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Preface

The Electric Power Monthly (EPM) presents monthly electricity statistics for a wide audience including Congress, Federal and State agencies, the electric power industry, and the general public. The purpose of this publication is to provide energy decision makers with accurate and timely information that may be used in forming various perspectives on electric issues that lie ahead. In order to provide an integrated view of the electric power industry, data in this report have been separated into two major categories: electric power sector and combined heat and power producers. The U.S. Energy Information Administration (EIA) collected the information in this report to fulfill its data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (Public Law 93 275) as amended.

Background

The Office of Electricity, Renewables & Uranium Statistics, U.S. EIA, U.S. Department of Energy, prepares the EPM. This publication provides monthly statistics at the State (lowest level of aggregation), Census Division, and U.S. levels for net generation, fossil fuel consumption and stocks, cost, quantity, and quality of fossil fuels received, sales of electricity to ultimate consumers, associated revenue, and average price of electricity sold. In addition, the report contains rolling 12-month totals in the national overviews, as appropriate.

Data sources

The EPM contains information from the following data sources: Form EIA-923, "Power Plant Operations Report;" Form EIA-826, "Monthly Electric Sales and Revenue With State Distributions Report;" Form EIA-860, "Annual Electric Generator Report;" Form EIA-860M, "Monthly Update to the Annual Electric Generator Report;" and Form EIA-861, "Annual Electric Power Industry Report." Forms and their instructions may be obtained from: <http://www.eia.gov/survey/#electricity>. A detailed description of these forms and associated algorithms are found in Appendix C, "Technical Notes."

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Net Generation and Consumption of Fuels for October														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	99,348	96,759	2.7%	73,088	71,408	25,547	24,463	36	34	677	853	0	0
Petroleum Liquids	Utility Scale Facilities	941	945	-0.4%	633	682	236	216	8	6	64	40	0	0
Petroleum Coke	Utility Scale Facilities	611	827	-26.1%	418	610	141	149	0	1	NM	67	0	0
Natural Gas	Utility Scale Facilities	102,635	110,005	-6.7%	47,527	49,533	47,008	52,489	583	643	7,517	7,340	0	0
Other Gas	Utility Scale Facilities	891	906	-1.7%	6	12	239	216	0	0	646	678	0	0
Nuclear	Utility Scale Facilities	60,733	60,571	0.3%	30,016	31,886	30,717	28,685	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	17,249	16,630	3.7%	16,101	15,378	1,065	1,135	NM	3	80	114	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	29,857	24,708	20.8%	3,649	3,375	23,680	18,743	251	266	2,277	2,324	0	0
... Wind	Utility Scale Facilities	20,376	16,380	24.4%	3,076	2,822	17,283	13,541	12	11	6	5	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	3,132	1,910	64.0%	177	114	2,908	1,762	45	32	2	2	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,105	3,252	-4.5%	181	220	738	826	4	4	2,181	2,201	0	0
... Other Biomass	Utility Scale Facilities	1,755	1,843	-4.8%	119	122	1,358	1,387	191	218	87	116	0	0
... Geothermal	Utility Scale Facilities	1,489	1,323	12.6%	96	97	1,393	1,226	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-561	-443	26.5%	-471	-364	-90	-79	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,083	1,204	-10.1%	25	42	566	589	87	95	406	478	0	0
All Energy Sources	Utility Scale Facilities	312,788	312,112	0.2%	170,993	172,561	129,109	126,607	968	1,049	11,719	11,894	0	0
Estimated Distributed Solar Photovoltaic	Distributed Facilities	1,609	1,198	34.4%	0	0	0	0	578	455	156	125	875	618
Estimated Total Solar Photovoltaic	All Facilities	4,492	2,897	55.1%	174	107	2,662	1,558	622	488	158	126	875	618
Estimated Total Solar	All Facilities	4,741	3,107	52.6%	177	114	2,908	1,762	622	488	158	126	875	618
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	54,638	53,659	1.8%	39,517	39,023	14,860	14,309	13	11	248	317	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,566	1,541	1.6%	1,140	1,215	352	273	11	7	64	46	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	246	300	-17.9%	172	227	62	57	0	0	13	16	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	775,514	824,878	-6.0%	368,436	380,830	350,473	386,725	5,144	5,943	51,461	51,380	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,006	1,245	-19.2%	76	81	148	145	37	41	745	979	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	231	225	2.5%	0	1	89	98	9	3	133	124	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	112	84	34.3%	0	0	10	8	0	2	102	73	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	76,146	78,745	-3.3%	695	688	21,651	23,297	3,598	3,788	50,201	50,972	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	55,643	54,904	1.3%	39,594	39,104	15,007	14,453	50	52	993	1,296	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,797	1,766	1.7%	1,140	1,216	441	371	20	9	196	170	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	359	384	-6.5%	172	227	72	65	0	2	115	89	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	851,659	903,623	-5.8%	369,130	381,518	372,124	410,022	8,742	9,731	101,663	102,351	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	165,042	178,243	-7.4%	133,257	138,712	30,217	36,876	136	258	1,432	2,397	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	36,317	34,776	4.4%	20,157	21,540	14,448	10,922	375	564	1,336	1,749	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	971	1,599	-39.3%	W	1,026	W	125	W	W	W	W	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for October									
Total U.S. Electric Power Industry									
Sector	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
	October 2016	October 2015	Percentage Change	October 2016	October 2015	Percentage Change	October 2016	October 2015	Percentage Change
Residential	101,138	99,349	1.8%	12,595	12,633	-0.3%	12.45	12.72	-2.1%
Commercial	112,314	112,821	-0.4%	11,755	12,100	-2.9%	10.47	10.73	-2.4%
Industrial	77,919	83,249	-6.4%	5,237	5,728	-8.6%	6.72	6.88	-2.3%
Transportation	613	636	-3.6%	58	63	-8.2%	9.44	9.91	-4.7%
All Sectors	291,985	296,055	-1.4%	29,645	30,524	-2.9%	10.15	10.31	-1.6%

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.

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

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

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date 2016 and 2015

Net Generation and Consumption of Fuels for January through October														
Fuel	Facility Type	Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
		October 2016 YTD	October 2015 YTD	Percentage Change	Electric Utilities		Independent Power Producers		October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
					October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD						
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	1,034,120	1,175,676	-12.0%	770,910	865,636	254,908	300,374	352	433	7,950	9,234	0	0
Petroleum Liquids	Utility Scale Facilities	10,470	15,429	-32.1%	7,240	9,018	2,722	5,751	89	171	419	489	0	0
Petroleum Coke	Utility Scale Facilities	9,585	9,413	1.8%	7,618	7,184	1,161	1,394	4	7	802	827	0	0
Natural Gas	Utility Scale Facilities	1,189,871	1,121,469	6.1%	564,679	517,881	542,118	524,621	6,557	6,270	76,516	72,697	0	0
Other Gas	Utility Scale Facilities	10,986	11,105	-1.1%	119	196	3,259	2,981	0	0	7,608	7,928	0	0
Nuclear	Utility Scale Facilities	668,454	667,280	0.2%	354,046	349,932	314,408	317,349	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	224,406	206,577	8.6%	207,867	190,443	15,378	14,974	51	28	1,109	1,132	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	281,548	238,494	18.1%	34,501	30,035	220,962	181,974	2,686	2,691	23,398	23,794	0	0
... Wind	Utility Scale Facilities	184,119	150,938	22.0%	27,995	24,092	155,944	126,712	117	94	63	41	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	31,190	21,593	44.4%	1,888	1,293	28,779	19,915	496	366	26	19	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	33,585	34,923	-3.8%	2,500	2,516	8,711	9,636	63	43	22,312	22,728	0	0
... Other Biomass	Utility Scale Facilities	18,364	17,832	3.0%	1,216	1,236	14,141	13,402	2,010	2,188	997	1,006	0	0
... Geothermal	Utility Scale Facilities	14,290	13,207	8.2%	903	898	13,387	12,309	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-5,326	-4,526	17.7%	-4,450	-3,677	-876	-849	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	11,458	11,603	-1.2%	263	461	5,918	5,640	908	970	4,369	4,531	0	0
All Energy Sources	Utility Scale Facilities	3,435,570	3,452,520	-0.5%	1,942,794	1,967,110	1,359,958	1,354,209	10,647	10,570	122,170	120,632	0	0
Estimated Distributed Solar Photovoltaic	Distributed Facilities	16,974	12,243	38.6%	0	0	0	0	6,243	4,973	1,596	1,258	9,134	6,012
Estimated Total Solar Photovoltaic	All Facilities	45,055	30,940	45.6%	1,820	1,193	25,739	17,119	6,740	5,339	1,623	1,276	9,134	6,012
Estimated Total Solar	All Facilities	48,164	33,837	42.3%	1,888	1,293	28,779	19,915	6,740	5,339	1,623	1,276	9,134	6,012
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	564,967	640,427	-11.8%	415,691	466,201	146,240	170,677	120	137	2,915	3,412	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	17,755	25,625	-30.7%	13,118	16,037	4,057	8,795	108	234	471	559	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,635	3,508	3.6%	2,931	2,710	497	581	1	2	206	216	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,998,629	8,442,020	6.6%	4,370,283	3,985,387	4,036,746	3,882,936	57,824	58,874	533,775	514,823	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	11,980	13,948	-14.1%	835	838	1,474	1,684	439	529	9,232	10,897	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	2,123	2,729	-22.2%	17	60	840	980	105	270	1,161	1,419	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	846	952	-11.2%	2	6	86	90	7	13	751	844	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	798,983	776,046	3.0%	9,188	6,604	240,300	237,424	40,054	38,421	509,440	493,596	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	576,947	654,375	-11.8%	416,526	467,039	147,714	172,361	559	667	12,147	14,309	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	19,878	28,354	-29.9%	13,135	16,097	4,898	9,775	213	504	1,632	1,978	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	4,481	4,461	0.5%	2,932	2,716	583	670	8	15	957	1,059	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,797,611	9,218,066	6.3%	4,379,471	3,991,992	4,277,046	4,120,359	97,878	97,296	1,043,215	1,008,420	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through October									
Sector	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	Percentage Change
	Residential	1,193,784	1,199,748	-0.5%	150,007	152,089	-1.4%	12.57	12.68
Commercial	1,145,708	1,149,782	-0.4%	119,196	123,234	-3.3%	10.40	10.72	-3.0%
Industrial	786,191	829,789	-5.3%	53,228	57,939	-8.1%	6.77	6.98	-3.0%
Transportation	6,253	6,413	-2.5%	596	652	-8.5%	9.53	10.16	-6.2%
All Sectors	3,131,935	3,185,732	-1.7%	323,026	333,913	-3.3%	10.31	10.48	-1.6%

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.

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

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

Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2016 and 2015

Total (All Sectors)										
Fuel	Receipts		Cost		Number of Plants		Year-to-Date Receipts		Year-to-Date Cost	
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Coal (1000 tons)	58,752	67,027	39.76	41.16	280	338	525,193	663,103	41.07	43.14
Petroleum Liquids (1000 barrels)	1,370	2,137	60.24	55.68	144	177	13,736	20,358	55.48	72.83
Petroleum Coke (1000 tons)	317	390	55.43	52.05	8	11	3,470	4,075	43.35	53.63
Natural Gas (1000 Mcf)	767,888	804,958	3.24	3.02	758	768	8,836,876	8,292,381	2.87	3.46

Electric Utilities										
Fuel	Receipts		Cost		Number of Plants		Year-to-Date Receipts		Year-to-Date Cost	
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Coal (1000 tons)	43,418	48,715	41.05	42.30	194	224	391,467	484,096	42.26	43.93
Petroleum Liquids (1000 barrels)	845	970	59.67	57.50	91	105	9,937	12,151	54.77	72.50
Petroleum Coke (1000 tons)	253	334	52.47	50.64	6	9	2,976	3,418	39.61	52.37
Natural Gas (1000 Mcf)	356,539	367,001	3.66	3.37	403	408	4,220,826	3,837,110	3.16	3.75

Independent Power Producers										
Fuel	Receipts		Cost		Number of Plants		Year-to-Date Receipts		Year-to-Date Cost	
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Coal (1000 tons)	14,743	17,340	35.14	37.04	66	85	127,810	168,714	36.49	39.88
Petroleum Liquids (1000 barrels)	487	1,131	61.10	53.42	43	57	3,553	7,889	57.26	72.86
Petroleum Coke (1000 tons)	56	47	W	W	1	1	391	399	68.95	68.35
Natural Gas (1000 Mcf)	350,117	381,566	2.71	2.64	307	304	4,009,129	3,839,983	2.53	3.16

Commercial Sector										
Fuel	Receipts		Cost		Number of Plants		Year-to-Date Receipts		Year-to-Date Cost	
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Coal (1000 tons)	7	6	W	W	1	1	37	92	W	64.62
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	575	523	W	W	3	3	6,628	5,114	W	W

Industrial Sector										
Fuel	Receipts		Cost		Number of Plants		Year-to-Date Receipts		Year-to-Date Cost	
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
Coal (1000 tons)	585	967	W	W	19	28	5,878	10,201	W	59.31
Petroleum Liquids (1000 barrels)	37	36	62.63	77.23	10	15	246	318	58.86	84.66
Petroleum Coke (1000 tons)	8	9	W	W	1	1	104	259	W	W
Natural Gas (1000 Mcf)	60,657	55,868	W	W	45	53	600,294	610,174	W	W

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

Number of Plants represents the number of plants for which receipts data were collected this month.

.... A plant using more than one fuel may be counted multiple times.

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

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

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

Table ES2.B. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Btus, 2016 and 2015

Total (All Sectors)											
							Year-to-Date				
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Billion Btu)		(Dollars / Million Btu)				(Billion Btu)		(Dollars / Million Btu)		
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	
Coal	1,125,624	1,285,699	2.07	2.15	280	338	10,159,891	12,791,362	2.12	2.24	
Petroleum Liquids	8,262	13,066	9.98	9.10	144	177	83,232	123,462	9.15	12.00	
Petroleum Coke	8,843	11,080	1.98	1.83	8	11	97,420	115,513	1.54	1.89	
Natural Gas	793,575	833,330	3.13	2.92	758	768	9,135,858	8,571,566	2.78	3.34	
Fossil Fuels	1,936,304	2,143,175	2.51	2.47	934	982	19,476,401	21,601,904	2.44	2.70	

Electric Utilities											
							Year-to-Date				
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Billion Btu)		(Dollars / Million Btu)				(Billion Btu)		(Dollars / Million Btu)		
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	
Coal	837,987	941,342	2.13	2.19	194	224	7,623,862	9,400,306	2.17	2.26	
Petroleum Liquids	5,174	5,909	9.75	9.43	91	105	60,849	74,080	8.94	11.89	
Petroleum Coke	7,088	9,567	1.87	1.77	6	9	83,818	97,356	1.41	1.84	
Natural Gas	368,564	380,675	3.54	3.25	403	408	4,363,873	3,966,269	3.06	3.63	
Fossil Fuels	1,218,813	1,337,493	2.58	2.52	530	550	12,132,402	13,538,010	2.52	2.71	

Independent Power Producers											
							Year-to-Date				
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Billion Btu)		(Dollars / Million Btu)				(Billion Btu)		(Dollars / Million Btu)		
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	
Coal	274,749	323,263	1.89	1.99	66	85	2,405,092	3,167,367	1.94	2.12	
Petroleum Liquids	2,860	6,936	10.39	8.70	43	57	20,881	47,438	9.73	12.10	
Petroleum Coke	1,548	1,295	W	W	1	1	10,772	11,166	2.50	2.44	
Natural Gas	361,881	394,437	2.62	2.55	307	304	4,145,758	3,969,069	2.44	3.06	
Fossil Fuels	641,038	725,931	W	W	353	369	6,582,503	7,195,040	W	W	

Commercial Sector											
							Year-to-Date				
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Billion Btu)		(Dollars / Million Btu)				(Billion Btu)		(Dollars / Million Btu)		
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	
Coal	159	130	W	W	1	1	837	2,070	W	2.88	
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--	
Petroleum Coke	0	0	--	--	0	0	0	0	--	--	
Natural Gas	598	530	W	W	3	3	6,825	5,200	W	W	
Fossil Fuels	757	660	W	W	3	3	7,662	7,270	W	W	

Industrial Sector											
							Year-to-Date				
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Billion Btu)		(Dollars / Million Btu)				(Billion Btu)		(Dollars / Million Btu)		
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	
Coal	12,729	20,964	W	W	19	28	130,099	221,619	W	2.73	
Petroleum Liquids	228	221	10.22	12.74	10	15	1,502	1,944	9.65	13.84	
Petroleum Coke	207	218	W	W	1	1	2,831	6,992	W	W	
Natural Gas	62,533	57,688	W	W	45	53	619,402	631,028	W	W	
Fossil Fuels	75,696	79,091	W	W	48	60	753,834	861,584	W	W	

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

Number of Plants represents the number of plants for which receipts data were collected this month.

.... The total number of fossil fuel plants is not the sum of the figures above it because a plant that receives two or more different fuels is only counted once.

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

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

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

Table 1.1. Net Generation by Energy Source: Total (All Sectors), 2006-October 2016 (Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
Annual Totals															
2006	1,990,511	44,460	19,706	816,441	14,177	787,219	289,246	508	96,018	-6,558	12,974	4,064,702	N/A	N/A	N/A
2007	2,016,456	49,505	16,234	896,590	13,453	806,425	247,510	612	104,626	-6,896	12,231	4,156,745	N/A	N/A	N/A
2008	1,985,801	31,917	14,325	882,981	11,707	806,208	254,831	864	125,237	-6,288	11,804	4,119,388	N/A	N/A	N/A
2009	1,755,904	25,972	12,964	920,979	10,632	798,855	273,445	891	143,388	-4,627	11,928	3,950,331	N/A	N/A	N/A
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	1,212	165,961	-5,501	12,855	4,125,060	N/A	N/A	N/A
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	1,818	192,163	-6,421	14,154	4,100,141	N/A	N/A	N/A
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	4,327	214,006	-4,950	13,787	4,047,765	N/A	N/A	N/A
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	9,036	244,472	-4,681	13,588	4,065,964	N/A	N/A	N/A
2014	1,581,710	18,276	11,955	1,126,609	12,022	797,166	259,367	17,691	261,522	-6,174	13,461	4,093,606	11,233	26,482	28,924
2015	1,352,398	17,372	10,877	1,333,482	13,117	797,178	249,080	24,893	270,268	-5,091	14,028	4,077,601	14,139	35,805	39,032
Year 2014															
January	157,097	5,913	1,158	91,061	933	73,163	21,634	751	24,742	-290	1,092	377,255	624	1,321	1,375
February	143,294	1,847	916	75,942	817	62,639	17,396	835	20,166	-445	941	324,348	664	1,416	1,499
March	136,443	2,002	1,186	78,151	866	62,397	24,257	1,317	24,534	-421	1,093	331,823	907	2,042	2,224
April	109,281	911	842	76,782	854	56,385	25,440	1,487	24,989	-378	1,039	297,631	988	2,249	2,476
May	118,786	960	1,084	89,120	944	62,947	26,544	1,750	22,073	-601	1,118	324,724	1,092	2,549	2,842
June	137,577	889	1,131	98,468	969	68,138	25,744	1,923	22,541	-653	1,117	357,844	1,101	2,678	3,024
July	149,627	992	1,050	115,081	1,069	71,940	24,357	1,788	19,256	-545	1,163	385,780	1,149	2,674	2,936
August	148,452	1,014	1,036	122,348	1,135	71,129	19,807	1,879	17,141	-840	1,239	384,341	1,139	2,757	3,019
Sept	126,110	929	1,019	106,582	1,126	67,535	16,074	1,832	18,061	-642	1,159	339,887	1,046	2,621	2,879
October	111,296	908	609	97,683	1,082	62,391	17,159	1,717	21,002	-448	1,122	314,522	965	2,448	2,682
November	119,127	963	775	84,354	1,073	65,140	18,625	1,380	25,428	-531	1,161	317,495	792	2,024	2,171
December	124,620	947	1,149	91,038	1,153	73,363	22,329	1,032	21,590	-480	1,218	337,957	766	1,703	1,798
Year 2015															
January	132,451	1,927	1,046	101,687	1,246	74,270	24,138	1,155	21,966	-551	1,120	360,455	746	1,838	1,902
February	126,977	5,221	1,100	91,315	1,025	63,461	22,286	1,484	21,078	-456	985	334,476	816	2,138	2,299
March	108,488	1,061	717	99,423	1,091	64,547	24,281	2,072	21,871	-409	1,051	324,192	1,134	2,920	3,206
April	88,989	919	809	92,806	979	59,784	22,471	2,379	24,115	-214	1,096	294,133	1,264	3,271	3,643
May	104,585	1,017	922	101,516	1,099	65,827	20,125	2,504	23,678	-370	1,185	322,087	1,394	3,553	3,898
June	125,673	1,040	821	121,478	1,118	68,516	20,414	2,558	20,003	-398	1,187	362,409	1,408	3,586	3,966
July	139,100	1,201	1,103	141,119	1,235	71,412	21,014	2,627	20,827	-513	1,293	400,419	1,487	3,734	4,114
August	134,670	1,093	1,040	139,084	1,196	72,415	19,122	2,688	20,134	-626	1,300	392,116	1,468	3,763	4,156
Sept	117,986	1,006	1,028	123,036	1,210	66,476	16,094	2,217	20,430	-544	1,182	350,122	1,330	3,238	3,547
October	96,759	945	827	110,005	906	60,571	16,630	1,910	22,798	-443	1,204	312,112	1,198	2,897	3,107
November	87,227	995	715	102,236	902	60,264	19,338	1,730	26,335	-285	1,197	300,653	982	2,507	2,712
December	89,495	948	749	109,777	1,110	69,634	23,166	1,570	27,032	-281	1,228	324,427	914	2,358	2,484
Year 2016															
January	113,453	1,340	953	109,767	1,263	72,536	25,355	1,492	25,532	-312	1,144	352,523	1,021	2,428	2,514
February	92,709	1,236	904	98,226	1,169	65,638	24,150	2,404	26,675	-399	1,018	313,729	1,190	3,352	3,593
March	72,133	820	945	104,003	1,241	66,149	27,025	2,667	28,406	-384	1,100	304,104	1,583	3,992	4,250
April	71,946	794	1,037	99,770	1,143	62,365	25,475	2,897	26,619	-452	1,124	292,719	1,764	4,388	4,661
May	81,639	948	984	111,156	977	66,563	25,363	3,539	25,368	-321	1,218	317,433	1,946	5,097	5,485
June	116,220	936	1,008	131,904	1,085	67,175	22,902	3,544	22,906	-497	1,164	368,348	1,993	5,126	5,537
July	136,583	1,263	1,056	151,827	1,066	70,349	21,247	4,024	24,565	-784	1,212	412,408	2,068	5,621	6,092
August	135,809	1,273	1,084	154,921	1,102	71,526	19,359	3,877	20,546	-902	1,231	409,827	2,008	5,517	5,885
Sept	114,280	920	1,003	125,661	1,050	65,420	16,281	3,613	23,015	-715	1,164	351,692	1,792	5,042	5,405
October	99,348	941	611	102,635	891	60,733	17,249	3,132	26,725	-561	1,083	312,788	1,609	4,492	4,741
Year to Date															
2014	1,337,963	16,367	10,032	951,218	9,795	658,663	218,413	15,280	214,504	-5,163	11,083	3,438,154	9,675	22,756	24,954
2015	1,175,676	15,429	9,413	1,121,469	11,105	667,280	206,577	21,593	216,901	-4,526	11,603	3,452,520	12,243	30,940	33,837
2016	1,034,120	10,470	9,585	1,189,871	10,986	668,454	224,406	31,190	250,358	-5,326	11,458	3,435,570	16,974	45,055	48,164
Rolling 12 Months Ending in October															
2015	1,419,424	17,339	11,336	1,296,861	13,332	805,783	247,530	24,005	263,918	-5,536	13,981	4,107,972	13,801	34,666	37,806
2016	1,210,842	12,412	11,049	1,401,884	12,998	798,351	266,909	34,490	303,725	-5,892	13,883	4,060,651	18,870	49,920	53,359

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, 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 for 2015 and prior years are final. Values for 2016 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

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

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

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

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

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

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

**Table 1.1.A. Net Generation from Renewable Sources: Total (All Sectors), 2006-October 2016
(Thousand Megawatthours)**

Period	Generation at Utility Scale Facilities										Total Renewable Generation at Utility Scale Facilities	Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation	
	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Estimated Distributed Solar Photovoltaic Generation		Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation	
Annual Totals														
2006	26,589	15	493	38,762	5,677	8,478	1,944	14,568	289,246	385,772	N/A	N/A	N/A	
2007	34,450	16	596	39,014	6,158	8,304	2,063	14,637	247,510	352,747	N/A	N/A	N/A	
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932	N/A	N/A	N/A	
2009	73,886	157	735	36,050	7,924	8,058	2,461	15,009	273,445	417,724	N/A	N/A	N/A	
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376	N/A	N/A	N/A	
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336	N/A	N/A	N/A	
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573	N/A	N/A	N/A	
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073	N/A	N/A	N/A	
2014	181,655	15,250	2,441	42,340	11,220	7,228	3,202	15,877	259,367	538,579	11,233	26,482	28,924	
2015	190,719	21,666	3,227	41,929	11,291	7,211	3,201	15,918	249,080	544,241	14,139	35,805	39,032	
Year 2014														
January	17,911	697	54	3,626	967	584	299	1,355	21,634	47,127	624	1,321	1,375	
February	14,009	752	83	3,265	930	490	267	1,206	17,396	38,397	664	1,416	1,499	
March	17,736	1,135	182	3,609	961	599	291	1,338	24,257	50,108	907	2,042	2,224	
April	18,636	1,261	226	3,230	957	586	267	1,314	25,440	51,916	988	2,249	2,476	
May	15,601	1,457	292	3,290	944	635	270	1,332	26,544	50,366	1,092	2,549	2,842	
June	15,799	1,578	345	3,622	943	613	271	1,293	25,744	50,208	1,101	2,678	3,024	
July	12,187	1,525	262	3,807	1,035	646	261	1,320	24,357	45,402	1,149	2,674	2,936	
August	10,171	1,618	261	3,761	988	647	245	1,329	19,807	38,828	1,139	2,757	3,019	
Sept	11,520	1,574	258	3,462	932	606	234	1,308	16,074	35,968	1,046	2,621	2,879	
October	14,508	1,484	233	3,422	854	603	269	1,345	17,159	39,878	965	2,448	2,682	
November	18,867	1,232	148	3,508	820	612	258	1,362	18,625	45,432	792	2,024	2,171	
December	14,711	936	95	3,737	890	609	268	1,375	22,329	44,950	766	1,703	1,798	
Year 2015														
January	15,162	1,092	63	3,717	885	582	258	1,362	24,138	47,259	746	1,838	1,902	
February	14,922	1,322	161	3,372	792	503	230	1,260	22,286	44,847	816	2,138	2,299	
March	15,308	1,786	286	3,457	914	543	255	1,394	24,281	48,224	1,134	2,920	3,206	
April	17,867	2,008	372	3,246	915	571	243	1,272	22,471	48,965	1,264	3,271	3,643	
May	17,151	2,160	345	3,338	951	609	238	1,390	20,125	46,308	1,394	3,553	3,898	
June	13,421	2,178	380	3,496	926	607	251	1,302	20,414	42,975	1,408	3,586	3,966	
July	13,675	2,247	380	3,806	1,035	661	293	1,357	21,014	44,469	1,487	3,734	4,114	
August	13,080	2,295	392	3,788	982	651	288	1,344	19,122	41,943	1,468	3,763	4,156	
Sept	13,972	1,908	309	3,450	931	607	268	1,203	16,094	38,742	1,330	3,238	3,547	
October	16,380	1,700	210	3,252	938	617	289	1,323	16,630	41,338	1,198	2,897	3,107	
November	19,682	1,525	204	3,418	993	620	290	1,334	19,338	47,403	982	2,507	2,712	
December	20,098	1,444	126	3,587	1,029	642	299	1,377	23,166	51,767	914	2,358	2,484	
Year 2016														
January	18,527	1,406	86	3,604	1,007	628	295	1,471	25,355	52,379	1,021	2,428	2,514	
February	20,199	2,163	241	3,391	892	547	274	1,372	24,150	53,228	1,190	3,352	3,593	
March	21,761	2,410	257	3,375	938	588	285	1,460	27,025	58,098	1,583	3,992	4,250	
April	20,566	2,624	273	2,895	937	602	280	1,340	25,475	54,992	1,764	4,388	4,661	
May	18,792	3,151	388	3,171	1,002	661	267	1,476	25,363	54,270	1,946	5,097	5,485	
June	16,314	3,133	412	3,400	976	620	233	1,364	22,902	49,353	1,993	5,126	5,537	
July	17,591	3,553	471	3,640	1,007	642	261	1,424	21,247	49,836	2,068	5,621	6,092	
August	13,558	3,509	368	3,637	1,005	645	257	1,444	19,359	43,782	2,008	5,517	5,885	
Sept	16,435	3,249	363	3,367	942	600	221	1,451	16,281	42,909	1,792	5,042	5,405	
October	20,376	2,883	249	3,105	919	592	244	1,489	17,249	47,106	1,609	4,492	4,741	
Year to Date														
2014	148,077	13,081	2,198	35,095	9,510	6,007	2,675	13,139	218,413	448,197	9,675	22,756	24,954	
2015	150,938	18,696	2,897	34,923	9,270	5,950	2,613	13,207	206,577	445,071	12,243	30,940	33,837	
2016	184,119	28,081	3,109	33,585	9,624	6,124	2,616	14,290	224,406	505,953	16,974	45,055	48,164	
Rolling 12 Months Ending in October														
2015	184,517	20,865	3,140	42,168	10,980	7,171	3,139	15,944	247,530	535,454	13,801	34,666	37,806	
2016	223,899	31,051	3,439	40,590	11,645	7,385	3,205	17,001	266,909	605,124	18,870	49,920	53,359	

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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.

