55	-4.7%	--	2.91	2.43	2.45
East North Central	2.37	2.30	3.0%	2.53	2.40	2.05	2.04
Illinois	1.93	1.72	12.0%	2.08	1.77	1.91	1.70
Indiana	W	W	W	2.59	2.47	W	W
Michigan	W	W	W	2.78	2.66	W	W
Ohio	W	2.47	W	2.41	2.29	W	3.01
Wisconsin	2.37	2.50	-5.2%	2.37	2.50	--	--
West North Central	1.72	1.64	4.9%	1.72	1.64	--	--
Iowa	1.48	1.43	3.5%	1.48	1.43	--	--
Kansas	1.83	1.75	4.6%	1.83	1.75	--	--
Minnesota	1.98	1.93	2.6%	1.98	1.93	--	--
Missouri	1.85	1.72	7.6%	1.85	1.72	--	--
Nebraska	1.55	1.51	2.6%	1.55	1.51	--	--
North Dakota	1.49	1.34	11.0%	1.49	1.34	--	--
South Dakota	2.19	2.09	4.8%	2.19	2.09	--	--
South Atlantic	3.35	3.41	-1.8%	3.45	3.46	2.92	3.15
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.49	3.53	W	W
Georgia	3.47	3.75	-7.5%	3.47	3.75	--	--
Maryland	3.62	3.72	-2.7%	--	--	3.62	3.72
North Carolina	3.77	3.63	3.9%	3.82	3.66	2.59	2.89
South Carolina	W	W	W	3.97	3.84	W	W
Virginia	W	3.55	W	3.61	3.53	W	3.66
West Virginia	2.54	2.46	3.3%	2.70	2.56	2.27	2.20
East South Central	W	W	W	2.69	2.65	W	W
Alabama	3.01	W	W	3.01	2.87	--	W
Kentucky	2.42	2.34	3.4%	2.42	2.34	--	--
Mississippi	W	W	W	4.45	3.87	W	W
Tennessee	2.61	2.82	-7.4%	2.61	2.82	--	--
West South Central	2.00	1.92	4.2%	2.12	1.96	1.87	1.87
Arkansas	W	W	W	2.25	1.91	W	W
Louisiana	W	W	W	2.87	2.66	W	W
Oklahoma	W	W	W	1.97	1.76	W	W
Texas	1.88	1.87	0.5%	1.99	1.93	1.82	1.84
Mountain	1.84	1.78	3.4%	1.87	1.81	1.42	1.44
Arizona	2.07	1.98	4.5%	2.07	1.98	--	--
Colorado	1.84	W	W	1.84	1.72	--	W
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.61	1.48	W	W
Nevada	W	W	W	2.55	2.60	W	W
New Mexico	2.18	2.05	6.3%	2.18	2.05	--	--
Utah	1.92	W	W	1.92	1.77	--	W
Wyoming	W	W	W	1.45	1.50	W	W
Pacific Contiguous	W	2.21	W	1.89	1.79	W	2.42
California	W	W	W	--	--	W	W
Oregon	1.89	1.79	5.6%	1.89	1.79	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	--	1.66	W	W
Alaska	--	W	W	--	1.66	--	W
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.37	2.37	0.0%	2.43	2.40	2.21	2.28

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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, 2012 and 2011

(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011
New England	18.64	W	W	21.43	21.12	18.47	W
Connecticut	W	21.91	W	23.87	NM	W	21.93
Maine	W	W	W	--	NM	W	W
Massachusetts	17.17	19.76	-13.0%	17.45	NM	17.16	19.66
New Hampshire	23.23	W	W	23.23	19.90	--	W
Rhode Island	--	W	W	--	NM	--	W
Vermont	24.11	NM	NM	24.11	NM	--	--
Middle Atlantic	W	20.15	W	21.01	19.21	W	20.66
New Jersey	19.77	18.36	7.7%	--	NM	19.77	20.28
New York	W	19.66	W	21.01	20.00	W	19.36
Pennsylvania	21.84	22.19	-1.6%	--	NM	21.84	22.19
East North Central	23.10	22.33	3.4%	22.98	22.20	23.73	23.18
Illinois	W	23.72	W	24.35	23.09	W	24.09
Indiana	23.19	W	W	23.19	21.83	--	W
Michigan	W	W	W	22.67	22.13	W	W
Ohio	23.06	22.26	3.6%	23.03	22.32	23.22	21.95
Wisconsin	W	W	W	22.00	22.49	W	W
West North Central	22.37	22.53	-0.7%	22.37	22.51	--	NM
Iowa	22.91	W	W	22.91	22.91	--	W
Kansas	22.93	22.20	3.3%	22.93	22.20	--	--
Minnesota	23.76	W	W	23.76	23.48	--	W
Missouri	20.42	W	W	20.42	21.61	--	W
Nebraska	22.96	22.77	0.8%	22.96	22.77	--	--
North Dakota	23.80	23.44	1.5%	23.80	23.44	--	--
South Dakota	20.69	W	W	20.69	23.29	--	W
South Atlantic	W	19.11	W	21.38	18.88	W	20.94
Delaware	W	W	W	--	NM	W	W
District of Columbia	W	W	W	--	--	W	W
Florida	W	18.52	W	20.16	18.49	W	NM
Georgia	W	22.72	W	24.24	22.74	W	NM
Maryland	22.67	21.30	6.4%	--	NM	22.67	21.31
North Carolina	W	21.95	W	23.18	22.01	W	NM
South Carolina	21.36	21.34	0.1%	21.36	21.34	--	--
Virginia	W	17.69	W	18.74	17.17	W	22.15
West Virginia	W	W	W	23.34	23.12	W	W
East South Central	W	W	W	22.62	21.39	W	W
Alabama	W	W	W	22.81	22.05	W	W
Kentucky	22.92	22.93	0.0%	22.92	22.93	--	--
Mississippi	22.22	NM	NM	22.22	NM	--	--
Tennessee	22.08	21.55	2.5%	22.08	21.55	--	--
West South Central	22.72	21.18	7.3%	22.88	19.96	22.59	22.39
Arkansas	W	W	W	22.99	21.73	W	W
Louisiana	W	W	W	22.37	14.49	W	W
Oklahoma	22.77	NM	NM	22.77	NM	--	--
Texas	W	W	W	23.00	22.00	W	W
Mountain	23.32	23.30	0.1%	23.86	23.50	19.01	21.74
Arizona	23.41	23.18	1.0%	23.41	23.18	--	--
Colorado	W	22.96	W	16.94	22.96	W	--
Idaho	--	NM	--	--	NM	--	--
Montana	W	20.92	W	--	20.48	W	21.02
Nevada	W	W	W	25.23	23.94	W	W
New Mexico	25.77	W	W	25.77	25.16	--	W
Utah	W	W	W	23.55	23.47	W	W
Wyoming	22.40	23.65	-5.3%	22.40	23.65	--	--
Pacific Contiguous	W	23.52	W	24.93	24.10	W	NM
California	26.89	W	W	26.89	23.74	--	W
Oregon	22.68	23.73	-4.4%	22.68	23.73	--	--
Washington	W	W	W	24.73	27.02	W	W
Pacific Noncontiguous	W	W	W	22.12	20.70	W	W
Alaska	23.40	22.95	2.0%	23.40	22.95	--	--
Hawaii	W	W	W	21.99	20.42	W	W
U.S. Total	22.16	20.30	9.2%	22.11	20.30	22.34	20.30

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Table 7.19. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, 2012 and 2011

(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	W	W	--	--	--	W
New Jersey	--	--	--	--	--	--	--
New York	--	W	W	--	--	--	W
Pennsylvania	--	--	--	--	--	--	--
East North Central	W	W	W	4.10	4.01	W	W
Illinois	--	--	--	--	--	--	--
Indiana	4.56	4.87	-6.4%	4.56	4.87	--	--
Michigan	W	W	W	--	--	W	W
Ohio	--	W	W	--	--	--	W
Wisconsin	1.69	1.64	3.0%	1.69	1.64	--	--
West North Central	--	1.63	--	--	1.63	--	--
Iowa	--	1.60	--	--	1.60	--	--
Kansas	--	1.76	--	--	1.76	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.58	3.82	-32.0%	2.58	3.82	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.58	3.82	-32.0%	2.58	3.82	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.83	0.53	245.0%	1.83	0.53	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.83	0.53	245.0%	1.83	0.53	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	W	W	W	1.99	3.08	W	W
Arkansas	--	--	--	--	--	--	--
Louisiana	1.99	3.08	-35.0%	1.99	3.08	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	W	W	W	--	--	W	W
Mountain	W	W	W	--	--	W	W
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	W	2.88	W	--	--	W	2.88
California	W	2.88	W	--	--	W	2.88
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.13	2.95	-28.0%	2.30	3.08	0.82	2.54

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

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

Table 7.20. Average Cost of Natural Gas Delivered for Electricity Generation by State, 2012 and 2011

(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	Year 2012	Year 2011	Percentage Change	Year 2012	Year 2011	Year 2012	Year 2011
New England	3.69	4.94	-25.0%	4.73	5.70	3.68	4.93
Connecticut	3.88	4.97	-22.0%	6.45	NM	3.87	4.96
Maine	W	W	W	--	--	W	W
Massachusetts	3.55	4.88	-27.0%	4.47	5.75	3.53	4.87
New Hampshire	W	W	W	5.54	6.01	W	W
Rhode Island	3.86	5.01	-23.0%	--	--	3.86	5.01
Vermont	4.06	5.22	-22.0%	4.06	5.22	--	--
Middle Atlantic	3.52	5.14	-32.0%	3.86	5.32	3.46	5.11
New Jersey	3.52	5.11	-31.0%	--	--	3.52	5.11
New York	3.85	5.45	-29.0%	3.86	5.32	3.84	5.50
Pennsylvania	3.06	4.73	-35.0%	--	NM	3.06	4.73
East North Central	3.10	4.62	-33.0%	3.12	4.69	3.08	4.58
Illinois	W	4.86	W	3.25	5.15	W	4.78
Indiana	W	4.48	W	3.01	4.42	W	4.59
Michigan	3.16	4.69	-33.0%	3.20	4.85	3.15	4.64
Ohio	2.98	4.44	-33.0%	2.99	4.49	2.98	4.42
Wisconsin	3.20	4.85	-34.0%	3.37	5.20	2.98	4.51
West North Central	W	5.18	W	3.56	5.17	W	5.22
Iowa	3.75	W	W	3.75	5.44	--	W
Kansas	3.21	4.70	-32.0%	3.21	4.70	--	--
Minnesota	W	W	W	3.71	5.88	W	W
Missouri	W	W	W	3.46	4.97	W	W
Nebraska	3.84	5.70	-33.0%	3.84	5.70	--	--
North Dakota	5.70	7.80	-27.0%	5.70	7.80	--	--
South Dakota	3.43	5.00	-31.0%	3.43	5.00	--	--
South Atlantic	4.23	5.45	-22.0%	4.42	5.57	3.13	5.00
Delaware	--	W	W	--	NM	--	W
District of Columbia	--	NM	--	--	NM	--	--
Florida	4.72	5.79	-18.0%	4.82	5.84	2.56	5.32
Georgia	3.35	4.64	-28.0%	3.38	4.51	3.29	4.76
Maryland	W	W	W	--	--	W	W
North Carolina	W	W	W	4.36	5.86	W	W
South Carolina	W	4.33	W	3.62	4.26	W	4.78
Virginia	3.27	4.94	-34.0%	3.32	4.89	3.20	5.00
West Virginia	3.24	4.74	-32.0%	3.20	4.79	3.25	4.73
East South Central	2.98	4.34	-31.0%	2.99	4.40	2.96	4.26
Alabama	3.04	4.28	-29.0%	3.12	4.37	3.00	4.24
Kentucky	W	5.86	W	3.52	6.00	W	4.63
Mississippi	W	4.29	W	2.91	4.28	W	4.36
Tennessee	2.87	4.61	-38.0%	2.87	4.61	--	--
West South Central	2.95	4.31	-32.0%	3.01	4.39	2.90	4.27
Arkansas	3.12	4.64	-33.0%	3.86	5.61	2.95	4.34
Louisiana	2.94	4.31	-32.0%	2.98	4.35	2.83	4.16
Oklahoma	2.96	4.42	-33.0%	3.03	4.45	2.76	4.32
Texas	2.93	4.27	-31.0%	2.97	4.30	2.92	4.27
Mountain	W	4.82	W	3.52	4.97	W	4.56
Arizona	3.43	4.94	-31.0%	3.69	5.52	3.09	4.46
Colorado	W	4.82	W	4.01	4.82	W	4.84
Idaho	W	W	W	4.20	6.74	W	W
Montana	W	W	W	4.06	4.15	W	W
Nevada	3.39	4.87	-30.0%	3.41	4.96	3.28	4.65
New Mexico	W	W	W	3.35	4.84	W	W
Utah	2.93	W	W	2.93	4.19	--	W
Wyoming	W	W	W	5.86	6.91	W	W
Pacific Contiguous	3.55	4.61	-23.0%	3.92	4.87	3.27	4.46
California	3.59	4.61	-22.0%	3.97	4.86	3.32	4.48
Oregon	W	W	W	3.09	4.04	W	W
Washington	W	W	W	4.35	5.52	W	W
Pacific Noncontiguous	4.29	5.00	-14.0%	4.29	5.00	--	--
Alaska	4.29	5.00	-14.0%	4.29	5.00	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.46	4.79	-28.0%	3.74	5.00	3.17	4.62