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

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

Table 1.2.A. Net Generation by Energy Source: Electric Utilities, 2006-October 2016
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Total
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	
Annual Totals												
2006	1,471,421	31,269	9,634	282,088	30	425,341	261,864	15	6,573	-5,281	700	2,483,656
2007	1,490,985	33,325	7,395	313,785	141	427,555	226,734	11	8,943	-5,328	586	2,504,131
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	17	11,291	-5,143	545	2,475,367
2009	1,322,092	18,035	7,182	349,166	96	417,275	247,198	28	14,589	-3,369	483	2,372,776
2010	1,378,028	17,258	8,807	392,616	52	424,843	236,104	101	17,826	-4,466	462	2,471,632
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	216	21,717	-5,492	604	2,460,851
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	639	27,378	-4,202	603	2,339,172
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	943	31,474	-3,773	615	2,388,058
2014	1,173,073	10,696	9,147	501,414	112	419,871	238,185	1,218	33,278	-5,144	622	2,382,473
2015	998,385	10,386	8,278	617,817	199	416,680	229,640	1,494	35,992	-4,105	558	2,315,323
Year 2014												
January	115,862	2,445	949	41,208	13	38,847	19,673	53	3,286	-218	47	222,165
February	104,638	1,051	706	33,600	7	32,937	15,973	61	2,698	-361	34	191,345
March	97,957	1,037	953	35,116	9	32,612	22,423	91	3,296	-355	57	193,194
April	77,724	711	572	34,890	20	30,312	22,977	98	3,274	-301	52	170,329
May	89,103	709	833	41,226	12	33,760	23,933	114	2,632	-506	49	191,866
June	104,523	650	894	44,315	5	35,898	23,790	127	2,613	-557	53	212,311
July	112,875	711	792	50,296	7	38,031	22,624	131	2,261	-445	62	227,343
August	112,568	711	778	54,553	6	37,182	18,251	130	1,894	-740	60	225,392
Sept	94,482	711	750	46,260	5	35,296	14,895	126	2,277	-461	50	194,390
October	82,991	652	457	42,360	4	32,017	15,863	124	2,826	-351	48	176,990
November	87,064	643	577	37,477	9	34,552	17,369	91	3,473	-441	55	180,869
December	93,287	666	887	40,114	15	38,428	20,415	72	2,749	-409	56	196,279
Year 2015												
January	94,835	1,147	813	46,573	26	39,377	22,523	68	3,130	-460	41	208,073
February	90,828	2,014	879	43,951	24	33,478	21,075	87	2,877	-387	45	194,871
March	78,606	696	502	45,972	21	33,328	22,523	126	3,123	-319	31	184,609
April	66,628	695	565	43,065	20	31,053	20,156	145	3,157	-153	47	165,379
May	79,341	701	691	46,882	20	35,089	18,481	156	3,043	-292	54	184,165
June	93,799	765	604	57,292	17	35,150	18,429	153	2,311	-300	50	208,270
July	104,128	834	898	64,971	15	37,055	19,004	155	2,514	-413	49	229,212
August	100,129	794	827	63,376	21	38,482	17,813	159	2,554	-513	53	223,696
Sept	85,932	690	797	56,266	20	35,034	15,062	130	2,771	-477	49	196,273
October	71,408	682	610	49,533	12	31,886	15,378	114	3,261	-364	42	172,561
November	64,191	718	490	47,590	1	30,751	17,901	103	3,673	-218	48	165,247
December	68,558	650	604	52,345	1	35,997	21,296	98	3,577	-210	49	182,965
Year 2016												
January	84,059	925	832	52,479	NM	37,985	23,120	100	3,317	-230	27	202,618
February	69,797	778	734	47,632	4	34,281	21,931	158	3,625	-332	26	178,636
March	56,899	584	724	49,819	6	34,445	24,916	172	3,693	-291	34	171,000
April	53,435	568	858	46,600	8	34,036	23,633	185	3,891	-367	28	162,874
May	62,119	654	763	52,953	NM	36,517	23,512	213	3,104	-257	27	179,615
June	86,708	687	793	64,052	17	37,000	21,477	221	3,034	-409	28	213,608
July	101,105	904	833	72,456	23	37,918	19,901	233	2,836	-678	23	235,556
August	100,319	887	856	72,696	15	37,927	18,054	224	2,429	-787	22	232,643
Sept	83,380	620	807	58,466	24	33,919	15,222	205	3,212	-626	22	195,250
October	73,088	633	418	47,527	6	30,016	16,101	177	3,472	-471	25	170,993
Year to Date												
2014	992,722	9,386	7,683	423,823	88	346,892	200,402	1,055	27,057	-4,294	511	2,005,325
2015	865,636	9,018	7,184	517,881	196	349,932	190,443	1,293	28,742	-3,677	461	1,967,110
2016	770,910	7,240	7,618	564,679	119	354,046	207,867	1,888	32,613	-4,450	263	1,942,794
Rolling 12 Months Ending in October												
2015	1,045,987	10,328	8,649	595,472	220	422,911	228,226	1,456	34,963	-4,526	573	2,344,259
2016	903,659	8,607	8,712	664,615	NM	420,794	247,064	2,088	39,863	-4,878	360	2,291,006

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, 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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 1.2.B Net Generation by Energy Source: Independent Power Producers, 2006-October 2016
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Total
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	
Annual Totals												
2006	498,316	10,396	8,409	452,329	4,223	361,877	24,390	493	58,853	-1,277	6,412	1,424,421
2007	507,406	13,645	6,942	500,967	3,901	378,869	19,109	601	65,150	-1,569	6,191	1,501,212
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	847	84,928	-1,145	6,414	1,498,982
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	863	100,997	-1,259	6,146	1,437,061
2010	449,709	5,117	3,497	508,774	2,915	382,126	22,351	1,105	119,851	-1,035	6,345	1,500,754
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	1,511	140,442	-928	7,059	1,487,335
2012	354,076	2,757	1,758	627,833	2,984	374,509	20,923	3,525	156,539	-748	7,030	1,551,186
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	7,782	181,263	-908	6,742	1,515,657
2014	395,701	6,789	1,410	531,758	3,246	377,295	19,861	16,086	196,723	-1,030	6,690	1,554,530
2015	342,608	6,240	1,601	619,839	3,517	380,498	17,996	22,962	202,858	-987	6,838	1,603,971
Year 2014												
January	40,054	3,281	109	41,761	253	34,316	1,837	681	18,727	-72	533	141,480
February	37,580	698	123	35,129	204	29,702	1,316	753	15,039	-84	472	120,930
March	37,333	880	129	35,402	206	29,785	1,715	1,196	18,569	-66	571	125,720
April	30,554	160	141	34,693	211	26,072	2,332	1,355	19,166	-77	516	115,124
May	28,635	203	125	40,419	271	29,187	2,477	1,596	16,817	-95	569	120,205
June	31,947	193	108	46,588	252	32,240	1,850	1,755	17,275	-96	565	132,678
July	35,597	236	128	56,400	276	33,909	1,641	1,618	14,183	-100	584	144,474
August	34,761	261	123	59,357	309	33,946	1,458	1,709	12,495	-101	594	144,913
Sept	30,580	171	145	52,430	293	32,238	1,091	1,670	13,267	-81	562	132,366
October	27,332	209	51	47,693	331	30,374	1,200	1,556	15,642	-97	566	124,857
November	31,053	268	88	39,234	292	30,589	1,155	1,260	19,441	-90	578	123,869
December	30,274	228	139	42,652	349	34,935	1,787	939	16,102	-71	580	127,913
Year 2015												
January	36,595	701	128	46,877	368	34,893	1,491	1,066	16,096	-92	560	138,685
February	35,196	3,049	132	40,256	305	29,984	1,104	1,372	15,785	-69	489	127,602
March	28,865	306	141	46,138	306	31,218	1,625	1,911	16,184	-90	527	127,131
April	21,519	170	140	42,762	269	28,732	2,175	2,193	18,393	-62	528	116,818
May	24,330	257	144	47,242	318	30,737	1,515	2,300	18,059	-78	561	125,387
June	30,878	215	138	56,098	282	33,366	1,867	2,359	15,117	-98	574	140,797
July	33,932	314	140	67,295	295	34,357	1,892	2,425	15,512	-101	617	156,677
August	33,522	250	142	66,938	311	33,933	1,216	2,481	14,856	-113	624	154,160
Sept	31,074	273	140	58,525	311	31,442	954	2,047	15,075	-67	571	140,345
October	24,463	216	149	52,489	216	28,685	1,135	1,762	16,981	-79	589	126,607
November	22,171	235	140	46,542	233	29,513	1,301	1,599	20,046	-67	591	122,304
December	20,063	254	67	48,676	302	33,637	1,721	1,448	20,754	-71	607	127,458
Year 2016												
January	28,475	361	42	48,890	367	34,551	2,093	1,368	19,501	-82	606	136,171
February	22,049	401	99	42,844	336	31,357	2,083	2,199	20,548	-66	543	122,394
March	14,352	204	138	46,034	367	31,704	1,957	2,446	22,115	-93	556	119,779
April	17,769	193	97	45,293	321	28,329	1,706	2,667	20,353	-84	575	117,220
May	18,760	236	124	50,000	284	30,046	1,714	3,271	19,725	-64	637	124,733
June	28,660	207	131	59,426	347	30,175	1,314	3,259	17,321	-88	610	141,362
July	34,563	300	136	70,504	322	32,430	1,238	3,719	19,045	-106	618	162,769
August	34,586	324	140	73,299	331	33,599	1,213	3,591	15,483	-115	627	163,079
Sept	30,147	259	113	58,821	344	31,500	995	3,350	17,320	-89	580	143,342
October	25,547	236	141	47,008	239	30,717	1,065	2,908	20,772	-90	566	129,109
Year to Date												
2014	334,374	6,293	1,183	449,872	2,605	311,771	16,919	13,887	161,181	-869	5,531	1,302,747
2015	300,374	5,751	1,394	524,621	2,981	317,349	14,974	19,915	162,058	-849	5,640	1,354,209
2016	254,908	2,722	1,161	542,118	3,259	314,408	15,378	28,779	192,183	-876	5,918	1,359,958
Rolling 12 Months Ending in October												
2015	361,701	6,247	1,621	606,507	3,623	382,872	17,916	22,114	197,601	-1,010	6,799	1,605,991
2016	297,143	3,211	1,367	637,337	3,795	377,558	18,400	31,826	232,983	-1,014	7,116	1,609,720

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, 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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 1.2.C. Net Generation by Energy Source: Commercial Sector, 2006-October 2016
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
Annual Totals															
2006	1,310	228	7	4,355	0	0	93	0	1,619	0	758	8,371	N/A	N/A	N/A
2007	1,371	180	9	4,257	0	0	77	0	1,614	0	764	8,273	N/A	N/A	N/A
2008	1,261	136	6	4,188	0	0	60	0	1,555	0	720	7,926	N/A	N/A	N/A
2009	1,096	157	5	4,225	0	0	71	0	1,769	0	842	8,165	N/A	N/A	N/A
2010	1,111	117	7	4,725	3	0	80	5	1,709	0	834	8,592	N/A	N/A	N/A
2011	1,049	86	3	5,487	3	0	26	84	2,392	0	950	10,080	N/A	N/A	N/A
2012	883	191	6	6,603	0	0	28	148	2,397	0	1,046	11,301	N/A	N/A	N/A
2013	839	118	5	7,154	0	0	44	294	2,662	0	1,118	12,234	N/A	N/A	N/A
2014	595	247	9	7,227	0	0	38	371	2,862	0	1,171	12,520	5,146	5,516	5,516
2015	509	183	8	7,471	0	0	35	416	2,803	0	1,170	12,595	5,689	6,106	6,106
Year 2014															
January	76	102	1	651	0	0	4	16	264	0	104	1,218	300	316	316
February	79	37	1	533	0	0	3	20	216	0	71	961	322	342	342
March	66	30	1	529	0	0	4	29	230	0	84	972	432	461	461
April	47	9	1	509	0	0	4	33	229	0	96	927	467	499	499
May	39	8	0	557	0	0	4	38	238	0	102	986	512	550	550
June	42	8	0	605	0	0	3	39	245	0	99	1,041	510	549	549
July	50	9	0	701	0	0	3	38	263	0	109	1,173	529	567	567
August	42	7	1	722	0	0	3	39	256	0	110	1,181	520	559	559
Sept	36	8	1	657	0	0	3	35	243	0	104	1,086	469	504	504
October	31	9	1	601	0	0	2	36	230	0	97	1,008	419	455	455
November	44	9	1	560	0	0	2	28	218	0	98	960	338	366	366
December	45	10	1	602	0	0	2	20	230	0	97	1,007	329	349	349
Year 2015															
January	56	22	1	564	0	0	3	20	225	0	88	981	327	347	347
February	59	72	1	499	0	0	3	23	198	0	77	932	356	379	379
March	52	11	1	560	0	0	3	33	227	0	91	977	479	512	512
April	38	8	1	513	0	0	3	39	231	0	98	931	525	564	564
May	32	10	0	583	0	0	3	46	237	0	101	1,013	574	619	619
June	45	10	0	662	0	0	4	43	232	0	102	1,098	571	614	614
July	44	12	0	769	0	0	3	45	256	0	108	1,238	596	641	641
August	39	12	1	760	0	0	2	46	243	0	104	1,206	575	621	621
Sept	33	7	1	716	0	0	2	37	242	0	106	1,145	515	553	553
October	34	6	1	643	0	0	3	32	234	0	95	1,049	455	488	488
November	35	6	1	583	0	0	3	27	236	0	102	992	367	394	394
December	41	7	1	617	0	0	4	24	242	0	98	1,033	349	373	373
Year 2016															
January	43	11	1	648	0	0	NM	23	235	0	91	1,057	407	430	430
February	47	13	1	550	0	0	NM	44	207	0	76	944	465	510	510
March	44	NM	1	596	0	0	NM	46	247	0	98	1,043	605	652	652
April	29	8	0	616	0	0	NM	44	223	0	97	1,023	657	701	701
May	26	8	0	650	0	0	NM	53	216	0	95	1,055	715	768	768
June	28	6	0	694	0	0	NM	61	201	0	82	1,079	719	780	780
July	30	9	1	764	0	0	NM	68	229	0	97	1,204	740	808	808
August	33	14	0	781	0	0	NM	58	224	0	96	1,212	714	772	772
Sept	34	7	0	675	0	0	NM	55	200	0	89	1,064	641	697	697
October	36	8	0	583	0	0	NM	45	207	0	87	968	578	622	622
Year to Date															
2014	507	227	7	6,065	0	0	34	323	2,414	0	976	10,553	4,479	4,801	4,801
2015	433	171	7	6,270	0	0	28	366	2,325	0	970	10,570	4,973	5,339	5,339
2016	352	89	4	6,557	0	0	51	496	2,190	0	908	10,647	6,243	6,740	6,740
Rolling 12 Months Ending in October															
2015	521	190	9	7,432	0	0	32	414	2,773	0	1,165	12,537	5,640	6,054	6,054
2016	428	NM	6	7,758	0	0	NM	547	2,668	0	1,108	12,673	6,959	7,506	7,506

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, 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 for 2015 and prior years are final. Values for 2016 are preliminary. 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.

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

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

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

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2006-October 2016
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Distributed Generation	Net Generation From Utility Scale Facilities and Distributed Generation		
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Distributed Solar Photovoltaic Generation	Estimated Total Solar Photovoltaic Generation	Estimated Total Solar Generation
Annual Totals															
2006	19,464	2,567	1,656	77,669	9,923	0	2,899	0	28,972	0	5,103	148,254	N/A	N/A	N/A
2007	16,694	2,355	1,889	77,580	9,411	0	1,590	0	28,919	0	4,690	143,128	N/A	N/A	N/A
2008	15,703	1,555	1,664	76,421	8,507	0	1,676	0	27,462	0	4,125	137,113	N/A	N/A	N/A
2009	13,686	1,474	1,489	75,748	7,574	0	1,868	0	26,033	0	4,457	132,329	N/A	N/A	N/A
2010	18,441	844	1,414	81,583	8,343	0	1,668	2	26,574	0	5,214	144,082	N/A	N/A	N/A
2011	14,490	657	1,234	81,911	8,624	0	1,799	7	27,612	0	5,541	141,875	N/A	N/A	N/A
2012	12,603	563	2,359	86,500	8,913	0	2,353	14	27,693	0	5,108	146,107	N/A	N/A	N/A
2013	12,554	495	2,036	88,733	8,531	0	3,463	17	29,074	0	5,113	150,015	N/A	N/A	N/A
2014	12,341	544	1,389	86,209	8,664	0	1,282	16	28,659	0	4,978	144,083	1,139	1,156	1,156
2015	10,896	563	990	88,355	9,401	0	1,410	21	28,614	0	5,462	145,712	1,451	1,472	1,472
Year 2014															
January	1,105	85	100	7,441	667	0	120	1	2,466	0	408	12,391	62	62	62
February	998	61	86	6,680	606	0	104	1	2,212	0	363	11,112	65	66	66
March	1,087	56	103	7,105	651	0	114	1	2,439	0	382	11,937	93	94	94
April	955	32	128	6,690	624	0	127	2	2,319	0	375	11,251	101	103	103
May	1,009	40	126	6,918	662	0	130	2	2,385	0	397	11,667	111	113	113
June	1,065	37	130	6,960	711	0	100	2	2,409	0	400	11,814	113	114	114
July	1,105	37	129	7,685	786	0	89	2	2,549	0	408	12,790	117	119	119
August	1,081	35	134	7,716	820	0	96	2	2,496	0	476	12,856	116	118	118
Sept	1,013	39	123	7,234	828	0	86	2	2,275	0	444	12,044	106	107	107
October	942	39	101	7,028	748	0	93	1	2,303	0	411	11,667	100	102	102
November	966	42	108	7,083	772	0	99	1	2,297	0	429	11,797	81	82	82
December	1,015	42	121	7,670	790	0	125	1	2,510	0	484	12,757	74	75	75
Year 2015															
January	964	57	103	7,674	852	0	121	1	2,514	0	430	12,717	80	80	80
February	894	86	88	6,609	696	0	105	1	2,217	0	374	11,071	85	86	86
March	965	49	74	6,753	764	0	130	2	2,337	0	402	11,475	119	121	121
April	804	45	104	6,465	690	0	138	2	2,335	0	423	11,005	129	132	132
May	881	48	87	6,809	761	0	127	2	2,339	0	469	11,522	144	146	146
June	951	49	78	7,426	819	0	114	2	2,343	0	462	12,244	144	146	146
July	995	41	66	8,084	925	0	115	2	2,545	0	518	13,292	150	152	152
August	980	37	70	8,010	864	0	90	2	2,480	0	519	13,054	147	149	149
Sept	947	37	91	7,528	879	0	77	2	2,342	0	456	12,359	135	137	137
October	853	40	67	7,340	678	0	114	2	2,322	0	478	11,894	125	126	126
November	830	36	85	7,521	668	0	133	1	2,380	0	456	12,110	100	102	102
December	832	38	77	8,137	806	0	145	1	2,459	0	475	12,970	93	94	94
Year 2016															
January	875	43	79	7,751	893	0	136	NM	2,480	0	420	12,677	99	NM	NM
February	816	43	70	7,199	828	0	131	NM	2,293	0	372	11,755	109	NM	NM
March	838	27	81	7,555	868	0	147	NM	2,352	0	412	12,281	152	NM	NM
April	712	25	81	7,261	814	0	131	NM	2,152	0	424	11,603	165	NM	NM
May	734	49	97	7,553	681	0	130	NM	2,322	0	459	12,030	183	NM	NM
June	823	36	85	7,732	720	0	105	NM	2,350	0	444	12,299	184	NM	NM
July	884	49	87	8,104	721	0	101	NM	2,455	0	474	12,879	191	NM	NM
August	870	49	88	8,144	756	0	87	NM	2,409	0	486	12,892	188	NM	NM
Sept	718	35	83	7,699	681	0	60	3	2,283	0	473	12,035	170	173	173
October	677	64	NM	7,517	646	0	80	2	2,274	0	406	11,719	156	158	158
Year to Date															
2014	10,360	460	1,160	71,457	7,102	0	1,058	14	23,852	0	4,065	119,529	984	999	999
2015	9,234	489	827	72,697	7,928	0	1,132	19	23,775	0	4,531	120,632	1,258	1,276	1,276
2016	7,950	419	802	76,516	7,608	0	1,109	26	23,372	0	4,369	122,170	1,596	1,623	1,623
Rolling 12 Months Ending in October															
2015	11,214	573	1,057	87,450	9,489	0	1,356	21	28,582	0	5,444	145,186	1,413	1,433	1,433
2016	9,612	493	NM	92,174	9,081	0	1,387	NM	28,211	0	5,300	147,251	1,790	NM	NM

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, 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 for 2015 and prior years are final. Values for 2016 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

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

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

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

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

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

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

**Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-October 2016
(Thousand Megawatthours)**

Distributed Generation	
Period	Estimated Distributed Solar Photovoltaic Generation
Annual Totals	
2014	4,947
2015	6,999
Year 2014	
January	263
February	277
March	382
April	421
May	468
June	478
July	502
August	503
Sept	472
October	445
November	373
December	363
Year 2015	
January	340
February	375
March	536
April	609
May	676
June	693
July	741
August	746
Sept	679
October	618
November	515
December	471
Year 2016	
January	515
February	615
March	826
April	942
May	1,048
June	1,089
July	1,137
August	1,106
Sept	981
October	875
Year to Date	
2014	4,212
2015	6,012
2016	9,134
Rolling 12 Months Ending in October	
2015	6,748
2016	10,121

See Glossary for definitions. Values for 2015 and prior years are final. Values for 2016 are preliminary.
 Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
 Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 Sources:
 Estimated distributed solar photovoltaic generation and distributed solar photovoltaic capacity are based on data from Form EIA-826, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.3.A. Utility Scale Facility Net Generation
by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	8,005	7,811	2.5%	132	182	7,614	7,294	83	105	176	229
Connecticut	3,051	2,622	16.4%	NM	4	2,997	2,548	NM	34	NM	37
Maine	814	1,049	-22.4%	NM	0	663	855	16	19	136	175
Massachusetts	2,108	2,760	-23.6%	NM	38	2,031	2,665	35	42	NM	15
New Hampshire	1,477	742	99.0%	41	69	1,430	666	NM	5	NM	3
Rhode Island	425	495	-14.3%	1	0	420	490	NM	NM	0	0
Vermont	130	142	-8.7%	57	71	73	70	NM	0	0	0
Middle Atlantic	32,391	33,325	-2.8%	2,500	2,693	29,439	30,076	152	186	299	371
New Jersey	6,363	6,269	1.5%	3	6	6,279	6,149	51	53	NM	60
New York	10,397	11,567	-10.1%	2,493	2,684	7,740	8,705	90	105	73	73
Pennsylvania	15,631	15,490	0.9%	NM	3	15,421	15,222	NM	27	195	238
East North Central	44,359	46,430	-4.5%	17,780	19,582	25,746	25,893	151	167	682	788
Illinois	14,858	15,635	-5.0%	235	215	14,413	15,183	33	39	178	199
Indiana	7,831	8,007	-2.2%	6,886	6,454	711	1,271	20	20	214	262
Michigan	8,072	8,620	-6.4%	5,433	6,639	2,443	1,790	78	87	117	104
Ohio	9,059	9,273	-2.3%	1,879	2,177	7,120	7,009	NM	12	52	75
Wisconsin	4,539	4,894	-7.2%	3,348	4,097	1,059	639	NM	9	121	148
West North Central	24,131	25,972	-7.1%	19,845	21,942	3,911	3,634	57	49	317	347
Iowa	4,253	4,294	-0.9%	3,407	2,975	666	1,127	NM	17	159	175
Kansas	3,274	3,613	-9.4%	1,938	2,792	1,327	820	0	0	NM	1
Minnesota	4,595	4,539	1.2%	3,550	3,642	912	759	17	14	116	123
Missouri	5,445	6,320	-13.8%	5,315	6,175	108	125	18	17	NM	3
Nebraska	2,693	3,323	-19.0%	2,357	3,041	316	250	NM	1	NM	30
North Dakota	3,220	3,003	7.2%	2,822	2,591	388	398	NM	0	NM	14
South Dakota	651	881	-26.1%	456	725	195	156	NM	0	0	0
South Atlantic	60,861	56,620	7.5%	50,172	47,231	9,069	7,761	95	103	1,525	1,525
Delaware	786	483	62.7%	NM	3	665	425	NM	1	116	55
District of Columbia	NM	6	NM	0	0	0	5	NM	2	0	0
Florida	19,230	19,305	-0.4%	17,666	17,512	1,156	1,321	NM	7	400	465
Georgia	10,170	8,803	15.5%	9,032	7,139	735	1,234	NM	1	402	429
Maryland	3,013	2,642	14.1%	2	1	2,960	2,589	NM	37	22	15
North Carolina	9,184	9,045	1.5%	8,125	8,376	879	492	18	16	163	161
South Carolina	7,294	7,214	1.1%	6,953	6,997	189	110	NM	0	152	107
Virginia	5,848	5,299	10.4%	4,546	4,362	1,068	681	34	39	200	216
West Virginia	5,332	3,822	39.5%	3,844	2,841	1,417	903	0	0	71	78
East South Central	26,998	27,806	-2.9%	22,950	23,499	3,365	3,568	NM	11	673	728
Alabama	10,384	12,263	-15.3%	6,924	8,649	3,166	3,280	0	0	295	334
Kentucky	6,174	6,044	2.2%	6,130	5,919	NM	78	0	0	39	46
Mississippi	4,131	4,490	-8.0%	3,790	4,131	177	194	NM	0	163	165
Tennessee	6,308	5,010	25.9%	6,106	4,800	16	16	NM	10	177	184
West South Central	56,331	52,715	6.9%	18,107	17,837	31,714	28,754	90	65	6,420	6,060
Arkansas	4,036	3,121	29.3%	2,750	2,385	1,148	590	NM	0	137	145
Louisiana	7,694	8,947	-14.0%	4,387	5,490	700	841	NM	15	2,594	2,600
Oklahoma	6,922	5,497	25.9%	3,914	3,505	2,931	1,916	NM	0	76	76
Texas	37,679	35,151	7.2%	7,055	6,457	26,935	25,407	75	49	3,614	3,238
Mountain	29,411	30,030	-2.1%	22,221	23,642	6,862	6,030	45	47	284	311
Arizona	8,708	9,504	-8.4%	6,903	7,924	1,792	1,565	12	15	0	0
Colorado	4,099	3,968	3.3%	3,113	3,077	977	882	NM	2	NM	7
Idaho	968	1,000	-3.2%	550	521	372	418	NM	3	45	57
Montana	2,293	2,317	-1.0%	692	579	1,599	1,735	0	0	NM	3
Nevada	2,930	3,309	-11.4%	2,077	2,603	815	668	11	10	26	27
New Mexico	3,318	2,659	24.8%	2,569	2,189	737	460	10	10	NM	0
Utah	3,368	3,326	1.3%	2,967	3,134	294	92	7	7	100	92
Wyoming	3,728	3,948	-5.6%	3,349	3,613	275	210	0	0	103	125
Pacific Contiguous	29,020	30,010	-3.3%	16,492	15,021	11,020	13,224	232	278	1,275	1,487
California	16,773	17,230	-2.7%	6,548	5,404	8,899	10,262	223	267	1,102	1,298
Oregon	4,175	4,518	-7.6%	3,214	3,115	913	1,340	NM	7	42	55
Washington	8,072	8,262	-2.3%	6,730	6,503	1,208	1,622	NM	4	130	133
Pacific Noncontiguous	1,281	1,394	-8.1%	794	932	369	375	52	40	66	47
Alaska	422	490	-13.9%	389	444	NM	23	13	14	NM	9
Hawaii	859	904	-4.9%	405	488	359	352	39	26	57	38
U.S. Total	312,788	312,112	0.2%	170,993	172,561	129,109	126,607	968	1,049	11,719	11,894

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 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	91,421	93,469	-2.2%	2,085	2,954	85,958	86,976	1,065	1,096	2,313	2,443
Connecticut	30,175	31,218	-3.3%	32	34	29,437	30,448	322	333	384	403
Maine	9,975	9,782	2.0%	NM		8,068	7,752	173	170	1,734	1,859
Massachusetts	27,965	27,791	0.6%	492	625	26,841	26,550	463	462	170	154
New Hampshire	15,970	17,091	-6.6%	810	1,552	15,087	15,449	49	63	25	27
Rhode Island	5,719	5,974	-4.3%	9	11	5,653	5,899	56	64	0	0
Vermont	1,617	1,613	0.2%	742	732	873	879	NM	3	0	0
Middle Atlantic	357,446	361,120	-1.0%	29,576	29,044	322,241	326,454	1,869	1,910	3,760	3,712
New Jersey	65,482	62,770	4.3%	-2	-27	64,366	61,652	572	554	547	591
New York	113,622	117,105	-3.0%	29,518	29,016	82,231	86,282	1,051	1,032	820	776
Pennsylvania	178,342	181,245	-1.6%	NM	56	175,643	178,520	246	324	2,393	2,345
East North Central	490,713	508,088	-3.4%	208,500	216,344	272,556	281,861	1,642	1,647	8,015	8,237
Illinois	156,323	162,976	-4.1%	4,632	3,797	149,239	156,594	336	406	2,116	2,178
Indiana	84,815	88,766	-4.5%	72,184	75,826	9,788	9,967	229	203	2,614	2,770
Michigan	95,635	94,770	0.9%	66,669	72,039	26,868	20,821	815	848	1,284	1,061
Ohio	99,249	105,823	-6.2%	22,211	20,558	76,243	84,438	126	101	669	726
Wisconsin	54,692	55,753	-1.9%	42,805	44,123	10,419	10,040	136	88	1,332	1,502
West North Central	272,210	278,052	-2.1%	228,753	239,083	39,381	34,985	597	503	3,479	3,481
Iowa	45,000	48,073	-6.4%	33,414	35,983	9,629	10,147	224	184	1,734	1,759
Kansas	39,922	38,561	3.5%	28,805	30,562	11,030	7,967	0	0	87	32
Minnesota	49,571	47,284	4.8%	39,694	38,171	8,509	7,762	190	157	1,178	1,194
Missouri	66,813	71,421	-6.5%	64,096	69,145	2,503	2,092	169	148	45	36
Nebraska	31,434	33,440	-6.0%	28,372	30,735	2,753	2,371	14	14	295	320
North Dakota	30,905	31,219	-1.0%	27,527	27,829	3,237	3,250	NM	0	141	140
South Dakota	8,566	8,053	6.4%	6,845	6,657	1,721	1,396	NM	0	0	0
South Atlantic	690,924	673,634	2.6%	573,859	565,673	100,316	90,878	1,193	1,099	15,557	15,983
Delaware	7,803	6,957	12.2%	NM	44	6,653	5,900	6	5	1,088	1,007
District of Columbia	47	41	14.4%	0	0	0	21	47	19	0	0
Florida	203,750	201,121	1.3%	184,549	185,062	14,767	11,514	87	65	4,347	4,479
Georgia	113,571	109,966	3.3%	98,075	94,360	11,378	11,368	12	12	4,107	4,226
Maryland	32,213	31,575	2.0%	18	18	31,522	30,889	449	432	224	236
North Carolina	111,476	109,337	2.0%	100,659	101,427	9,051	6,080	219	178	1,546	1,652
South Carolina	81,505	82,032	-0.6%	77,206	78,637	2,755	1,964	NM	3	1,532	1,428
Virginia	77,701	71,345	8.9%	63,858	57,596	11,488	11,350	362	384	1,993	2,014
West Virginia	62,859	61,261	2.6%	49,439	48,529	12,701	11,790	0	0	719	942
East South Central	310,098	320,322	-3.2%	262,262	272,635	40,331	40,150	132	128	7,374	7,409
Alabama	120,515	128,270	-6.0%	82,913	90,786	34,154	33,978	0	0	3,447	3,506
Kentucky	67,705	72,182	-6.2%	66,726	71,113	491	587	0	0	487	482
Mississippi	55,152	54,888	0.5%	48,034	47,862	5,518	5,425	NM	6	1,592	1,596
Tennessee	66,727	64,982	2.7%	64,589	62,874	168	161	123	122	1,847	1,825
West South Central	593,154	586,533	1.1%	206,166	208,834	320,982	314,719	860	765	65,145	62,216
Arkansas	51,179	48,641	5.2%	36,837	34,423	12,990	12,763	NM	5	1,348	1,449
Louisiana	90,388	90,851	-0.5%	55,075	56,188	8,804	9,373	142	145	26,366	25,145
Oklahoma	65,380	63,655	2.7%	37,910	41,399	26,709	21,525	NM	0	746	730
Texas	386,206	383,386	0.7%	76,344	76,823	272,479	271,057	698	615	36,685	34,891
Mountain	304,762	312,877	-2.6%	237,425	250,612	64,113	58,910	446	446	2,778	2,910
Arizona	93,456	96,289	-2.9%	76,294	79,873	17,041	16,285	122	131	0	0
Colorado	45,125	43,250	4.3%	35,139	34,929	9,901	8,240	31	24	55	57
Idaho	13,742	13,382	2.7%	9,137	8,952	4,115	3,930	6	16	484	484
Montana	22,646	24,302	-6.8%	8,766	9,059	13,855	15,221	0	0	25	23
Nevada	33,626	32,695	2.8%	25,201	25,679	8,037	6,661	121	97	267	258
New Mexico	26,994	26,854	0.5%	20,136	21,499	6,753	5,251	94	103	NM	1
Utah	31,172	35,423	-12.0%	28,089	33,248	2,068	1,237	72	76	943	862
Wyoming	38,000	40,683	-6.6%	34,662	37,373	2,344	2,084	0	0	994	1,226
Pacific Contiguous	312,395	304,902	2.5%	186,020	172,650	110,683	115,943	2,372	2,526	13,320	13,782
California	169,188	167,114	1.2%	68,805	60,535	86,545	92,195	2,270	2,436	11,568	11,948
Oregon	49,857	47,110	5.8%	36,315	33,768	13,001	12,720	67	62	474	559
Washington	93,350	90,678	2.9%	80,900	78,347	11,136	11,028	35	29	1,279	1,275
Pacific Noncontiguous	12,447	13,524	-8.0%	8,149	9,282	3,398	3,334	472	449	429	458
Alaska	4,464	5,131	-13.0%	4,069	4,688	164	205	133	136	98	103
Hawaii	7,983	8,393	-4.9%	4,079	4,594	3,234	3,130	339	314	330	356
U.S. Total	3,435,570	3,452,520	-0.5%	1,942,794	1,967,110	1,359,958	1,354,209	10,647	10,570	122,170	120,632

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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 1.4.A. Utility Scale Facility Net Generation from Coal
by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	66	168	-60.6%	0	18	64	149	0	0	NM	1
Connecticut	-2	7	-130.8%	0	0	-2	7	0	0	0	0
Maine	5	7	-25.4%	0	0	5	7	0	0	1	1
Massachusetts	62	136	-54.1%	0	0	61	135	0	0	NM	1
New Hampshire	0	18	-98.9%	0	18	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	3,546	3,674	-3.5%	0	0	3,492	3,616	0	0	54	58
New Jersey	94	88	7.0%	0	0	94	88	0	0	0	0
New York	82	114	-28.2%	0	0	57	92	0	0	26	23
Pennsylvania	3,369	3,471	-2.9%	0	0	3,341	3,436	0	0	NM	35
East North Central	20,769	23,809	-12.8%	12,407	14,215	8,197	9,376	NM	6	161	212
Illinois	4,642	5,486	-15.4%	118	184	4,408	5,176	NM	1	114	125
Indiana	5,591	6,030	-7.3%	5,501	5,516	88	514	NM	0	NM	0
Michigan	2,904	4,102	-29.2%	2,854	4,056	42	31	0	5	NM	10
Ohio	5,054	5,312	-4.8%	1,390	1,641	3,659	3,655	0	0	NM	16
Wisconsin	2,578	2,879	-10.4%	2,545	2,818	0	0	0	0	33	61
West North Central	14,075	14,889	-5.5%	13,872	14,635	NM	2	NM	14	181	238
Iowa	2,184	1,934	13.0%	2,054	1,776	0	0	NM	7	119	150
Kansas	1,743	1,783	-2.2%	1,743	1,783	0	0	0	0	0	0
Minnesota	1,876	1,805	4.0%	1,839	1,758	0	0	NM	0	NM	47
Missouri	4,003	5,089	-21.3%	3,991	5,080	NM	2	8	7	NM	0
Nebraska	1,939	1,962	-1.1%	1,920	1,932	0	0	0	0	NM	30
North Dakota	2,304	2,121	8.6%	2,299	2,109	0	0	0	0	NM	11
South Dakota	26	197	-87.1%	26	197	0	0	0	0	0	0
South Atlantic	17,252	14,103	22.3%	14,838	12,483	2,330	1,494	NM	5	81	121
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	3,557	3,421	4.0%	3,505	3,327	37	80	0	0	NM	15
Georgia	2,882	1,753	64.4%	2,867	1,739	0	0	0	0	16	15
Maryland	1,108	755	46.7%	0	0	1,102	750	0	0	6	5
North Carolina	2,730	2,049	33.2%	2,697	2,023	NM	8	2	3	NM	15
South Carolina	1,015	1,404	-27.7%	1,006	1,395	0	0	0	0	9	9
Virginia	1,065	1,285	-17.1%	975	1,203	66	54	NM	1	23	27
West Virginia	4,895	3,436	42.5%	3,786	2,797	1,109	602	0	0	0	37
East South Central	10,637	9,715	9.5%	10,400	9,508	175	118	0	0	62	90
Alabama	3,123	3,073	1.6%	3,121	3,065	0	0	0	0	NM	8
Kentucky	5,237	4,950	5.8%	5,237	4,950	0	0	0	0	0	0
Mississippi	393	158	148.8%	218	40	175	118	0	0	0	0
Tennessee	1,884	1,534	22.8%	1,824	1,452	0	0	0	0	60	82
West South Central	17,483	14,430	21.2%	8,487	7,152	8,957	7,244	0	0	38	34
Arkansas	2,368	1,530	54.8%	1,914	1,312	451	213	0	0	3	5
Louisiana	751	997	-24.7%	439	671	312	326	0	0	0	0
Oklahoma	2,335	2,177	7.3%	2,106	1,934	194	213	0	0	35	29
Texas	12,029	9,726	23.7%	4,028	3,235	8,001	6,491	0	0	0	0
Mountain	14,520	14,752	-1.6%	12,910	13,009	1,543	1,665	0	0	66	78
Arizona	2,947	3,133	-6.0%	2,947	3,133	0	0	0	0	0	0
Colorado	2,370	2,095	13.1%	2,365	2,087	NM	7	0	0	NM	1
Idaho	NM	7	NM	0	0	0	0	0	0	NM	7
Montana	1,401	1,503	-6.8%	NM	0	1,382	1,502	0	0	NM	1
Nevada	134	219	-38.9%	68	155	66	65	0	0	0	0
New Mexico	2,047	1,730	18.4%	2,047	1,730	0	0	0	0	0	0
Utah	2,444	2,544	-3.9%	2,363	2,477	NM	28	0	0	48	39
Wyoming	3,173	3,522	-9.9%	3,102	3,427	NM	64	0	0	NM	31
Pacific Contiguous	837	1,020	-17.9%	153	351	655	650	0	0	29	18
California	27	16	70.3%	0	0	0	0	0	0	27	16
Oregon	153	351	-56.5%	153	351	0	0	0	0	0	0
Washington	658	653	0.7%	0	0	655	650	0	0	2	2
Pacific Noncontiguous	164	199	-17.3%	21	38	132	149	NM	10	NM	2
Alaska	36	67	-46.2%	21	38	NM	19	NM	10	0	0
Hawaii	128	132	-2.6%	0	0	126	130	0	0	NM	2
U.S. Total	99,348	96,759	2.7%	73,088	71,408	25,547	24,463	36	34	677	853

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 for 2016 are preliminary. Values for 2015 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 1.4.B. Utility Scale Facility Net Generation from Coal

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	1,936	3,480	-44.4%	265	912	1,648	2,528	0	0	22	40
Connecticut	89	604	-85.2%	0	0	89	604	0	0	0	0
Maine	56	81	-31.5%	0	0	48	56	0	0	8	25
Massachusetts	1,526	1,883	-19.0%	0	0	1,511	1,868	0	0	NM	15
New Hampshire	265	912	-70.9%	265	912	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	47,859	60,450	-20.8%	0	0	47,228	59,805	0	2	630	643
New Jersey	1,106	1,553	-28.8%	0	0	1,106	1,553	0	0	0	0
New York	1,661	2,211	-24.9%	0	0	1,377	1,954	0	0	284	257
Pennsylvania	45,092	56,686	-20.5%	0	0	44,746	56,298	0	2	346	386
East North Central	229,992	273,272	-15.8%	137,675	156,983	90,425	113,966	74	125	1,818	2,198
Illinois	50,222	64,346	-22.0%	2,940	3,191	46,043	59,795	24	32	1,215	1,328
Indiana	60,657	68,181	-11.0%	57,703	63,628	2,918	4,521	35	31	NM	0
Michigan	33,902	44,686	-24.1%	33,428	44,185	370	329	15	62	88	111
Ohio	57,398	64,223	-10.6%	16,164	14,725	41,093	49,321	0	0	140	176
Wisconsin	27,813	31,837	-12.6%	27,440	31,254	0	0	0	0	373	583
West North Central	152,905	170,197	-10.2%	150,509	167,553	16	22	142	153	2,238	2,468
Iowa	21,636	26,534	-18.5%	20,096	24,901	0	0	105	105	1,435	1,528
Kansas	19,164	21,932	-12.6%	19,164	21,932	0	0	0	0	0	0
Minnesota	18,996	20,622	-7.9%	18,556	20,100	0	0	NM	1	438	521
Missouri	51,310	56,234	-8.8%	51,238	56,144	16	22	35	47	NM	21
Nebraska	18,053	20,552	-12.2%	17,776	20,233	0	0	0	0	277	319
North Dakota	22,073	23,201	-4.9%	22,008	23,121	0	0	0	0	65	80
South Dakota	1,672	1,121	49.1%	1,672	1,121	0	0	0	0	0	0
South Atlantic	202,581	213,911	-5.3%	176,938	187,537	24,620	24,871	48	63	974	1,442
Delaware	471	576	-18.3%	0	0	471	576	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	33,059	37,222	-11.2%	32,209	35,975	704	1,087	0	0	146	160
Georgia	32,727	34,096	-4.0%	32,548	33,910	0	0	0	0	179	185
Maryland	12,111	12,825	-5.6%	0	0	12,050	12,724	0	0	61	101
North Carolina	32,575	36,629	-11.1%	32,105	36,109	298	322	35	46	137	152
South Carolina	17,958	20,164	-10.9%	17,861	20,041	0	0	0	0	97	123
Virginia	14,298	14,669	-2.5%	13,483	13,583	560	815	NM	16	242	256
West Virginia	59,381	57,730	2.9%	48,732	47,919	10,537	9,348	0	0	112	464
East South Central	115,718	133,136	-13.1%	112,475	129,626	2,412	2,592	0	0	831	918
Alabama	28,757	36,314	-20.8%	28,690	36,233	0	0	0	0	67	81
Kentucky	56,156	63,274	-11.2%	56,156	63,274	0	0	0	0	0	0
Mississippi	4,529	5,857	-22.7%	2,118	3,265	2,412	2,592	0	0	0	0
Tennessee	26,275	27,691	-5.1%	25,511	26,855	0	0	0	0	764	836
West South Central	144,393	160,915	-10.3%	73,380	83,654	70,637	76,897	0	0	377	364
Arkansas	19,330	19,582	-1.3%	15,607	16,021	3,682	3,514	0	0	41	47
Louisiana	10,111	13,227	-23.6%	6,805	7,711	3,306	5,517	0	0	0	0
Oklahoma	15,542	22,082	-29.6%	13,614	20,262	1,592	1,503	0	0	336	317
Texas	99,410	106,024	-6.2%	37,353	39,660	62,057	66,363	0	0	0	0
Mountain	131,777	152,934	-13.8%	117,887	137,403	13,147	14,676	0	0	743	855
Arizona	25,254	30,894	-18.3%	25,254	30,894	0	0	0	0	0	0
Colorado	24,500	26,565	-7.8%	24,446	26,511	48	47	0	0	NM	7
Idaho	52	64	-19.2%	0	0	0	0	0	0	52	64
Montana	11,684	13,176	-11.3%	171	189	11,506	12,981	0	0	NM	5
Nevada	2,029	2,310	-12.2%	1,288	1,618	740	693	0	0	0	0
New Mexico	14,533	16,871	-13.9%	14,533	16,871	0	0	0	0	0	0
Utah	21,046	26,994	-22.0%	20,324	26,228	284	342	0	0	437	424
Wyoming	32,681	36,060	-9.4%	31,871	35,092	568	613	0	0	242	355
Pacific Contiguous	5,237	5,768	-9.2%	1,530	1,700	3,416	3,795	0	0	291	273
California	265	244	8.9%	0	0	0	0	0	0	265	244
Oregon	1,530	1,700	-10.0%	1,530	1,700	0	0	0	0	0	0
Washington	3,442	3,824	-10.0%	0	0	3,416	3,795	0	0	26	29
Pacific Noncontiguous	1,723	1,613	6.8%	251	269	1,360	1,222	87	89	NM	32
Alaska	457	520	-12.1%	251	269	119	162	87	89	0	0
Hawaii	1,265	1,093	15.8%	0	0	1,241	1,060	0	0	NM	32
U.S. Total	1,034,120	1,175,676	-12.0%	770,910	865,636	254,908	300,374	352	433	7,950	9,234

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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 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	64	11	461.4%	2	1	55	5	NM	3	NM	2
Connecticut	NM	2	NM	1	0	NM	1	NM	0	NM	0
Maine	3	7	-57.9%	NM	0	1	5	NM	0	2	2
Massachusetts	58	2	NM	0	0	55	-1	NM	3	NM	0
New Hampshire	NM	1	NM	NM	1	NM	0	NM	0	NM	0
Rhode Island	NM	NM	NM	1	0	NM	0	NM	NM	0	0
Vermont	NM	0	NM	NM	0	0	0	NM	0	0	0
Middle Atlantic	30	36	-15.7%	6	9	20	22	NM	NM	4	3
New Jersey	2	2	7.6%	NM	0	2	2	NM	0	NM	0
New York	13	14	-7.3%	6	9	4	2	NM	NM	2	2
Pennsylvania	15	20	-23.8%	NM	0	14	19	NM	0	NM	0
East North Central	28	33	-15.3%	15	20	12	12	NM	0	1	2
Illinois	4	4	0.8%	0	1	3	3	NM	0	0	0
Indiana	6	10	-38.3%	5	9	0	0	NM	0	1	1
Michigan	6	6	2.6%	6	6	0	NM	0	0	NM	0
Ohio	12	12	1.6%	3	3	8	8	NM	0	NM	0
Wisconsin	0	2	-87.8%	0	2	0	0	NM	0	NM	0
West North Central	21	13	54.3%	18	13	NM	0	NM	0	NM	0
Iowa	8	3	132.5%	8	3	NM	0	NM	0	NM	0
Kansas	2	1	69.2%	2	1	0	0	0	0	0	0
Minnesota	NM	1	NM	NM	1	NM	0	NM	0	NM	0
Missouri	3	5	-28.9%	3	5	NM	0	NM	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	NM	2	NM	NM	2	0	0	NM	0	NM	0
South Dakota	NM	1	NM	NM	1	NM	0	NM	0	0	0
South Atlantic	117	90	30.2%	90	72	18	11	NM	0	NM	6
Delaware	NM	-1	NM	NM	0	NM	-1	0	0	0	0
District of Columbia	NM	0	NM	0	0	0	0	NM	0	0	0
Florida	55	36	53.0%	53	34	NM	1	0	0	NM	1
Georgia	7	4	89.2%	4	2	NM	0	NM	0	NM	2
Maryland	11	8	41.8%	1	0	10	7	NM	0	NM	0
North Carolina	17	10	72.4%	14	8	NM	1	NM	0	NM	NM
South Carolina	5	10	-51.0%	3	8	NM	0	NM	0	2	2
Virginia	13	14	-7.8%	5	10	7	3	NM	0	NM	1
West Virginia	11	10	16.8%	11	10	0	0	0	0	0	0
East South Central	22	14	54.9%	19	11	NM	NM	NM	0	NM	3
Alabama	NM	4	NM	1	2	NM	NM	0	0	NM	2
Kentucky	11	6	91.3%	11	6	0	0	0	0	0	0
Mississippi	2	0	NM	1	0	0	0	0	0	1	0
Tennessee	6	4	52.8%	6	3	NM	0	NM	0	NM	0
West South Central	7	17	-57.6%	4	10	3	6	NM	0	NM	1
Arkansas	NM	5	NM	1	4	0	0	0	0	NM	1
Louisiana	1	2	-64.1%	1	2	0	1	0	0	0	0
Oklahoma	1	1	6.4%	1	1	0	0	NM	0	NM	0
Texas	5	9	-49.6%	2	4	2	5	NM	0	NM	0
Mountain	16	15	6.1%	15	14	1	1	NM	0	NM	0
Arizona	4	3	20.0%	4	3	0	0	NM	0	0	0
Colorado	NM	0	NM	NM	0	0	0	0	0	NM	0
Idaho	NM	0	NM	NM	0	0	0	0	0	0	0
Montana	NM	1	NM	NM	0	1	1	0	0	0	0
Nevada	1	1	-64.4%	0	1	0	1	0	0	0	0
New Mexico	NM	3	NM	NM	3	0	0	0	0	NM	0
Utah	3	2	73.1%	3	2	NM	0	0	0	NM	0
Wyoming	4	5	-14.3%	4	5	0	0	0	0	NM	0
Pacific Contiguous	7	8	-5.7%	3	4	1	3	NM	0	3	1
California	6	6	-5.6%	3	3	NM	3	NM	0	3	0
Oregon	NM	1	NM	0	1	0	0	NM	0	0	0
Washington	NM	1	NM	NM	0	1	0	NM	0	NM	1
Pacific Noncontiguous	629	707	-11.0%	461	529	124	155	NM	0	NM	23
Alaska	67	69	-1.9%	64	64	0	0	NM	0	3	4
Hawaii	562	639	-12.0%	398	465	124	155	0	0	NM	19
U.S. Total	941	945	-0.4%	633	682	236	216	8	6	64	40

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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 1.5.B. Utility Scale Facility Net Generation from Petroleum Liquids

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	471	2,029	-76.8%	49	182	361	1,728	40	79	21	41
Connecticut	81	437	-81.4%	6	8	66	411	NM	10	NM	9
Maine	113	542	-79.1%	NM	0	95	508	NM	2	17	32
Massachusetts	228	767	-70.2%	15	57	193	675	20	35	NM	0
New Hampshire	25	171	-85.3%	18	104	NM	53	NM	15	NM	0
Rhode Island	22	109	-79.4%	9	11	6	82	NM	NM	0	0
Vermont	NM	3	NM	NM	2	0	0	NM	1	0	0
Middle Atlantic	873	2,698	-67.6%	284	813	520	1,754	28	60	41	71
New Jersey	72	301	-76.2%	NM	4	66	291	NM	1	NM	5
New York	578	1,870	-69.1%	281	809	242	951	26	57	29	53
Pennsylvania	223	527	-57.7%	NM	0	212	512	NM	2	10	13
East North Central	442	476	-7.0%	267	298	157	154	4	3	15	21
Illinois	55	44	23.6%	4	6	50	38	1	0	0	0
Indiana	94	139	-32.3%	85	125	NM	0	NM	0	9	14
Michigan	104	95	9.4%	101	91	0	NM	2	2	2	2
Ohio	163	174	-6.3%	55	57	104	112	NM	0	3	4
Wisconsin	26	23	12.7%	23	19	3	3	NM	0	NM	1
West North Central	187	235	-20.7%	178	229	NM	5	1	1	2	1
Iowa	56	46	20.7%	55	46	NM	0	NM	0	NM	0
Kansas	19	37	-49.7%	19	37	0	0	0	0	0	0
Minnesota	25	24	1.1%	18	19	NM	4	1	1	NM	1
Missouri	57	85	-33.2%	57	85	NM	0	NM	0	0	0
Nebraska	6	5	27.6%	6	5	0	0	0	0	0	0
North Dakota	22	22	2.0%	21	21	0	0	NM	0	NM	1
South Dakota	3	17	-82.5%	3	17	NM	0	NM	0	0	0
South Atlantic	1,929	2,690	-28.3%	1,421	1,939	430	647	6	21	72	82
Delaware	51	144	-64.9%	NM	4	48	139	0	0	0	0
District of Columbia	NM	0	NM	0	0	0	0	NM	0	0	0
Florida	650	458	42.0%	627	441	NM	5	0	0	NM	12
Georgia	109	146	-25.5%	54	59	20	47	3	3	31	37
Maryland	171	224	-23.6%	9	10	158	196	NM	16	2	NM
North Carolina	239	398	-39.9%	181	334	52	51	NM	0	NM	12
South Carolina	101	176	-42.7%	86	152	NM	11	NM	0	14	13
Virginia	509	1,028	-50.5%	365	835	138	186	NM	1	NM	6
West Virginia	100	117	-14.3%	96	103	4	13	0	0	0	0
East South Central	246	289	-14.8%	222	261	5	9	NM	0	19	19
Alabama	42	69	-39.0%	22	44	5	9	0	0	NM	16
Kentucky	88	89	-1.7%	88	89	0	0	0	0	0	0
Mississippi	15	13	17.5%	13	11	0	0	0	0	2	2
Tennessee	101	117	-14.0%	99	116	NM	0	NM	0	NM	1
West South Central	123	221	-44.3%	80	132	37	78	NM	1	NM	10
Arkansas	29	49	-40.0%	19	33	8	9	0	0	NM	7
Louisiana	13	68	-81.2%	11	55	2	12	0	0	0	0
Oklahoma	16	8	91.1%	15	7	0	0	NM	0	1	1
Texas	65	96	-32.5%	35	37	28	56	NM	1	NM	1
Mountain	182	176	3.3%	163	161	18	15	NM	NM	NM	1
Arizona	43	41	5.8%	43	41	0	0	NM	0	0	0
Colorado	NM	6	NM	NM	5	0	0	0	NM	NM	0
Idaho	NM	0	NM	NM	0	0	0	0	0	0	0
Montana	15	11	32.9%	NM	0	15	11	0	0	0	0
Nevada	11	14	-23.0%	8	11	3	3	0	0	0	0
New Mexico	41	53	-22.6%	41	53	0	0	0	0	NM	0
Utah	26	16	66.1%	26	15	NM	1	0	0	NM	0
Wyoming	38	35	8.6%	38	35	0	0	0	0	NM	0
Pacific Contiguous	104	95	9.6%	32	35	13	26	NM	1	58	32
California	84	76	11.8%	28	29	5	21	NM	0	51	25
Oregon	3	5	-47.5%	3	5	0	0	NM	0	0	0
Washington	17	14	18.9%	NM	1	8	5	NM	0	7	8
Pacific Noncontiguous	5,913	6,522	-9.3%	4,544	4,968	1,176	1,336	8	7	185	211
Alaska	594	652	-8.8%	557	608	0	0	5	4	32	40
Hawaii	5,319	5,870	-9.4%	3,987	4,361	1,176	1,336	3	3	153	171
U.S. Total	10,470	15,429	-32.1%	7,240	9,018	2,722	5,751	89	171	419	489

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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 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	NM	21	NM	0	0	0	0	0	0	NM	21
New Jersey	0	7	-100.0%	0	0	0	0	0	0	0	7
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	15	NM	0	0	0	0	0	0	NM	15
East North Central	160	150	6.7%	48	29	100	107	0	0	NM	14
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	10	-100.0%	0	10	0	0	0	0	0	0
Michigan	46	34	35.8%	37	18	0	5	0	0	NM	12
Ohio	101	103	-2.0%	0	0	100	102	0	0	NM	1
Wisconsin	12	3	310.4%	11	2	0	0	0	0	1	1
West North Central	NM	3	NM	0	0	0	0	0	1	NM	2
Iowa	NM	3	NM	0	0	0	0	0	1	NM	2
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	95	137	-30.7%	89	126	0	0	0	0	6	11
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	89	126	-29.2%	89	126	0	0	0	0	0	0
Georgia	6	11	-47.8%	0	0	0	0	0	0	6	11
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	84	54	55.3%	84	54	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	84	54	55.3%	84	54	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	218	420	-47.9%	196	401	0	0	0	0	NM	19
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	210	410	-48.7%	196	401	0	0	0	0	NM	9
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	10	NM	0	0	0	0	0	0	NM	10
Mountain	41	43	-3.5%	0	0	41	43	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	41	43	-3.5%	0	0	41	43	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	611	827	-26.1%	418	610	141	149	0	1	NM	67

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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 1.6.B. Utility Scale Facility Net Generation from Petroleum Coke

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
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	221	192	14.7%	0	0	0	0	0	0	221	192
New Jersey	62	60	3.5%	0	0	0	0	0	0	62	60
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	159	133	19.8%	0	0	0	0	0	0	159	133
East North Central	2,026	2,684	-24.5%	1,050	1,463	799	991	0	0	177	230
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	497	881	-43.6%	497	881	0	0	0	0	0	0
Michigan	616	678	-9.1%	483	532	3	21	0	0	131	125
Ohio	809	978	-17.3%	0	0	797	970	0	0	NM	8
Wisconsin	103	146	-29.4%	70	49	0	0	0	0	34	97
West North Central	52	39	33.3%	0	0	0	0	4	7	48	32
Iowa	52	39	33.3%	0	0	0	0	4	7	48	32
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	2,007	1,462	37.3%	1,917	1,370	0	0	0	0	89	92
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,917	1,370	39.9%	1,917	1,370	0	0	0	0	0	0
Georgia	89	92	-2.4%	0	0	0	0	0	0	89	92
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	972	828	17.4%	972	828	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	972	828	17.4%	972	828	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	3,946	3,804	3.7%	3,679	3,523	0	0	0	0	267	281
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	3,844	3,689	4.2%	3,679	3,523	0	0	0	0	165	166
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	102	116	-11.7%	0	0	0	0	0	0	102	116
Mountain	361	403	-10.4%	0	0	361	403	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	361	403	-10.4%	0	0	361	403	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	9,585	9,413	1.8%	7,618	7,184	1,161	1,394	4	7	802	827

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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 1.7.A. Utility Scale Facility Net Generation from Natural Gas by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	3,649	4,773	-23.6%	12	21	3,506	4,567	58	79	72	106
Connecticut	1,382	1,517	-8.9%	0	2	1,331	1,445	NM	34	NM	37
Maine	284	410	-30.9%	0	0	249	354	NM	4	33	52
Massachusetts	1,247	1,884	-33.8%	12	19	1,196	1,815	29	35	NM	14
New Hampshire	333	482	-31.0%	0	0	330	478	NM	2	NM	3
Rhode Island	403	479	-15.8%	0	0	400	474	NM	NM	0	0
Vermont	NM	0	NM	0	0	0	0	NM	0	0	0
Middle Atlantic	12,759	13,192	-3.3%	739	853	11,821	12,082	75	93	124	163
New Jersey	3,685	3,183	15.8%	NM	6	3,646	3,130	NM	18	NM	28
New York	3,898	4,806	-18.9%	732	846	3,084	3,866	56	65	26	28
Pennsylvania	5,177	5,204	-0.5%	NM	0	5,091	5,086	NM	11	78	107
East North Central	7,688	6,737	14.1%	3,068	2,977	4,352	3,505	114	116	154	139
Illinois	1,401	879	59.3%	110	25	1,229	772	30	37	NM	44
Indiana	1,511	1,128	33.9%	1,313	846	140	223	15	16	43	43
Michigan	2,068	1,842	12.3%	640	688	1,335	1,085	53	46	41	23
Ohio	2,045	1,884	8.5%	454	505	1,573	1,363	NM	11	11	5
Wisconsin	662	1,004	-34.0%	552	913	75	61	NM	5	26	24
West North Central	1,257	917	37.0%	1,095	826	82	44	23	19	57	28
Iowa	159	128	24.5%	118	107	NM	0	NM	6	34	15
Kansas	130	39	235.1%	123	38	0	0	0	0	NM	1
Minnesota	445	460	-3.3%	342	434	82	12	NM	7	NM	7
Missouri	354	196	80.4%	346	155	NM	32	7	7	NM	3
Nebraska	53	10	442.9%	52	10	0	0	NM	0	NM	0
North Dakota	58	50	16.1%	56	48	0	0	0	0	NM	1
South Dakota	58	35	67.5%	58	35	0	0	0	0	0	0
South Atlantic	24,367	23,956	1.7%	19,861	19,818	4,087	3,810	37	41	382	287
Delaware	760	464	63.6%	NM	3	658	418	0	0	98	44
District of Columbia	NM	2	NM	0	0	0	0	NM	2	0	0
Florida	13,194	13,226	-0.2%	12,282	12,181	802	920	NM	3	105	122
Georgia	3,673	4,190	-12.3%	3,028	2,945	582	1,187	0	0	63	57
Maryland	390	344	13.2%	0	0	358	304	NM	35	NM	5
North Carolina	2,380	2,540	-6.3%	1,869	2,273	493	250	1	1	NM	16
South Carolina	1,398	1,520	-8.1%	1,236	1,442	153	75	NM	0	8	3
Virginia	2,373	1,511	57.0%	1,434	972	892	499	NM	0	46	40
West Virginia	197	159	24.2%	8	2	148	157	0	0	40	0
East South Central	9,460	9,017	4.9%	6,152	5,435	3,136	3,407	NM	10	162	165
Alabama	4,416	4,439	-0.5%	1,209	1,103	3,131	3,255	0	0	76	80
Kentucky	600	781	-23.2%	580	676	5	77	0	0	NM	28
Mississippi	3,622	3,152	14.9%	3,585	3,041	1	75	NM	0	36	35
Tennessee	822	645	27.4%	778	614	0	0	NM	10	36	21
West South Central	25,059	27,353	-8.4%	7,324	7,876	12,094	14,197	83	60	5,559	5,220
Arkansas	1,239	547	126.4%	533	154	683	367	NM	0	22	25
Louisiana	4,823	5,726	-15.8%	2,370	3,102	290	464	NM	15	2,150	2,145
Oklahoma	2,327	2,209	5.3%	1,464	1,461	847	732	NM	0	NM	16
Texas	16,670	18,870	-11.7%	2,957	3,158	10,274	12,633	68	44	3,371	3,034
Mountain	7,338	8,781	-16.4%	4,924	6,504	2,254	2,121	33	37	126	118
Arizona	2,750	3,359	-18.1%	1,274	2,056	1,465	1,290	10	13	0	0
Colorado	754	1,069	-29.4%	645	891	106	177	2	0	NM	2
Idaho	190	350	-45.7%	52	155	132	187	0	3	6	5
Montana	NM	47	NM	NM	42	NM	5	0	0	0	0
Nevada	2,104	2,536	-17.0%	1,894	2,313	178	190	NM	6	26	27
New Mexico	853	714	19.5%	491	440	351	265	9	9	NM	0
Utah	586	638	-8.1%	525	589	NM	8	NM	6	37	35
Wyoming	63	68	-7.8%	NM	19	NM	0	0	0	54	50
Pacific Contiguous	10,896	15,076	-27.7%	4,195	5,024	5,675	8,755	151	187	874	1,109
California	9,097	11,947	-23.9%	3,105	3,468	4,983	7,200	145	180	864	1,099
Oregon	1,142	1,598	-28.6%	666	678	467	910	NM	5	NM	6
Washington	657	1,530	-57.1%	424	878	226	646	NM	2	6	4
Pacific Noncontiguous	162	204	-20.3%	157	199	0	0	NM	0	NM	5
Alaska	162	204	-20.3%	157	199	0	0	NM	0	NM	5
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	102,635	110,005	-6.7%	47,527	49,533	47,008	52,489	583	643	7,517	7,340

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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 1.7.B. Utility Scale Facility Net Generation from Natural Gas

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers		□		□	
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	46,772	46,100	1.5%	274	374	44,695	44,045	806	997	881	881
Connecticut	14,988	14,238	5.3%	2	7	14,289	13,521	317	316	380	395
Maine	3,351	2,411	39.0%	0	0	2,887	2,062	21	22	444	327
Massachusetts	18,943	18,643	1.6%	235	347	18,152	17,765	407	399	148	132
New Hampshire	4,001	5,140	-22.2%	36	20	3,923	5,074	NM	19	25	27
Rhode Island	5,488	5,666	-3.1%	0	0	5,445	5,623	43	43	0	0
Vermont	NM	1	NM	1	1	0	0	NM	0	0	0
Middle Atlantic	143,919	129,692	11.0%	10,468	10,324	130,921	116,937	954	909	1,575	1,522
New Jersey	37,899	30,837	22.9%	NM	63	37,369	30,316	173	172	282	286
New York	49,082	49,216	-0.3%	10,386	10,258	37,740	38,087	666	634	289	237
Pennsylvania	56,938	49,639	14.7%	NM	3	55,812	48,534	114	103	1,004	999
East North Central	96,133	72,889	31.9%	42,087	31,991	51,090	38,484	1,242	1,110	1,714	1,304
Illinois	15,412	8,855	74.1%	1,614	539	13,038	7,551	305	368	455	396
Indiana	16,590	13,091	26.7%	13,236	10,621	2,747	1,891	163	137	444	441
Michigan	25,783	16,354	57.7%	9,031	5,095	15,730	10,584	554	454	468	221
Ohio	24,347	23,527	3.5%	5,701	5,582	18,471	17,785	113	91	62	69
Wisconsin	14,001	11,062	26.6%	12,506	10,154	1,104	673	106	58	285	177
West North Central	20,585	14,953	37.7%	16,944	12,522	2,873	1,943	287	198	482	291
Iowa	2,849	2,067	37.8%	2,572	1,890	NM	0	84	36	192	141
Kansas	1,904	1,082	75.9%	1,825	1,050	0	0	0	0	79	32
Minnesota	8,154	6,118	33.3%	6,541	5,225	1,350	722	113	88	150	84
Missouri	5,397	3,967	36.0%	3,766	2,660	1,522	1,221	88	73	NM	13
Nebraska	620	406	52.8%	601	405	0	0	NM	1	17	0
North Dakota	774	680	13.8%	751	660	0	0	0	0	NM	20
South Dakota	887	633	40.1%	887	633	0	0	0	0	0	0
South Atlantic	277,172	257,003	7.8%	224,333	212,098	48,964	41,357	537	457	3,338	3,091
Delaware	6,930	5,939	16.7%	NM	34	6,042	5,100	0	0	842	805
District of Columbia	46	19	142.5%	0	0	0	0	46	19	0	0
Florida	137,120	131,575	4.2%	125,209	123,379	10,734	7,018	46	28	1,132	1,150
Georgia	45,631	42,398	7.6%	35,017	31,242	10,156	10,667	0	0	457	488
Maryland	5,271	3,885	35.7%	0	0	4,779	3,440	421	398	71	48
North Carolina	33,293	30,668	8.6%	28,631	27,144	4,488	3,374	8	6	165	144
South Carolina	13,632	13,499	1.0%	11,204	11,902	2,346	1,564	NM	1	72	31
Virginia	34,156	27,846	22.7%	24,097	18,284	9,610	9,132	NM	5	444	425
West Virginia	1,093	1,175	-7.0%	127	114	809	1,061	0	0	156	0
East South Central	109,261	97,362	12.2%	69,953	58,492	37,485	37,158	129	125	1,694	1,586
Alabama	48,995	46,759	4.8%	14,219	12,144	33,911	33,761	0	0	866	854
Kentucky	7,108	4,814	47.7%	6,439	4,043	478	574	0	0	191	198
Mississippi	43,431	38,039	14.2%	39,980	34,867	3,096	2,823	NM	6	347	343
Tennessee	9,726	7,749	25.5%	9,316	7,438	0	0	120	119	290	191
West South Central	302,059	298,755	1.1%	95,621	88,920	149,420	155,835	789	708	56,229	53,293
Arkansas	15,785	13,217	19.4%	6,397	3,825	9,148	9,127	NM	2	238	264
Louisiana	56,858	54,386	4.5%	30,566	31,143	4,434	2,932	142	145	21,716	20,167
Oklahoma	31,294	28,257	10.7%	20,940	17,959	10,193	10,160	NM	0	146	137
Texas	198,122	202,895	-2.4%	37,719	35,993	125,644	133,616	630	562	34,129	32,724
Mountain	87,039	81,095	7.3%	63,861	57,817	21,683	21,783	309	348	1,186	1,147
Arizona	31,336	28,956	8.2%	17,628	15,613	13,606	13,231	103	112	0	0
Colorado	11,015	9,229	19.4%	9,365	7,286	1,632	1,924	2	NM	NM	15
Idaho	2,938	3,074	-4.4%	1,691	1,772	1,177	1,252	0	9	70	41
Montana	620	473	31.0%	552	422	68	51	0	0	0	0
Nevada	24,430	24,259	0.7%	22,391	22,123	1,723	1,821	52	59	265	256
New Mexico	8,644	7,796	10.9%	5,214	4,355	3,328	3,340	91	101	NM	1
Utah	7,424	6,718	10.5%	6,856	6,132	148	162	62	64	359	359
Wyoming	632	590	7.1%	165	114	NM	1	0	0	466	475
Pacific Contiguous	104,956	121,052	-13.3%	39,225	42,833	54,989	67,079	1,503	1,616	9,239	9,524
California	82,049	97,854	-16.2%	27,538	31,099	44,005	55,753	1,430	1,560	9,075	9,442
Oregon	13,300	12,853	3.5%	6,002	5,233	7,152	7,540	52	41	94	39
Washington	9,607	10,346	-7.1%	5,685	6,501	3,831	3,786	NM	15	70	44
Pacific Noncontiguous	1,976	2,568	-23.1%	1,912	2,510	0	0	2	0	61	59
Alaska	1,976	2,568	-23.1%	1,912	2,510	0	0	2	0	61	59
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,189,871	1,121,469	6.1%	564,679	517,881	542,118	524,621	6,557	6,270	76,516	72,697