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

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

Table 7.21. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, 2012

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	1,104	1.31	9.5	41	0.09	2.0	0	--	--
Connecticut	0	--	--	41	0.09	2.0	0	--	--
Maine	51	0.75	6.9	0	--	--	0	--	--
Massachusetts	700	0.88	10.7	0	--	--	0	--	--
New Hampshire	353	2.20	7.7	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	35,282	2.95	11.1	860	0.30	5.4	0	--	--
New Jersey	1,046	1.49	9.3	13	0.25	5.6	0	--	--
New York	1,370	2.45	9.0	847	0.30	5.4	0	--	--
Pennsylvania	32,865	3.01	11.2	0	--	--	0	--	--
East North Central	77,731	2.89	9.7	104,615	0.25	4.9	0	--	--
Illinois	8,042	3.05	15.2	53,077	0.22	4.8	0	--	--
Indiana	30,634	2.69	9.1	6,038	0.27	5.2	0	--	--
Michigan	3,910	1.60	8.6	25,638	0.29	4.9	0	--	--
Ohio	33,647	3.23	9.4	1,358	0.28	5.3	0	--	--
Wisconsin	1,499	1.79	7.6	18,503	0.27	5.0	0	--	--
West North Central	1,553	3.13	9.1	116,022	0.28	5.0	21,645	0.82	10.2
Iowa	452	3.47	8.0	23,984	0.29	4.9	0	--	--
Kansas	245	3.14	13.4	17,675	0.31	5.1	0	--	--
Minnesota	21	0.86	8.9	13,104	0.34	5.6	0	--	--
Missouri	835	3.01	8.4	43,014	0.24	4.9	0	--	--
Nebraska	0	--	--	15,368	0.28	5.0	0	--	--
North Dakota	0	--	--	1,063	0.33	4.8	21,645	0.82	10.2
South Dakota	0	--	--	1,813	0.37	5.7	0	--	--
South Atlantic	105,134	1.89	10.5	12,613	0.30	4.7	0	--	--
Delaware	645	1.76	8.2	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	18,400	2.18	9.3	0	--	--	0	--	--
Georgia	11,052	1.25	9.6	12,206	0.30	4.7	0	--	--
Maryland	6,617	1.77	10.2	360	0.23	4.7	0	--	--
North Carolina	19,811	1.23	10.6	0	--	--	0	--	--
South Carolina	11,606	1.55	9.5	0	--	--	0	--	--
Virginia	6,528	1.14	12.6	0	--	--	0	--	--
West Virginia	30,474	2.70	11.6	47	0.26	4.6	0	--	--
East South Central	63,264	2.38	10.0	22,959	0.28	5.2	3,065	0.50	15.1
Alabama	12,886	1.64	10.4	11,753	0.27	5.1	0	--	--
Kentucky	37,224	2.84	10.3	2,259	0.28	5.4	0	--	--
Mississippi	3,431	1.66	9.6	94	0.24	5.4	3,065	0.50	15.1
Tennessee	9,723	1.94	8.7	8,853	0.29	5.2	0	--	--
West South Central	817	1.93	20.4	104,523	0.29	5.1	46,890	1.00	16.6
Arkansas	0	--	--	16,969	0.27	5.1	0	--	--
Louisiana	338	3.11	8.9	11,381	0.31	5.1	3,867	0.68	16.7
Oklahoma	479	0.93	30.1	19,126	0.26	4.9	0	--	--
Texas	0	--	--	57,048	0.30	5.1	43,023	1.03	16.6
Mountain	30,912	0.59	13.5	76,601	0.53	9.5	248	0.51	9.3
Arizona	7,798	0.60	10.6	15,439	0.69	10.1	0	--	--
Colorado	3,628	0.48	10.6	15,059	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	8,560	0.68	8.9	248	0.51	9.3
Nevada	926	0.44	11.0	1,289	0.38	6.5	0	--	--
New Mexico	5,740	0.75	23.1	8,864	0.70	23.2	0	--	--
Utah	12,820	0.58	12.4	569	1.07	8.7	0	--	--
Wyoming	0	--	--	26,821	0.46	7.2	0	--	--
Pacific Contiguous	935	0.61	11.3	4,440	0.37	7.1	0	--	--
California	935	0.61	11.3	0	--	--	0	--	--
Oregon	0	--	--	1,826	0.41	5.1	0	--	--
Washington	0	--	--	2,615	0.34	8.6	0	--	--
Pacific Noncontiguous	667	0.67	8.3	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	667	0.67	8.3	0	--	--	0	--	--
U.S. Total	317,398	2.23	10.6	442,674	0.32	5.8	71,848	0.93	14.6

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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, 2012

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	353	2.20	7.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	353	2.20	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	63,760	2.92	9.3	53,549	0.28	4.9	0	--	--
Illinois	2,453	3.27	11.8	3,709	0.23	4.9	0	--	--
Indiana	27,905	2.66	8.9	6,038	0.27	5.2	0	--	--
Michigan	3,661	1.62	8.6	25,557	0.29	4.9	0	--	--
Ohio	28,618	3.36	9.5	10	0.26	4.3	0	--	--
Wisconsin	1,122	1.70	7.5	18,235	0.27	5.0	0	--	--
West North Central	1,020	2.98	9.6	113,151	0.28	5.0	21,645	0.82	10.2
Iowa	0	--	--	22,264	0.30	4.9	0	--	--
Kansas	245	3.14	13.4	17,675	0.31	5.1	0	--	--
Minnesota	21	0.86	8.9	12,708	0.34	5.6	0	--	--
Missouri	754	2.99	8.4	43,014	0.24	4.9	0	--	--
Nebraska	0	--	--	14,613	0.28	5.0	0	--	--
North Dakota	0	--	--	1,063	0.33	4.8	21,645	0.82	10.2
South Dakota	0	--	--	1,813	0.37	5.7	0	--	--
South Atlantic	82,703	1.76	10.4	12,253	0.30	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	17,388	2.25	9.1	0	--	--	0	--	--
Georgia	10,657	1.26	9.6	12,206	0.30	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	18,726	1.24	10.8	0	--	--	0	--	--
South Carolina	11,400	1.56	9.5	0	--	--	0	--	--
Virginia	5,327	1.09	13.4	0	--	--	0	--	--
West Virginia	19,205	2.39	11.4	47	0.26	4.6	0	--	--
East South Central	60,719	2.42	10.1	22,959	0.28	5.2	0	--	--
Alabama	12,792	1.65	10.4	11,753	0.27	5.1	0	--	--
Kentucky	37,224	2.84	10.3	2,259	0.28	5.4	0	--	--
Mississippi	2,556	1.24	10.0	94	0.24	5.4	0	--	--
Tennessee	8,147	2.16	8.9	8,853	0.29	5.2	0	--	--
West South Central	338	3.11	8.9	66,949	0.27	5.0	10,595	1.19	18.8
Arkansas	0	--	--	14,503	0.27	5.1	0	--	--
Louisiana	338	3.11	8.9	3,868	0.30	5.4	3,867	0.68	16.7
Oklahoma	0	0.48	9.7	17,871	0.27	4.9	0	--	--
Texas	0	--	--	30,707	0.27	5.0	6,728	1.52	20.2
Mountain	30,682	0.60	13.5	66,696	0.52	9.7	248	0.51	9.3
Arizona	7,798	0.60	10.6	15,231	0.68	10.1	0	--	--
Colorado	3,628	0.48	10.6	15,059	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	248	0.51	9.3
Nevada	926	0.44	11.0	654	0.41	7.4	0	--	--
New Mexico	5,740	0.75	23.1	8,864	0.70	23.2	0	--	--
Utah	12,590	0.58	12.4	569	1.07	8.7	0	--	--
Wyoming	0	--	--	26,319	0.46	7.2	0	--	--
Pacific Contiguous	0	--	--	1,826	0.41	5.1	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	1,826	0.41	5.1	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	239,576	2.10	10.4	337,382	0.33	5.9	32,488	0.94	12.9

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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, 2012

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	732	0.87	10.5	41	0.09	2.0	0	--	--
Connecticut	0	--	--	41	0.09	2.0	0	--	--
Maine	32	0.80	7.0	0	--	--	0	--	--
Massachusetts	700	0.88	10.7	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	34,584	2.97	11.1	860	0.30	5.4	0	--	--
New Jersey	1,046	1.49	9.3	13	0.25	5.6	0	--	--
New York	1,037	2.70	8.6	847	0.30	5.4	0	--	--
Pennsylvania	32,500	3.03	11.3	0	--	--	0	--	--
East North Central	11,511	2.68	12.6	50,221	0.22	4.8	0	--	--
Illinois	3,889	2.74	20.6	48,793	0.22	4.8	0	--	--
Indiana	2,729	3.09	11.2	0	--	--	0	--	--
Michigan	133	1.13	8.4	81	0.22	4.7	0	--	--
Ohio	4,760	2.49	8.5	1,348	0.28	5.3	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	20,029	2.49	10.8	360	0.23	4.7	0	--	--
Delaware	645	1.76	8.2	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	770	1.01	11.7	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	6,227	1.75	9.5	360	0.23	4.7	0	--	--
North Carolina	699	1.07	7.8	0	--	--	0	--	--
South Carolina	27	1.52	8.6	0	--	--	0	--	--
Virginia	728	0.97	9.3	0	--	--	0	--	--
West Virginia	10,932	3.30	12.0	0	--	--	0	--	--
East South Central	874	2.93	8.5	0	--	--	3,065	0.50	15.1
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	874	2.93	8.5	0	--	--	3,065	0.50	15.1
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	479	0.93	30.1	37,074	0.33	5.1	36,295	0.95	16.0
Arkansas	0	--	--	2,466	0.28	5.3	0	--	--
Louisiana	0	--	--	7,513	0.32	4.9	0	--	--
Oklahoma	479	0.93	30.1	755	0.21	4.6	0	--	--
Texas	0	--	--	26,341	0.34	5.2	36,295	0.95	16.0
Mountain	0	--	--	9,697	0.64	8.5	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	8,560	0.68	8.9	0	--	--
Nevada	0	--	--	635	0.35	5.6	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	502	0.39	5.8	0	--	--
Pacific Contiguous	292	1.01	12.4	2,514	0.34	8.8	0	--	--
California	292	1.01	12.4	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	2,514	0.34	8.8	0	--	--
Pacific Noncontiguous	667	0.67	8.3	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	667	0.67	8.3	0	--	--	0	--	--
U.S. Total	69,167	2.72	11.3	100,769	0.30	5.4	39,360	0.92	15.9

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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, 2012

	Bituminous			Subbituminous			Lignite		
Census Division and State	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	111	2.44	9.2	0	--	--	0	--	--
Illinois	42	3.10	8.8	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	69	2.05	9.4	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	81	3.19	9.2	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	81	3.19	9.2	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	192	2.75	9.2	0	--	--	0	--	--

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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, 2012

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	19	0.66	6.9	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	19	0.66	6.9	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	698	1.80	9.6	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	333	1.68	10.2	0	--	--	0	--	--
Pennsylvania	365	1.91	9.0	0	--	--	0	--	--
East North Central	2,350	3.10	9.0	844	0.51	6.0	0	--	--
Illinois	1,657	3.36	9.0	575	0.62	6.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	46	0.46	6.6	0	--	--	0	--	--
Ohio	269	3.59	11.3	0	--	--	0	--	--
Wisconsin	377	2.07	7.8	269	0.28	5.0	0	--	--
West North Central	452	3.47	8.0	2,871	0.22	4.5	0	--	--
Iowa	452	3.47	8.0	1,720	0.22	4.4	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	396	0.25	5.2	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	755	0.20	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	2,402	1.31	11.3	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	242	0.75	9.8	0	--	--	0	--	--
Georgia	395	1.03	10.4	0	--	--	0	--	--
Maryland	390	2.13	22.6	0	--	--	0	--	--
North Carolina	386	1.00	7.0	0	--	--	0	--	--
South Carolina	179	0.80	8.8	0	--	--	0	--	--
Virginia	473	1.84	9.0	0	--	--	0	--	--
West Virginia	337	1.04	11.7	0	--	--	0	--	--
East South Central	1,670	0.89	7.9	0	--	--	0	--	--
Alabama	94	0.80	5.9	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	1,576	0.89	8.0	0	--	--	0	--	--
West South Central	0	--	--	500	0.24	5.2	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	500	0.24	5.2	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	230	0.33	9.4	208	0.96	14.5	0	--	--
Arizona	0	--	--	208	0.96	14.5	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	230	0.33	9.4	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	643	0.42	10.8	100	0.33	4.1	0	--	--
California	643	0.42	10.8	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	100	0.33	4.1	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	8,464	1.74	9.6	4,524	0.31	5.4	0	--	--

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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, 2002 through 2012 (Btu per Kilowatthour)

Year	Coal	Petroleum	Natural Gas	Nuclear
2002	10,314	10,641	9,533	10,442
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	8,159	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

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 - 2012

(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	--

Notes: W = Withheld to avoid disclosure of individual company data.

Heat rate is reported at full load conditions for electric utilities and independent power producers.
The average heat rates above are weighted by Net Summer Capacity.
Coal Combined Cycle represents integrated gasification units.

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

Table 8.3. Revenue and Expense Statistics for Major U.S. Investor-Owned Electric Utilities, 2002 through 2012 (Million Dollars)

Description	2002	2003	2004	2005	2006	2007
Utility Operating Revenues	**219,609**	**230,151**	**238,759**	**265,652**	**275,501**	**270,964**
......Electric Utility	200,360	206,268	213,012	234,909	246,736	240,864
......Other Utility	19,250	23,883	25,747	30,743	28,765	30,100
Utility Operating Expenses	**189,062**	**201,057**	**206,960**	**236,786**	**245,589**	**241,198**
......Electric Utility	171,604	179,044	183,121	207,830	218,445	213,076
.....Operation	116,660	125,436	131,560	150,645	158,893	153,885
.....Production	90,715	98,305	103,871	120,586	127,494	121,700
.....Cost of Fuel	24,149	26,871	28,544	36,106	37,945	39,548
.....Purchased Power	58,810	63,749	67,126	77,902	79,205	74,112
.....Other	7,776	7,709	8,226	6,599	10,371	8,058
.....Transmission	3,560	3,653	4,531	5,664	6,179	6,051
.....Distribution	3,117	3,214	3,287	3,502	3,640	3,765
.....Customer Accounts	4,168	4,262	4,077	4,229	4,409	4,652
.....Customer Service	1,820	1,902	2,013	2,291	2,536	2,939
.....Sales	264	238	237	219	240	239
.....Administrative and General	13,018	13,863	13,537	14,130	14,580	14,346
.....Maintenance	10,861	11,340	11,743	12,033	12,838	13,181
.....Depreciation	16,199	15,981	16,322	17,123	17,373	17,936
.....Taxes and Other	26,716	25,027	22,190	26,805	28,149	27,000
......Other Utility	17,457	22,013	23,839	28,956	27,143	28,122
Net Utility Operating Income	**30,548**	**29,094**	**31,799**	**28,866**	**29,912**	**29,766**

Description	2008	2009	2010	2011	2012
Utility Operating Revenues	**298,962**	**276,124**	**285,512**	**280,520**	**270,912**
......Electric Utility	266,124	249,303	260,119	255,573	249,166
......Other Utility	32,838	26,822	25,393	24,946	21,745
Utility Operating Expenses	**267,263**	**244,243**	**253,022**	**247,118**	**235,694**
......Electric Utility	236,572	219,544	234,173	228,873	220,722
.....Operation	175,887	154,925	166,922	161,460	152,379
.....Production	140,974	118,816	128,831	122,520	111,714
.....Cost of Fuel	47,337	40,242	44,138	42,779	38,998
.....Purchased Power	84,724	67,630	67,284	61,447	54,570
.....Other	8,937	10,970	17,409	18,294	18,146
.....Transmission	6,950	6,742	6,948	6,876	7,183
.....Distribution	3,997	3,947	4,007	4,044	4,181
.....Customer Accounts	5,286	5,203	5,091	5,180	5,086
.....Customer Service	3,567	3,857	4,741	5,311	5,640
.....Sales	225	178	185	185	221
.....Administrative and General	14,718	15,991	17,120	17,343	18,353
.....Maintenance	14,192	14,092	14,957	15,772	15,489
.....Depreciation	19,049	20,095	20,951	22,555	23,677
.....Taxes and Other	26,202	29,081	31,343	29,086	29,177
......Other Utility	30,692	24,698	18,849	18,245	14,972
Net Utility Operating Income	**31,699**	**31,881**	**32,490**	**33,402**	**35,218**

Notes: 2007 financial data does not include information on Entergy Gulf State Louisiana LLC and Entergy Texas Inc. as both were not reported on the FERC Form for that year.
Missing or erroneous respondent data may result in slight imbalances in some of the expense account subtotals.
Total may not equal sum of components due to independent rounding.

Sources: Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others via Ventyx Global Energy Velocity Suite.

Table 8.4. Average Power Plant Operating Expenses for Major U.S. Investor-Owned Electric Utilities, 2002 through 2012 (Mills per Kilowatthour)

	Operation				Maintenance			
Year	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale
2002	9.00	2.59	3.71	3.26	5.04	2.67	2.62	2.38
2003	9.12	2.74	3.47	3.50	5.23	2.72	2.32	2.26
2004	8.97	3.13	3.83	4.27	5.38	2.96	2.76	2.14
2005	8.26	3.21	3.95	3.69	5.27	2.98	2.73	1.89
2006	9.03	3.57	3.76	3.51	5.69	3.19	2.70	2.16
2007	9.54	3.63	5.44	3.26	5.79	3.37	3.87	2.42
2008	9.89	3.72	5.78	3.77	6.20	3.59	3.89	2.72
2009	10.00	4.23	4.88	3.05	6.34	3.96	3.50	2.58
2010	10.50	4.04	5.33	2.79	6.80	3.99	3.81	2.73
2011	10.89	4.02	5.13	2.81	6.80	3.99	3.74	2.93
2012	11.60	3.73	6.71	2.46	6.80	3.99	4.63	2.76

	Fuel				Total			
Year	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale	Nuclear	Fossil Steam	Hydro-electric	Gas Turbine and Small Scale
2002	4.60	16.09	--	31.84	18.65	21.36	6.33	37.47
2003	4.60	17.29	--	43.89	18.95	22.75	5.79	49.66
2004	4.58	18.21	--	45.18	18.93	24.31	6.60	51.59
2005	4.63	21.69	--	55.52	18.15	27.88	6.68	61.10
2006	4.85	23.09	--	53.89	19.57	29.85	6.46	59.56
2007	4.99	23.88	--	58.75	20.32	30.88	9.32	64.43
2008	5.29	28.43	--	64.23	21.37	35.75	9.67	70.72
2009	5.35	32.30	--	51.93	21.69	40.48	8.38	57.55
2010	6.68	27.73	--	43.21	23.98	35.76	9.15	48.74
2011	7.01	27.08	--	38.80	24.70	35.09	8.88	44.54
2012	7.08	24.17	--	30.45	25.48	31.89	11.34	35.67

Hydroelectric category consists of both conventional hydroelectric and pumped storage.
Gas Turbine and Small Scale category consists of gas turbine, internal combustion, photovoltaic, and wind plants.
Notes: Expenses are average expenses weighted by net generation. A mill is a monetary cost and billing unit equal to 1/1000 of the U.S. dollar (equivalent to 1/10 of one cent).
Total may not equal sum of components due to independent rounding.
Sources: Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others via Ventyx Global Energy Velocity Suite.

Table 8.6.A. Noncoincident Peak Load by North American Electric Reliability Corporation Assessment Area, 2002 - 2012, 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.
2002	**40,696**	**56,012**	**442,535**	102,996	55,569	56,396	--	--	29,119	--	--	158,767	39,688	**56,248**	**119,074**	**714,565**
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**

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.
2002 / 2003	**45,635**	**46,009**	**371,977**	87,300	46,551	42,412	--	--	23,645	--	--	141,882	30,187	**45,414**	**95,951**	**604,986**
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**

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, 2012 Actual, 2013-2017 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.
Actual 2012	**44,338**	**58,319**	**468,092**	5,051	96,769	154,339	161,687	50,246	**66,548**	**130,465**	**767,762**
Projected 2013	**45,668**	**59,969**	**469,857**	5,109	96,192	155,553	159,032	53,971	**67,998**	**133,523**	**777,015**
Projected 2014	**46,338**	**60,654**	**475,005**	5,249	96,879	158,717	159,457	54,703	**69,289**	**132,731**	**784,017**
Projected 2015	**47,053**	**61,428**	**484,637**	5,360	97,565	162,216	164,150	55,346	**71,423**	**134,183**	**798,724**
Projected 2016	**47,650**	**62,386**	**491,880**	5,632	98,251	165,128	166,813	56,056	**73,410**	**138,215**	**813,540**
Projected 2017	**48,285**	**62,871**	**497,648**	5,695	98,938	167,211	169,039	56,765	**74,492**	**140,843**	**824,139**

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.
Actual 2012 / 2013	**36,409**	**45,545**	**390,818**	5,168	74,430	122,566	153,738	34,916	**46,909**	**101,706**	**621,387**
Projected 2013 / 2014	**46,456**	**46,008**	**407,717**	5,726	77,364	132,229	151,097	41,301	**54,390**	**109,058**	**663,629**
Projected 2014 / 2015	**47,161**	**46,090**	**414,248**	5,852	79,813	134,742	152,010	41,831	**55,439**	**111,293**	**674,231**
Projected 2015 / 2016	**47,722**	**46,184**	**419,528**	5,921	80,619	137,338	153,310	42,339	**57,090**	**112,709**	**683,233**
Projected 2016 / 2017	**48,251**	**46,546**	**424,229**	6,256	80,931	139,296	154,791	42,955	**58,370**	**114,073**	**691,468**
Projected 2017 / 2018	**48,773**	**46,522**	**429,521**	6,302	81,605	140,430	157,613	43,571	**59,087**	**115,658**	**699,561**

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, 2002 - 2012, 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.
2002	**211,116**	**286,199**	**2,301,321**	567,897	273,907	279,264	--	--	150,058	--	--	835,319	194,876	**280,269**	**666,696**	**3,745,601**
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**