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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 1.8.A. Utility Scale Facility Net Generation from Other Gases
by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	44	52	-15.8%	0	0	NM	0	0	0	44	52
New Jersey	NM	19	NM	0	0	0	0	0	0	NM	19
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	33	33	0.9%	0	0	NM	0	0	0	33	33
East North Central	293	282	4.2%	6	12	122	64	0	0	165	205
Illinois	NM	7	NM	0	0	2	0	0	0	NM	7
Indiana	144	179	-19.7%	0	1	0	0	0	0	144	178
Michigan	95	11	786.9%	6	11	89	0	0	0	0	0
Ohio	NM	84	NM	0	0	NM	64	0	0	NM	20
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	NM	1	NM	0	0	0	0	0	0	NM	1
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	NM	1	NM	0	0	0	0	0	0	NM	1
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	20	12	71.6%	0	0	0	0	0	0	20	12
Delaware	17	9	87.7%	0	0	0	0	0	0	17	9
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-28.7%	0	0	0	0	0	0	0	1
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	2	2	23.4%	0	0	0	0	0	0	2	2
East South Central	NM	2	NM	0	0	0	0	0	0	NM	2
Alabama	NM	0	NM	0	0	0	0	0	0	NM	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	2	-4.3%	0	0	0	0	0	0	1	2
West South Central	342	383	-10.7%	0	0	82	116	0	0	259	267
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	156	178	-12.2%	0	0	0	0	0	0	156	178
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	186	205	-9.4%	0	0	82	116	0	0	103	89
Mountain	36	40	-9.7%	0	0	0	2	0	0	36	38
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	1	-100.0%	0	0	0	1	0	0	0	0
Nevada	0	1	-100.0%	0	0	0	1	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	NM	1	NM	0	0	0	0	0	0	NM	1
Wyoming	36	37	-3.7%	0	0	0	0	0	0	36	37
Pacific Contiguous	147	132	10.7%	0	0	34	34	0	0	112	98
California	112	98	14.2%	0	0	0	0	0	0	112	98
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	34	34	0.8%	0	0	34	34	0	0	0	0
Pacific Noncontiguous	NM	3	NM	0	0	0	0	0	0	NM	3
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	NM	3	NM	0	0	0	0	0	0	NM	3
U.S. Total	891	906	-1.7%	6	12	239	216	0	0	646	678

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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 1.8.B. Utility Scale Facility Net Generation from Other Gases

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
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	622	543	14.6%	0	0	NM	0	0	0	622	543
New Jersey	199	185	7.6%	0	0	0	0	0	0	199	185
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	423	358	18.2%	0	0	NM	0	0	0	423	358
East North Central	4,187	4,132	1.3%	119	196	1,843	1,622	0	0	2,224	2,314
Illinois	252	222	13.7%	0	0	6	1	0	0	247	221
Indiana	1,812	1,941	-6.7%	NM	18	0	0	0	0	1,794	1,924
Michigan	1,317	1,176	12.0%	102	178	1,215	997	0	0	0	0
Ohio	806	793	1.7%	0	0	623	624	0	0	184	169
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	41	36	12.9%	0	0	0	0	0	0	41	36
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	41	36	12.9%	0	0	0	0	0	0	41	36
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	260	217	19.7%	0	0	0	0	0	0	260	217
Delaware	235	189	24.8%	0	0	0	0	0	0	235	189
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4	4	10.0%	0	0	0	0	0	0	4	4
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	20	24	-18.2%	0	0	0	0	0	0	20	24
East South Central	34	46	-27.0%	0	0	0	0	0	0	34	46
Alabama	21	36	-41.4%	0	0	0	0	0	0	21	36
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	13	10	24.3%	0	0	0	0	0	0	13	10
West South Central	3,945	4,114	-4.1%	0	0	1,071	1,017	0	0	2,874	3,097
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,774	2,021	-12.2%	0	0	0	0	0	0	1,774	2,021
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,171	2,093	3.7%	0	0	1,071	1,017	0	0	1,099	1,076
Mountain	299	357	-16.2%	0	0	7	19	0	0	292	337
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	6	14	-54.7%	0	0	6	14	0	0	0	0
Nevada	1	5	-85.5%	0	0	1	5	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	NM	7	NM	0	0	0	0	0	0	NM	7
Wyoming	285	331	-13.7%	0	0	0	0	0	0	285	331
Pacific Contiguous	1,564	1,618	-3.4%	0	0	337	323	0	0	1,226	1,295
California	1,226	1,295	-5.3%	0	0	0	0	0	0	1,226	1,295
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	337	323	4.4%	0	0	337	323	0	0	0	0
Pacific Noncontiguous	36	42	-15.3%	0	0	0	0	0	0	36	42
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	36	42	-15.3%	0	0	0	0	0	0	36	42
U.S. Total	10,986	11,105	-1.1%	119	196	3,259	2,981	0	0	7,608	7,928

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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 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	2,960	1,461	102.6%	0	0	2,960	1,461	0	0	0	0
Connecticut	1,542	963	60.1%	0	0	1,542	963	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	490	498	-1.5%	0	0	490	498	0	0	0	0
New Hampshire	928	0	NM	0	0	928	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	12,589	12,702	-0.9%	0	0	12,589	12,702	0	0	0	0
New Jersey	2,385	2,777	-14.1%	0	0	2,385	2,777	0	0	0	0
New York	3,828	3,831	-0.1%	0	0	3,828	3,831	0	0	0	0
Pennsylvania	6,377	6,093	4.6%	0	0	6,377	6,093	0	0	0	0
East North Central	12,545	11,940	5.1%	1,704	1,620	10,841	10,320	0	0	0	0
Illinois	7,758	8,013	-3.2%	0	0	7,758	8,013	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,299	1,827	25.8%	1,704	1,620	595	207	0	0	0	0
Ohio	1,596	1,628	-2.0%	0	0	1,596	1,628	0	0	0	0
Wisconsin	892	471	89.1%	0	0	892	471	0	0	0	0
West North Central	2,209	4,331	-49.0%	2,189	3,885	21	446	0	0	0	0
Iowa	21	446	-95.3%	0	0	21	446	0	0	0	0
Kansas	-5	904	-100.6%	-5	904	0	0	0	0	0	0
Minnesota	1,046	1,103	-5.1%	1,046	1,103	0	0	0	0	0	0
Missouri	906	913	-0.8%	906	913	0	0	0	0	0	0
Nebraska	242	965	-74.9%	242	965	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	15,943	15,025	6.1%	14,638	13,708	1,305	1,317	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	1,704	1,804	-5.6%	1,704	1,804	0	0	0	0	0	0
Georgia	3,068	2,353	30.4%	3,068	2,353	0	0	0	0	0	0
Maryland	1,305	1,317	-0.9%	0	0	1,305	1,317	0	0	0	0
North Carolina	3,231	3,551	-9.0%	3,231	3,551	0	0	0	0	0	0
South Carolina	4,611	3,937	17.1%	4,611	3,937	0	0	0	0	0	0
Virginia	2,024	2,062	-1.9%	2,024	2,062	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,384	6,729	-20.0%	5,384	6,729	0	0	0	0	0	0
Alabama	2,287	3,823	-40.2%	2,287	3,823	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	-14	1,049	-101.3%	-14	1,049	0	0	0	0	0	0
Tennessee	3,111	1,856	67.6%	3,111	1,856	0	0	0	0	0	0
West South Central	4,461	4,381	1.8%	1,459	1,942	3,002	2,439	0	0	0	0
Arkansas	78	627	-87.5%	78	627	0	0	0	0	0	0
Louisiana	1,381	1,315	5.0%	1,381	1,315	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,002	2,439	23.1%	0	0	3,002	2,439	0	0	0	0
Mountain	2,196	2,245	-2.2%	2,196	2,245	0	0	0	0	0	0
Arizona	2,196	2,245	-2.2%	2,196	2,245	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	2,446	1,758	39.1%	2,446	1,758	0	0	0	0	0	0
California	1,605	905	77.4%	1,605	905	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	841	853	-1.4%	841	853	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	60,733	60,571	0.3%	30,016	31,886	30,717	28,685	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.9.B. Utility Scale Facility Net Generation from Nuclear Energy

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	27,001	26,670	1.2%	0	0	27,001	26,670	0	0	0	0
Connecticut	13,519	14,576	-7.2%	0	0	13,519	14,576	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	4,551	4,003	13.7%	0	0	4,551	4,003	0	0	0	0
New Hampshire	8,930	8,091	10.4%	0	0	8,930	8,091	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	127,389	131,817	-3.4%	0	0	127,389	131,817	0	0	0	0
New Jersey	24,310	28,144	-13.6%	0	0	24,310	28,144	0	0	0	0
New York	34,577	36,916	-6.3%	0	0	34,577	36,916	0	0	0	0
Pennsylvania	68,503	66,758	2.6%	0	0	68,503	66,758	0	0	0	0
East North Central	130,528	128,014	2.0%	21,495	19,757	109,033	108,256	0	0	0	0
Illinois	81,177	80,647	0.7%	0	0	81,177	80,647	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	27,354	24,888	9.9%	21,495	19,757	5,859	5,131	0	0	0	0
Ohio	13,612	14,167	-3.9%	0	0	13,612	14,167	0	0	0	0
Wisconsin	8,386	8,311	0.9%	0	0	8,386	8,311	0	0	0	0
West North Central	38,436	38,569	-0.3%	34,610	34,221	3,825	4,348	0	0	0	0
Iowa	3,825	4,348	-12.0%	0	0	3,825	4,348	0	0	0	0
Kansas	7,088	6,840	3.6%	7,088	6,840	0	0	0	0	0	0
Minnesota	11,547	10,321	11.9%	11,547	10,321	0	0	0	0	0	0
Missouri	7,623	8,633	-11.7%	7,623	8,633	0	0	0	0	0	0
Nebraska	8,353	8,427	-0.9%	8,353	8,427	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	171,246	167,346	2.3%	159,061	155,196	12,185	12,150	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	24,171	23,470	3.0%	24,171	23,470	0	0	0	0	0	0
Georgia	28,419	27,790	2.3%	28,419	27,790	0	0	0	0	0	0
Maryland	12,185	12,150	0.3%	0	0	12,185	12,150	0	0	0	0
North Carolina	35,458	34,576	2.5%	35,458	34,576	0	0	0	0	0	0
South Carolina	46,454	45,433	2.2%	46,454	45,433	0	0	0	0	0	0
Virginia	24,559	23,927	2.6%	24,559	23,927	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	62,722	66,170	-5.2%	62,722	66,170	0	0	0	0	0	0
Alabama	33,011	35,000	-5.7%	33,011	35,000	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	5,924	9,718	-39.0%	5,924	9,718	0	0	0	0	0	0
Tennessee	23,788	21,452	10.9%	23,788	21,452	0	0	0	0	0	0
West South Central	60,652	59,444	2.0%	25,678	25,337	34,974	34,107	0	0	0	0
Arkansas	11,663	11,581	0.7%	11,663	11,581	0	0	0	0	0	0
Louisiana	14,015	13,756	1.9%	14,015	13,756	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	34,974	34,107	2.5%	0	0	34,974	34,107	0	0	0	0
Mountain	26,734	27,202	-1.7%	26,734	27,202	0	0	0	0	0	0
Arizona	26,734	27,202	-1.7%	26,734	27,202	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	23,746	22,049	7.7%	23,746	22,049	0	0	0	0	0	0
California	15,592	15,552	0.3%	15,592	15,552	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	8,154	6,497	25.5%	8,154	6,497	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	668,454	667,280	0.2%	354,046	349,932	314,408	317,349	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	360	444	-18.8%	NM	53	296	359	NM	0	NM	31
Connecticut	NM	20	NM	NM	2	NM	18	0	0	0	0
Maine	189	243	-22.0%	0	0	171	212	0	0	NM	31
Massachusetts	NM	42	NM	NM	10	NM	31	NM	0	NM	0
New Hampshire	47	78	-39.8%	NM	20	NM	58	0	0	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	0	0
Vermont	NM	61	NM	NM	22	NM	40	0	0	0	0
Middle Atlantic	2,133	2,289	-6.8%	1,798	1,882	331	401	NM	0	NM	5
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	2,008	2,184	-8.0%	1,794	1,879	210	299	NM	0	NM	5
Pennsylvania	123	104	18.6%	NM	3	120	101	0	0	0	0
East North Central	353	420	-16.1%	308	361	NM	41	NM	0	NM	19
Illinois	NM	6	NM	NM	2	NM	4	NM	0	0	0
Indiana	35	45	-21.0%	35	45	0	0	0	0	0	0
Michigan	102	76	34.4%	94	70	NM	4	0	0	NM	2
Ohio	43	49	-11.0%	30	26	NM	22	0	0	0	0
Wisconsin	163	245	-33.6%	144	218	NM	11	0	0	NM	17
West North Central	708	815	-13.1%	683	784	NM	19	0	0	NM	11
Iowa	66	63	4.2%	66	63	NM	0	0	0	0	0
Kansas	NM	1	NM	0	0	NM	1	0	0	0	0
Minnesota	62	82	-23.8%	39	53	NM	18	0	0	NM	11
Missouri	55	30	81.3%	55	30	0	0	0	0	0	0
Nebraska	117	111	5.2%	117	111	0	0	0	0	0	0
North Dakota	122	124	-1.7%	122	124	0	0	0	0	0	0
South Dakota	285	403	-29.3%	285	403	0	0	0	0	0	0
South Atlantic	924	1,342	-31.2%	788	1,159	104	141	NM	1	31	42
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	NM	22	NM	NM	22	0	0	0	0	0	0
Georgia	190	206	-7.7%	188	204	NM	1	0	0	NM	1
Maryland	63	98	-35.4%	0	0	63	98	0	0	0	0
North Carolina	298	526	-43.3%	295	520	NM	5	NM	1	NM	0
South Carolina	131	258	-49.4%	127	252	NM	7	NM	0	0	0
Virginia	130	138	-5.7%	125	128	NM	9	0	0	NM	1
West Virginia	97	94	2.9%	NM	33	30	22	0	0	28	39
East South Central	971	1,753	-44.6%	971	1,752	NM	1	0	0	0	0
Alabama	305	655	-53.4%	305	655	0	0	0	0	0	0
Kentucky	205	225	-8.6%	205	224	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	461	873	-47.2%	461	873	0	0	0	0	0	0
West South Central	543	382	42.2%	447	334	96	47	0	0	0	0
Arkansas	227	291	-22.1%	224	287	NM	NM	0	0	0	0
Louisiana	90	42	112.9%	0	0	90	42	0	0	0	0
Oklahoma	182	24	643.3%	182	24	0	0	0	0	0	0
Texas	NM	23	NM	NM	23	NM	1	0	0	0	0
Mountain	1,938	1,695	14.3%	1,876	1,646	62	49	NM	1	0	0
Arizona	444	440	0.9%	444	440	0	0	0	0	0	0
Colorado	124	131	-5.6%	110	116	NM	15	NM	1	0	0
Idaho	534	390	37.0%	497	365	37	25	0	0	0	0
Montana	635	525	20.8%	625	518	NM	8	0	0	0	0
Nevada	113	136	-16.7%	112	135	NM	1	0	0	0	0
New Mexico	NM	6	NM	NM	6	0	0	0	0	0	0
Utah	53	43	23.7%	53	42	NM	0	0	0	0	0
Wyoming	27	25	7.4%	26	25	NM	0	0	0	0	0
Pacific Contiguous	9,170	7,342	24.9%	9,046	7,269	122	73	NM	0	0	0
California	1,731	905	91.3%	1,645	864	85	41	NM	0	0	0
Oregon	2,345	2,014	16.4%	2,327	1,997	NM	17	0	0	0	0
Washington	5,093	4,423	15.2%	5,074	4,408	19	14	0	0	0	0
Pacific Noncontiguous	150	149	0.6%	140	139	7	4	0	0	NM	6
Alaska	138	136	1.4%	138	136	0	0	0	0	0	0
Hawaii	12	13	-7.7%	NM	2	7	4	0	0	NM	6
U.S. Total	17,249	16,630	3.7%	16,101	15,378	1,065	1,135	NM	3	80	114

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 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.10.B. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	5,356	5,726	-6.5%	766	754	4,300	4,640	NM	4	285	327
Connecticut	256	252	1.5%	NM	20	236	232	0	0	0	0
Maine	2,555	2,846	-10.3%	0	0	2,274	2,523	0	0	281	324
Massachusetts	664	658	1.0%	177	160	479	490	NM	4	NM	4
New Hampshire	955	1,046	-8.7%	237	251	718	796	0	0	0	0
Rhode Island	NM	3	NM	0	0	NM	3	0	0	0	0
Vermont	923	921	0.2%	332	324	591	597	0	0	0	0
Middle Atlantic	24,335	23,588	3.2%	19,300	18,366	4,984	5,168	NM	4	NM	51
New Jersey	NM	8	NM	0	0	NM	8	0	0	0	0
New York	22,281	21,404	4.1%	19,248	18,313	2,981	3,036	NM	4	NM	51
Pennsylvania	2,035	2,176	-6.5%	52	52	1,984	2,123	0	0	0	0
East North Central	4,135	3,620	14.2%	3,580	3,116	395	357	NM	1	159	146
Illinois	110	101	9.0%	NM	34	66	65	NM	1	0	0
Indiana	347	296	17.2%	347	296	0	0	0	0	0	0
Michigan	1,278	1,128	13.3%	1,176	1,043	78	62	0	0	NM	23
Ohio	431	326	32.3%	266	175	166	151	0	0	0	0
Wisconsin	1,969	1,769	11.3%	1,749	1,568	86	78	0	0	134	123
West North Central	9,235	10,254	-9.9%	8,949	10,007	180	161	0	0	106	86
Iowa	774	824	-6.1%	769	819	NM	5	0	0	0	0
Kansas	NM	16	NM	0	0	NM	16	0	0	0	0
Minnesota	722	641	12.8%	458	415	159	139	0	0	106	86
Missouri	1,169	1,269	-7.9%	1,169	1,269	0	0	0	0	0	0
Nebraska	1,409	1,446	-2.6%	1,409	1,446	0	0	0	0	0	0
North Dakota	1,646	1,840	-10.5%	1,646	1,840	0	0	0	0	0	0
South Dakota	3,498	4,218	-17.0%	3,498	4,218	0	0	0	0	0	0
South Atlantic	12,969	10,684	21.4%	10,860	8,420	1,633	1,776	NM	10	463	479
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	189	179	5.6%	189	179	0	0	0	0	0	0
Georgia	2,712	2,214	22.5%	2,686	2,191	NM	7	0	0	NM	16
Maryland	1,201	1,368	-12.2%	0	0	1,201	1,368	0	0	0	0
North Carolina	4,112	3,298	24.7%	4,059	3,259	NM	30	NM	8	NM	0
South Carolina	2,175	1,586	37.1%	2,117	1,544	55	40	NM	1	0	0
Virginia	1,394	922	51.2%	1,325	853	59	59	0	0	NM	10
West Virginia	1,187	1,118	6.2%	484	393	272	271	0	0	431	454
East South Central	16,416	17,615	-6.8%	16,409	17,608	NM	7	0	0	0	0
Alabama	6,971	7,365	-5.3%	6,971	7,365	0	0	0	0	0	0
Kentucky	2,954	2,781	6.2%	2,947	2,774	NM	7	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	6,491	7,469	-13.1%	6,491	7,469	0	0	0	0	0	0
West South Central	7,408	6,707	10.5%	6,353	5,797	1,055	910	0	0	0	0
Arkansas	3,155	2,976	6.0%	3,113	2,936	NM	40	0	0	0	0
Louisiana	984	838	17.4%	0	0	984	838	0	0	0	0
Oklahoma	2,246	2,085	7.7%	2,246	2,085	0	0	0	0	0	0
Texas	1,023	808	26.6%	994	776	NM	32	0	0	0	0
Mountain	27,136	26,735	1.5%	26,077	25,734	1,051	995	NM	6	0	0
Arizona	6,097	5,584	9.2%	6,097	5,584	0	0	0	0	0	0
Colorado	1,660	1,422	16.7%	1,485	1,255	167	162	NM	6	0	0
Idaho	8,167	7,852	4.0%	7,435	7,170	732	682	0	0	0	0
Montana	7,981	8,396	-4.9%	7,861	8,274	120	121	0	0	0	0
Nevada	1,499	1,939	-22.7%	1,482	1,926	NM	13	0	0	0	0
New Mexico	126	86	46.3%	126	86	0	0	0	0	0	0
Utah	680	664	2.3%	672	657	NM	8	0	0	0	0
Wyoming	927	791	17.1%	918	782	NM	9	0	0	0	0
Pacific Contiguous	116,060	100,340	15.7%	114,293	99,405	1,746	932	NM	3	0	0
California	24,965	12,308	102.8%	23,675	11,805	1,270	500	NM	3	0	0
Oregon	27,780	25,896	7.3%	27,553	25,701	227	196	0	0	0	0
Washington	63,315	62,135	1.9%	63,065	61,899	249	236	0	0	0	0
Pacific Noncontiguous	1,355	1,309	3.5%	1,279	1,237	27	30	0	0	NM	42
Alaska	1,261	1,221	3.3%	1,261	1,221	0	0	0	0	0	0
Hawaii	93	88	6.5%	NM	16	27	30	0	0	NM	42
U.S. Total	224,406	206,577	8.6%	207,867	190,443	15,378	14,974	51	28	1,109	1,132

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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 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	792	850	-6.8%	72	89	632	663	12	15	75	83
Connecticut	64	69	-7.5%	NM	0	64	69	0	0	0	0
Maine	310	360	-13.9%	0	0	228	270	7	8	75	82
Massachusetts	172	165	4.0%	7	8	162	153	NM	3	NM	0
New Hampshire	164	159	2.8%	31	31	131	125	NM	3	0	0
Rhode Island	20	16	22.3%	0	0	19	16	NM	1	0	0
Vermont	63	81	-21.9%	34	50	28	31	NM	0	0	0
Middle Atlantic	1,195	1,251	-4.5%	9	5	1,081	1,128	47	55	58	62
New Jersey	152	144	5.2%	9	5	116	114	27	24	NM	0
New York	529	589	-10.2%	0	0	497	555	16	20	16	14
Pennsylvania	514	518	-0.7%	0	0	468	459	5	11	42	48
East North Central	2,524	3,012	-16.2%	293	396	2,080	2,456	19	25	132	135
Illinois	1,011	1,219	-17.1%	NM	3	1,008	1,215	NM	1	0	0
Indiana	521	568	-8.4%	31	27	483	533	NM	2	5	6
Michigan	597	737	-19.1%	163	220	365	444	13	18	55	55
Ohio	168	203	-17.3%	NM	2	139	168	NM	1	26	32
Wisconsin	227	283	-19.9%	94	143	85	96	NM	3	45	41
West North Central	5,810	4,970	16.9%	1,959	1,789	3,778	3,108	11	12	62	60
Iowa	1,814	1,715	5.8%	1,161	1,026	645	680	NM	3	5	6
Kansas	1,402	884	58.6%	75	66	1,326	819	0	0	NM	0
Minnesota	1,128	1,052	7.2%	266	278	803	716	4	4	54	54
Missouri	113	97	16.1%	NM	3	106	91	3	3	NM	0
Nebraska	342	275	24.2%	25	23	316	250	NM	1	0	0
North Dakota	730	702	4.0%	341	304	388	398	0	0	NM	0
South Dakota	282	245	15.0%	87	90	195	156	0	0	0	0
South Atlantic	2,047	1,787	14.6%	138	95	1,032	787	39	38	838	867
Delaware	11	11	2.0%	NM	0	9	8	NM	1	NM	1
District of Columbia	0	5	-100.0%	0	0	0	5	0	0	0	0
Florida	376	412	-8.8%	18	18	204	202	NM	4	150	188
Georgia	476	378	25.7%	15	0	153	46	NM	1	307	332
Maryland	111	93	18.7%	NM	1	97	85	NM	2	11	5
North Carolina	475	309	53.7%	19	0	332	195	15	11	109	103
South Carolina	186	155	19.8%	24	36	32	28	0	0	131	91
Virginia	282	301	-6.4%	60	39	76	96	16	19	129	147
West Virginia	131	122	6.7%	0	0	131	122	0	0	0	0
East South Central	503	517	-2.7%	9	7	53	43	NM	0	441	467
Alabama	248	269	-7.5%	0	0	36	25	0	0	213	244
Kentucky	33	26	29.2%	9	7	NM	1	0	0	24	18
Mississippi	127	130	-1.8%	0	0	NM	1	0	0	126	129
Tennessee	95	93	1.3%	0	0	16	16	NM	0	78	77
West South Central	8,113	5,221	55.4%	198	128	7,479	4,693	7	5	429	395
Arkansas	121	119	2.1%	0	0	11	5	NM	0	110	114
Louisiana	228	222	2.3%	0	0	8	8	0	0	220	214
Oklahoma	2,086	1,091	91.2%	172	91	1,890	970	0	0	24	30
Texas	5,678	3,789	49.9%	26	37	5,570	3,710	7	4	74	37
Mountain	3,296	2,411	36.7%	320	247	2,934	2,116	11	9	31	39
Arizona	369	319	16.0%	41	42	327	275	2	2	0	0
Colorado	863	693	24.5%	9	10	852	682	2	1	NM	0
Idaho	234	244	-4.3%	NM	1	203	206	NM	1	29	37
Montana	154	167	-8.1%	16	20	136	146	0	0	NM	2
Nevada	578	416	39.0%	NM	0	570	412	6	4	NM	0
New Mexico	406	207	96.5%	19	11	386	195	NM	0	0	0
Utah	266	80	230.8%	22	24	243	55	NM	1	0	0
Wyoming	425	284	49.4%	208	138	217	146	0	0	0	0
Pacific Contiguous	5,424	4,585	18.3%	636	605	4,505	3,683	80	90	203	207
California	4,112	3,273	25.6%	178	153	3,812	3,001	77	87	44	32
Oregon	532	550	-3.3%	68	88	425	410	NM	2	37	50
Washington	781	763	2.4%	390	363	268	272	NM	1	122	126
Pacific Noncontiguous	152	104	46.5%	15	14	107	64	24	17	7	8
Alaska	18	15	21.1%	9	7	5	4	NM	4	NM	0
Hawaii	134	89	50.8%	6	7	102	61	20	13	7	8
U.S. Total	29,857	24,708	20.8%	3,649	3,375	23,680	18,743	251	266	2,277	2,324

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 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.11.B. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	8,730	8,388	4.1%	731	732	6,956	6,452	137	139	907	1,065
Connecticut	745	661	12.7%	NM	0	741	657	0	4	0	0
Maine	3,605	3,624	-0.5%	0	0	2,627	2,486	74	75	904	1,063
Massachusetts	1,734	1,528	13.5%	65	61	1,636	1,441	30	24	NM	2
New Hampshire	1,749	1,690	3.5%	254	266	1,470	1,394	25	30	0	0
Rhode Island	206	197	4.6%	0	0	200	191	6	5	0	0
Vermont	692	688	0.5%	409	405	282	282	NM	2	0	0
Middle Atlantic	11,330	11,124	1.9%	97	57	10,063	9,860	547	570	623	636
New Jersey	1,540	1,360	13.2%	97	57	1,162	1,039	279	262	NM	1
New York	5,084	5,095	-0.2%	0	0	4,736	4,743	178	176	170	177
Pennsylvania	4,705	4,668	0.8%	0	0	4,164	4,078	90	133	451	457
East North Central	23,056	22,461	2.7%	2,847	2,919	18,682	17,906	185	230	1,342	1,406
Illinois	8,899	8,531	4.3%	31	27	8,864	8,500	NM	4	0	0
Indiana	4,495	3,889	15.6%	300	257	4,123	3,554	16	18	57	60
Michigan	5,655	5,853	-3.4%	1,489	1,558	3,487	3,564	123	169	556	563
Ohio	1,663	1,638	1.5%	25	22	1,367	1,314	13	9	258	293
Wisconsin	2,344	2,550	-8.1%	1,003	1,055	841	974	30	30	471	490
West North Central	50,183	43,091	16.5%	17,169	14,054	32,363	28,400	134	116	517	521
Iowa	15,803	14,213	11.2%	9,921	8,329	5,797	5,793	31	35	53	56
Kansas	11,732	8,654	35.6%	710	703	11,013	7,951	0	0	8	0
Minnesota	9,788	9,235	6.0%	2,424	1,945	6,877	6,791	45	40	442	460
Missouri	1,050	916	14.7%	37	37	965	849	45	27	NM	2
Nebraska	2,993	2,604	14.9%	227	220	2,753	2,371	13	13	0	0
North Dakota	6,313	5,405	16.8%	3,066	2,153	3,237	3,250	0	0	11	3
South Dakota	2,505	2,064	21.4%	784	668	1,721	1,396	0	0	0	0
South Atlantic	21,382	19,003	12.5%	1,955	1,647	10,405	8,154	422	377	8,601	8,825
Delaware	116	108	6.8%	6	6	93	85	6	5	11	13
District of Columbia	0	21	-100.0%	0	0	0	21	0	0	0	0
Florida	3,974	4,302	-7.6%	227	248	2,060	2,270	40	38	1,646	1,745
Georgia	4,512	3,999	12.8%	66	1	1,192	647	8	10	3,245	3,342
Maryland	1,004	860	16.7%	8	8	878	749	27	18	90	85
North Carolina	5,229	3,208	63.0%	225	5	3,839	1,986	164	117	1,000	1,099
South Carolina	2,002	1,931	3.7%	339	363	347	345	0	0	1,316	1,223
Virginia	3,467	3,476	-0.3%	1,082	1,016	917	953	177	189	1,292	1,318
West Virginia	1,079	1,097	-1.7%	0	0	1,079	1,097	0	0	0	0
East South Central	5,285	5,275	0.2%	82	70	423	384	NM	2	4,777	4,818
Alabama	2,716	2,727	-0.4%	0	0	238	208	0	0	2,478	2,518
Kentucky	384	360	6.7%	82	70	6	6	0	0	296	284
Mississippi	1,248	1,256	-0.6%	0	0	11	9	0	0	1,237	1,246
Tennessee	936	932	0.4%	0	0	168	161	NM	2	765	769
West South Central	69,472	51,363	35.3%	1,411	1,508	63,760	45,804	71	56	4,231	3,996
Arkansas	1,175	1,198	-1.9%	0	0	110	73	3	3	1,062	1,121
Louisiana	2,230	2,239	-0.4%	0	0	78	75	0	0	2,151	2,164
Oklahoma	16,323	11,279	44.7%	1,168	1,151	14,906	9,862	0	0	249	265
Texas	49,744	36,648	35.7%	243	356	48,665	35,793	68	53	768	446
Mountain	30,884	23,623	30.7%	2,877	2,454	27,556	20,743	129	92	322	334
Arizona	3,915	3,534	10.8%	462	461	3,435	3,054	19	19	0	0
Colorado	8,153	6,223	31.0%	87	110	8,042	6,097	21	14	NM	2
Idaho	2,522	2,325	8.5%	11	10	2,206	1,996	6	7	299	312
Montana	1,703	1,566	8.7%	183	173	1,502	1,375	0	0	18	18
Nevada	5,657	4,167	35.8%	31	0	5,554	4,127	69	38	NM	2
New Mexico	3,650	2,047	78.3%	222	134	3,425	1,911	NM	2	0	0
Utah	1,847	950	94.5%	212	216	1,625	721	11	12	0	0
Wyoming	3,436	2,811	22.2%	1,670	1,350	1,766	1,462	0	0	0	0
Pacific Contiguous	59,957	53,004	13.1%	7,172	6,444	49,932	43,531	848	907	2,006	2,122
California	44,325	38,964	13.8%	1,948	1,899	41,107	35,748	820	872	450	445
Oregon	7,204	6,621	8.8%	1,227	1,130	5,583	4,950	15	21	380	521
Washington	8,428	7,419	13.6%	3,996	3,416	3,242	2,834	14	14	1,176	1,156
Pacific Noncontiguous	1,269	1,162	9.1%	162	150	824	740	210	201	73	71
Alaska	175	172	1.8%	87	82	44	43	39	43	5	4
Hawaii	1,094	991	10.4%	75	68	779	697	171	159	69	67
U.S. Total	281,548	238,494	18.1%	34,501	30,035	220,962	181,974	2,686	2,691	23,398	23,794