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, 2012 Actual, 2013-2017 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.
Actual 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**
Projected 2013	**225,384**	**294,264**	**2,498,324**	35,149	548,976	822,208	828,189	263,802	**331,877**	**734,994**	**4,084,843**
Projected 2014	**229,771**	**295,689**	**2,521,241**	36,158	551,810	843,697	819,994	269,582	**340,369**	**746,821**	**4,133,891**
Projected 2015	**233,937**	**297,402**	**2,559,761**	36,928	554,704	863,161	838,690	266,278	**351,281**	**767,899**	**4,210,280**
Projected 2016	**237,569**	**300,078**	**2,599,814**	37,853	558,956	882,669	851,001	269,334	**362,282**	**778,039**	**4,277,781**
Projected 2017	**240,276**	**300,474**	**2,626,640**	39,074	561,645	892,369	861,713	271,838	**367,931**	**787,088**	**4,322,409**

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.A. Summer Net Internal Demand, Capacity Resources, and Capacity Margins by North American Electric Reliability Assessment Area, 2002 - 2012, Actual

Net Internal Demand (Megawatts) -- Summer																
	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.
2002	**37,951**	**55,164**	**430,396**	101,251	54,296	53,267	--	--	28,825	--	--	154,459	38,298	**55,833**	**117,032**	**696,376**
2003	**40,387**	**53,936**	**422,253**	98,487	53,566	53,617	--	--	28,775	--	--	148,380	39,428	**59,282**	**120,894**	**696,752**
2004	**42,243**	**51,580**	**419,349**	95,300	52,049	50,499	--	--	29,094	--	--	153,024	39,383	**58,531**	**121,205**	**692,908**
2005	**45,950**	**57,402**	**455,594**	--	--	--	--	--	38,266	--	190,200	186,049	41,079	**59,060**	**128,464**	**746,470**
2006	**45,345**	**60,879**	**469,639**	--	--	--	--	--	40,661	--	190,800	196,196	41,982	**61,214**	**139,402**	**776,479**
2007	**46,434**	**58,221**	**465,229**	--	--	--	--	--	40,249	--	177,200	205,321	42,459	**61,063**	**135,839**	**766,786**
2008	**44,660**	**59,896**	**447,629**	--	--	--	--	--	38,857	--	169,155	196,711	42,906	**61,049**	**130,916**	**744,151**
2009	**46,263**	**55,730**	**424,714**	--	--	--	--	--	35,849	--	161,241	186,507	41,117	**63,518**	**122,881**	**713,106**
2010	**45,522**	**56,232**	**453,436**	--	--	--	4,493	100,963	--	135,142	--	160,896	51,942	**64,378**	**126,944**	**746,513**
2011	**44,798**	**62,313**	**466,360**	--	--	--	4,641	98,290	--	146,443	--	161,995	54,991	**68,416**	**117,755**	**759,642**
2012	**44,338**	**58,319**	**469,273**	--	--	--	4,967	96,769	--	156,319	--	158,041	53,177	**66,548**	**130,465**	**768,943**

Capacity Resources (Megawatts) -- Summer																
	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.
2002	**43,342**	**66,208**	**504,357**	119,736	63,619	67,025	--	--	34,259	--	--	172,485	47,233	**76,849**	**142,624**	**833,380**
2003	**46,806**	**70,902**	**513,382**	123,755	65,897	67,410	--	--	33,287	--	--	177,231	45,802	**74,764**	**150,277**	**856,131**
2004	**48,579**	**71,532**	**526,454**	127,919	66,167	65,677	--	--	35,830	--	--	182,861	48,000	**73,850**	**155,455**	**875,870**
2005	**50,200**	**72,258**	**532,917**	--	--	--	--	--	46,792	--	220,000	219,749	46,376	**66,724**	**160,026**	**882,125**
2006	**50,909**	**73,095**	**534,270**	--	--	--	--	--	50,116	--	214,693	223,630	45,831	**70,664**	**162,288**	**891,226**
2007	**53,027**	**73,771**	**543,608**	--	--	--	--	--	47,259	--	213,544	234,232	48,573	**75,912**	**168,080**	**914,397**
2008	**51,541**	**75,894**	**539,936**	--	--	--	--	--	48,180	--	215,477	228,169	48,110	**74,274**	**167,860**	**909,504**
2009	**49,239**	**78,639**	**559,823**	--	--	--	--	--	47,529	--	215,700	247,400	49,194	**76,280**	**152,467**	**916,449**
2010	**53,370**	**67,569**	**570,396**	--	--	--	7,210	131,691	--	167,647	--	200,511	63,337	**73,857**	**158,407**	**923,599**
2011	**54,340**	**72,277**	**549,067**	--	--	--	5,244	110,611	--	170,066	--	201,103	62,044	**69,595**	**147,147**	**892,426**
2012	**53,475**	**76,525**	**576,314**	--	--	--	5,981	112,085	--	187,305	--	198,140	72,802	**73,219**	**147,527**	**927,060**

Capacity Margin (Percent) -- Summer																
	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.
2002	**12.4%**	**16.7%**	**14.7%**	15.4%	14.7%	20.5%	--	--	15.9%	--	--	10.5%	18.9%	**27.3%**	**17.9%**	**16.4%**
2003	**13.7%**	**23.9%**	**17.8%**	20.4%	18.7%	20.5%	--	--	13.6%	--	--	16.3%	13.9%	**20.7%**	**19.6%**	**18.6%**
2004	**13.0%**	**27.9%**	**20.3%**	25.5%	21.3%	23.1%	--	--	18.8%	--	--	16.3%	18.0%	**20.7%**	**22.0%**	**20.9%**
2005	**8.5%**	**20.6%**	**14.5%**	--	--	--	--	--	18.2%	--	13.5%	15.3%	11.4%	**11.5%**	**19.7%**	**15.4%**
2006	**10.9%**	**16.7%**	**12.1%**	--	--	--	--	--	18.9%	--	11.1%	12.3%	8.4%	**13.4%**	**14.1%**	**12.9%**
2007	**12.4%**	**21.1%**	**14.4%**	--	--	--	--	--	14.8%	--	17.0%	12.3%	12.6%	**19.6%**	**19.2%**	**16.1%**
2008	**13.4%**	**21.1%**	**17.1%**	--	--	--	--	--	19.3%	--	21.5%	13.8%	10.8%	**17.8%**	**22.0%**	**18.2%**
2009	**6.0%**	**29.1%**	**24.1%**	--	--	--	--	--	24.6%	--	25.2%	24.6%	16.4%	**16.7%**	**19.4%**	**22.2%**
2010	**14.7%**	**16.8%**	**20.5%**	--	--	--	37.7%	23.3%	--	19.4%	--	19.8%	18.0%	**12.8%**	**19.9%**	**19.2%**
2011	**17.6%**	**13.8%**	**15.1%**	--	--	--	11.5%	11.1%	--	13.9%	--	19.4%	11.4%	**1.7%**	**20.0%**	**14.9%**
2012	**17.1%**	**23.8%**	**18.6%**	--	--	--	17.0%	13.7%	--	16.5%	--	20.2%	27.0%	**9.1%**	**11.6%**	**17.1%**

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.
N/A - Not Available
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, 2012 Actual, 2013-2017 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.
Actual 2012	**44,338**	**58,319**	**469,273**	4,967	96,769	156,319	158,041	53,177	**66,548**	**130,465**	**768,943**
Projected 2013	**42,532**	**59,969**	**447,171**	5,022	91,644	144,378	152,949	53,177	**65,901**	**129,278**	**744,851**
Projected 2014	**43,142**	**60,654**	**448,912**	5,161	92,331	144,497	152,843	54,080	**67,592**	**128,200**	**748,499**
Projected 2015	**43,812**	**61,428**	**457,865**	5,270	93,017	147,568	157,287	54,722	**69,679**	**129,553**	**762,336**
Projected 2016	**44,355**	**62,386**	**464,840**	5,540	93,703	150,480	159,684	55,433	**71,613**	**133,150**	**776,343**
Projected 2017	**44,907**	**62,871**	**470,476**	5,601	94,390	152,563	161,702	56,220	**72,637**	**135,740**	**786,631**

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.
Actual 2012	**53,475**	**76,525**	**576,314**	5,981	112,085	187,305	198,140	72,802	**73,219**	**147,527**	**927,060**
Projected 2013	**51,613**	**72,050**	**556,959**	6,412	104,194	176,356	196,660	73,337	**72,681**	**155,044**	**908,348**
Projected 2014	**51,923**	**76,127**	**558,157**	6,570	104,663	177,039	197,116	72,768	**75,182**	**172,443**	**933,830**
Projected 2015	**52,825**	**75,413**	**545,640**	6,717	99,750	171,655	194,447	73,071	**76,010**	**174,960**	**924,848**
Projected 2016	**53,613**	**75,443**	**543,786**	6,797	95,712	173,523	194,830	72,924	**77,220**	**175,673**	**925,736**
Projected 2017	**53,413**	**73,956**	**546,471**	6,750	95,781	174,971	195,820	73,150	**78,383**	**177,344**	**929,567**

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.
Actual 2012	**17.1%**	**23.8%**	**18.6%**	17.0%	13.7%	16.5%	20.2%	27.0%	**9.1%**	**11.6%**	**17.1%**
Projected 2013	**17.6%**	**16.8%**	**19.7%**	21.7%	12.0%	18.1%	22.2%	27.5%	**9.3%**	**16.6%**	**18.0%**
Projected 2014	**16.9%**	**20.3%**	**19.6%**	21.4%	11.8%	18.4%	22.5%	25.7%	**10.1%**	**25.7%**	**19.8%**
Projected 2015	**17.1%**	**18.5%**	**16.1%**	21.5%	6.8%	14.0%	19.1%	25.1%	**8.3%**	**26.0%**	**17.6%**
Projected 2016	**17.3%**	**17.3%**	**14.5%**	18.5%	2.1%	13.3%	18.0%	24.0%	**7.3%**	**24.2%**	**16.1%**
Projected 2017	**15.9%**	**15.0%**	**13.9%**	17.0%	1.5%	12.8%	17.4%	23.1%	**7.3%**	**23.5%**	**15.4%**

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
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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.A. Winter Net Internal Demand, Capacity Resources, and Capacity Margins by North American Electric Reliability Assessment Area, 2002 - 2012, Actual

Net Internal Demand (Megawatts) -- Winter																
	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.
2002 / 2003	**42,001**	**45,980**	**360,748**	84,844	46,159	39,974	--	--	23,090	--	--	137,541	29,140	**44,719**	**94,554**	**588,002**
2003 / 2004	**36,229**	**47,850**	**357,026**	86,332	45,625	39,955	--	--	24,042	--	--	133,244	27,828	**41,988**	**100,337**	**583,430**
2004 / 2005	**41,449**	**47,859**	**371,011**	91,800	45,565	40,618	--	--	24,446	--	--	139,486	29,096	**44,010**	**101,002**	**605,331**
2005 / 2006	**42,493**	**46,328**	**375,365**	--	--	--	--	--	32,854	--	151,600	160,054	30,857	**46,991**	**105,670**	**616,847**
2006 / 2007	**45,993**	**48,394**	**385,887**	--	--	--	--	--	34,582	--	147,800	173,036	30,469	**46,038**	**107,586**	**633,898**
2007 / 2008	**46,093**	**46,185**	**383,779**	--	--	--	--	--	34,358	--	141,200	176,766	31,455	**46,068**	**113,504**	**635,629**
2008 / 2009	**45,042**	**47,151**	**384,495**	--	--	--	--	--	34,539	--	142,395	175,199	32,362	**46,747**	**110,977**	**634,412**
2009 / 2010	**51,703**	**44,864**	**399,204**	--	--	--	--	--	33,983	--	143,827	188,653	32,741	**56,191**	**106,256**	**658,219**
2010 / 2011	**45,954**	**44,172**	**389,351**	--	--	--	4,877	80,311	--	115,535	--	148,062	40,566	**55,917**	**99,515**	**634,909**
2011 / 2012	**39,924**	**43,806**	**385,428**	--	--	--	4,443	83,946	--	110,963	--	147,454	38,622	**50,100**	**107,568**	**626,826**
2012 / 2013	**36,409**	**45,545**	**386,359**	--	--	--	4,925	74,430	--	122,566	--	149,359	35,079	**46,909**	**101,706**	**616,927**