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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 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	-38	-44	-14.2%	0	0	-38	-44	0	0	0	0
Connecticut	0	0	29.2%	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-38	-45	-14.0%	0	0	-38	-45	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	-103	-91	13.1%	-51	-56	-52	-35	0	0	0	0
New Jersey	-12	-6	108.5%	-12	-6	0	0	0	0	0	0
New York	-39	-50	-22.8%	-39	-50	0	0	0	0	0	0
Pennsylvania	-52	-35	48.5%	0	0	-52	-35	0	0	0	0
East North Central	-71	-52	38.5%	-71	-52	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	-71	-52	38.5%	-71	-52	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	11	-13	-184.0%	11	-13	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	11	-13	-184.0%	11	-13	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	-270	-229	17.9%	-270	-229	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	-138	-103	33.4%	-138	-103	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	-100.0%	0	0	0	0	0	0	0	0
South Carolina	-54	-74	-26.4%	-54	-74	0	0	0	0	0	0
Virginia	-78	-52	50.4%	-78	-52	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-74	1	NM	-74	1	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	-74	1	NM	-74	1	0	0	0	0	0	0
West South Central	-9	-6	50.8%	-9	-6	0	0	0	0	0	0
Arkansas	1	1	-15.1%	1	1	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-10	-7	43.9%	-10	-7	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-20	-21	-7.3%	-20	-21	0	0	0	0	0	0
Arizona	-2	5	-141.8%	-2	5	0	0	0	0	0	0
Colorado	-17	-26	-34.5%	-17	-26	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	13	11	17.9%	13	11	0	0	0	0	0	0
California	12	12	1.1%	12	12	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	0	-619.0%	2	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	-561	-443	26.5%	-471	-364	-90	-79	0	0	0	0

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 Negative generation denotes that electric power consumed for plant use exceeds gross generation.
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 Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.12.B. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	-416	-416	0.0%	0	0	-416	-416	0	0	0	0
Connecticut	2	-4	-141.1%	0	0	2	-4	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-418	-412	1.5%	0	0	-418	-412	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	-1,033	-949	8.9%	-573	-516	-460	-433	0	0	0	0
New Jersey	-176	-151	16.4%	-176	-151	0	0	0	0	0	0
New York	-397	-365	8.8%	-397	-365	0	0	0	0	0	0
Pennsylvania	-460	-433	6.4%	0	0	-460	-433	0	0	0	0
East North Central	-646	-428	51.0%	-646	-428	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	-646	-428	51.0%	-646	-428	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	200	270	-25.9%	200	270	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	200	270	-25.9%	200	270	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	-2,625	-2,534	3.6%	-2,625	-2,534	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	-716	-834	-14.1%	-716	-834	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	-100.0%	0	0	0	0	0	0	0	0
South Carolina	-856	-798	7.3%	-856	-798	0	0	0	0	0	0
Virginia	-1,054	-902	16.8%	-1,054	-902	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-616	-456	35.1%	-616	-456	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	-616	-456	35.1%	-616	-456	0	0	0	0	0	0
West South Central	-35	-37	-5.5%	-35	-37	0	0	0	0	0	0
Arkansas	38	29	33.5%	38	29	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-73	-65	11.7%	-73	-65	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-176	-161	9.1%	-176	-161	0	0	0	0	0	0
Arizona	76	77	-1.7%	76	77	0	0	0	0	0	0
Colorado	-251	-238	5.6%	-251	-238	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	21	185	-88.6%	21	185	0	0	0	0	0	0
California	23	153	-85.2%	23	153	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	-1	32	-104.4%	-1	32	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-5,326	-4,526	17.7%	-4,450	-3,677	-876	-849	0	0	0	0

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 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources
by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	151	148	2.3%	0	0	137	134	7	7	7	7
Connecticut	47	44	8.0%	0	0	47	44	0	0	0	0
Maine	23	22	2.8%	0	0	9	8	7	7	7	7
Massachusetts	76	77	-1.1%	0	0	76	77	0	0	0	0
New Hampshire	5	5	3.1%	0	0	5	5	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	186	200	-6.7%	0	0	158	158	28	35	0	6
New Jersey	46	54	-14.0%	0	0	35	37	12	11	0	6
New York	77	79	-1.9%	0	0	61	60	17	18	0	0
Pennsylvania	63	67	-6.5%	0	0	63	61	0	6	0	0
East North Central	71	99	-27.9%	1	5	10	12	14	19	46	63
Illinois	18	21	-11.1%	0	0	0	-1	0	0	19	22
Indiana	22	36	-38.0%	0	0	0	0	NM	2	21	34
Michigan	25	36	-31.9%	0	3	11	14	13	18	2	2
Ohio	1	0	-505.6%	0	0	0	-1	0	0	1	1
Wisconsin	4	6	-26.0%	1	3	0	0	0	0	NM	3
West North Central	38	44	-15.6%	19	22	12	14	NM	3	NM	6
Iowa	0	1	-100.0%	0	0	0	0	0	0	0	1
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	34	36	-7.3%	15	15	12	14	NM	3	NM	5
Missouri	0	3	-90.1%	0	3	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	3	4	-9.4%	3	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	367	398	-7.7%	0	0	193	201	15	18	159	179
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	241	258	-6.7%	0	0	112	119	0	0	129	139
Georgia	5	11	-53.1%	0	0	0	0	0	0	5	11
Maryland	27	27	-1.5%	0	0	27	27	0	0	0	0
North Carolina	54	61	-11.9%	0	0	32	34	0	0	22	27
South Carolina	3	3	4.5%	0	0	NM	0	0	0	3	3
Virginia	38	38	-1.0%	0	0	22	20	15	18	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	6	4	42.4%	4	2	0	0	0	0	1	2
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	4	2	151.2%	4	2	0	0	0	0	0	0
Mississippi	NM	1	NM	0	0	0	0	0	0	NM	1
Tennessee	1	2	-29.5%	0	0	0	0	0	0	1	2
West South Central	114	136	-16.2%	0	0	NM	11	0	0	112	124
Arkansas	1	1	-44.2%	0	0	0	0	0	0	1	1
Louisiana	54	54	0.2%	0	0	0	0	0	0	54	54
Oklahoma	NM	1	NM	0	0	0	0	0	0	NM	1
Texas	58	80	-28.0%	0	0	NM	11	0	0	57	69
Mountain	50	70	-28.2%	0	0	26	32	0	0	24	38
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	NM	6	NM	0	0	NM	1	0	0	NM	4
Idaho	NM	9	NM	0	0	0	0	0	0	NM	9
Montana	25	30	-16.6%	0	0	25	30	0	0	0	0
Nevada	0	0	-100.0%	0	0	0	0	0	0	0	0
New Mexico	0	0	-100.0%	0	0	0	0	0	0	0	0
Utah	15	18	-14.1%	0	0	NM	0	0	0	15	18
Wyoming	0	7	-100.0%	0	0	0	0	0	0	0	7
Pacific Contiguous	80	78	2.9%	0	0	27	25	0	0	53	53
California	71	70	2.6%	0	0	18	17	0	0	53	53
Oregon	4	3	20.0%	0	0	4	3	0	0	0	0
Washington	5	5	-4.7%	0	0	5	5	0	0	0	0
Pacific Noncontiguous	20	28	-29.9%	0	13	0	2	19	13	0	0
Alaska	0	0	-100.0%	0	0	0	0	0	0	0	0
Hawaii	20	28	-30.3%	0	14	0	2	19	13	0	0
U.S. Total	1,083	1,204	-10.1%	25	42	566	589	87	95	406	478

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 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.13.B. Utility Scale Facility Net Generation from Other Energy Sources

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	1,572	1,493	5.3%	0	0	1,414	1,330	77	74	81	89
Connecticut	495	454	8.8%	0	0	495	451	0	3	0	0
Maine	296	277	6.8%	0	0	137	117	77	71	81	89
Massachusetts	736	721	2.2%	0	0	736	721	0	0	0	0
New Hampshire	45	41	9.2%	0	0	45	41	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	1,931	1,965	-1.7%	0	0	1,595	1,545	336	365	0	55
New Jersey	452	474	-4.7%	0	0	333	300	118	120	0	55
New York	756	758	-0.3%	0	0	578	596	177	162	0	0
Pennsylvania	724	733	-1.3%	0	0	683	650	41	83	0	0
East North Central	861	970	-11.2%	26	49	132	125	136	178	566	618
Illinois	196	230	-14.8%	0	0	-4	-3	0	0	200	233
Indiana	323	348	-7.4%	0	0	0	0	15	16	307	332
Michigan	273	340	-19.7%	11	27	126	134	121	161	15	18
Ohio	20	-2	-966.2%	0	-2	11	-6	0	0	10	6
Wisconsin	49	54	-9.3%	15	24	0	0	0	0	35	30
West North Central	386	408	-5.2%	193	229	119	107	29	28	46	44
Iowa	5	2	159.8%	0	0	0	0	0	0	5	2
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	339	323	5.0%	151	146	119	107	29	28	41	42
Missouri	8	48	-82.6%	8	48	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	34	35	-1.7%	34	35	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,004	3,851	4.0%	0	0	2,079	1,923	166	173	1,759	1,755
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,665	2,541	4.9%	0	0	1,261	1,134	0	0	1,405	1,407
Georgia	88	65	35.1%	0	0	0	0	0	0	88	65
Maryland	271	263	2.7%	0	0	270	263	NM	0	0	0
North Carolina	570	561	1.6%	0	0	337	316	0	0	233	245
South Carolina	39	42	-7.3%	0	0	5	4	0	0	34	38
Virginia	371	378	-1.9%	0	0	206	206	165	173	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	61	58	6.1%	42	35	0	0	0	0	20	22
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	42	35	17.5%	42	35	0	0	0	0	0	0
Mississippi	5	5	-8.4%	0	0	0	0	0	0	5	5
Tennessee	15	17	-13.0%	0	0	0	0	0	0	15	17
West South Central	1,191	1,246	-4.4%	0	0	29	72	0	0	1,162	1,174
Arkansas	4	10	-59.6%	0	0	0	0	0	0	4	10
Louisiana	560	627	-10.7%	0	0	0	0	0	0	560	627
Oklahoma	32	9	241.1%	0	0	18	0	0	0	13	9
Texas	595	600	-0.7%	0	0	10	72	0	0	585	528
Mountain	525	514	2.2%	NM	1	290	277	0	0	234	236
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	42	43	-3.5%	0	0	11	10	0	0	30	33
Idaho	64	67	-5.0%	0	0	0	0	0	0	64	67
Montana	276	263	4.8%	0	0	276	263	0	0	0	0
Nevada	NM	1	NM	NM	1	0	0	0	0	0	0
New Mexico	NM	1	NM	NM	1	0	0	0	0	0	0
Utah	143	75	91.5%	0	0	NM	3	0	0	140	72
Wyoming	0	64	-100.0%	0	0	0	0	0	0	0	64
Pacific Contiguous	750	791	-5.1%	NM	-1	249	255	0	0	500	537
California	659	668	-1.4%	NM	-1	158	172	0	0	500	498
Oregon	39	35	12.7%	NM	0	39	35	0	0	0	0
Washington	52	88	-40.6%	0	0	52	49	0	0	0	39
Pacific Noncontiguous	176	308	-42.9%	NM	148	11	7	165	152	0	0
Alaska	NM	-2	NM	NM	-2	0	0	0	0	0	0
Hawaii	175	310	-43.4%	0	150	11	7	165	152	0	0
U.S. Total	11,458	11,603	-1.2%	263	461	5,918	5,640	908	970	4,369	4,531

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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 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	219	227	-3.5%	20	27	196	196	NM	4	NM	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	133	129	3.2%	0	0	133	129	0	0	0	0
Massachusetts	20	25	-21.3%	5	7	12	15	NM	3	NM	0
New Hampshire	36	40	-9.6%	0	0	36	40	0	0	0	0
Rhode Island	NM	1	NM	0	0	NM	0	NM	1	0	0
Vermont	25	31	-18.9%	14	20	11	12	0	0	0	0
Middle Atlantic	664	709	-6.3%	0	0	664	709	0	0	NM	0
New Jersey	NM	2	NM	0	0	NM	2	0	0	0	0
New York	327	390	-16.2%	0	0	327	390	0	0	NM	0
Pennsylvania	335	317	5.9%	0	0	335	317	0	0	0	0
East North Central	2,037	2,500	-18.5%	242	331	1,788	2,164	NM	1	NM	4
Illinois	960	1,167	-17.7%	NM	1	959	1,165	NM	1	0	0
Indiana	460	517	-10.9%	0	0	460	517	NM	0	0	0
Michigan	393	529	-25.7%	162	220	231	309	0	0	0	0
Ohio	99	128	-22.1%	NM	1	93	123	NM	0	NM	4
Wisconsin	123	160	-22.7%	78	109	44	50	0	0	NM	1
West North Central	5,610	4,780	17.4%	1,919	1,749	3,688	3,028	NM	3	0	0
Iowa	1,793	1,694	5.9%	1,159	1,024	634	670	NM	0	0	0
Kansas	1,396	879	58.8%	75	66	1,321	813	0	0	0	0
Minnesota	977	906	7.8%	238	246	736	657	NM	3	0	0
Missouri	100	86	16.5%	0	0	100	86	0	0	0	0
Nebraska	333	269	23.6%	18	19	315	250	0	0	0	0
North Dakota	729	702	3.9%	341	304	388	398	0	0	0	0
South Dakota	282	245	15.0%	87	90	195	156	0	0	0	0
South Atlantic	180	164	9.9%	0	0	180	164	NM	0	0	0
Delaware	NM	0	NM	0	0	0	0	NM	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	50	42	19.2%	0	0	50	42	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	130	122	6.8%	0	0	130	122	0	0	0	0
East South Central	3	4	-19.0%	0	0	3	4	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	3	4	-19.0%	0	0	3	4	0	0	0	0
West South Central	7,534	4,720	59.6%	198	110	7,332	4,608	NM	2	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	2,061	1,060	94.5%	172	91	1,889	969	0	0	0	0
Texas	5,473	3,661	49.5%	26	19	5,443	3,639	NM	2	0	0
Mountain	2,045	1,544	32.5%	233	168	1,811	1,374	NM	1	NM	0
Arizona	51	35	47.0%	0	0	51	35	0	0	0	0
Colorado	789	668	18.0%	9	10	779	658	0	0	NM	0
Idaho	173	182	-4.6%	0	0	173	182	0	0	0	0
Montana	152	166	-8.1%	16	20	136	146	0	0	0	0
Nevada	42	18	134.4%	0	0	42	18	0	0	0	0
New Mexico	325	160	103.0%	0	0	324	160	NM	0	0	0
Utah	89	31	188.4%	0	0	89	31	0	0	0	0
Wyoming	425	284	49.4%	208	138	217	146	0	0	0	0
Pacific Contiguous	1,999	1,681	18.9%	455	430	1,544	1,250	NM	0	NM	0
California	963	667	44.4%	46	31	916	635	NM	0	NM	0
Oregon	430	437	-1.4%	60	82	370	355	0	0	0	0
Washington	606	578	4.9%	348	317	258	261	0	0	0	0
Pacific Noncontiguous	85	51	67.8%	9	7	76	44	0	0	0	0
Alaska	14	10	32.0%	9	7	5	4	0	0	0	0
Hawaii	71	40	77.1%	0	0	71	40	0	0	0	0
U.S. Total	20,376	16,380	24.4%	3,076	2,822	17,283	13,541	12	11	6	5

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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 1.14.B. Utility Scale Facility Net Generation from Wind

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	2,063	1,784	15.7%	204	219	1,827	1,537	29	26	NM	2
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	1,262	992	27.2%	0	0	1,262	992	0	0	0	0
Massachusetts	179	171	4.5%	50	50	104	99	23	21	NM	2
New Hampshire	360	344	4.6%	0	0	360	344	0	0	0	0
Rhode Island	17	8	115.1%	0	0	11	2	6	5	0	0
Vermont	245	268	-8.7%	154	169	91	99	0	0	0	0
Middle Atlantic	5,706	5,807	-1.7%	0	0	5,703	5,805	0	0	NM	2
New Jersey	18	17	4.9%	0	0	18	17	0	0	0	0
New York	3,038	3,161	-3.9%	0	0	3,035	3,160	0	0	NM	2
Pennsylvania	2,650	2,628	0.8%	0	0	2,650	2,628	0	0	0	0
East North Central	17,947	17,336	3.5%	2,245	2,393	15,643	14,907	9	5	50	31
Illinois	8,371	8,059	3.9%	12	10	8,355	8,045	NM	4	0	0
Indiana	3,886	3,381	14.9%	0	0	3,885	3,381	NM	1	0	0
Michigan	3,560	3,765	-5.4%	1,475	1,557	2,085	2,208	0	0	0	0
Ohio	956	914	4.6%	11	10	897	879	NM	0	44	26
Wisconsin	1,174	1,217	-3.5%	747	816	421	395	0	0	6	6
West North Central	48,158	41,163	17.0%	16,718	13,639	31,415	27,499	25	25	0	0
Iowa	15,590	13,990	11.4%	9,898	8,304	5,690	5,684	NM	2	0	0
Kansas	11,669	8,602	35.7%	710	703	10,959	7,899	0	0	0	0
Minnesota	8,284	7,768	6.6%	2,101	1,632	6,160	6,113	23	23	0	0
Missouri	900	786	14.6%	0	0	900	786	0	0	0	0
Nebraska	2,907	2,551	14.0%	159	180	2,748	2,371	0	0	0	0
North Dakota	6,903	5,402	16.7%	3,066	2,153	3,237	3,250	0	0	0	0
South Dakota	2,505	2,064	21.4%	784	668	1,721	1,396	0	0	0	0
South Atlantic	1,476	1,424	3.6%	0	0	1,471	1,420	NM	4	0	0
Delaware	NM	4	NM	0	0	0	0	NM	4	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	397	326	21.5%	0	0	397	326	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	1,075	1,093	-1.7%	0	0	1,075	1,093	0	0	0	0
East South Central	31	33	-6.8%	0	0	31	33	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	31	33	-6.8%	0	0	31	33	0	0	0	0
West South Central	63,730	46,129	38.2%	1,387	1,382	62,308	44,723	35	24	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	16,059	11,002	46.0%	1,163	1,150	14,896	9,852	0	0	0	0
Texas	47,671	35,127	35.7%	224	232	47,412	34,871	35	24	0	0
Mountain	19,026	14,664	29.8%	1,940	1,632	17,074	13,024	10	5	NM	2
Arizona	450	341	31.9%	0	0	450	341	0	0	0	0
Colorado	7,625	5,947	28.2%	87	110	7,528	5,832	7	3	NM	2
Idaho	1,939	1,767	9.7%	0	0	1,939	1,767	0	0	0	0
Montana	1,685	1,549	8.8%	183	173	1,502	1,375	0	0	0	0
Nevada	285	247	15.3%	0	0	285	247	0	0	0	0
New Mexico	2,937	1,490	97.1%	0	0	2,934	1,488	NM	2	0	0
Utah	668	511	30.8%	0	0	668	511	0	0	0	0
Wyoming	3,436	2,811	22.2%	1,670	1,350	1,766	1,462	0	0	0	0
Pacific Contiguous	25,314	21,994	15.1%	5,414	4,744	19,891	17,242	NM	5	NM	3
California	12,335	10,694	15.3%	640	647	11,686	10,038	NM	5	NM	3
Oregon	6,217	5,539	12.2%	1,150	1,068	5,067	4,471	0	0	0	0
Washington	6,762	5,761	17.4%	3,624	3,028	3,138	2,733	0	0	0	0
Pacific Noncontiguous	667	604	10.4%	87	82	580	522	0	0	0	0
Alaska	131	125	4.8%	87	82	44	43	0	0	0	0
Hawaii	536	479	11.9%	0	0	536	479	0	0	0	0
U.S. Total	184,119	150,938	22.0%	27,995	24,092	155,944	126,712	117	94	63	41

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 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	512	582	-12.1%	51	61	377	427	9	11	75	82
Connecticut	62	68	-8.5%	0	0	62	68	0	0	0	0
Maine	177	231	-23.5%	0	0	95	140	7	8	75	82
Massachusetts	99	105	-5.5%	0	0	99	105	NM	0	0	0
New Hampshire	128	119	7.0%	31	31	95	85	NM	3	0	0
Rhode Island	14	14	0.3%	0	0	14	14	0	0	0	0
Vermont	33	46	-28.5%	20	30	NM	15	NM	0	0	0
Middle Atlantic	440	474	-7.0%	0	0	349	369	34	43	57	61
New Jersey	80	89	-10.2%	0	0	66	76	14	13	0	0
New York	188	189	-0.7%	0	0	156	155	16	20	16	14
Pennsylvania	173	196	-11.8%	0	0	127	138	NM	10	41	47
East North Central	450	491	-8.3%	42	63	264	274	18	24	126	130
Illinois	46	48	-4.4%	NM	2	45	47	0	0	0	0
Indiana	36	39	-8.3%	25	26	NM	5	NM	2	5	6
Michigan	202	209	-3.1%	0	0	134	135	13	18	55	55
Ohio	62	71	-12.6%	0	0	41	42	NM	1	21	28
Wisconsin	104	124	-16.2%	16	34	41	46	NM	3	45	41
West North Central	196	188	4.3%	40	40	86	78	8	9	62	60
Iowa	20	21	-4.2%	NM	2	10	10	NM	3	5	6
Kansas	6	5	11.4%	0	0	5	5	0	0	NM	0
Minnesota	150	146	3.1%	28	31	66	59	NM	2	54	54
Missouri	11	10	7.6%	NM	3	NM	4	3	3	NM	0
Nebraska	8	6	40.5%	7	4	0	0	NM	1	0	0
North Dakota	NM	0	NM	0	0	0	0	0	0	NM	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,412	1,485	-4.9%	90	82	455	505	28	31	838	867
Delaware	6	7	-14.2%	0	0	NM	5	0	0	NM	1
District of Columbia	0	5	-100.0%	0	0	0	5	0	0	0	0
Florida	358	397	-9.9%	7	7	197	198	NM	4	150	188
Georgia	357	369	-3.3%	0	0	49	37	NM	0	307	332
Maryland	47	41	13.7%	0	0	34	35	NM	1	11	5
North Carolina	177	210	-15.4%	0	0	63	101	5	6	109	103
South Carolina	186	155	19.8%	24	36	31	28	0	0	131	91
Virginia	281	301	-6.7%	60	39	76	96	16	19	129	147
West Virginia	NM	NM	NM	0	0	NM	NM	0	0	0	0
East South Central	481	507	-5.3%	7	7	33	33	0	0	441	467
Alabama	238	269	-11.6%	0	0	25	25	0	0	213	244
Kentucky	31	26	22.8%	7	7	NM	1	0	0	24	18
Mississippi	127	130	-1.8%	0	0	NM	1	0	0	126	129
Tennessee	84	84	1.1%	0	0	6	7	0	0	78	77
West South Central	503	464	8.5%	0	18	71	49	NM	2	429	395
Arkansas	119	119	0.3%	0	0	9	5	NM	0	110	114
Louisiana	228	222	2.3%	0	0	8	8	0	0	220	214
Oklahoma	25	31	-19.1%	0	0	NM	1	0	0	24	30
Texas	131	91	43.5%	0	18	54	35	NM	2	74	37
Mountain	83	93	-10.5%	NM	1	50	51	NM	2	31	39
Arizona	17	17	1.7%	0	0	17	17	0	0	0	0
Colorado	7	7	3.0%	0	0	7	7	0	0	0	0
Idaho	47	56	-16.3%	NM	1	16	17	NM	1	29	37
Montana	NM	2	NM	0	0	0	0	0	0	NM	2
Nevada	NM	2	NM	0	0	NM	2	0	0	0	0
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	0
Utah	7	7	-7.9%	0	0	6	6	NM	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	749	782	-4.1%	67	65	411	427	70	83	202	207
California	500	501	-0.1%	19	13	371	377	67	79	43	31
Oregon	74	96	-22.6%	6	5	30	39	NM	2	37	50
Washington	175	185	-5.4%	42	46	10	11	NM	1	122	126
Pacific Noncontiguous	33	30	9.5%	2	5	0	0	24	17	7	8
Alaska	NM	4	NM	0	0	0	0	NM	4	NM	0
Hawaii	29	26	12.0%	2	5	0	0	20	13	7	8
U.S. Total	4,859	5,095	-4.6%	301	342	2,096	2,214	195	223	2,268	2,317

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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 1.15.B. Utility Scale Facility Net Generation from Biomass

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	6,017	6,145	-2.1%	509	502	4,503	4,470	101	110	904	1,063
Connecticut	724	646	12.2%	0	0	724	642	0	4	0	0
Maine	2,343	2,632	-11.0%	0	0	1,364	1,494	74	75	904	1,063
Massachusetts	993	967	2.7%	0	0	992	966	NM	0	0	0
New Hampshire	1,389	1,346	3.2%	254	266	1,110	1,050	25	30	0	0
Rhode Island	172	177	-2.9%	0	0	172	177	0	0	0	0
Vermont	396	378	4.5%	255	236	140	141	NM	2	0	0
Middle Atlantic	4,683	4,603	1.7%	0	0	3,669	3,533	404	445	610	625
New Jersey	803	775	3.5%	0	0	660	633	143	142	0	0
New York	1,893	1,845	2.6%	0	0	1,550	1,497	176	173	167	175
Pennsylvania	1,987	1,982	0.2%	0	0	1,459	1,403	85	130	442	450
East North Central	4,735	4,897	-3.3%	533	510	2,742	2,791	173	223	1,287	1,373
Illinois	477	429	11.1%	17	16	460	413	0	0	0	0
Indiana	373	374	-0.4%	256	251	45	46	15	17	57	60
Michigan	2,081	2,088	-0.3%	NM	0	1,402	1,356	123	189	556	563
Ohio	637	675	-5.7%	4	4	417	399	6	7	210	265
Wisconsin	1,168	1,332	-12.3%	256	239	418	578	30	30	465	485
West North Central	1,988	1,910	4.1%	449	414	916	883	107	91	517	521
Iowa	213	223	-4.4%	23	25	107	109	29	33	53	56
Kansas	60	51	19.4%	0	0	52	51	0	0	8	0
Minnesota	1,496	1,465	2.1%	323	313	710	675	22	17	442	460
Missouri	126	115	9.5%	34	37	46	49	43	27	NM	2
Nebraska	81	53	51.9%	68	40	0	0	13	13	0	0
North Dakota	11	3	263.9%	0	0	0	0	0	0	11	3
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	15,567	15,956	-2.4%	1,490	1,468	5,180	5,369	297	294	8,601	8,825
Delaware	62	62	0.0%	0	0	51	49	0	0	11	13
District of Columbia	0	21	-100.0%	0	0	0	21	0	0	0	0
Florida	3,750	4,097	-8.5%	74	88	1,991	2,227	39	36	1,646	1,745
Georgia	3,829	3,895	-1.7%	0	0	578	546	5	7	3,245	3,342
Maryland	453	429	5.6%	0	0	342	331	21	12	90	85
North Carolina	2,011	2,045	-1.7%	0	0	955	897	55	50	1,000	1,099
South Carolina	1,998	1,927	3.7%	339	363	343	341	0	0	1,316	1,223
Virginia	3,461	3,476	-0.4%	1,077	1,016	916	953	177	189	1,292	1,318
West Virginia	4	4	0.9%	0	0	4	4	0	0	0	0
East South Central	5,158	5,175	-0.3%	72	70	308	287	0	0	4,777	4,818
Alabama	2,705	2,727	-0.8%	0	0	227	208	0	0	2,478	2,518
Kentucky	375	360	4.0%	72	70	6	6	0	0	296	284
Mississippi	1,248	1,256	-0.6%	0	0	11	9	0	0	1,237	1,246
Tennessee	830	833	-0.4%	0	0	64	63	0	0	765	769
West South Central	5,097	4,899	4.0%	19	125	815	749	33	30	4,231	3,996
Arkansas	1,150	1,198	-4.0%	0	0	85	73	3	3	1,062	1,121
Louisiana	2,230	2,239	-0.4%	0	0	78	75	0	0	2,151	2,164
Oklahoma	260	275	-5.6%	0	0	11	10	0	0	249	265
Texas	1,458	1,187	22.8%	19	125	641	590	30	27	768	446
Mountain	865	875	-1.2%	11	18	520	509	17	19	317	329
Arizona	180	187	-3.5%	0	7	180	179	0	0	0	0
Colorado	76	66	16.1%	0	0	76	66	0	0	0	0
Idaho	484	497	-2.7%	11	10	168	168	6	7	299	312
Montana	18	18	1.1%	0	0	0	0	0	0	18	18
Nevada	21	21	1.4%	0	0	21	21	0	0	0	0
New Mexico	15	16	-7.9%	0	0	15	16	0	0	0	0
Utah	70	70	-0.1%	0	0	59	58	11	12	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	7,523	7,975	-5.7%	603	599	4,199	4,446	730	818	1,992	2,112
California	5,074	5,398	-6.0%	174	157	3,762	4,022	701	783	437	436
Oregon	784	920	-14.8%	57	55	333	324	15	21	380	521
Washington	1,666	1,657	0.5%	372	387	104	101	14	14	1,176	1,156
Pacific Noncontiguous	315	320	-1.5%	32	47	0	0	210	201	73	71
Alaska	44	47	-6.4%	0	0	0	0	39	43	5	4
Hawaii	272	273	-0.6%	32	47	0	0	171	159	69	67
U.S. Total	51,948	52,755	-1.5%	3,716	3,752	22,851	23,038	2,073	2,232	23,309	23,734

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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 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	381	315	20.9%	22	24	358	291	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	8	7	26.0%	0	0	8	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	324	268	21.0%	0	0	324	268	0	0	0	0
New Mexico	NM	1	NM	0	0	NM	1	0	0	0	0
Utah	47	39	18.9%	22	24	24	15	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,082	990	9.3%	74	73	1,008	917	0	0	0	0
California	1,063	974	9.1%	72	73	991	902	0	0	0	0
Oregon	19	16	19.7%	NM	1	17	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	27	18	44.8%	0	0	27	18	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	27	18	44.8%	0	0	27	18	0	0	0	0
U.S. Total	1,489	1,323	12.6%	96	97	1,393	1,226	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 1.16.B. Utility Scale Facility Net Generation from Geothermal

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	0	--	0	0	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	3,668	2,890	26.9%	212	216	3,456	2,673	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	80	61	31.5%	0	0	80	61	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	3,143	2,465	27.5%	0	0	3,143	2,465	0	0	0	0
New Mexico	13	8	68.3%	0	0	13	8	0	0	0	0
Utah	432	356	21.3%	212	216	220	139	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	10,417	10,125	2.9%	691	681	9,726	9,444	0	0	0	0
California	10,263	9,985	2.8%	677	681	9,586	9,304	0	0	0	0
Oregon	154	140	9.9%	NM	1	140	140	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	206	192	7.0%	0	0	206	192	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	206	192	7.0%	0	0	206	192	0	0	0	0
U.S. Total	14,290	13,207	8.2%	903	888	13,387	12,309	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors							Electric Power Sector				Commercial Sector				Industrial Sector				Residential Sector						
	Estimated Net Generation From Utility Scale Facilities and Distributed Solar Photovoltaic Generation			Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation		Electric Utilities		Independent Power Producers		Estimated Net Generation From Utility Scale Facilities and Distributed Solar		Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation		Estimated Net Generation From Utility Scale Facilities and Distributed Solar		Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation				
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015			
New England	192	137	40.2%	61	41	131	96	2	1	59	40	NM	58	NM	0	72	58	6	4	0	0	6	4	52	34	
Connecticut	27	18	50.3%	2	1	25	17	NM	0	2	1	10	7	0	0	10	7	1	1	0	0	1	1	14	9	
Maine	2	2	35.4%	0	0	2	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	1	1	
Massachusetts	145	105	37.5%	53	35	92	70	1	1	51	34	NM	47	NM	0	57	47	5	4	0	0	5	4	30	20	
New Hampshire	5	2	116.7%	0	0	5	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	1	
Rhode Island	3	2	51.2%	2	1	2	1	0	0	2	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	
Vermont	10	8	30.6%	5	4	5	4	0	0	5	4	2	1	0	0	2	1	0	0	0	0	0	0	3	3	
Middle Atlantic	314	246	27.8%	91	68	224	178	9	5	68	50	133	116	13	12	120	104	NM	12	NM	1	12	12	92	62	
New Jersey	202	163	23.6%	70	53	132	110	9	5	49	37	98	88	13	11	85	77	NM	6	NM	0	7	6	40	27	
New York	83	58	43.9%	14	10	68	48	0	14	9	9	NM	20	NM	0	25	19	1	1	0	0	1	1	43	28	
Pennsylvania	29	25	18.2%	6	5	23	19	0	0	5	4	NM	8	NM	0	10	8	NM	5	NM	1	4	4	9	7	
East North Central	55	36	53.8%	37	21	18	15	9	2	28	18	NM	11	NM	0	12	11	NM	1	NM	0	NM	0	5	4	
Illinois	8	6	29.5%	5	4	3	2	NM	0	4	4	2	1	0	0	2	1	0	NM	0	0	0	0	NM	1	1
Indiana	26	13	90.1%	24	12	1	1	6	1	18	11	0	1	0	0	0	1	NM	NM	0	0	0	NM	NM	1	0
Michigan	NM	3	NM	NM	0	3	3	NM	0	0	0	2	2	0	0	2	2	NM	0	0	0	0	NM	NM	0	1
Ohio	15	12	27.2%	6	4	9	8	NM	1	5	3	NM	6	NM	0	7	6	NM	0	NM	0	0	0	0	2	1
Wisconsin	NM	2	NM	NM	0	3	2	0	0	NM	0	1	1	0	0	1	1	NM	NM	0	0	0	NM	NM	1	1
West North Central	25	19	33.2%	4	2	22	17	0	0	3	2	NM	10	NM	0	12	10	0	0	0	0	0	0	0	9	7
Iowa	4	3	33.6%	0	0	4	3	0	0	0	0	3	2	0	0	3	2	0	0	0	0	0	0	0	1	1
Kansas	NM	1	NM	NM	0	1	0	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minnesota	NM	2	NM	NM	0	3	2	0	0	NM	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	1
Missouri	16	13	19.7%	2	1	13	12	0	0	2	1	NM	7	NM	0	7	7	0	0	0	0	0	0	0	6	5
Nebraska	NM	0	NM	NM	0	0	0	0	0	NM	0	NM	0	0	0	NM	0	NM	0	0	0	0	NM	0	0	0
North Dakota	0	0	5.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	80.1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	577	202	185.5%	452	132	125	71	44	7	397	119	80	47	11	6	70	40	4	3	0	0	4	3	52	28	
Delaware	14	10	43.9%	5	3	9	6	NM	0	4	3	NM	4	NM	0	6	4	0	0	0	0	0	0	0	3	2
District of Columbia	5	2	89.3%	0	0	5	2	0	0	0	0	3	2	0	0	3	2	0	0	0	0	0	0	0	1	1
Florida	36	23	59.0%	16	9	21	14	9	5	7	4	NM	6	NM	0	10	6	0	0	0	0	0	0	0	10	7
Georgia	NM	17	NM	119	9	NM	NM	15	0	103	9	NM	NM	0	NM	NM	NM	NM	NM	0	0	NM	NM	NM	NM	NM
Maryland	70	40	76.3%	14	10	56	30	NM	1	13	9	NM	15	NM	1	25	15	3	1	0	0	3	1	28	13	
North Carolina	311	106	192.3%	298	100	13	7	19	0	269	94	20	10	10	5	10	5	0	0	0	0	0	0	0	3	2
South Carolina	NM	1	NM	NM	0	4	1	0	0	NM	0	1	NM	0	0	1	NM	0	0	0	0	0	0	0	3	1
Virginia	NM	3	NM	NM	0	4	3	NM	0	0	0	2	1	0	0	2	1	NM	NM	0	0	0	NM	NM	2	1
West Virginia	0	0	38.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East South Central	26	12	121.5%	19	6	7	6	2	0	17	6	NM	6	NM	0	7	6	0	0	0	0	0	0	0	0	0
Alabama	11	0	NM	11	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kentucky	3	1	167.0%	2	0	1	1	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0
Mississippi	0	0	205.5%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	12	10	14.1%	7	6	5	5	0	0	7	6	NM	5	NM	0	5	5	0	0	0	0	0	0	0	0	0
West South Central	126	72	74.6%	77	37	49	35	0	0	76	36	NM	9	NM	0	12	9	0	0	0	0	0	0	0	37	26
Arkansas	NM	0	NM	NM	0	1	0	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana	16	15	10.0%	0	0	16	15	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	15	14	
Oklahoma	1	1	45.9%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas	106	56	88.5%	74	36	32	20	0	0	74	36	NM	8	NM	0	11	8	0	0	0	0	0	0	0	21	12
Mountain	965	590	63.6%	724	402	241	188	63	53	652	342	88	78	7	79	71	NM	15	NM	0	16	15	145	101		
Arizona	388	332	16.8%	250	217	138	115	41	42	208	174	45	43	2	2	43	41	13	13	0	0	13	13	81	61	
Colorado	107	51	110.3%	68	18	39	33	0	0	66	17	18	16	1	1	17	15	0	0	0	0	0	0	22	18	
Idaho	6	1	940.8%	5	0	1	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
Montana	1	1	31.9%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Nevada	229	139	64.5%	198	119	31	20	NM	0	189	115	14	11	6	4	8	7	NM	2	NM	0	2	1	21	11	
New Mexico	93	56	66.5%	79	44	15	12	19	11	59	33	7	6	0	0	7	6	0	0	0	0	0	0	8	6	
Utah	140	10	NM	124	3	16	7	0	0	124	3	4	2	0	0	4	2	1	0	0	0	1	0	11	4	
Wyoming	0	0	30.4%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NM
Pacific Contiguous	2,143	1,526	40.4%	1,411	987	732	539	41	36	1,359	943	182	133	10	7	172	126	NM	91	NM	1	117	91	443	323	
California	2,121	1,513	40.1%	1,403	985	718	528	41	36	1,351	942	178	129	10	7	168	122	NM	91	NM	1	116	90	434	316	
Oregon	16	9	84.6%	8	2	8	7	NM	0	8	1	4	3	0	0	4	3	0	0	0	0	0	0	4	4	
Washington	6	4	51.0%	0	0	6	4	0	0	0	0	1	1	0												

Table 1.17.B. Net Generation from Solar Photovoltaic by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors						Electric Power Sector				Commercial Sector						Industrial Sector				Residential Sector					
	Estimated Net Generation From Utility Scale Facilities and Distributed Solar Photovoltaic Generation			Generation at Utility Scale Facilities			Estimated Distributed Solar Photovoltaic Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Net Generation From Utility Scale Facilities and Distributed Solar		Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation		Generation at Utility Scale Facilities		Estimated Distributed Solar Photovoltaic Generation					
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD			
New England	2,206	1,484	48.6%	650	459	1,556	1,025	18	12	626	445	861	658	7	3	855	655	72	45	0	0	72	45	629	325	
Connecticut	302	188	60.5%	20	15	282	173	NM	0	17	15	114	79	0	0	114	79	14	9	0	0	14	9	154	85	
Maine	26	17	57.2%	0	0	26	17	0	0	0	0	9	5	0	0	9	5	0	0	0	0	0	0	17	11	
Massachusetts	1,669	1,146	45.7%	561	390	1,108	756	14	12	540	375	685	541	7	3	679	539	57	35	0	0	57	35	373	182	
New Hampshire	47	20	133.1%	0	0	47	20	0	0	0	0	14	6	0	0	14	6	2	1	0	0	2	1	31	13	
Rhode Island	36	24	50.4%	17	12	18	12	0	0	17	12	13	9	0	0	13	9	0	0	0	0	0	0	6	2	
Vermont	126	90	40.1%	52	42	74	48	0	0	52	42	26	16	0	0	26	16	0	0	0	0	0	0	48	31	
Middle Atlantic	3,519	2,734	28.7%	941	714	2,579	2,020	97	57	690	523	1,567	1,353	143	125	1,424	1,228	154	141	10	9	143	132	1,011	660	
New Jersey	2,234	1,836	21.7%	720	568	1,515	1,268	97	57	485	389	1,143	1,020	136	120	1,007	900	80	72	NM	1	79	71	429	297	
New York	951	608	56.3%	153	89	798	520	0	0	151	86	303	233	NM	2	300	230	12	9	0	0	12	9	486	281	
Pennsylvania	334	290	15.1%	68	58	266	232	0	0	55	47	121	100	5	3	117	97	62	60	9	7	53	53	96	82	
East North Central	585	407	43.8%	374	228	212	179	69	15	297	207	150	135	NM	3	147	132	11	7	NM	2	6	5	59	42	
Illinois	84	67	25.1%	52	43	32	24	NM	1	49	42	22	17	0	0	22	17	0	0	0	0	0	0	10	7	
Indiana	249	145	72.3%	237	134	12	11	43	6	194	128	5	6	0	0	5	6	0	0	0	0	0	0	7	5	
Michigan	53	35	50.7%	14	1	40	34	14	1	0	0	27	25	0	0	27	25	1	1	0	0	1	1	12	9	
Ohio	168	134	24.9%	70	49	98	86	9	8	53	36	79	72	NM	3	76	69	9	6	NM	2	4	4	18	12	
Wisconsin	32	26	22.2%	NM	1	30	25	0	0	NM	1	16	15	0	0	16	15	1	0	0	0	1	0	13	9	
West North Central	274	211	30.0%	38	18	236	192	2	0	33	18	136	114	NM	0	134	114	4	3	0	0	4	3	98	76	
Iowa	47	36	29.1%	0	0	47	36	0	0	0	0	32	23	0	0	32	23	1	1	0	0	1	1	15	12	
Kansas	10	5	82.4%	NM	2	8	4	0	0	NM	2	4	2	0	0	4	2	0	0	0	0	0	0	4	2	
Minnesota	39	25	54.6%	7	2	31	23	0	0	7	2	15	12	0	0	15	12	2	1	0	0	2	1	14	9	
Missouri	171	142	20.4%	23	14	147	128	2	0	19	14	84	76	NM	0	82	75	1	1	0	0	1	1	64	51	
Nebraska	6	1	434.0%	NM	0	2	1	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
North Dakota	0	0	2.9%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
South Dakota	1	0	73.7%	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	
South Atlantic	5,575	2,240	148.9%	4,271	1,523	1,304	717	396	79	3,753	1,365	874	517	121	79	753	438	50	20	0	0	50	20	501	259	
Delaware	152	112	35.5%	50	42	102	70	6	6	42	36	66	48	NM	1	64	47	3	4	0	0	3	4	34	19	
District of Columbia	47	29	62.8%	0	0	47	29	0	0	0	0	32	20	0	0	32	20	0	0	0	0	0	0	14	8	
Florida	375	235	59.2%	156	105	219	131	85	59	69	44	114	64	NM	2	112	62	5	3	0	0	5	3	102	66	
Georgia	840	191	339.4%	683	104	157	87	66	1	613	101	147	83	NM	3	144	80	4	2	0	0	4	2	9	5	
Maryland	728	398	83.1%	155	105	574	293	8	8	140	91	277	165	6	6	271	158	35	10	0	0	35	10	268	124	
North Carolina	3,357	1,236	171.5%	3,219	1,162	139	74	225	5	2,885	1,089	215	124	109	68	106	57	3	2	0	0	3	2	30	16	
South Carolina	27	10	183.7%	4	4	23	6	0	0	4	4	5	1	0	0	5	1	0	0	0	0	0	0	18	4	
Virginia	44	25	73.2%	NM	0	38	25	NM	0	0	0	16	11	0	0	16	11	1	0	0	0	1	0	22	14	
West Virginia	5	4	34.8%	0	0	5	4	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	4	3	
East South Central	175	136	28.9%	96	66	79	69	10	0	83	64	78	69	NM	2	75	66	0	0	0	0	0	0	4	3	
Alabama	15	3	422.2%	11	0	3	3	0	0	11	0	3	2	0	0	3	2	0	0	0	0	0	0	0	0	
Kentucky	24	12	96.1%	10	0	14	12	10	0	0	0	11	10	0	0	11	10	0	0	0	0	0	0	3	2	
Mississippi	4	1	204.1%	0	0	4	1	0	0	0	0	4	1	0	0	4	1	0	0	0	0	0	0	0	0	
Tennessee	132	119	10.6%	75	66	57	53	0	0	72	64	59	55	NM	2	56	53	0	0	0	0	0	0	0	0	
West South Central	1,133	661	71.3%	644	334	489	327	5	1	637	332	128	94	NM	2	126	92	0	0	0	0	0	0	364	235	
Arkansas	31	5	570.2%	25	0	6	5	0	0	25	0	3	2	0	0	3	2	0	0	0	0	0	0	3	2	
Louisiana	178	130	37.2%	0	0	178	130	0	0	0	0	11	5	0	0	11	5	0	0	0	0	0	0	167	125	
Oklahoma	9	4	152.4%	5	1	4	3	5	1	0	0	2	1	0	0	2	1	0	0	0	0	0	0	3	2	
Texas	915	523	74.8%	614	333	301	190	0	0	612	332	112	86	NM	2	110	84	0	0	0	0	0	0	191	106	
Mountain	8,961	6,302	42.2%	6,501	4,452	2,460	1,850	715	588	5,682	3,794	933	804	102	68	831	736	170	147	NM	2	168	145	1,461	969	
Arizona	4,126	3,530	16.9%	2,698	2,364	1,428	1,167	462	454	2,218	1,890	478	450	19	19	459	431	139	124	0	0	139	124	830	612	
Colorado	865	549	57.5%	452	210	413	339	0	0	438	199	191	167	14	11	177	155	2	2	0	0	2	2	234	182	
Idaho	28	6	410.3%	19	0	9	6	0	0	19	0	3	2	0	0	3	2	0	0	0	0	0	0	6	3	
Montana	10	7	34.8%	0	0	10	7	0	0	0	0	3	2	0	0	3	2	0	0	0	0	0	0	7	5	
Nevada	2,293	1,485	54.4%	1,969	1,333	325	152	31	0	1,867	1,293	153	98	69	38	84	60	22	17	NM	2	20	14	221	77	
New Mexico	833	653	27.5%	685	533	148	120	222	134	463	399	67	62	0	0	67	62	1	1	0	0	1	1	80	57	
Utah	802	69	NM	677	13	125	56	0	0	677	13	37	23	0	0	37	23	6	4	0	0	6	4	82	30	
Wyoming	3	2	31.4%	0	0	3	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1	
Pacific Contiguous	21,921	16,180	35.5%	14,486	10,855	7,435	5,324	464	420	13,899	10,345	1,798	1,387	113	84	1,685	1,302	1,161	913	9	6	1,151				

Table 1.18.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	□			Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	3	6	-57.0%	3	6	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	3	6	-57.0%	3	6	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	63	58	8.4%	0	0	63	58	0	0	0	0
Arizona	51	49	2.3%	0	0	51	49	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	12	8	44.6%	0	0	12	8	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	183	146	25.6%	0	0	183	146	0	0	0	0
California	183	146	25.6%	0	0	183	146	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	249	210	18.5%	3	6	246	204	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 1.18.B. Utility Scale Facility Net Generation from Solar Thermal

by State, by Sector, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	Generation at Utility Scale Facilities			Electric Utilities		Independent Power Producers		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
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	68	100	-31.9%	68	100	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	68	100	-31.9%	68	100	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	824	742	11.1%	0	0	824	742	0	0	0	0
Arizona	587	643	-8.7%	0	0	587	643	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	237	99	139.3%	0	0	237	99	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	2,216	2,054	7.9%	0	0	2,216	2,054	0	0	0	0
California	2,216	2,054	7.9%	0	0	2,216	2,054	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	3,109	2,897	7.3%	68	100	3,041	2,797	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	1,030,556	753,390	269,412	347	7,408
2007	1,046,795	764,765	276,581	361	5,089
2008	1,042,335	760,326	276,565	369	5,075
2009	934,683	695,615	234,077	317	4,674
2010	979,684	721,431	249,814	314	8,125
2011	934,938	689,316	239,541	347	5,735
2012	825,734	615,467	205,295	307	4,665
2013	860,729	638,327	217,219	513	4,670
2014	853,634	624,235	224,568	202	4,629
2015	739,594	539,506	195,927	163	3,999
Year 2014					
January	83,647	61,084	22,129	27	407
February	76,160	55,073	20,699	27	362
March	72,124	51,559	20,147	22	396
April	58,065	41,151	16,541	16	357
May	64,033	47,114	16,521	12	385
June	74,328	55,542	18,365	15	406
July	81,495	60,238	20,821	16	420
August	81,074	60,222	20,422	14	417
Sept	69,127	50,728	17,998	12	389
October	61,129	44,987	15,772	11	359
November	64,651	46,561	17,720	14	356
December	67,799	49,976	17,434	16	373
Year 2015					
January	71,384	50,757	20,271	18	338
February	67,136	47,845	18,954	19	318
March	58,367	42,202	15,797	17	351
April	48,543	36,037	12,193	12	302
May	57,153	42,814	14,005	10	323
June	68,982	50,592	18,017	14	359
July	76,570	56,202	19,977	14	376
August	73,810	54,023	19,408	12	368
Sept	64,823	46,706	17,746	10	360
October	53,659	39,023	14,309	11	317
November	48,943	35,427	13,209	12	295
December	50,224	37,878	12,041	14	292
Year 2016					
January	62,032	45,569	16,131	14	319
February	50,570	37,655	12,605	15	296
March	39,852	31,038	8,496	14	304
April	38,965	28,674	10,027	11	254
May	44,998	33,836	10,894	9	259
June	63,328	46,364	16,644	10	310
July	74,282	54,238	19,705	11	328
August	73,871	53,929	19,600	12	330
Sept	62,430	44,871	17,280	12	267
October	54,638	39,517	14,860	13	248
Year to Date					
2014	721,183	527,698	189,414	171	3,899
2015	640,427	466,201	170,677	137	3,412
2016	564,967	415,691	146,240	120	2,915
Rolling 12 Months Ending in October					
2015	772,878	562,737	205,831	167	4,142
2016	664,134	488,997	171,490	146	3,502

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.1.B. Coal: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	23,227	0	3,834	1,539	17,854
2007	22,810	0	3,795	1,566	17,449
2008	22,168	0	3,689	1,652	16,827
2009	20,507	0	3,935	1,481	15,091
2010	21,727	0	3,808	1,406	16,513
2011	21,532	0	3,628	1,321	16,584
2012	19,333	0	2,790	1,143	15,400
2013	18,350	0	2,416	843	15,090
2014	18,107	978	1,821	861	14,448
2015	16,632	1,032	1,980	635	12,985
Year 2014					
January	1,773	114	171	105	1,384
February	1,641	97	167	105	1,271
March	1,722	95	199	96	1,332
April	1,425	81	162	66	1,115
May	1,450	81	146	59	1,164
June	1,413	63	153	63	1,134
July	1,466	78	150	70	1,169
August	1,451	70	149	58	1,175
Sept	1,355	70	121	52	1,113
October	1,359	66	122	47	1,123
November	1,480	76	138	68	1,198
December	1,573	86	142	74	1,271
Year 2015					
January	1,649	99	197	79	1,275
February	1,505	96	166	78	1,165
March	1,494	94	178	67	1,155
April	1,296	76	144	43	1,034
May	1,335	75	165	40	1,055
June	1,327	87	172	47	1,022
July	1,451	86	187	50	1,129
August	1,345	71	176	45	1,052
Sept	1,301	75	155	40	1,031
October	1,245	81	145	41	979
November	1,321	99	145	47	1,030
December	1,363	95	151	58	1,059
Year 2016					
January	1,498	100	152	62	1,185
February	1,390	87	141	63	1,099
March	1,362	94	142	61	1,065
April	1,039	78	170	39	752
May	1,132	78	135	31	887
June	1,172	78	155	36	902
July	1,173	81	151	35	906
August	1,171	87	141	39	904
Sept	1,038	75	140	37	786
October	1,006	76	148	37	745
Year to Date					
2014	15,055	815	1,541	720	11,979
2015	13,948	838	1,684	529	10,897
2016	11,980	835	1,474	439	9,232
Rolling 12 Months Ending in October					
2015	17,001	1,001	1,964	671	13,365
2016	14,664	1,028	1,770	545	11,321

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.1.C. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	1,053,783	753,390	273,246	1,886	25,262
2007	1,069,606	764,765	280,377	1,927	22,537
2008	1,064,503	760,326	280,254	2,021	21,902
2009	955,190	695,615	238,012	1,798	19,766
2010	1,001,411	721,431	253,621	1,720	24,638
2011	956,470	689,316	243,168	1,668	22,319
2012	845,066	615,467	208,085	1,450	20,065
2013	879,078	638,327	219,635	1,356	19,761
2014	871,741	625,212	226,389	1,063	19,076
2015	756,226	540,538	197,906	798	16,984
Year 2014					
January	85,420	61,198	22,300	132	1,791
February	77,801	55,170	20,866	131	1,633
March	73,846	51,654	20,346	118	1,729
April	59,489	41,232	16,703	82	1,472
May	65,483	47,195	16,667	72	1,549
June	75,741	55,606	18,518	78	1,540
July	82,961	60,316	20,970	85	1,589
August	82,526	60,292	20,571	72	1,591
Sept	70,482	50,798	18,118	64	1,502
October	62,488	45,053	15,895	58	1,482
November	66,131	46,637	17,858	82	1,554
December	69,372	50,062	17,576	90	1,644
Year 2015					
January	73,033	50,856	20,467	97	1,613
February	68,640	47,941	19,120	97	1,483
March	59,861	42,297	15,975	83	1,506
April	49,840	36,112	12,337	54	1,336
May	58,488	42,889	14,171	50	1,378
June	70,309	50,678	18,189	61	1,381
July	78,021	56,288	20,164	64	1,505
August	75,156	54,094	19,584	58	1,420
Sept	66,124	46,780	17,901	51	1,391
October	54,904	39,104	14,453	52	1,296
November	50,264	35,526	13,353	59	1,325
December	51,587	37,973	12,192	72	1,350
Year 2016					
January	63,530	45,669	16,282	76	1,503
February	51,961	37,742	12,746	78	1,395
March	41,214	31,132	8,637	75	1,370
April	40,004	28,752	10,196	49	1,006
May	46,129	33,914	11,029	40	1,147
June	64,500	46,442	16,800	46	1,212
July	75,455	54,319	19,856	46	1,234
August	75,041	54,017	19,740	50	1,234
Sept	63,469	44,946	17,420	49	1,053
October	55,643	39,594	15,007	50	993
Year to Date					
2014	736,238	528,513	190,955	891	15,879
2015	654,375	467,039	172,361	667	14,309
2016	576,947	416,526	147,714	559	12,147
Rolling 12 Months Ending in October					
2015	789,879	563,738	207,796	838	17,507
2016	678,797	490,025	173,260	691	14,822

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.2.A. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	73,821	53,529	17,179	327	2,786
2007	82,433	56,910	22,793	250	2,480
2008	53,846	38,995	13,152	160	1,538
2009	43,562	31,847	9,880	184	1,652
2010	40,103	30,806	8,278	164	855
2011	27,326	20,844	5,633	133	716
2012	22,604	17,521	4,110	272	702
2013	23,231	16,827	5,494	328	582
2014	31,531	19,652	10,689	451	739
2015	28,925	18,562	9,473	249	641
Year 2014					
January	10,190	4,468	5,487	112	122
February	3,117	1,879	1,099	58	81
March	3,476	1,917	1,443	43	72
April	1,556	1,283	200	31	42
May	1,647	1,296	274	22	56
June	1,502	1,179	246	27	50
July	1,696	1,308	311	24	53
August	1,751	1,310	372	23	45
Sept	1,645	1,296	274	24	50
October	1,550	1,218	251	28	53
November	1,681	1,230	362	28	60
December	1,721	1,268	368	30	54
Year 2015					
January	3,293	2,061	1,135	33	64
February	8,589	3,547	4,845	93	103
March	1,785	1,243	472	18	53
April	1,522	1,232	222	14	54
May	1,697	1,251	376	15	55
June	1,745	1,380	296	14	56
July	1,995	1,480	453	16	45
August	1,801	1,398	344	17	42
Sept	1,656	1,230	378	7	41
October	1,541	1,215	273	7	46
November	1,720	1,348	324	7	40
December	1,581	1,177	354	8	42
Year 2016					
January	2,326	1,681	584	12	48
February	2,111	1,405	645	14	47
March	1,366	1,044	284	NM	31
April	1,318	1,016	262	10	31
May	1,560	1,173	320	11	56
June	1,577	1,242	281	9	44
July	2,207	1,679	461	11	57
August	2,192	1,627	498	15	52
Sept	1,532	1,111	370	10	41
October	1,566	1,140	352	11	64
Year to Date					
2014	28,129	17,155	9,958	392	624
2015	25,625	16,037	8,795	234	559
2016	17,755	13,118	4,057	108	471
Rolling 12 Months Ending in October					
2015	29,026	18,534	9,525	293	674
2016	21,056	15,643	4,736	NM	553

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	14,077	0	1,153	559	12,365
2007	13,462	0	1,303	441	11,718
2008	7,533	0	1,311	461	5,762
2009	8,128	0	1,301	293	6,534
2010	4,866	0	1,086	212	3,567
2011	3,826	0	1,004	168	2,654
2012	3,097	0	992	122	1,984
2013	3,456	0	1,050	498	1,908
2014	3,099	64	1,170	216	1,650
2015	3,142	62	1,155	282	1,643
Year 2014					
January	643	45	189	115	294
February	336	5	88	44	199
March	301	7	101	27	165
April	203	0	86	4	114
May	211	1	89	5	116
June	208	1	90	3	114
July	195	1	93	4	97
August	201	1	108	3	89
Sept	173	1	62	2	109
October	208	0	92	2	114
November	220	0	90	4	125
December	200	1	80	4	114
Year 2015					
January	324	7	99	43	175
February	595	46	175	116	259
March	261	1	89	25	146
April	239	0	80	17	142
May	232	0	82	18	132
June	218	1	79	14	123
July	231	1	102	15	113
August	203	1	88	16	98
Sept	199	1	90	2	106
October	225	1	98	3	124
November	203	1	85	7	110
December	210	1	90	5	114
Year 2016					
January	244	4	84	16	140
February	223	7	68	16	132
March	183	0	89	NM	87
April	180	1	79	10	91
May	208	0	86	9	113
June	197	2	78	8	109
July	239	0	87	11	140
August	233	0	94	10	128
Sept	186	1	88	9	89
October	231	0	89	9	133
Year to Date					
2014	2,680	62	999	208	1,410
2015	2,729	60	980	270	1,419
2016	2,123	17	840	105	1,161
Rolling 12 Months Ending in October					
2015	3,149	62	1,151	277	1,659
2016	2,536	19	1,015	NM	1,385

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	87,898	53,529	18,332	886	15,150
2007	95,895	56,910	24,097	691	14,198
2008	61,379	38,995	14,463	621	7,300
2009	51,690	31,847	11,181	477	8,185
2010	44,968	30,806	9,364	376	4,422
2011	31,152	20,844	6,637	301	3,370
2012	25,702	17,521	5,102	394	2,685
2013	26,687	16,827	6,544	826	2,490
2014	34,630	19,716	11,859	667	2,389
2015	32,067	18,624	10,629	531	2,283
Year 2014					
January	10,833	4,513	5,677	227	416
February	3,453	1,885	1,187	101	280
March	3,776	1,924	1,545	70	237
April	1,760	1,283	286	35	156
May	1,858	1,296	363	27	172
June	1,711	1,180	336	30	164
July	1,890	1,309	404	28	150
August	1,952	1,311	481	26	134
Sept	1,818	1,297	336	26	159
October	1,758	1,219	343	30	166
November	1,900	1,230	453	32	186
December	1,921	1,269	449	34	169
Year 2015					
January	3,617	2,069	1,234	76	239
February	9,184	3,593	5,020	209	362
March	2,046	1,244	560	43	199
April	1,761	1,233	301	31	196
May	1,930	1,251	458	34	187
June	1,963	1,381	375	28	179
July	2,226	1,481	555	32	159
August	2,004	1,399	432	33	140
Sept	1,856	1,230	468	10	147
October	1,766	1,216	371	9	170
November	1,923	1,349	409	14	150
December	1,791	1,178	444	13	155
Year 2016					
January	2,569	1,685	668	28	188
February	2,334	1,412	713	30	179
March	1,549	1,045	372	NM	118
April	1,499	1,016	341	20	121
May	1,768	1,173	406	20	169
June	1,774	1,245	359	17	153
July	2,446	1,679	548	22	197
August	2,425	1,628	592	25	181
Sept	1,718	1,112	458	18	130
October	1,797	1,140	441	20	196
Year to Date					
2014	30,809	17,217	10,957	600	2,034
2015	28,354	16,097	9,775	504	1,978
2016	19,878	13,135	4,898	213	1,632
Rolling 12 Months Ending in October					
2015	32,175	18,596	10,676	570	2,332
2016	23,592	15,662	5,751	NM	1,938

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	7,363	3,619	3,286	1	456
2007	6,036	2,808	2,715	2	512
2008	5,417	2,296	2,704	1	416
2009	4,821	2,761	1,724	1	335
2010	4,994	3,325	1,354	2	313
2011	5,012	3,449	1,277	1	286
2012	3,675	2,105	756	1	812
2013	4,852	3,409	779	1	662
2014	4,412	3,440	599	2	371
2015	4,044	3,120	669	2	253
Year 2014					
January	436	349	55	0	32
February	361	275	56	0	30
March	421	332	57	0	31
April	303	212	55	0	36
May	393	314	49	0	30
June	418	339	46	0	33
July	385	299	54	0	33
August	382	298	51	0	33
Sept	372	281	62	0	29
October	230	178	23	0	29
November	288	228	33	0	27
December	424	335	60	0	29
Year 2015					
January	402	312	56	0	33
February	413	332	56	0	25
March	275	195	60	0	20
April	300	213	59	0	28
May	339	260	59	0	20
June	306	233	55	0	18
July	409	333	59	0	17
August	388	311	58	0	18
Sept	376	294	61	0	21
October	300	227	57	0	16
November	260	178	62	0	20
December	276	232	26	0	18
Year 2016					
January	341	302	17	0	22
February	329	272	39	0	17
March	366	283	63	0	20
April	390	326	43	0	21
May	372	296	52	0	24
June	382	308	52	0	22
July	403	325	56	0	22
August	422	337	62	0	23
Sept	383	311	50	0	22
October	246	172	62	0	13
Year to Date					
2014	3,700	2,877	507	2	315
2015	3,508	2,710	581	2	216
2016	3,635	2,931	497	1	206
Rolling 12 Months Ending in October					
2015	4,220	3,273	673	2	272
2016	4,171	3,340	586	1	244