Capacity Resources (Megawatts) -- Winter																
	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.
2002 / 2003	**46,219**	**68,884**	**511,642**	123,823	66,143	66,694	--	--	33,224	--	--	174,925	46,833	**73,335**	**132,278**	**832,358**
2003 / 2004	**50,010**	**73,123**	**524,995**	129,351	68,134	68,942	--	--	32,769	--	--	179,810	45,989	**77,111**	**152,158**	**877,397**
2004 / 2005	**51,196**	**74,277**	**538,041**	131,187	69,604	66,414	--	--	34,371	--	--	186,784	49,681	**71,902**	**149,360**	**884,776**
2005 / 2006	**49,066**	**76,076**	**545,850**	--	--	--	--	--	44,620	--	229,000	224,652	47,578	**61,003**	**152,211**	**884,206**
2006 / 2007	**56,896**	**76,110**	**547,005**	--	--	--	--	--	46,959	--	220,930	231,917	47,199	**71,451**	**166,362**	**917,824**
2007 / 2008	**57,510**	**75,772**	**537,094**	--	--	--	--	--	44,987	--	212,257	229,627	50,223	**75,504**	**167,770**	**913,650**
2008 / 2009	**53,278**	**79,394**	**545,843**	--	--	--	--	--	47,343	--	215,477	234,797	48,226	**73,910**	**167,312**	**919,736**
2009 / 2010	**52,751**	**78,992**	**567,746**	--	--	--	--	--	46,422	--	215,700	255,527	50,097	**69,490**	**151,022**	**920,002**
2010 / 2011	**57,358**	**70,557**	**573,274**	--	--	--	6,941	129,241	--	167,647	--	207,558	61,888	**77,660**	**156,413**	**935,262**
2011 / 2012	**56,466**	**72,741**	**544,706**	--	--	--	4,960	98,329	--	170,077	--	212,063	59,276	**69,202**	**150,091**	**893,206**
2012 / 2013	**57,431**	**79,173**	**576,569**	--	--	--	6,220	110,600	--	184,185	--	205,376	70,188	**74,107**	**154,380**	**941,660**

Capacity Margin (Percent) -- Winter																
	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.
2002 / 2003	**9.1%**	**33.3%**	**29.5%**	31.5%	30.2%	40.1%	--	--	30.5%	--	--	21.4%	37.8%	**39.0%**	**28.5%**	**29.4%**
2003 / 2004	**27.6%**	**34.6%**	**32.0%**	33.3%	33.0%	42.0%	--	--	26.6%	--	--	25.9%	39.5%	**45.5%**	**34.1%**	**33.5%**
2004 / 2005	**19.0%**	**35.6%**	**31.0%**	30.0%	34.5%	38.8%	--	--	28.9%	--	--	25.3%	41.4%	**38.8%**	**32.4%**	**31.6%**
2005 / 2006	**13.4%**	**39.1%**	**31.2%**	--	--	--	--	--	26.4%	--	33.8%	28.8%	35.1%	**23.0%**	**30.6%**	**30.2%**
2006 / 2007	**19.2%**	**36.4%**	**29.5%**	--	--	--	--	--	26.4%	--	33.1%	25.4%	35.4%	**35.6%**	**35.3%**	**30.9%**
2007 / 2008	**19.9%**	**39.0%**	**28.5%**	--	--	--	--	--	23.6%	--	33.5%	23.0%	37.4%	**39.0%**	**32.3%**	**30.4%**
2008 / 2009	**15.5%**	**40.6%**	**29.6%**	--	--	--	--	--	27.0%	--	33.9%	25.4%	32.9%	**36.8%**	**33.7%**	**31.0%**
2009 / 2010	**2.0%**	**43.2%**	**29.7%**	--	--	--	--	--	26.8%	--	33.3%	26.2%	34.6%	**19.1%**	**29.6%**	**28.5%**
2010 / 2011	**19.9%**	**37.4%**	**32.1%**	--	--	--	29.7%	37.9%	--	31.1%	--	28.7%	34.5%	**28.0%**	**36.4%**	**32.1%**
2011 / 2012	**29.3%**	**39.8%**	**29.2%**	--	--	--	10.4%	14.6%	--	34.8%	--	30.5%	34.8%	**27.6%**	**28.3%**	**29.8%**
2012 / 2013	**36.6%**	**42.5%**	**33.0%**	--	--	--	20.8%	32.7%	--	33.5%	--	27.3%	50.0%	**36.7%**	**34.1%**	**34.5%**

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.
N/A - Not Available
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, 2012 Actual, 2013-2017 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.
Actual 2012 / 2013	**36,409**	**45,545**	**386,359**	4,925	74,430	122,566	149,359	35,079	**46,909**	**101,706**	**616,927**
Projected 2013 / 2014	**43,384**	**46,008**	**399,149**	5,385	75,320	132,229	145,657	40,558	**51,435**	**107,341**	**647,317**
Projected 2014 / 2015	**44,060**	**46,090**	**403,883**	5,500	76,252	134,742	146,130	41,259	**53,742**	**109,418**	**657,192**
Projected 2015 / 2016	**44,596**	**46,184**	**408,927**	5,563	77,058	137,338	147,201	41,767	**55,346**	**110,814**	**665,866**
Projected 2016 / 2017	**45,074**	**46,546**	**413,356**	5,889	77,370	139,296	148,418	42,383	**56,573**	**112,143**	**673,691**
Projected 2017 / 2018	**45,543**	**46,522**	**418,458**	5,933	78,044	140,430	151,052	42,999	**57,232**	**113,694**	**681,450**

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.
Actual 2012 / 2013	**57,431**	**79,173**	**576,569**	6,220	110,600	184,185	205,376	70,188	**74,107**	**154,380**	**941,660**
Projected 2013 / 2014	**54,993**	**77,145**	**565,835**	7,207	134,573	188,684	170,284	65,086	**72,145**	**151,849**	**921,966**
Projected 2014 / 2015	**57,184**	**80,211**	**583,727**	7,011	105,650	191,384	205,798	73,883	**77,626**	**154,705**	**953,453**
Projected 2015 / 2016	**56,209**	**80,002**	**574,634**	7,195	100,738	187,909	204,601	74,192	**78,134**	**155,690**	**944,669**
Projected 2016 / 2017	**58,187**	**80,132**	**570,911**	7,027	96,699	189,099	204,084	74,002	**80,481**	**155,873**	**945,585**
Projected 2017 / 2018	**56,331**	**78,646**	**571,993**	6,924	96,768	189,171	204,985	74,145	**80,424**	**156,342**	**943,736**

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.
Actual 2012 / 2013	**36.6%**	**42.5%**	**33.0%**	20.8%	32.7%	33.5%	27.3%	50.0%	**36.7%**	**34.1%**	**34.5%**
Projected 2013 / 2014	**21.1%**	**40.4%**	**29.5%**	25.3%	44.0%	29.9%	14.5%	37.7%	**28.7%**	**29.3%**	**29.8%**
Projected 2014 / 2015	**23.0%**	**42.5%**	**30.8%**	21.6%	27.8%	29.6%	29.0%	44.2%	**30.8%**	**29.3%**	**31.1%**
Projected 2015 / 2016	**20.7%**	**42.3%**	**28.8%**	22.7%	23.5%	26.9%	28.1%	43.7%	**29.2%**	**28.8%**	**29.5%**
Projected 2016 / 2017	**22.5%**	**41.9%**	**27.6%**	16.2%	20.0%	26.3%	27.3%	42.7%	**29.7%**	**28.1%**	**28.8%**
Projected 2017 / 2018	**19.2%**	**40.8%**	**26.8%**	14.3%	19.3%	25.8%	26.3%	42.0%	**28.8%**	**27.3%**	**27.8%**

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
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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, 2012

Voltage		Circuit Miles								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	100-199	--	--	--	--	--	--	--	--	--
AC	200-299	6,018	7,813	1,538	6,933	21,757	2,948	--	38,410	85,416
AC	300-399	--	7,362	5,850	13,429	3,650	5,303	9,529	10,913	56,036
AC	400-599	1,201	543	--	2,618	8,876	94	--	12,794	26,125
AC	600-799	--	--	190	2,226	--	--	--	--	2,416
AC Multi-Circuit Structure	200-299	1,198	686	36	2,008	4,156	9	--	--	8,092
AC Multi-Circuit Structure	300-399	--	372	274	3,706	313	153	2,747	--	7,564
AC Multi-Circuit Structure	400-599	--	--	--	90	857	--	--	--	947
AC Multi-Circuit Structure	600-799	--	--	--	--	--	--	--	--	--
AC Multi-Circuit Structure	Mixed	--	57	28	9	35	--	--	--	128
AC Total	**US Total**	**8,416**	**16,832**	**7,915**	**31,018**	**39,643**	**8,507**	**12,276**	**62,117**	**186,724**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	930	--	--	--	--	--	53	983
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	872	--	--	--	--	--	--	872
DC	500-599	--	--	--	66	--	--	--	2,137	2,203
DC	600-799	--	--	--	--	--	--	--	--	--
DC Total	**US Total**	**--**	**1,802**	**--**	**66**	**--**	**--**	**--**	**2,190**	**4,058**
Grand Total	**Grand Total**	**8,416**	**18,634**	**7,915**	**31,084**	**39,643**	**8,507**	**12,276**	**64,307**	**190,782**

Voltage		Circuit Counts								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	100-199	--	--	--	--	--	--	--	--	--
AC	200-299	411	191	62	577	1,297	133	--	1,526	4,197
AC	300-399	--	195	254	488	118	120	305	145	1,626
AC	400-599	19	3	--	76	235	1	--	231	565
AC	600-799	--	--	2	32	--	--	--	--	34
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**	**430**	**389**	**318**	**1,173**	**1,651**	**255**	**305**	**1,902**	**6,422**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	2	--	--	--	--	--	1	3
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	2	--	--	--	--	--	--	2
DC	500-599	--	--	--	1	--	--	--	4	5
DC	600-799	--	--	--	--	--	--	--	--	--
DC Total	**US Total**	**--**	**4**	**--**	**1**	**--**	**--**	**--**	**5**	**10**
Grand Total	**Grand Total**	**430**	**393**	**318**	**1,174**	**1,651**	**255**	**305**	**1,907**	**6,432**

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, 2013 - 2019
(Circuit Miles of Transmission)

Voltage		Circuit Miles							
Type	Operating (kV)	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	All Years
AC	100-199	954	1,222	992	1,047	392	382	176	5,165
AC	200-299	1,003	792	1,398	319	539	427	118	4,596
AC	300-399	4,779	839	1,532	1,527	502	1,650	349	11,178
AC	400-599	399	708	669	643	660	1,151	334	4,564
AC	600+	--	--	14	--	--	69	--	83
AC Total		**7,134**	**3,562**	**4,606**	**3,536**	**2,092**	**3,679**	**978**	**25,586**
DC	100-199	2	11	5	--	--	7	--	25
DC	200-299	--	--	--	--	--	--	--	--
DC	300-399	--	--	--	--	333	--	--	333
DC	400-599	--	--	10	--	--	--	--	10
DC	600+	--	--	--	--	--	--	--	--
DC Total		**2**	**11**	**15**	**--**	**333**	**7**	**--**	**368**
Grand Total		**7,136**	**3,573**	**4,621**	**3,536**	**2,425**	**3,687**	**978**	**25,955**

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, 2012

Outage Type	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Circuit Outage Counts									
Automatic Outages (Sustained)	151	163	127	272	374	105	80	796	2,068
Non-Automatic Outages (Operational)	77	44	97	230	192	27	45	337	1,049
Non-Automatic Outages (Planned)	2,650	453	512	2,050	2,450	369	472	2,744	11,700
Circuit Outage Hours									
Automatic Outages (Sustained)	2,852	1,313	14,245	19,857	7,124	1,510	683	24,239	71,822
Non-Automatic Outages (Operational)	187	27	68	186	427	3	14	68	979
Non-Automatic Outages (Planned)	873	710	1,222	1,095	503	357	105	1,105	5,972
Circuit Outage Counts per 1,000 Circuit Miles									
Automatic Outages (Sustained)	17.94	8.75	16.05	8.75	9.43	12.34	6.52	12.38	10.84
Non-Automatic Outages (Operational)	9.15	2.36	12.25	7.40	4.84	3.17	3.67	5.24	5.50
Non-Automatic Outages (Planned)	314.87	24.31	64.69	65.95	61.80	43.38	38.45	42.67	61.33
Circuit Outage Hours per Outage Incident									
Automatic Outages (Sustained)	18.89	8.06	112.16	73.00	19.05	14.38	8.53	30.45	34.73
Non-Automatic Outages (Operational)	2.43	0.62	0.70	0.81	2.22	0.12	0.31	0.20	0.93
Non-Automatic Outages (Planned)	0.33	1.57	2.39	0.53	0.21	0.97	0.22	0.40	0.51

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, 2012

Outage Type	Eastern Interconnection	TRE	WECC	Contiguous U.S.
Circuit Outage Counts				
Automatic Outages (Sustained)	16	--	16	32
Non-Automatic Outages (Operational)	48	--	73	121
Non-Automatic Outages (Planned)	291	--	290	581
Circuit Outage Hours				
Automatic Outages (Sustained)	3,224	--	302	3,526
Non-Automatic Outages (Operational)	514	--	10	524
Non-Automatic Outages (Planned)	2,383	--	770	3,153
Circuit Outage Hours per Outage Incident				
Automatic Outages (Sustained)	201.51	--	18.86	110.19
Non-Automatic Outages (Operational)	10.71	--	0.14	4.33
Non-Automatic Outages (Planned)	8.19	--	2.65	5.43

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, 2012

Sustained Automatic Outage Counts										
Voltage		Region								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	200-299	142	49	14	141	242	49	--	484	1,121
AC	300-399	--	88	107	95	46	56	80	165	637
AC	400-599	9	3	--	22	86	--	--	125	245
AC	600+	--	--	6	9	--	--	--	--	15
AC Total		**151**	**140**	**127**	**267**	**374**	**105**	**80**	**774**	**2,018**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	18	--	--	--	--	--	5	23
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	5	--	--	--	--	--	--	5
DC	500-599	--	--	--	5	--	--	--	17	22
DC	600+	--	--	--	--	--	--	--	--	--
DC Total		**--**	**23**	**--**	**5**	**--**	**--**	**--**	**22**	**50**
Grand Total		**151**	**163**	**127**	**272**	**374**	**105**	**80**	**796**	**2,068**

Total Outages per 1,000 Circuit Miles										
		Region								
		FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Rate		**21.08**	**7.54**	**18.90**	**10.69**	**11.01**	**13.03**	**8.29**	**12.63**	**11.77**

Sustained Automatic Outage Hours										
Voltage		Region								
Type	Operating (kV)	FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
AC	200-299	823	256	7,832	10,033	4,672	494	--	13,264	37,374
AC	300-399	--	835	6,386	5,892	1,080	1,016	683	578	16,468
AC	400-599	2,030	15	--	1,825	1,372	--	--	10,087	15,328
AC	600+	--	--	28	2,089	--	--	--	--	2,117
AC Total		**2,852**	**1,106**	**14,245**	**19,839**	**7,124**	**1,510**	**683**	**23,930**	**71,287**
DC	100-199	--	--	--	--	--	--	--	--	--
DC	200-299	--	127	--	--	--	--	--	44	171
DC	300-399	--	--	--	--	--	--	--	--	--
DC	400-499	--	80	--	--	--	--	--	--	80
DC	500-599	--	--	--	19	--	--	--	264	283
DC	600+	--	--	--	--	--	--	--	--	--
DC Total		**--**	**207**	**--**	**19**	**--**	**--**	**--**	**308**	**534**
Grand Total		**2,852**	**1,313**	**14,245**	**19,857**	**7,124**	**1,510**	**683**	**24,239**	**71,822**

Outage Hours per Outage Incident										
		Region								
		FRCC	MRO	NPCC	RFC	SERC	SPP	TRE	WECC	Contiguous U.S.
Rate		**18.89**	**8.06**	**112.16**	**73.00**	**19.05**	**14.38**	**8.53**	**30.45**	**34.73**

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, 2012

Sustained Automatic Outage Counts				
High-Side Voltage (kV)	**Eastern Interconnection**	**TRE**	**WECC**	**Contiguous U.S.**
100-199	--	--	--	--
200-299	--	--	1	1
300-399	2	--	4	6
400-599	14	--	11	25
600+	--	--	--	--
Grand Total	**16**	**--**	**16**	**32**

Sustained Automatic Outage Hours				
High-Side Voltage (kV)	**Eastern Interconnection**	**TRE**	**WECC**	**Contiguous U.S.**
100-199	--	--	--	--
200-299	--	--	28	28
300-399	153	--	16	169
400-599	3,071	--	258	3,329
600+	--	--	--	--
Grand Total	**3,224**	**--**	**302**	**3,526**

Outage Hours per Outage Incident				
	Eastern Interconnection	**TRE**	**WECC**	**Contiguous U.S.**
Rate	**201.51**	**--**	**18.86**	**110.19**

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, 2012 (Page 1)

	AC & DC Circuit Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	6	27	3	30	63	12	--	69	**210**
Lightning	5	10	8	5	31	16	13	57	**145**
Environmental	--	1	1	5	--	1	--	--	**8**
Contamination	14	--	--	--	22	3	6	7	**52**
Foreign Interference	34	3	--	4	13	1	2	14	**71**
Fire	--	2	--	1	6	3	1	85	**98**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	2	--	--	1	**3**
Failed AC Substation Equipment	18	16	35	63	57	16	15	65	**285**
Failed AC/DC Terminal Equipment	--	14	--	4	--	--	--	6	**24**
Failed Protection System Equipment	16	10	25	42	35	7	11	53	**199**
Failed AC Circuit Equipment	26	12	25	34	47	14	6	79	**243**
Failed DC Circuit Equipment	--	1	--	--	--	--	--	3	**4**
Vegetation	2	--	3	7	17	--	--	10	**39**
Power System Condition	1	7	--	17	2	3	5	42	**77**
Human Error	8	36	10	38	43	6	18	104	**263**
Unknown	14	14	6	8	22	13	1	124	**202**
Other	7	10	11	14	14	10	2	77	**145**
TOTAL	**151**	**163**	**127**	**272**	**374**	**105**	**80**	**796**	**2,068**

	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	4.0%	16.6%	2.4%	11.0%	16.8%	11.4%	0.0%	8.7%	**10.2%**
Lightning	3.3%	6.1%	6.3%	1.8%	8.3%	15.2%	16.3%	7.2%	**7.0%**
Environmental	0.0%	0.6%	0.8%	1.8%	0.0%	1.0%	0.0%	0.0%	**0.4%**
Contamination	9.3%	0.0%	0.0%	0.0%	5.9%	2.9%	7.5%	0.9%	**2.5%**
Foreign Interference	22.5%	1.8%	0.0%	1.5%	3.5%	1.0%	2.5%	1.8%	**3.4%**
Fire	0.0%	1.2%	0.0%	0.4%	1.6%	2.9%	1.3%	10.7%	**4.7%**
Vandalism, Terrorism, or Malicious Acts	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.1%	**0.2%**
Failed AC Substation Equipment	11.9%	9.8%	27.6%	23.2%	15.2%	15.2%	18.8%	8.2%	**13.8%**
Failed AC/DC Terminal Equipment	0.0%	8.6%	0.0%	1.5%	0.0%	0.0%	0.0%	0.8%	**1.2%**
Failed Protection System Equipment	10.6%	6.1%	19.7%	15.4%	9.4%	6.7%	13.8%	6.7%	**9.6%**
Failed AC Circuit Equipment	17.2%	7.4%	19.7%	12.5%	12.6%	13.3%	7.5%	9.9%	**11.8%**
Failed DC Circuit Equipment	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	**0.2%**
Vegetation	1.3%	0.0%	2.4%	2.6%	4.6%	0.0%	0.0%	1.3%	**1.9%**
Power System Condition	0.7%	4.3%	0.0%	6.3%	0.5%	2.9%	6.3%	5.3%	**3.7%**
Human Error	5.3%	22.1%	7.9%	14.0%	11.5%	5.7%	22.5%	13.1%	**12.7%**
Unknown	9.3%	8.6%	4.7%	2.9%	5.9%	12.4%	1.3%	15.6%	**9.8%**
Other	4.6%	6.1%	8.7%	5.2%	3.7%	9.5%	2.5%	9.7%	**7.0%**
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, 2012 (Page 2)

	AC & DC Circuit Outage Hours								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	24	193	181	7,737	2,294	322	--	616	**11,368**
Lightning	27	3	17	8	57	89	42	73	**315**
Environmental	--	8	93	2,954	--	1	--	--	**3,056**
Contamination	128	--	--	--	396	4	0	13	**540**
Foreign Interference	98	13	--	22	139	0	1	88	**362**
Fire	--	1	--	10	31	29	19	1,987	**2,077**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	28	--	--	0	**28**
Failed AC Substation Equipment	2,072	274	10,312	4,773	601	249	317	642	**19,239**
Failed AC/DC Terminal Equipment	--	119	--	18	--	--	--	22	**159**
Failed Protection System Equipment	125	77	746	235	184	15	20	470	**1,871**
Failed AC Circuit Equipment	304	277	2,504	3,597	2,662	337	110	10,406	**20,199**
Failed DC Circuit Equipment	--	78	--	--	--	--	--	29	**107**
Vegetation	23	--	53	180	172	--	--	87	**516**
Power System Condition	0	97	--	85	12	24	146	4,891	**5,255**
Human Error	17	32	21	179	157	7	27	4,261	**4,701**
Unknown	27	11	63	10	132	69	0	486	**799**
Other	7	130	253	48	261	364	0	168	**1,232**
TOTAL	**2,852**	**1,313**	**14,245**	**19,857**	**7,124**	**1,510**	**683**	**24,239**	**71,822**

	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	0.8%	14.7%	1.3%	39.0%	32.2%	21.3%	0.0%	2.5%	**15.8%**
Lightning	0.9%	0.2%	0.1%	0.0%	0.8%	5.9%	6.1%	0.3%	**0.4%**
Environmental	0.0%	0.6%	0.7%	14.9%	0.0%	0.0%	0.0%	0.0%	**4.3%**
Contamination	4.5%	0.0%	0.0%	0.0%	5.6%	0.2%	0.0%	0.1%	**0.8%**
Foreign Interference	3.4%	1.0%	0.0%	0.1%	2.0%	0.0%	0.2%	0.4%	**0.5%**
Fire	0.0%	0.1%	0.0%	0.1%	0.4%	1.9%	2.8%	8.2%	**2.9%**
Vandalism, Terrorism, or Malicious Acts	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	**0.0%**
Failed AC Substation Equipment	72.6%	20.8%	72.4%	24.0%	8.4%	16.5%	46.4%	2.7%	**26.8%**
Failed AC/DC Terminal Equipment	0.0%	9.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	**0.2%**
Failed Protection System Equipment	4.4%	5.9%	5.2%	1.2%	2.6%	1.0%	2.9%	1.9%	**2.6%**
Failed AC Circuit Equipment	10.7%	21.1%	17.6%	18.1%	37.4%	22.3%	16.2%	42.9%	**28.1%**
Failed DC Circuit Equipment	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	**0.2%**
Vegetation	0.8%	0.0%	0.4%	0.9%	2.4%	0.0%	0.0%	0.4%	**0.7%**
Power System Condition	0.0%	7.4%	0.0%	0.4%	0.2%	1.6%	21.3%	20.2%	**7.3%**
Human Error	0.6%	2.4%	0.2%	0.9%	2.2%	0.5%	4.0%	17.6%	**6.6%**
Unknown	1.0%	0.9%	0.4%	0.1%	1.9%	4.6%	0.1%	2.0%	**1.1%**
Other	0.2%	9.9%	1.8%	0.2%	3.7%	24.1%	0.1%	0.7%	**1.7%**
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, 2012 (Page 1)