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	1,259	0	195	9	1,055
2007	1,262	0	162	11	1,090
2008	897	0	119	9	769
2009	1,007	0	126	8	873
2010	1,059	0	98	11	950
2011	1,080	0	112	6	962
2012	1,346	0	113	11	1,222
2013	1,486	0	96	11	1,379
2014	1,283	3	90	16	1,174
2015	1,144	9	109	16	1,010
Year 2014					
January	105	0	9	2	95
February	93	1	7	1	84
March	106	0	8	2	96
April	116	0	9	2	105
May	110	0	8	1	102
June	109	0	0	0	109
July	114	0	5	0	109
August	112	0	9	2	101
Sept	113	0	9	2	102
October	86	0	9	1	75
November	104	1	9	2	92
December	114	0	9	2	103
Year 2015					
January	109	0	10	2	96
February	99	1	9	2	88
March	101	1	9	2	89
April	106	1	9	1	95
May	96	1	10	0	86
June	91	2	9	0	81
July	81	1	9	0	71
August	87	0	9	2	77
Sept	98	0	8	2	88
October	84	0	8	2	73
November	106	3	10	2	92
December	86	0	10	1	75
Year 2016					
January	79	0	10	2	66
February	87	0	9	2	76
March	108	0	10	2	96
April	71	0	6	0	64
May	76	0	6	0	69
June	79	0	8	0	71
July	85	0	8	1	76
August	84	0	9	0	75
Sept	65	0	9	0	56
October	112	0	10	0	102
Year to Date					
2014	1,064	2	71	12	978
2015	952	6	90	13	844
2016	846	2	86	7	751
Rolling 12 Months Ending in October					
2015	1,171	7	108	17	1,039
2016	1,038	5	106	10	917

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	8,622	3,619	3,482	10	1,511
2007	7,299	2,808	2,877	12	1,602
2008	6,314	2,296	2,823	10	1,184
2009	5,828	2,761	1,850	9	1,209
2010	6,053	3,325	1,452	12	1,264
2011	6,092	3,449	1,388	6	1,248
2012	5,021	2,105	869	13	2,034
2013	6,338	3,409	875	12	2,041
2014	5,695	3,443	689	18	1,545
2015	5,188	3,128	779	18	1,263
Year 2014					
January	541	349	63	2	127
February	454	276	63	2	113
March	527	332	65	2	128
April	418	212	64	2	141
May	504	314	57	1	132
June	527	339	46	0	141
July	499	299	58	0	142
August	494	298	59	2	134
Sept	485	281	70	2	131
October	316	178	32	2	104
November	393	229	42	2	120
December	538	335	69	2	132
Year 2015					
January	510	313	66	3	129
February	513	332	65	2	113
March	376	196	69	2	109
April	406	213	68	2	123
May	435	261	69	0	105
June	398	235	63	0	99
July	490	334	68	0	88
August	475	311	67	2	95
Sept	475	294	69	2	109
October	384	227	65	2	89
November	365	181	72	2	111
December	362	232	36	2	93
Year 2016					
January	420	302	27	3	89
February	416	272	49	2	93
March	474	283	74	2	116
April	461	326	50	0	85
May	448	296	58	0	93
June	461	308	60	0	93
July	488	325	65	1	98
August	506	337	71	0	98
Sept	448	311	59	0	78
October	359	172	72	0	115
Year to Date					
2014	4,764	2,879	578	14	1,293
2015	4,461	2,716	670	15	1,059
2016	4,481	2,932	583	8	957
Rolling 12 Months Ending in October					
2015	5,391	3,280	781	19	1,311
2016	5,209	3,345	692	12	1,161

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	6,461,615	2,478,396	3,412,826	34,623	535,770
2007	7,089,342	2,736,418	3,765,194	34,087	553,643
2008	6,895,843	2,730,134	3,612,197	33,403	520,109
2009	7,121,069	2,911,279	3,655,712	34,279	519,799
2010	7,680,185	3,290,993	3,794,423	39,462	555,307
2011	7,883,865	3,446,087	3,819,107	47,170	571,501
2012	9,484,710	4,101,927	4,686,260	63,116	633,407
2013	8,596,299	3,970,447	3,917,131	66,570	642,152
2014	8,544,387	3,895,008	3,954,032	71,957	623,390
2015	10,016,576	4,745,255	4,576,683	70,092	624,545
Year 2014					
January	694,661	324,657	309,522	6,411	54,071
February	579,819	265,645	261,103	5,180	47,892
March	591,101	271,638	263,442	5,292	50,729
April	579,336	270,132	256,256	4,967	47,981
May	680,193	323,448	300,470	5,761	50,513
June	754,126	348,327	349,049	6,119	50,630
July	880,805	393,011	425,395	6,966	55,433
August	935,170	426,346	445,556	7,430	55,839
Sept	805,960	355,962	391,332	6,396	52,270
October	736,039	323,456	356,020	5,939	50,625
November	633,279	288,760	287,096	5,496	51,927
December	673,898	303,627	308,792	5,999	55,480
Year 2015					
January	745,235	347,151	338,575	5,254	54,254
February	676,139	331,550	293,466	4,643	46,480
March	736,500	348,019	335,606	5,168	47,707
April	692,199	329,693	312,160	4,864	45,483
May	765,715	361,501	350,073	5,514	48,627
June	922,461	447,079	416,030	6,221	53,131
July	1,084,120	510,084	509,399	7,336	57,301
August	1,064,683	496,826	503,679	7,235	56,943
Sept	930,090	432,653	437,222	6,696	53,518
October	824,878	380,830	386,725	5,943	51,380
November	767,336	366,510	342,625	5,470	52,732
December	807,219	393,358	351,123	5,748	56,990
Year 2016					
January	803,536	390,262	353,893	5,851	53,529
February	717,097	352,615	309,377	5,032	50,073
March	776,605	379,759	339,039	5,416	52,392
April	755,518	364,499	335,359	5,313	50,348
May	841,299	409,783	373,032	5,602	52,882
June	1,007,072	501,227	445,303	6,081	54,460
July	1,178,919	576,292	538,877	6,668	57,083
August	1,191,890	573,066	554,800	6,754	57,270
Sept	951,179	454,346	436,593	5,963	54,278
October	775,514	368,436	350,473	5,144	51,461
Year to Date					
2014	7,237,209	3,302,622	3,358,144	60,461	515,983
2015	8,442,020	3,985,387	3,882,936	58,874	514,823
2016	8,998,629	4,370,283	4,036,746	57,824	533,775
Rolling 12 Months Ending in October					
2015	9,749,197	4,577,774	4,478,823	70,370	622,231
2016	10,573,184	5,130,151	4,730,494	69,042	643,497

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	942,817	0	330,878	33,112	578,828
2007	872,579	0	339,796	35,987	496,796
2008	793,537	0	326,048	32,813	434,676
2009	816,787	0	305,542	41,275	469,970
2010	821,775	0	301,769	46,324	473,683
2011	839,681	0	308,669	39,856	491,155
2012	886,103	0	322,607	47,883	515,613
2013	882,385	0	303,177	51,057	528,151
2014	865,146	4,926	292,016	46,635	521,569
2015	935,098	8,060	283,372	46,287	597,379
Year 2014					
January	87,362	527	28,175	7,205	51,455
February	68,875	539	23,822	3,527	40,988
March	72,690	476	25,252	3,245	43,717
April	67,023	286	22,224	3,085	41,428
May	67,861	224	22,787	3,272	41,578
June	67,490	274	23,101	3,460	40,656
July	72,370	267	24,630	3,749	43,724
August	74,882	441	25,464	4,031	44,946
Sept	69,772	367	23,285	3,731	42,390
October	71,722	431	23,484	3,776	44,032
November	70,483	534	24,002	3,672	42,274
December	74,615	561	25,790	3,883	44,381
Year 2015					
January	79,075	582	25,015	4,250	49,227
February	73,005	615	22,712	3,906	45,772
March	80,319	512	24,594	4,013	51,201
April	73,041	598	21,826	3,220	47,398
May	72,919	629	22,283	3,475	46,532
June	74,850	589	22,777	3,582	47,901
July	82,339	727	25,332	4,138	52,143
August	83,543	935	25,150	3,973	53,485
Sept	78,210	731	24,437	4,076	48,965
October	78,745	688	23,297	3,788	50,972
November	77,684	713	22,566	3,845	50,561
December	81,369	743	23,382	4,021	53,223
Year 2016					
January	85,479	1,184	25,629	4,561	54,106
February	78,301	1,070	23,422	4,217	49,592
March	80,284	948	24,328	4,163	50,844
April	77,752	711	22,367	4,054	50,620
May	77,815	875	23,998	3,652	49,290
June	78,230	909	24,030	3,692	49,598
July	82,796	981	25,489	4,171	52,156
August	84,263	952	26,221	4,188	52,901
Sept	77,918	865	23,164	3,758	50,131
October	76,146	695	21,651	3,598	50,201
Year to Date					
2014	720,048	3,831	242,224	39,079	434,914
2015	776,046	6,604	237,424	38,421	493,596
2016	798,983	9,188	240,300	40,054	509,440
Rolling 12 Months Ending in October					
2015	921,144	7,699	287,216	45,977	580,252
2016	958,035	10,644	286,248	47,920	613,223

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

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Values for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	7,404,432	2,478,396	3,743,704	67,735	1,114,597
2007	7,961,922	2,736,418	4,104,991	70,074	1,050,439
2008	7,689,380	2,730,134	3,938,245	66,216	954,785
2009	7,937,856	2,911,279	3,961,254	75,555	989,769
2010	8,501,960	3,290,993	4,096,192	85,786	1,028,990
2011	8,723,546	3,446,087	4,127,777	87,026	1,062,657
2012	10,370,812	4,101,927	5,008,867	110,999	1,149,020
2013	9,478,685	3,970,447	4,220,309	117,626	1,170,303
2014	9,409,532	3,899,934	4,246,048	118,591	1,144,959
2015	10,951,674	4,753,315	4,860,055	116,380	1,221,924
Year 2014					
January	782,023	325,184	337,697	13,616	105,526
February	648,695	266,184	284,925	8,706	88,880
March	663,791	272,114	288,694	8,537	94,446
April	646,360	270,418	278,481	8,052	89,409
May	748,053	323,672	323,257	9,033	92,091
June	821,616	348,601	372,150	9,580	91,286
July	953,174	393,278	450,025	10,715	99,157
August	1,010,052	426,786	471,019	11,461	100,785
Sept	875,732	356,329	414,618	10,126	94,659
October	807,761	323,887	379,503	9,715	94,657
November	703,762	289,294	311,098	9,169	94,202
December	748,513	304,188	334,581	9,883	99,861
Year 2015					
January	824,310	347,733	363,591	9,504	103,482
February	749,144	332,165	316,178	8,549	92,252
March	816,819	348,531	360,200	9,180	98,908
April	765,240	330,291	333,985	8,084	92,881
May	838,634	362,129	372,356	8,989	95,159
June	997,311	447,668	438,807	9,804	101,032
July	1,166,459	510,811	534,731	11,474	109,444
August	1,148,226	497,761	528,829	11,208	110,428
Sept	1,008,300	433,385	461,659	10,772	102,484
October	903,623	381,518	410,022	9,731	102,351
November	845,020	367,223	365,190	9,315	103,292
December	888,588	394,101	374,505	9,769	110,212
Year 2016					
January	889,015	391,446	379,522	10,412	107,635
February	795,397	353,684	332,799	9,249	99,665
March	856,889	380,706	363,368	9,579	103,236
April	833,271	365,210	357,726	9,367	100,968
May	919,114	410,658	397,030	9,254	102,173
June	1,085,302	502,136	469,334	9,774	104,058
July	1,261,715	577,273	564,366	10,838	109,238
August	1,276,152	574,018	581,022	10,942	110,171
Sept	1,029,097	455,210	459,756	9,721	104,409
October	851,659	369,130	372,124	8,742	101,663
Year to Date					
2014	7,957,257	3,306,453	3,600,368	99,540	950,896
2015	9,218,066	3,991,992	4,120,359	97,296	1,008,420
2016	9,797,611	4,379,471	4,277,046	97,878	1,043,215
Rolling 12 Months Ending in October					
2015	10,670,341	4,585,473	4,766,039	116,347	1,202,482
2016	11,531,219	5,140,795	5,016,742	116,962	1,256,720

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.5.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	160,033	16,617	136,108	6,644	664
2007	166,774	17,442	144,104	4,598	630
2008	195,777	20,465	169,547	5,235	530
2009	206,792	19,583	180,689	5,931	589
2010	218,331	19,975	192,428	5,535	393
2011	232,795	22,086	180,856	29,469	384
2012	256,376	25,193	201,965	26,672	2,545
2013	271,967	27,259	211,942	28,143	4,623
2014	285,982	25,819	228,447	27,038	4,678
2015	282,530	25,257	227,381	25,250	4,642
Year 2014					
January	24,810	2,187	19,717	2,506	401
February	23,764	1,997	19,121	2,289	357
March	24,623	2,107	19,714	2,388	414
April	24,489	2,133	19,679	2,260	416
May	24,111	2,136	19,380	2,190	404
June	24,096	2,173	19,233	2,294	396
July	26,390	2,372	21,117	2,498	404
August	25,163	2,332	20,037	2,403	391
Sept	23,690	2,143	18,898	2,290	359
October	21,697	2,148	17,099	2,092	358
November	20,698	2,030	16,561	1,723	385
December	22,451	2,062	17,892	2,105	393
Year 2015					
January	22,341	2,166	17,669	2,131	375
February	19,907	1,894	15,857	1,843	313
March	22,993	2,187	18,282	2,152	372
April	23,039	2,153	18,422	2,078	386
May	23,827	2,070	19,235	2,148	374
June	23,305	2,066	18,720	2,146	372
July	25,727	2,228	20,794	2,293	413
August	24,507	2,120	19,753	2,227	407
Sept	23,326	2,004	18,828	2,108	387
October	23,435	2,081	18,967	1,989	398
November	24,602	2,123	20,052	2,020	408
December	25,520	2,165	20,803	2,115	438
Year 2016					
January	28,779	2,572	23,258	2,481	467
February	26,323	2,469	21,262	2,183	410
March	26,918	2,473	21,197	2,724	524
April	27,153	2,585	22,247	1,867	454
May	27,948	2,606	22,797	2,071	473
June	26,392	2,389	21,901	1,729	372
July	27,016	2,395	22,290	1,916	415
August	28,815	2,711	23,771	1,923	410
Sept	26,512	2,506	21,856	1,769	382
October	29,081	2,862	23,356	2,417	447
Year to Date					
2014	242,832	21,727	193,994	23,211	3,901
2015	232,407	20,969	186,526	21,115	3,796
2016	274,937	25,568	223,934	21,081	4,354
Rolling 12 Months Ending in October					
2015	275,557	25,061	220,979	24,943	4,574
2016	325,060	29,856	264,789	25,216	5,199

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	2,051	0	525	1,094	433
2007	1,988	0	386	1,102	501
2008	1,025	0	454	433	138
2009	793	0	545	176	72
2010	1,623	0	1,195	370	58
2011	3,195	0	2,753	351	91
2012	3,189	0	2,788	340	61
2013	831	0	261	423	147
2014	1,710	176	525	674	335
2015	1,522	2	644	515	362
Year 2014					
January	169	20	62	61	25
February	148	18	64	44	23
March	132	19	41	44	27
April	137	19	28	60	30
May	144	19	33	64	29
June	154	17	54	54	29
July	179	14	70	64	30
August	161	15	62	55	30
Sept	140	14	47	51	28
October	101	2	21	53	25
November	112	3	17	64	29
December	132	15	26	61	30
Year 2015					
January	105	0	34	42	29
February	102	0	40	37	24
March	131	0	54	47	30
April	128	0	50	47	31
May	125	0	49	45	31
June	119	0	42	46	30
July	151	0	72	47	32
August	123	0	60	31	32
Sept	132	0	54	47	31
October	111	0	45	36	30
November	143	0	68	45	30
December	152	0	76	45	31
Year 2016					
January	400	0	221	98	81
February	406	1	231	90	85
March	597	0	335	133	129
April	471	1	268	100	103
May	289	0	155	71	63
June	161	0	108	30	22
July	242	0	150	50	42
August	207	1	121	50	36
Sept	148	0	85	39	23
October	499	2	264	124	109
Year to Date					
2014	1,465	158	482	549	276
2015	1,227	2	500	426	300
2016	3,420	5	1,937	784	694
Rolling 12 Months Ending in October					
2015	1,472	20	542	550	359
2016	3,715	5	2,081	874	755

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 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2006-October 2016 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	162,084	16,617	136,632	7,738	1,096
2007	168,762	17,442	144,490	5,699	1,131
2008	196,802	20,465	170,001	5,668	668
2009	207,585	19,583	181,234	6,106	661
2010	219,954	19,975	193,623	5,905	451
2011	235,990	22,086	183,609	29,820	474
2012	259,564	25,193	204,753	27,012	2,606
2013	272,798	27,259	212,203	28,566	4,770
2014	287,692	25,995	228,971	27,713	5,013
2015	284,052	25,259	228,024	25,765	5,004
Year 2014					
January	24,980	2,207	19,779	2,567	426
February	23,912	2,014	19,185	2,334	379
March	24,755	2,126	19,755	2,432	442
April	24,625	2,152	19,708	2,320	446
May	24,255	2,155	19,413	2,254	433
June	24,250	2,190	19,287	2,348	425
July	26,569	2,386	21,187	2,561	434
August	25,324	2,347	20,099	2,458	421
Sept	23,830	2,158	18,944	2,341	387
October	21,798	2,150	17,119	2,145	383
November	20,811	2,033	16,578	1,786	414
December	22,584	2,077	17,918	2,166	423
Year 2015					
January	22,445	2,166	17,702	2,173	404
February	20,009	1,894	15,897	1,881	337
March	23,125	2,187	18,336	2,199	401
April	23,167	2,153	18,473	2,125	417
May	23,952	2,070	19,283	2,193	405
June	23,424	2,066	18,763	2,192	403
July	25,877	2,228	20,865	2,340	445
August	24,630	2,120	19,813	2,258	439
Sept	23,458	2,004	18,881	2,155	418
October	23,546	2,081	19,012	2,025	428
November	24,746	2,124	20,120	2,064	438
December	25,672	2,165	20,878	2,160	469
Year 2016					
January	29,179	2,573	23,479	2,579	548
February	26,729	2,469	21,493	2,273	494
March	27,515	2,473	21,532	2,858	652
April	27,624	2,586	22,514	1,967	557
May	28,236	2,606	22,952	2,142	536
June	26,553	2,390	22,009	1,759	395
July	27,258	2,395	22,439	1,966	457
August	29,022	2,711	23,891	1,973	446
Sept	26,660	2,506	21,941	1,808	405
October	29,581	2,864	23,620	2,541	556
Year to Date					
2014	244,297	21,885	194,476	23,760	4,176
2015	233,634	20,970	187,026	21,541	4,097
2016	278,357	25,573	225,871	21,866	5,047
Rolling 12 Months Ending in October					
2015	277,028	25,081	221,521	25,493	4,933
2016	328,775	29,861	266,870	26,089	5,954

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 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	19,629	500	17,343	1,761	25
2007	19,576	553	17,116	1,785	122
2008	19,805	509	17,487	1,809	0
2009	19,669	465	17,048	2,155	0
2010	19,437	402	16,802	2,233	0
2011	16,972	388	14,625	1,955	4
2012	16,968	418	14,235	2,304	12
2013	17,007	456	14,057	2,485	8
2014	16,706	444	13,809	2,447	6
2015	16,631	452	13,797	2,375	8
Year 2014					
January	1,381	28	1,131	221	0
February	1,205	24	1,014	166	0
March	1,390	38	1,165	187	0
April	1,371	44	1,127	200	0
May	1,455	42	1,200	214	1
June	1,418	40	1,170	207	1
July	1,489	44	1,224	220	1
August	1,469	38	1,210	220	1
Sept	1,384	38	1,141	205	1
October	1,374	40	1,133	200	0
November	1,373	32	1,139	201	0
December	1,397	36	1,155	205	1
Year 2015					
January	1,335	31	1,114	190	0
February	1,212	24	1,020	168	0
March	1,310	28	1,088	194	0
April	1,315	41	1,077	196	1
May	1,380	45	1,136	199	1
June	1,417	44	1,168	205	1
July	1,540	46	1,274	219	1
August	1,491	43	1,239	208	1
Sept	1,388	43	1,139	206	1
October	1,383	38	1,157	187	1
November	1,389	34	1,153	202	1
December	1,471	36	1,232	202	1
Year 2016					
January	1,341	34	1,123	183	1
February	1,215	27	1,030	157	1
March	1,270	41	1,018	209	1
April	1,370	40	1,133	196	1
May	1,382	44	1,157	182	1
June	1,384	40	1,157	186	0
July	1,404	37	1,163	203	1
August	1,427	42	1,190	195	0
Sept	1,311	43	1,093	175	0
October	1,260	37	1,043	179	1
Year to Date					
2014	13,936	376	11,514	2,041	5
2015	13,771	382	11,412	1,971	6
2016	13,365	386	11,106	1,866	7
Rolling 12 Months Ending in October					
2015	16,540	449	13,706	2,377	7
2016	16,225	456	13,491	2,269	8

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	2,840	0	725	1,595	520
2007	2,219	0	768	1,136	315
2008	2,328	0	806	1,514	8
2009	2,426	0	823	1,466	137
2010	2,287	0	819	1,316	152
2011	2,044	0	742	1,148	154
2012	1,986	0	522	1,273	190
2013	1,865	0	517	1,160	187
2014	1,955	0	650	1,104	200
2015	1,986	0	655	1,127	203
Year 2014					
January	203	0	59	126	17
February	140	0	49	76	15
March	154	0	52	86	15
April	155	0	58	82	15
May	166	0	57	92	18
June	163	0	57	90	16
July	164	0	54	93	17
August	161	0	47	92	22
Sept	157	0	48	92	18
October	165	0	56	93	17
November	158	0	55	88	15
December	169	0	59	93	17
Year 2015					
January	180	0	67	95	19
February	147	0	48	83	16
March	172	0	59	96	17
April	162	0	53	92	17
May	164	0	49	99	16
June	154	0	47	90	17
July	170	0	55	99	17
August	164	0	55	91	18
Sept	162	0	49	95	18
October	169	0	57	94	17
November	166	0	56	96	14
December	174	0	61	96	17
Year 2016					
January	164	0	62	89	13
February	169	0	72	84	13
March	198	0	80	103	15
April	165	0	51	100	14
May	157	0	48	95	14
June	160	0	51	94	16
July	175	0	53	106	16
August	163	0	49	100	14
Sept	151	0	45	94	13
October	142	0	46	86	10
Year to Date					
2014	1,628	0	537	923	169
2015	1,646	0	539	935	172
2016	1,644	0	556	950	138
Rolling 12 Months Ending in October					
2015	1,973	0	652	1,116	204
2016	1,983	0	673	1,142	169

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

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

Values for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and

Useful Thermal Output, by Sector, 2006-October 2016 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	22,469	500	18,068	3,356	545
2007	21,796	553	17,885	2,921	437
2008	22,134	509	18,294	3,323	8
2009	22,095	465	17,872	3,622	137
2010	21,725	402	17,621	3,549	152
2011	19,016	388	15,367	3,103	158
2012	18,954	418	14,757	3,577	203
2013	18,871	456	14,574	3,646	195
2014	18,661	444	14,459	3,551	206
2015	18,617	452	14,452	3,502	211
Year 2014					
January	1,584	28	1,190	347	18
February	1,345	24	1,063	242	15
March	1,544	38	1,217	273	16
April	1,526	44	1,184	283	15
May	1,622	42	1,256	306	18
June	1,581	40	1,227	297	17
July	1,653	44	1,279	313	18
August	1,629	38	1,257	312	22
Sept	1,541	38	1,188	297	18
October	1,540	40	1,189	293	17
November	1,531	32	1,194	289	15
December	1,566	36	1,214	299	17
Year 2015					
January	1,515	31	1,181	284	19
February	1,359	24	1,068	250	16
March	1,482	28	1,147	290	18
April	1,477	41	1,130	289	17
May	1,544	45	1,185	298	17
June	1,571	44	1,214	296	18
July	1,710	46	1,329	318	18
August	1,655	43	1,294	299	19
Sept	1,551	43	1,188	301	19
October	1,551	38	1,215	281	18
November	1,555	34	1,209	297	15
December	1,645	36	1,293	298	18
Year 2016					
January	1,505	34	1,185	272	14
February	1,383	27	1,102	241	14
March	1,468	41	1,098	312	16
April	1,536	40	1,184	297	15
May	1,539	44	1,205	277	14
June	1,544	40	1,207	280	16
July	1,579	37	1,216	309	17
August	1,590	42	1,239	294	15
Sept	1,462	43	1,138	269	13
October	1,402	37	1,089	265	11
Year to Date					
2014	15,564	376	12,051	2,964	173
2015	15,416	382	11,951	2,906	178
2016	15,008	386	11,662	2,816	144
Rolling 12 Months Ending in October					
2015	18,513	449	14,359	3,494	211
2016	18,208	456	14,163	3,412	177

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2006-October 2016 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	350,074	27,455	135,546	269	186,803
2007	353,025	31,568	132,953	284	188,220
2008	338,786	29,150	130,122	287	179,227
2009	320,444	29,565	130,894	274	159,712
2010	349,530	40,167	137,072	274	172,016
2011	347,623	35,474	130,108	482	181,559
2012	390,342	32,723	138,217	478	218,924
2013	397,929	43,363	143,721	536	210,308
2014	431,285	45,643	174,513	961	210,167
2015	406,650	43,919	171,387	504	190,840
Year 2014					
January	37,135	4,268	14,488	150	18,228
February	33,670	3,805	13,442	125	16,298
March	36,751	4,396	14,837	87	17,430
April	31,558	2,624	12,884	43	16,007
May	32,416	2,959	12,100	67	17,290
June	37,105	3,977	15,346	124	17,658
July	39,028	4,052	16,069	81	18,827
August	38,477	4,275	15,672	69	18,461
Sept	35,553	3,720	14,839	54	16,940
October	35,086	3,777	13,871	64	17,375
November	36,209	3,715	15,424	46	17,025
December	38,296	4,075	15,542	51	18,628
Year 2015					
January	36,170	4,203	15,139	53	16,775
February	33,328	3,574	14,696	51	15,007
March	33,569	3,459	14,639	41	15,430
April	31,142	2,361	13,300	48	15,433
May	32,373	3,394	13,359	54	15,567
June	33,871	3,817	14,521	25	15,508
July	36,954	4,615	15,335	62	16,942
August	37,027	4,529	15,927	30	16,541
Sept	33,522	3,464	14,011	42	16,005
October	30,952	3,269	12,065	42	15,577
November	32,840	3,484	13,457	20	15,880
December	34,900	3,750	14,939	35	16,176
Year 2016					
January	34,215	4,250	13,941	62	15,962
February	32,736	3,992	13,891	58	14,794
March	32,600	3,528	13,929	26	15,117
April	27,015	2,672	10,221	42	14,081
May	29,050	2,739	10,907	19	15,386
June	32,098	3,928	12,641	80	15,449
July	34,361	4,286	14,094	69	15,912
August	34,805	4,290	14,538	120	15,857
Sept	31,800	3,558	13,057	67	15,119
October	28,597	2,676	10,881	37	15,003
Year to Date					
2014	356,780	37,854	143,548	864	174,514
2015	338,909	36,685	142,992	449	158,784
2016	317,279	35,919	128,100	581	152,679
Rolling 12 Months Ending in October					
2015	413,414	44,474	173,957	546	194,437
2016	385,019	43,153	156,496	636	184,735

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

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

Values for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2006-October 2016 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
2006	1,049,161	0	18,814	1,045	1,029,303
2007	982,486	0	21,435	1,756	959,296
2008	923,889	0	18,075	1,123	904,690
2009	816,285	0	19,587	1,135	795,563
2010	876,041	0	18,357	1,064	856,620
2011	893,314	0	16,577	1,022	875,716
2012	883,158	0	19,251	949	862,958
2013	919,631	0	20,342	950	898,339
2014	946,344	8,835	22,262	3,766	911,481
2015	943,962	9,351	19,200	3,714	911,697
Year 2014					
January	80,405	649	1,975	311	77,469
February	73,581	733	1,988	271	70,589
March	80,081	875	2,027	342	76,837
April	77,233	678	1,914	246	74,395
May	76,839	773	1,454	338	74,274
June	79,101	683	1,848	400	76,170
July	80,733	767	1,876	351	77,739
August	82,539	722	1,908	346	79,564
Sept	76,170	573	1,706	296	73,596
October	78,477	737	1,894	285	75,561
November	78,316	728	1,738	271	75,578
December	82,869	916	1,935	309	79,709
Year 2015					
January	84,431	912	1,877	388	81,254
February	75,501	897	1,754	371	72,478
March	77,437	822	1,688	320	74,607
April	77,369	538	1,622	300	74,909
May	79,154	742	936	146	77,329
June	77,486	796	1,477	273	74,940
July	80,499	768	1,635	384	77,711
August	81,262	782	1,727	295	78,459
Sept	77,136	694	1,765	327	74,350
October	75,247	739	1,386	273	72,849
November	77,481	741	1,513	295	74,932
December	80,959	919	1,819	342	77,880
Year 2016					
January	82,459	864	1,755	471	79,369
February	75,184	893	1,746	412	72,133
March	75,784	871	1,367	274	73,272
April	73,377	710	1,407	344	70,917
May	75,986	659	1,338	271	73,717
June	76,995	563	1,373	375	74,684
July	78,055	689	1,276	363	75,726
August	77,875	709	1,284	423	75,459
Sept	73,432	411	1,429	363	71,228
October	73,927	349	1,084	328	72,167
Year to Date					
2014	785,159	7,190	18,589	3,186	756,194
2015	785,522	7,691	15,868	3,078	758,885
2016	763,073	6,718	14,060	3,623	738,672
Rolling 12 Months Ending in October					
2015	946,707	9,336	19,541	3,658	914,172
2016	921,512	8,377	17,392	4,260	891,483