	Transformer Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	--	--	1	--	--	--	**1**
Lightning	--	--	--	--	--	--	--	--	**--**
Environmental	--	--	--	--	--	--	--	--	**--**
Contamination	1	--	--	--	--	--	--	--	**1**
Foreign Interference	--	--	--	--	--	--	--	--	**--**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	--	--	--	--	**--**
Failed AC Substation Equipment	3	1	--	1	5	--	--	4	**14**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	--	1	--	--	3	--	--	--	**4**
Failed AC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	1	**1**
Human Error	--	--	--	--	--	--	--	2	**2**
Unknown	--	--	--	--	--	--	--	6	**6**
Other	--	--	--	--	--	--	--	3	**3**
TOTAL	**4**	**2**	**--**	**1**	**9**	**--**	**--**	**16**	**32**

	Percentage of Total Transformer Outage Counts								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	0.0%	0.0%	--	0.0%	11.1%	--	--	0.0%	**3.1%**
Lightning	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Environmental	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Contamination	25.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**3.1%**
Foreign Interference	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Fire	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Vandalism, Terrorism, or Malicious Acts	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed AC Substation Equipment	75.0%	50.0%	--	100.0%	55.6%	--	--	25.0%	**43.8%**
Failed AC/DC Terminal Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed Protection System Equipment	0.0%	50.0%	--	0.0%	33.3%	--	--	0.0%	**12.5%**
Failed AC Circuit Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed DC Circuit Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Vegetation	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Power System Condition	0.0%	0.0%	--	0.0%	0.0%	--	--	6.3%	**3.1%**
Human Error	0.0%	0.0%	--	0.0%	0.0%	--	--	12.5%	**6.3%**
Unknown	0.0%	0.0%	--	0.0%	0.0%	--	--	37.5%	**18.8%**
Other	0.0%	0.0%	--	0.0%	0.0%	--	--	18.8%	**9.4%**
TOTAL	**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, 2012 (Page 2)

	Transformer Outage Hours								
Sustained Outage Causes	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	--	--	--	--	2	--	--	--	**2**
Lightning	--	--	--	--	--	--	--	--	**--**
Environmental	--	--	--	--	--	--	--	--	**--**
Contamination	22	--	--	--	--	--	--	--	**22**
Foreign Interference	--	--	--	--	--	--	--	--	**--**
Fire	--	--	--	--	--	--	--	--	**--**
Vandalism, Terrorism, or Malicious Acts	--	--	--	--	--	--	--	--	**--**
Failed AC Substation Equipment	2,683	132	--	48	104	--	--	44	**3,012**
Failed AC/DC Terminal Equipment	--	--	--	--	--	--	--	--	**--**
Failed Protection System Equipment	--	21	--	--	212	--	--	--	**233**
Failed AC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Failed DC Circuit Equipment	--	--	--	--	--	--	--	--	**--**
Vegetation	--	--	--	--	--	--	--	--	**--**
Power System Condition	--	--	--	--	--	--	--	1	**1**
Human Error	--	--	--	--	--	--	--	0	**0**
Unknown	--	--	--	--	--	--	--	255	**255**
Other	--	--	--	--	--	--	--	0	**0**
TOTAL	**2,705**	**153**	**--**	**48**	**318**	**--**	**--**	**302**	**3,526**

	Percentage of Total Transformer Outage Hours								
OUTAGE_CAUSE	**FRCC**	**MRO**	**NPCC**	**RFC**	**SERC**	**SPP**	**TRE**	**WECC**	**Contiguous U.S.**
Weather, excluding lightning	0.0%	0.0%	--	0.0%	0.7%	--	--	0.0%	**0.1%**
Lightning	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Environmental	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Contamination	0.8%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.6%**
Foreign Interference	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Fire	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Vandalism, Terrorism, or Malicious Acts	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed AC Substation Equipment	99.2%	86.5%	--	100.0%	32.8%	--	--	14.7%	**85.4%**
Failed AC/DC Terminal Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed Protection System Equipment	0.0%	13.6%	--	0.0%	66.5%	--	--	0.0%	**6.6%**
Failed AC Circuit Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Failed DC Circuit Equipment	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Vegetation	0.0%	0.0%	--	0.0%	0.0%	--	--	0.0%	**0.0%**
Power System Condition	0.0%	0.0%	--	0.0%	0.0%	--	--	0.4%	**0.0%**
Human Error	0.0%	0.0%	--	0.0%	0.0%	--	--	0.1%	**0.0%**
Unknown	0.0%	0.0%	--	0.0%	0.0%	--	--	84.6%	**7.2%**
Other	0.0%	0.0%	--	0.0%	0.0%	--	--	0.1%	**0.0%**
TOTAL	**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 2002 through 2012 (Thousand Metric Tons)

Year	Carbon Dioxide (CO2)	Sulfur Dioxide (SO2)	Nitrogen Oxides (NOx)
2002	2,423,963	10,881	5,194
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

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 9.4. Average Costs of Existing Flue Gas Desulfurization Units, 2007 - 2012

Year	Average Operation and Maintenance Costs (Mills per Kilowatthour)	Average Installed Capital Costs (Dollars per Kilowatt)
2007	1.51	135.41
2008	1.55	150.77
2009	1.61	186.73
2010	1.61	206.27
2011	1.94	240.34
2012	2.07	252.48

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

Table 9.5. Emissions from Energy Consumption at Conventional Power Plants and Combined-Heat-and-Power Plants, by State, 2011 and 2012 (Thousand Metric Tons)

Census Division and State	Carbon Dioxide (CO2)		Sulfur Dioxide (SO2)		Nitrogen Oxides (NOx)	
	Year 2012	Year 2011	Year 2012	Year 2011	Year 2012	Year 2011
New England	34,766	37,698	33	58	39	37
Connecticut	8,987	8,196	7	1	12	6
Maine	3,722	4,351	8	12	7	8
Massachusetts	14,346	16,404	15	22	14	14
New Hampshire	4,295	5,127	2	23	4	5
Rhode Island	3,403	3,595	0	0	2	3
Vermont	12	24	0	0	1	1
Middle Atlantic	161,786	171,603	275	370	187	203
New Jersey	16,120	16,917	4	5	14	13
New York	35,669	37,256	31	52	40	43
Pennsylvania	109,997	117,430	240	313	133	147
East North Central	398,780	438,218	1,099	1,533	379	442
Illinois	94,411	100,731	172	207	61	73
Indiana	99,773	109,608	260	347	107	120
Michigan	67,877	69,301	215	235	81	82
Ohio	95,523	112,320	355	616	91	121
Wisconsin	41,196	46,257	98	128	39	46
West North Central	237,669	253,061	443	543	262	286
Iowa	41,267	43,879	96	101	42	44
Kansas	31,693	35,119	30	36	33	41
Minnesota	28,494	32,618	33	52	36	41
Missouri	75,545	81,428	136	190	66	61
Nebraska	26,467	27,251	58	68	29	41
North Dakota	30,934	29,855	79	86	46	48
South Dakota	3,269	2,911	12	10	11	9
South Atlantic	384,603	419,896	570	771	318	367
Delaware	4,981	3,928	2	8	3	4
District of Columbia	66	175	0	1	0	0
Florida	111,236	114,441	101	113	84	83
Georgia	59,035	71,368	149	237	50	75
Maryland	20,697	23,625	40	49	22	25
North Carolina	57,924	62,797	74	91	53	50
South Carolina	34,238	38,720	65	87	22	30
Virginia	29,223	32,637	56	86	36	44
West Virginia	67,203	72,203	83	98	48	55
East South Central	220,815	237,905	450	608	175	205
Alabama	69,107	76,413	148	195	51	65
Kentucky	85,683	92,694	171	226	75	85
Mississippi	24,285	23,326	43	48	23	26
Tennessee	41,741	45,472	88	138	25	29
West South Central	399,292	417,434	616	693	370	410
Arkansas	36,234	35,926	84	80	38	41
Louisiana	60,182	62,680	108	118	75	78
Oklahoma	49,186	51,364	74	90	63	77
Texas	253,689	267,464	350	405	194	214
Mountain	233,511	235,951	161	216	277	313
Arizona	52,350	53,536	19	30	46	53
Colorado	39,926	39,509	39	43	45	51
Idaho	1,172	825	5	5	4	3
Montana	16,024	17,029	15	18	16	17
Nevada	14,929	14,748	4	5	12	12
New Mexico	29,163	31,164	15	16	55	57
Utah	32,484	33,943	20	23	49	58
Wyoming	47,463	45,197	44	78	49	62
Pacific Contiguous	73,724	62,858	39	34	105	105
California	59,369	47,908	6	3	84	81
Oregon	7,365	6,721	13	14	9	9
Washington	6,990	8,229	20	18	12	15
Pacific Noncontiguous	11,930	12,447	17	20	36	37
Alaska	4,305	4,347	3	3	17	17
Hawaii	7,625	8,100	15	17	19	20
U.S. Total	2,156,875	2,287,071	3,704	4,845	2,148	2,406

Notes:
The emissions data presented include total emissions from both electricity generation and the production of useful thermal output.
See Appendix A, Technical Notes, for a description of the sources and methodology used to develop the emissions estimates.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Source: Calculations made by the Office of Electricity, Renewables, and Uranium Statistics, U.S. Energy Information Administration.

Chapter 10

Demand-Side Management and Advanced Metering

Table 10.1. Demand-Side Management Program Annual Effects by Program Category, 2002 through 2012

	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)
2002	50,328	13,457	1,700	26,471	9,256	52,029	22,713
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

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, 2002 through 2012

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2002	15,284	24,803	10,242	--	50,328
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)					
2002	5,300	5,389	2,768	--	13,457
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)					
2002	531	153	1,016	--	1,700
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)					
2002	6,877	4,065	15,529	--	26,471
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)					
2002	3,942	1,606	3,708	--	9,256
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

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, 2002 through 2012

	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)
2002	3,625	1,103	66	2,730	1,213	3,690	2,316
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

Previously, large and small respondents were published separately, now they are combined.
Non-Utility DSM Administrators are included in the 2011 data. See technical notes for list.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861, "Annual Electric Power Industry Report."

Table 10.4. Demand-Side Management Program Incremental Effects by Program Category, by Sector, 2004 through 2012

Year	Residential	Commercial	Industrial	Transportation	Total
Energy Efficiency - Energy Savings (Thousand MWh)					
2002	1,205	1,720	700	--	3,625
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)					
2002	576	395	118	14	1,103
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)					
2002	43	10	6	6	66
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)					
2002	799	399	1,402	130	2,730
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)					
2002	367	173	573	100	1,213
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

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, 2002 through 2012 (Thousand Dollars)

Year	Energy Efficiency	Load Management	Direct Cost	Indirect Cost	Total Cost
2002	1,032,911	410,323	1,443,234	206,169	1,649,403
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

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. Advanced Metering Count by Technology Type, 2007 through 2012

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
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

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 Boiler	Fluidized Bed Boiler	Opposed Firing Boiler	Spreader Stoker Boiler	Tangential Boiler	All Other Boiler Types	Combustion Turbine	Internal Combustion Engine
Agricultural Byproducts	AB	Source: 1	Lbs per ton	0.08	0.01	0.08	0.08	0.08	0.08	N/A	N/A
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	0.60
Bituminous Coal*	BIT	Source: 2, Table 1.1-3	Lbs per ton	38.00	3.80	38.00	38.00	38.00	38.00	N/A	N/A
Black Liquor	BLQ	Source: 1	Lbs per ton **	7.00	0.70	7.00	7.00	7.00	7.00	N/A	N/A
Distillate Fuel Oil*	DFO	Source: 2, Table 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	140.00	140.00
Jet Fuel*	JF	Assumed to have emissions similar to DFO.	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	140.00	140.00
Kerosene*	KER	Assumed to have emissions similar to DFO.	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	140.00	140.00
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	0.60
Lignite Coal*	LIG	Source: 2, Table 1.7-1	Lbs per ton	30.00	3.00	30.00	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	1.70	N/A	N/A
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	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	0.60
Other Biomass Liquids*	OBL	Source: 1 (including footnotes 3 and 16 within source)	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	140.00	140.00
Other Biomass Solids	OBS	Source: 1 (including footnote 11 within source)	Lbs per ton	0.23	0.02	0.23	0.23	0.23	0.23	N/A	N/A
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	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	0.60
Petroleum Coke*	PC	Source: 1	Lbs per ton	39.00	3.90	39.00	39.00	39.00	39.00	N/A	N/A
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	0.60
Residual Fuel Oil*	RFO	Source: 2, Table 1.3-1	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	N/A	N/A
Synthetic Coal*	SC	Assumed to have the emissions similar to Bituminous Coal.	Lbs per ton	38.00	3.80	38.00	38.00	38.00	38.00	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	2.80	N/A	N/A
Subbituminous Coal*	SUB	Source: 2, Table 1.1-3	Lbs per ton	35.00	3.50	35.00	38.00	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	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	30.00	N/A	N/A
Wood Waste Liquids*	WDL	Source: 1 (including footnotes 3 and 16 within source)	Lbs per MG	157.00	15.70	157.00	157.00	157.00	157.00	140.00	140.00
Wood Waste Solids	WDS	Source: 1	Lbs per ton	0.29	0.08	0.29	0.08	0.29	0.29	N/A	N/A
Waste Oil*	WO	Source: 2, Table 1.11-2	Lbs per MG	147.00	14.70	147.00	147.00	147.00	147.00	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				
				Cyclone Boiler	Fluidized Bed Boiler	Opposed Firing Boiler		Spreader Stoker Boiler
Fuel	EIA Fuel Code	Source and Tables (As Appropriate)	Emissions Units Lbs = Pounds MMCF = Million Cubic Feet MG = Thousand Gallons	Dry-Bottom Boilers	Dry-Bottom Boilers	Dry-Bottom Boilers	Wet-Bottom Boilers	Dry-Bottom Boilers
Agricultural Byproducts	AB	Source: 1	Lbs per ton	1.20	1.20	1.20	N/A	1.20
Blast Furnace Gas	BFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	15.40	15.40	15.40	N/A	15.40
Bituminous Coal	BIT	Source: 2, Table 1.1-3	Lbs per ton	33.00	5.00	12.00	31.00	11.00
Black Liquor	BLQ	Source: 1	Lbs per ton **	1.50	1.50	1.50	N/A	1.50
Distillate Fuel Oil	DFO	Source: 2, Tables 3.4-1 & 1.3-1	Lbs per MG	24.00	24.00	24.00	N/A	24.00
Jet Fuel	JF	Source: 2, Tables 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	24.00	24.00	24.00	N/A	24.00
Kerosene	KER	Source: 2, Tables 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	24.00	24.00	24.00	N/A	24.00
Landfill Gas	LFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	72.44	72.44	72.44	N/A	72.44
Lignite Coal	LIG	Source: 2, Table 1.7-1	Lbs per ton	15.00	3.60	6.30	N/A	5.80
Municipal Solid Waste	MSW	Source: 1	Lbs per ton	5.00	5.00	5.00	N/A	5.00
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	N/A	280.00
Other Biomass Gas	OBG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	112.83	112.83	112.83	N/A	112.83
Other Biomass Liquids	OBL	Source: 1 (including footnote 3 within source)	Lbs per MG	19.00	19.00	19.00	N/A	19.00
Other Biomass Solids	OBS	Source: 1 (including footnote 11 within source)	Lbs per ton	2.00	2.00	2.00	N/A	2.00
Other Gases	OG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	152.82	152.82	152.82	N/A	152.82
Other	OTH	Assumed to have emissions similar to Natural Gas.	Lbs per MMCF	280.00	280.00	280.00	N/A	280.00
Petroleum Coke	PC	Source: 1 (including footnote 8 within source)	Lbs per ton	21.00	5.00	21.00	N/A	21.00
Propane Gas	PG	Sources: 3; EIA estimates	Lbs per MMCF	215.00	215.00	215.00	N/A	215.00
Residual Fuel Oil	RFO	Source: 2, Table 1.3-1	Lbs per MG	47.00	47.00	47.00	N/A	47.00
Synthetic Coal	SC	Assumed to have the emissions similar to Bituminous Coal.	Lbs per ton	33.00	5.00	12.00	31.00	11.00
Sludge Waste	SLW	Source: 1 (including footnote 11 within source)	Lbs per ton **	5.00	5.00	5.00	N/A	5.00
Subbituminous Coal	SUB	Source: 2, Table 1.1-3	Lbs per ton	17.00	5.00	7.40	24.00	8.80
Tire-Derived Fuel	TDF	Source: 1 (including footnote 13 within source)	Lbs per ton	33.00	5.00	12.00	31.00	11.00
Waste Coal	WC	Source: 1 (including footnote 20 within source)	Lbs per ton	15.00	3.60	6.30	N/A	5.80
Wood Waste Liquids	WDL	Source: 1 (including footnote 16 within source)	Lbs per MG	5.43	5.43	5.43	N/A	5.43
Wood Waste Solids	WDS	Source: 1	Lbs per ton	2.51	2.00	2.51	N/A	1.50
Waste Oil	WO	Source: 2, Table 1.11-2	Lbs per MG	19.00	19.00	19.00	N/A	19.00

Fuel, Code, Source and Emission Units				Combustion System Type / Firing Configuration					
				Tangential Boiler		All Other Boiler Types		Combustion Turbine	Internal Combustion Engine
Fuel	EIA Fuel Code	Source and Tables (As Appropriate)	Emissions Units Lbs = Pounds MMCF = Million Cubic Feet MG = Thousand Gallons	Dry-Bottom Boilers	Wet-Bottom Boilers	Dry-Bottom Boilers	Wet-Bottom Boilers	Dry-Bottom Boilers	Dry-Bottom Boilers
Agricultural Byproducts	AB	Source: 1	Lbs per ton	1.20	N/A	1.20	N/A	N/A	N/A
Blast Furnace Gas	BFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	15.40	N/A	15.40	N/A	30.40	256.55
Bituminous Coal	BIT	Source: 2, Table 1.1-3	Lbs per ton	10.00	14.00	12.00	31.00	N/A	N/A
Black Liquor	BLQ	Source: 1	Lbs per ton **	1.50	N/A	1.50	N/A	N/A	N/A
Distillate Fuel Oil	DFO	Source: 2, Tables 3.4-1 & 1.3-1	Lbs per MG	24.00	N/A	24.00	N/A	122.00	443.80
Jet Fuel	JF	Source: 2, Tables 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	24.00	N/A	24.00	N/A	118.00	432.00
Kerosene	KER	Source: 2, Tables 3.1-2a, 3.4-1 & 1.3-1	Lbs per MG	24.00	N/A	24.00	N/A	118.00	432.00
Landfill Gas	LFG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	72.44	N/A	72.44	N/A	144.00	1,215.22
Lignite Coal	LIG	Source: 2, Table 1.7-1	Lbs per ton	7.10	N/A	6.30	N/A	N/A	N/A
Municipal Solid Waste	MSW	Source: 1	Lbs per ton	5.00	N/A	5.00	N/A	N/A	N/A
Natural Gas	NG	Source: 2, Tables 1.4-1, 3.1-1, and 3.4-1	Lbs per MMCF	170.00	N/A	280.00	N/A	328.00	2,768.00
Other Biomass Gas	OBG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	112.83	N/A	112.83	N/A	313.60	2,646.48
Other Biomass Liquids	OBL	Source: 1 (including footnote 3 within source)	Lbs per MG	19.00	N/A	19.00	N/A	N/A	N/A
Other Biomass Solids	OBS	Source: 1 (including footnote 11 within source)	Lbs per ton	2.00	N/A	2.00	N/A	N/A	N/A
Other Gases	OG	Sources: 1 (including footnote 7 within source); EIA estimates	Lbs per MMCF	152.82	N/A	152.82	N/A	263.82	2,226.41
Other	OTH	Assumed to have emissions similar to Natural Gas.	Lbs per MMCF	170.00	N/A	280.00	N/A	328.00	2,768.00
Petroleum Coke	PC	Source: 1 (including footnote 8 within source)	Lbs per ton	21.00	N/A	21.00	N/A	N/A	N/A
Propane Gas	PG	Sources: 3; EIA estimates	Lbs per MMCF	215.00	N/A	215.00	N/A	330.75	2,791.22
Residual Fuel Oil	RFO	Source: 2, Table 1.3-1	Lbs per MG	32.00	N/A	47.00	N/A	N/A	N/A
Synthetic Coal	SC	Assumed to have the emissions similar to Bituminous Coal.	Lbs per ton	10.00	14.00	12.00	31.00	N/A	N/A
Sludge Waste	SLW	Source: 1 (including footnote 11 within source)	Lbs per ton **	5.00	N/A	5.00	N/A	N/A	N/A
Subbituminous Coal	SUB	Source: 2, Table 1.1-3	Lbs per ton	7.20	N/A	7.40	24.00	N/A	N/A
Tire-Derived Fuel	TDF	Source: 1 (including footnote 13 within source)	Lbs per ton	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	7.10	N/A	6.30	N/A	N/A	N/A
Wood Waste Liquids	WDL	Source: 1 (including footnote 16 within source)	Lbs per MG	5.43	N/A	5.43	N/A	N/A	N/A
Wood Waste Solids	WDS	Source: 1	Lbs per ton	2.51	N/A	2.51	N/A	N/A	N/A
Waste Oil	WO	Source: 2, Table 1.11-2	Lbs per MG	19.00	N/A	19.00	N/A	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	205.30000
Distillate Fuel Oil	DFO	Source: 1	161.38600
Geothermal	GEO	Estimate from EIA, Office of Integrated Analysis and Forecasting	16.59983
Jet Fuel	JF	Source: 1	156.25800
Kerosene	KER	Source: 1	159.53500
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	117.08000
Petroleum Coke	PC	Source: 1	225.13000
Propane Gas	PG	Sources: 1	139.17800
Residual Fuel Oil	RFO	Source: 1	173.90600
Synthetic Coal	SC	Assumed to have the emissions similar to Bituminous Coal.	205.30000
Subbituminous Coal	SUB	Source: 1	212.70000
Tire-Derived Fuel	TDF	Source: 1	189.53800
Waste Coal	WC	Assumed to have emissions similar to Bituminous Coal.	205.30000
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

Nitrogen Oxides Control Technology	EIA-Code(s)	Reduction Factor
Advanced Overfire Air	AA	30%
Alternate Burners	BF	20%
Flue Gas Recirculation	FR	40%
Fluidized Bed Combustor	CF	20%
Fuel Reburning	FU	30%
Low Excess Air	LA	20%
Low NOx Burners	LN	30%
Other (or Unspecified)	OT	20%
Overfire Air	OV	20%
Selective Catalytic Reduction	SR	70%
Selective Catalytic Reduction With Low Nitrogen Oxide Burners	SR and LN	90%
Selective Noncatalytic Reduction	SN	30%
Selective Noncatalytic Reduction With Low NOx Burners	SN and LN	50%
Slagging	SC	20%

Notes: Starting with 1995 data, reduction factors for Advanced Overfire Air, Low NOx Burners, and Overfire Air were reduced by 10 percent.

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