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 for 2015 and prior years are final. Values for 2016 are preliminary. 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 2.8.A. Consumption of Coal for Electricity Generation by State, by Sector, October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	34	81	-59.0%	0	9	33	72	0	0	NM	0
Connecticut	0	7	-100.0%	0	0	0	7	0	0	0	0
Maine	1	2	-16.0%	0	0	1	1	0	0	0	0
Massachusetts	32	64	-50.0%	0	0	32	64	0	0	NM	0
New Hampshire	0	9	-99.0%	0	9	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	1,618	1,728	-6.4%	0	0	1,603	1,710	0	0	15	18
New Jersey	39	40	-1.5%	0	0	39	40	0	0	0	0
New York	30	54	-44.0%	0	0	25	49	0	0	5	5
Pennsylvania	1,549	1,635	-5.3%	0	0	1,539	1,622	0	0	9	13
East North Central	10,818	12,557	-14.0%	6,527	7,620	4,230	4,866	NM	2	60	69
Illinois	2,792	3,225	-13.0%	68	101	2,678	3,080	NM	1	45	44
Indiana	2,729	2,984	-8.5%	2,679	2,731	50	253	NM	0	NM	0
Michigan	1,681	2,361	-29.0%	1,653	2,336	24	18	0	1	NM	5
Ohio	2,095	2,273	-7.8%	615	753	1,478	1,515	0	0	NM	4
Wisconsin	1,521	1,715	-11.0%	1,512	1,699	0	0	0	0	9	15
West North Central	8,931	9,385	-4.8%	8,838	9,253	NM	1	7	4	86	128
Iowa	1,285	1,119	15.0%	1,233	1,052	0	0	NM	2	48	65
Kansas	1,077	1,155	-6.7%	1,077	1,155	0	0	0	0	0	0
Minnesota	1,125	1,072	4.9%	1,107	1,046	0	0	NM	0	17	25
Missouri	2,387	2,955	-19.0%	2,382	2,952	NM	1	2	2	NM	0
Nebraska	1,171	1,193	-1.9%	1,155	1,165	0	0	0	0	NM	28
North Dakota	1,869	1,758	6.3%	1,865	1,748	0	0	0	0	NM	10
South Dakota	18	134	-87.0%	18	134	0	0	0	0	0	0
South Atlantic	7,392	6,161	20.0%	6,382	5,463	990	669	1	1	19	28
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,598	1,510	5.8%	1,581	1,478	14	29	0	0	3	3
Georgia	1,399	977	43.0%	1,396	974	0	0	0	0	3	3
Maryland	465	323	44.0%	0	0	464	321	0	0	2	2
North Carolina	1,054	796	32.0%	1,045	788	NM	4	1	1	3	3
South Carolina	436	573	-24.0%	433	569	0	0	0	0	3	4
Virginia	447	537	-17.0%	411	506	31	25	NM	1	4	5
West Virginia	1,992	1,446	38.0%	1,517	1,149	475	288	0	0	0	9
East South Central	5,364	4,797	12.0%	5,168	4,654	183	124	0	0	13	18
Alabama	1,580	1,585	-0.3%	1,580	1,583	0	0	0	0	1	2
Kentucky	2,477	2,328	6.4%	2,477	2,328	0	0	0	0	0	0
Mississippi	310	148	109.0%	126	23	183	124	0	0	0	0
Tennessee	997	736	35.0%	985	720	0	0	0	0	12	16
West South Central	11,730	9,934	18.0%	5,406	4,637	6,308	5,282	0	0	15	15
Arkansas	1,346	915	47.0%	1,103	793	243	121	0	0	1	1
Louisiana	540	703	-23.0%	332	482	208	221	0	0	0	0
Oklahoma	1,468	1,373	6.9%	1,330	1,223	124	136	0	0	15	14
Texas	8,377	6,943	21.0%	2,642	2,140	5,734	4,803	0	0	0	0
Mountain	8,113	8,237	-1.5%	7,088	7,150	993	1,053	0	0	32	35
Arizona	1,583	1,709	-7.4%	1,583	1,709	0	0	0	0	0	0
Colorado	1,350	1,162	16.0%	1,349	1,160	NM	2	0	0	NM	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	908	938	-3.2%	NM	0	890	938	0	0	NM	1
Nevada	72	119	-39.0%	34	81	38	38	0	0	0	0
New Mexico	1,131	988	14.0%	1,131	988	0	0	0	0	0	0
Utah	1,136	1,176	-3.4%	1,085	1,128	NM	29	0	0	24	20
Wyoming	1,933	2,143	-9.8%	1,890	2,084	NM	46	0	0	NM	13
Pacific Contiguous	549	654	-16.0%	91	205	451	444	0	0	7	4
California	6	4	64.0%	0	0	0	0	0	0	6	4
Oregon	91	205	-56.0%	91	205	0	0	0	0	0	0
Washington	452	445	1.6%	0	0	451	444	0	0	1	1
Pacific Noncontiguous	90	124	-28.0%	19	32	66	87	4	4	NM	1
Alaska	29	58	-50.0%	19	32	NM	22	4	4	0	0
Hawaii	61	66	-7.5%	0	0	60	65	0	0	NM	1
U.S. Total	54,638	53,659	1.8%	39,517	39,023	14,860	14,309	13	11	248	317

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 for 2016 are preliminary. Values for 2015 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 2.8.B. Consumption of Coal for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	943	1,607	-41.0%	122	394	814	1,203	0	0	6	11
Connecticut	73	359	-80.0%	0	0	73	359	0	0	0	0
Maine	13	19	-32.0%	0	0	10	12	0	0	3	7
Massachusetts	734	836	-12.0%	0	0	731	833	0	0	3	3
New Hampshire	122	394	-69.0%	122	394	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	22,581	28,464	-21.0%	0	0	22,401	28,264	0	1	181	199
New Jersey	469	666	-30.0%	0	0	469	666	0	0	0	0
New York	686	1,013	-32.0%	0	0	627	957	0	0	59	56
Pennsylvania	21,426	26,784	-20.0%	0	0	21,305	26,640	0	1	121	143
East North Central	120,343	143,436	-16.0%	72,381	83,374	47,287	59,298	23	35	652	729
Illinois	30,533	38,460	-21.0%	1,648	1,741	28,418	36,232	10	11	457	475
Indiana	30,132	34,179	-12.0%	28,606	31,868	1,516	2,301	9	8	1	0
Michigan	19,338	24,978	-23.0%	19,072	24,712	209	191	4	15	53	60
Ohio	24,336	27,291	-11.0%	7,153	6,669	17,143	20,573	0	0	39	48
Wisconsin	16,004	18,528	-14.0%	15,903	18,383	0	0	0	0	101	145
West North Central	96,403	107,310	-10.0%	95,270	105,948	8	11	47	47	1,078	1,304
Iowa	12,606	15,739	-20.0%	12,000	15,048	0	0	31	27	576	664
Kansas	12,127	14,075	-14.0%	12,127	14,075	0	0	0	0	0	0
Minnesota	11,302	12,246	-7.7%	11,090	11,968	0	0	5	4	207	274
Missouri	30,199	32,904	-8.2%	30,168	32,866	8	11	11	15	12	12
Nebraska	10,967	12,637	-13.0%	10,735	12,340	0	0	0	0	232	297
North Dakota	18,077	18,974	-4.7%	18,026	18,916	0	0	0	0	51	57
South Dakota	1,124	734	53.0%	1,124	734	0	0	0	0	0	0
South Atlantic	88,139	93,041	-5.3%	77,281	81,747	10,612	10,941	16	19	230	334
Delaware	220	264	-16.0%	0	0	220	264	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	14,876	16,535	-10.0%	14,581	16,084	264	421	0	0	31	30
Georgia	16,648	17,628	-5.6%	16,607	17,587	0	0	0	0	41	41
Maryland	5,224	5,566	-6.2%	0	0	5,207	5,540	0	0	17	27
North Carolina	12,894	14,328	-10.0%	12,735	14,146	121	142	9	12	29	28
South Carolina	7,396	8,216	-10.0%	7,358	8,169	0	0	0	0	38	47
Virginia	6,466	6,544	-1.2%	6,158	6,121	252	365	7	7	48	51
West Virginia	24,415	23,961	1.9%	19,841	19,640	4,547	4,210	0	0	27	110
East South Central	58,434	65,907	-11.0%	55,719	63,026	2,546	2,692	0	0	170	188
Alabama	14,618	18,331	-20.0%	14,601	18,312	0	0	0	0	17	20
Kentucky	26,984	29,860	-9.6%	26,984	29,860	0	0	0	0	0	0
Mississippi	3,820	4,320	-12.0%	1,274	1,627	2,546	2,692	0	0	0	0
Tennessee	13,013	13,395	-2.9%	12,860	13,226	0	0	0	0	153	169
West South Central	99,477	110,081	-9.6%	48,330	54,411	50,998	55,504	0	0	149	166
Arkansas	11,416	11,497	-0.7%	9,383	9,531	2,022	1,955	0	0	10	12
Louisiana	7,273	9,317	-22.0%	4,992	5,581	2,280	3,736	0	0	0	0
Oklahoma	10,018	14,011	-28.0%	8,873	12,876	1,006	980	0	0	139	154
Texas	70,771	75,256	-6.0%	25,081	26,423	45,689	48,833	0	0	0	0
Mountain	74,405	85,989	-13.0%	65,481	76,088	8,552	9,496	0	0	372	405
Arizona	13,829	16,914	-18.0%	13,829	16,914	0	0	0	0	0	0
Colorado	13,563	14,678	-7.6%	13,547	14,661	12	12	0	0	4	4
Idaho	11	13	-17.0%	0	0	0	0	0	0	11	13
Montana	7,666	8,470	-9.5%	167	188	7,493	8,277	0	0	6	4
Nevada	1,103	1,309	-16.0%	674	906	429	403	0	0	0	0
New Mexico	8,398	9,826	-15.0%	8,398	9,826	0	0	0	0	0	0
Utah	9,894	12,601	-21.0%	9,408	12,006	252	361	0	0	235	234
Wyoming	19,941	22,178	-10.0%	19,458	21,587	366	443	0	0	117	148
Pacific Contiguous	3,262	3,624	-10.0%	905	994	2,290	2,567	0	0	67	63
California	60	55	8.9%	0	0	0	0	0	0	60	55
Oregon	905	994	-9.0%	905	994	0	0	0	0	0	0
Washington	2,297	2,574	-11.0%	0	0	2,290	2,567	0	0	7	7
Pacific Noncontiguous	980	969	1.2%	203	218	733	700	34	36	11	14
Alaska	367	433	-15.0%	203	218	130	179	34	36	0	0
Hawaii	613	535	15.0%	0	0	602	521	0	0	11	14
U.S. Total	564,967	640,427	-12.0%	415,691	466,201	146,240	170,677	120	137	2,915	3,412

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Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, October 2016 and October 2015 (Thousand Barrels)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	137	24	466.0%	4	2	126	17	NM	4	2	2
Connecticut	NM	4	NM	1	0	NM	4	NM	0	NM	0
Maine	9	14	-40.0%	NM	0	7	13	NM	0	2	1
Massachusetts	121	4	NM	1	0	117	1	NM	3	NM	0
New Hampshire	NM	2	NM	NM	1	NM	0	NM	0	NM	0
Rhode Island	NM	NM	NM	2	0	NM	0	NM	NM	0	0
Vermont	NM	0	NM	NM	0	0	0	NM	0	0	0
Middle Atlantic	63	72	-12.0%	13	21	43	46	NM	NM	5	3
New Jersey	NM	5	NM	NM	0	4	5	NM	0	NM	0
New York	25	28	-8.9%	13	21	9	3	NM	NM	2	2
Pennsylvania	34	40	-14.0%	NM	0	31	38	1	1	NM	1
East North Central	62	64	-2.4%	34	38	27	23	NM	0	1	2
Illinois	7	7	-0.2%	1	1	6	6	NM	0	0	0
Indiana	11	17	-38.0%	10	16	NM	0	NM	0	1	1
Michigan	15	12	27.0%	15	11	0	0	0	0	NM	0
Ohio	27	23	16.0%	6	5	20	17	NM	0	NM	0
Wisconsin	3	5	-36.0%	3	5	0	0	NM	0	NM	0
West North Central	40	26	55.0%	35	25	4	1	NM	0	NM	0
Iowa	12	5	144.0%	12	5	NM	0	NM	0	NM	0
Kansas	7	3	185.0%	7	3	0	0	0	0	0	0
Minnesota	NM	3	NM	NM	3	NM	1	NM	0	NM	0
Missouri	7	9	-22.0%	7	9	NM	0	NM	0	0	0
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	0
North Dakota	NM	3	NM	NM	3	0	0	NM	0	NM	0
South Dakota	NM	2	NM	NM	2	NM	0	NM	0	0	0
South Atlantic	209	171	22.0%	163	137	36	26	NM	0	8	8
Delaware	NM	1	NM	NM	0	NM	0	0	0	0	0
District of Columbia	NM	0	NM	0	0	0	0	NM	0	0	0
Florida	99	71	38.0%	96	67	NM	3	0	0	NM	1
Georgia	11	6	74.0%	7	4	NM	0	NM	0	3	2
Maryland	21	16	29.0%	2	1	19	15	NM	0	NM	0
North Carolina	26	17	57.0%	25	16	NM	1	NM	0	NM	NM
South Carolina	10	19	-46.0%	7	14	NM	0	NM	0	3	4
Virginia	22	24	-8.8%	8	17	12	6	NM	0	NM	1
West Virginia	19	18	9.6%	19	18	0	0	0	0	0	0
East South Central	40	33	18.0%	37	30	NM	NM	NM	0	NM	4
Alabama	NM	7	NM	3	3	NM	NM	0	0	NM	3
Kentucky	20	13	51.0%	20	13	0	0	0	0	0	0
Mississippi	4	0	NM	3	0	0	0	0	0	1	0
Tennessee	11	13	-16.0%	11	13	NM	0	NM	0	NM	0
West South Central	15	33	-56.0%	9	20	5	12	NM	0	NM	1
Arkansas	NM	8	NM	1	7	0	1	0	0	NM	1
Louisiana	2	5	-54.0%	2	3	0	1	0	0	0	0
Oklahoma	2	2	1.0%	2	2	0	0	NM	0	NM	0
Texas	NM	18	NM	4	8	5	10	NM	0	NM	0
Mountain	29	30	-1.5%	27	26	3	3	NM	0	NM	0
Arizona	7	6	22.0%	7	6	0	0	NM	0	0	0
Colorado	NM	0	NM	NM	0	0	0	0	0	NM	0
Idaho	NM	0	NM	NM	0	0	0	0	0	0	0
Montana	NM	2	NM	NM	0	2	2	0	0	0	0
Nevada	1	3	-67.0%	0	2	1	1	0	0	0	0
New Mexico	NM	6	NM	NM	6	0	0	0	0	NM	0
Utah	NM	3	NM	6	3	NM	0	0	0	NM	0
Wyoming	7	9	-21.0%	7	9	0	0	0	0	NM	0
Pacific Contiguous	12	16	-25.0%	NM	7	2	8	NM	0	4	1
California	9	14	-32.0%	5	6	NM	7	NM	0	4	0
Oregon	NM	1	NM	0	1	0	0	NM	0	0	0
Washington	3	2	73.0%	NM	0	2	1	NM	0	1	1
Pacific Noncontiguous	959	1,071	-10.0%	813	908	106	137	NM	0	NM	25
Alaska	132	125	6.0%	126	117	0	0	NM	0	6	7
Hawaii	827	946	-13.0%	687	791	106	137	1	0	NM	17
U.S. Total	1,566	1,541	1.6%	1,140	1,215	352	273	11	7	64	46

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Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Thousand Barrels)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	947	3,375	-72.0%	96	337	786	2,895	43	96	23	47
Connecticut	184	730	-75.0%	8	12	158	685	NM	20	8	13
Maine	218	905	-76.0%	NM	0	200	865	NM	7	15	33
Massachusetts	462	1,305	-65.0%	28	94	416	1,165	18	46	NM	0
New Hampshire	49	284	-83.0%	40	203	NM	68	7	13	NM	0
Rhode Island	30	143	-79.0%	16	22	11	112	NM	8	0	0
Vermont	NM	8	NM	NM	7	0	0	NM	2	0	0
Middle Atlantic	1,638	4,543	-64.0%	566	1,402	989	2,990	31	69	52	83
New Jersey	124	489	-75.0%	NM	7	116	474	NM	1	3	7
New York	1,043	3,061	-66.0%	561	1,394	432	1,554	23	63	27	50
Pennsylvania	470	994	-53.0%	NM	1	441	962	7	5	21	26
East North Central	871	923	-5.7%	535	601	312	292	5	3	19	27
Illinois	108	85	27.0%	9	13	98	71	1	0	0	0
Indiana	173	252	-32.0%	160	234	NM	0	NM	0	12	18
Michigan	210	193	8.7%	204	187	0	0	3	2	3	4
Ohio	318	335	-5.1%	104	114	211	216	NM	0	3	5
Wisconsin	63	58	7.4%	58	53	4	5	NM	0	1	1
West North Central	405	481	-16.0%	389	462	11	13	3	4	2	2
Iowa	96	69	38.0%	94	67	2	2	NM	0	NM	0
Kansas	76	78	-2.3%	76	78	0	0	0	0	0	0
Minnesota	49	61	-19.0%	36	45	NM	12	3	3	1	1
Missouri	120	180	-33.0%	120	180	NM	0	NM	0	0	0
Nebraska	14	12	18.0%	14	12	0	0	0	0	0	0
North Dakota	42	43	-1.8%	42	42	0	0	NM	0	1	1
South Dakota	8	37	-80.0%	7	37	NM	0	NM	0	0	0
South Atlantic	3,552	4,864	-27.0%	2,679	3,591	785	1,137	NM	47	80	89
Delaware	93	240	-61.0%	NM	8	88	232	0	0	0	0
District of Columbia	NM	0	NM	0	0	0	0	NM	0	0	0
Florida	1,222	860	42.0%	1,186	835	NM	15	0	0	12	10
Georgia	185	253	-27.0%	120	133	35	84	3	4	27	32
Maryland	341	465	-27.0%	16	22	320	402	NM	39	2	2
North Carolina	417	722	-42.0%	345	655	64	52	NM	1	8	14
South Carolina	190	352	-46.0%	161	313	NM	13	NM	0	26	26
Virginia	929	1,766	-47.0%	679	1,443	244	316	NM	2	4	5
West Virginia	176	205	-14.0%	168	183	9	22	0	0	0	0
East South Central	483	569	-15.0%	447	526	12	20	NM	0	24	23
Alabama	76	125	-39.0%	43	85	12	19	0	0	21	21
Kentucky	179	193	-7.3%	179	193	0	0	0	0	0	0
Mississippi	30	28	7.6%	28	27	0	0	0	0	2	1
Tennessee	197	222	-11.0%	196	221	NM	0	NM	0	1	1
West South Central	234	398	-41.0%	154	232	72	152	NM	1	7	13
Arkansas	54	87	-38.0%	38	63	13	16	0	0	3	8
Louisiana	27	108	-75.0%	23	84	3	24	0	0	0	0
Oklahoma	30	15	93.0%	28	13	0	0	NM	0	2	2
Texas	123	187	-34.0%	65	72	55	112	NM	1	NM	2
Mountain	351	350	0.5%	312	316	38	33	NM	0	NM	1
Arizona	83	79	4.8%	83	79	0	0	NM	0	0	0
Colorado	NM	16	NM	NM	16	0	0	0	0	NM	0
Idaho	NM	0	NM	NM	0	0	0	0	0	0	0
Montana	33	27	24.0%	NM	1	32	26	0	0	0	0
Nevada	21	27	-22.0%	16	21	5	NM	0	0	0	0
New Mexico	81	107	-24.0%	81	107	0	0	0	0	NM	0
Utah	46	28	65.0%	44	26	NM	1	0	0	NM	1
Wyoming	72	67	8.0%	72	66	0	0	0	0	NM	0
Pacific Contiguous	165	178	-7.1%	60	67	30	66	NM	1	74	43
California	132	145	-9.0%	52	56	15	57	NM	1	64	31
Oregon	5	9	-47.0%	5	9	0	0	NM	0	0	0
Washington	28	24	20.0%	NM	2	15	9	NM	0	10	12
Pacific Noncontiguous	9,108	9,944	-8.4%	7,880	8,503	1,022	1,198	16	12	189	230
Alaska	1,089	1,156	-5.8%	1,023	1,082	0	0	6	5	60	69
Hawaii	8,019	8,787	-8.7%	6,858	7,421	1,022	1,198	9	7	130	161
U.S. Total	17,755	25,625	-31.0%	13,118	16,037	4,057	8,795	108	234	471	559

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Table 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	NM	5	NM	0	0	0	0	0	0	NM	5
New Jersey	0	1	-100.0%	0	0	0	0	0	0	0	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	4	NM	0	0	0	0	0	0	NM	4
East North Central	74	58	28.0%	26	14	45	41	0	0	3	3
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	4	-100.0%	0	4	0	0	0	0	0	0
Michigan	23	14	63.0%	21	10	0	2	0	0	NM	2
Ohio	45	39	16.0%	0	0	45	39	0	0	NM	0
Wisconsin	6	1	357.0%	6	1	0	0	0	0	0	0
West North Central	NM	1	NM	0	0	0	0	0	0	NM	1
Iowa	NM	1	NM	0	0	0	0	0	0	NM	1
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	33	47	-30.0%	32	45	0	0	0	0	1	3
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	32	45	-29.0%	32	45	0	0	0	0	0	0
Georgia	1	3	-46.0%	0	0	0	0	0	0	1	3
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	32	20	59.0%	32	20	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	32	20	59.0%	32	20	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	87	153	-43.0%	82	148	0	0	0	0	5	5
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	84	149	-44.0%	82	148	0	0	0	0	NM	1
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	4	NM	0	0	0	0	0	0	NM	4
Mountain	16	16	2.4%	0	0	16	16	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	16	16	2.4%	0	0	16	16	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	246	300	-18.0%	172	227	62	57	0	0	13	16

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 for 2016 are preliminary. Values for 2015 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 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
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	52	46	12.0%	0	0	0	0	0	0	52	46
New Jersey	13	6	126.0%	0	0	0	0	0	0	13	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	39	41	-3.5%	0	0	0	0	0	0	39	41
East North Central	839	1,064	-21.0%	437	592	360	428	0	0	43	44
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	159	293	-46.0%	159	293	0	0	0	0	0	0
Michigan	279	309	-9.7%	244	275	1	11	0	0	33	23
Ohio	360	418	-14.0%	0	0	358	417	0	0	2	1
Wisconsin	42	45	-6.7%	34	24	0	0	0	0	7	20
West North Central	22	15	45.0%	0	0	0	0	1	2	21	14
Iowa	22	15	45.0%	0	0	0	0	1	2	21	14
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	710	521	36.0%	687	496	0	0	0	0	23	25
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	687	496	39.0%	687	496	0	0	0	0	0	0
Georgia	23	25	-10.0%	0	0	0	0	0	0	23	25
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	378	315	20.0%	378	315	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	378	315	20.0%	378	315	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	1,497	1,394	7.4%	1,429	1,308	0	0	0	0	68	87
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,459	1,333	9.4%	1,429	1,308	0	0	0	0	30	26
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	38	61	-38.0%	0	0	0	0	0	0	38	61
Mountain	137	153	-10.0%	0	0	137	153	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	137	153	-10.0%	0	0	137	153	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	3,635	3,508	3.6%	2,931	2,710	497	581	1	2	206	216

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 for 2016 are preliminary. Values for 2015 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 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, October 2016 and October 2015 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	26,956	35,645	-24.0%	132	242	25,734	33,851	543	786	548	765
Connecticut	9,994	11,006	-9.2%	1	39	9,457	10,228	NM	342	NM	397
Maine	1,958	2,821	-31.0%	0	0	1,769	2,515	NM	49	167	257
Massachusetts	9,617	14,498	-34.0%	128	202	9,178	13,874	238	321	NM	100
New Hampshire	2,385	3,406	-30.0%	0	1	2,362	3,374	NM	20	NM	11
Rhode Island	3,001	3,914	-23.0%	0	0	2,968	3,860	NM	54	0	0
Vermont	NM	0	NM	2	0	0	0	NM	0	0	0
Middle Atlantic	98,765	100,603	-1.8%	7,353	8,275	89,867	90,387	742	902	803	1,039
New Jersey	26,837	23,089	16.0%	NM	60	26,484	22,606	NM	156	NM	266
New York	32,411	39,457	-18.0%	7,289	8,211	24,391	30,417	563	635	168	193
Pennsylvania	39,517	38,058	3.8%	NM	3	38,993	37,364	NM	111	446	580
East North Central	59,277	51,407	15.0%	23,979	23,374	33,033	25,658	803	905	1,462	1,470
Illinois	11,999	6,982	72.0%	894	260	10,619	6,096	271	342	NM	283
Indiana	11,346	8,779	29.0%	9,643	6,354	1,305	1,987	93	97	306	341
Michigan	16,533	14,635	13.0%	5,713	5,832	9,774	7,840	319	298	727	666
Ohio	14,265	13,721	4.0%	3,336	4,213	10,793	9,335	NM	127	65	46
Wisconsin	5,133	7,291	-30.0%	4,393	6,715	542	400	NM	41	148	135
West North Central	10,839	7,243	50.0%	9,320	6,428	714	362	268	189	537	263
Iowa	1,370	986	39.0%	943	774	NM	0	NM	47	378	165
Kansas	1,416	537	164.0%	1,360	513	0	0	0	0	NM	24
Minnesota	3,428	3,280	4.5%	2,507	3,065	708	120	NM	63	71	32
Missouri	3,054	1,598	91.0%	2,957	1,241	NM	242	78	79	NM	35
Nebraska	478	103	366.0%	469	102	0	0	NM	0	NM	0
North Dakota	620	449	38.0%	611	443	0	0	0	0	NM	6
South Dakota	474	291	63.0%	474	291	0	0	0	0	0	0
South Atlantic	183,438	182,949	0.3%	147,488	149,796	32,650	30,536	NM	574	2,840	2,043
Delaware	6,499	3,759	73.0%	NM	25	5,302	3,163	0	0	1,163	571
District of Columbia	NM	51	NM	0	0	0	0	NM	51	0	0
Florida	97,268	100,536	-3.3%	90,231	92,449	6,328	7,287	NM	18	689	782
Georgia	26,437	29,940	-12.0%	21,410	20,741	4,625	8,849	0	0	403	350
Maryland	3,595	3,316	8.4%	0	0	3,175	2,798	NM	493	NM	25
North Carolina	18,708	19,493	-4.0%	14,749	16,970	3,873	2,435	5	6	81	81
South Carolina	10,913	12,480	-13.0%	9,665	11,934	1,195	522	NM	2	50	22
Virginia	18,135	11,837	53.0%	11,306	7,660	6,609	3,963	NM	3	214	211
West Virginia	1,845	1,536	20.0%	94	16	1,542	1,520	0	0	210	0
East South Central	71,322	67,124	6.3%	47,858	41,668	22,340	24,199	NM	87	1,045	1,169
Alabama	32,348	32,070	0.9%	9,522	8,518	22,272	22,896	0	0	553	656
Kentucky	4,840	6,305	-23.0%	4,671	5,296	59	790	0	0	NM	219
Mississippi	27,475	23,997	14.0%	27,260	23,291	9	513	NM	2	202	190
Tennessee	6,659	4,751	40.0%	6,404	4,562	0	0	NM	84	180	104
West South Central	189,288	203,012	-6.8%	62,726	63,848	87,976	101,729	665	517	37,922	36,918
Arkansas	8,905	3,902	128.0%	4,036	1,265	4,739	2,482	NM	1	128	154
Louisiana	39,011	45,281	-14.0%	19,816	24,978	2,470	3,538	NM	146	16,598	16,619
Oklahoma	18,651	16,380	14.0%	12,772	11,155	5,788	5,136	NM	0	83	89
Texas	122,722	137,449	-11.0%	26,102	26,450	74,978	90,572	528	370	21,113	20,057
Mountain	55,578	64,872	-14.0%	37,717	47,951	16,510	15,580	354	412	997	928
Arizona	20,900	24,522	-15.0%	10,001	15,108	10,797	9,268	NM	147	0	0
Colorado	5,661	7,748	-27.0%	4,781	6,194	844	1,531	14	0	NM	23
Idaho	1,393	2,544	-45.0%	445	1,201	886	1,276	0	29	61	39
Montana	NM	514	NM	NM	466	NM	48	0	0	0	0
Nevada	15,251	18,278	-17.0%	13,618	16,579	1,347	1,407	NM	62	226	230
New Mexico	7,109	6,030	18.0%	4,572	3,937	2,421	1,986	NM	106	NM	1
Utah	4,437	4,768	-7.0%	3,839	4,305	NM	64	NM	68	352	331
Wyoming	421	466	-9.5%	NM	161	NM	0	0	0	327	305
Pacific Contiguous	78,242	109,850	-29.0%	30,131	37,134	41,650	64,422	1,229	1,571	5,232	6,723
California	65,578	87,906	-25.0%	22,653	26,187	36,590	53,556	1,174	1,506	5,162	6,656
Oregon	7,764	10,924	-29.0%	4,390	4,684	3,290	6,140	NM	55	35	44
Washington	4,900	11,020	-56.0%	3,088	6,263	1,770	4,726	NM	9	35	22
Pacific Noncontiguous	1,808	2,175	-17.0%	1,732	2,114	0	0	NM	0	NM	61
Alaska	1,808	2,175	-17.0%	1,732	2,114	0	0	NM	0	NM	61
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	775,514	824,878	-6.0%	368,436	380,830	350,473	386,725	5,144	5,943	51,461	51,380

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Table 2.11.B. Consumption of Natural Gas for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	348,282	345,894	0.7%	2,878	3,876	330,338	327,207	7,608	7,939	7,458	6,873
Connecticut	109,979	105,762	4.0%	29	127	102,603	98,233	3,265	3,212	4,082	4,190
Maine	22,838	16,558	38.0%	0	0	20,416	14,650	255	290	2,168	1,618
Massachusetts	144,838	143,934	0.6%	2,387	3,457	137,974	135,782	3,380	3,750	1,097	946
New Hampshire	28,871	36,506	-21.0%	451	275	28,112	35,897	NM	215	NM	119
Rhode Island	41,744	43,116	-3.2%	0	0	41,233	42,644	511	471	0	0
Vermont	NM	19	NM	11	17	0	0	NM	1	0	0
Middle Atlantic	1,113,241	1,002,026	11.0%	104,241	98,966	990,083	884,494	8,967	8,867	9,949	9,699
New Jersey	278,830	230,744	21.0%	NM	586	274,098	226,006	1,458	1,514	2,575	2,638
New York	410,891	404,869	1.5%	103,465	98,352	299,003	298,561	6,498	6,266	1,925	1,689
Pennsylvania	423,520	366,413	16.0%	NM	28	416,983	359,927	1,012	1,087	5,448	5,372
East North Central	758,743	563,568	35.0%	340,200	249,612	393,501	291,371	8,817	8,532	16,224	14,053
Illinois	132,877	71,349	86.0%	13,222	4,713	114,096	60,577	2,720	3,371	2,839	2,688
Indiana	131,190	100,015	31.0%	102,978	78,449	23,949	17,376	970	814	3,292	3,377
Michigan	208,728	134,799	55.0%	80,039	44,454	117,159	81,104	3,370	2,871	8,160	6,370
Ohio	180,475	175,424	2.9%	48,903	46,413	130,063	127,375	1,160	1,023	349	613
Wisconsin	105,473	81,981	29.0%	95,058	75,583	8,234	4,940	597	453	1,585	1,005
West North Central	166,650	123,359	35.0%	137,171	103,750	22,122	14,317	3,142	2,542	4,214	2,750
Iowa	21,685	16,161	34.0%	18,929	14,199	NM	0	571	456	2,183	1,506
Kansas	18,828	13,824	36.0%	18,193	13,312	0	0	0	0	635	512
Minnesota	60,868	45,262	34.0%	47,742	37,887	10,621	5,628	1,580	1,265	924	482
Missouri	45,106	32,928	37.0%	32,372	23,259	11,498	8,689	985	818	251	161
Nebraska	5,607	3,983	41.0%	5,482	3,977	0	0	NM	3	NM	2
North Dakota	7,773	6,159	26.0%	7,670	6,072	0	0	0	0	104	87
South Dakota	6,783	5,043	34.0%	6,783	5,043	0	0	0	0	0	0
South Atlantic	2,096,121	1,926,769	8.8%	1,671,107	1,568,997	394,087	327,632	6,155	6,425	24,772	23,715
Delaware	58,136	50,728	15.0%	NM	325	47,657	40,541	0	0	10,037	9,861
District of Columbia	513	547	-6.2%	0	0	0	0	513	547	0	0
Florida	1,033,229	981,582	5.3%	936,586	918,447	88,980	55,552	NM	176	7,428	7,408
Georgia	331,447	303,253	9.3%	252,581	220,867	76,087	79,388	0	0	2,780	2,999
Maryland	51,635	38,288	35.0%	0	0	45,974	32,451	5,253	5,587	407	250
North Carolina	249,032	225,447	10.0%	213,550	198,293	34,602	26,367	58	40	821	747
South Carolina	111,112	109,983	1.0%	90,751	96,833	19,902	12,934	NM	17	424	199
Virginia	250,521	204,984	22.0%	175,822	132,949	72,581	69,726	NM	58	2,059	2,251
West Virginia	10,495	11,956	-12.0%	1,375	1,283	8,304	10,673	0	0	816	0
East South Central	815,287	724,294	13.0%	537,162	447,447	265,914	263,897	1,093	1,044	11,118	11,906
Alabama	357,864	338,504	5.7%	111,660	92,001	239,939	238,917	0	0	6,264	7,585
Kentucky	58,698	44,537	32.0%	52,234	37,146	5,068	5,935	0	0	1,396	1,455
Mississippi	320,340	281,332	14.0%	297,401	260,345	20,907	19,044	NM	29	1,991	1,914
Tennessee	78,385	59,922	31.0%	75,866	57,954	0	0	1,053	1,016	1,467	952
West South Central	2,271,037	2,235,934	1.6%	787,203	733,349	1,081,834	1,116,682	6,534	6,272	395,466	379,631
Arkansas	114,680	93,705	22.0%	49,334	30,087	63,948	61,987	NM	22	1,379	1,610
Louisiana	458,515	437,089	4.9%	248,208	255,151	38,143	20,816	1,391	1,377	170,772	159,745
Oklahoma	237,958	211,674	12.0%	166,743	139,200	70,304	71,681	81	0	830	793
Texas	1,459,884	1,493,465	-2.2%	322,918	308,911	909,439	962,198	5,042	4,873	222,485	217,483
Mountain	650,236	609,088	6.8%	480,789	436,264	156,769	159,893	3,333	3,812	9,344	9,120
Arizona	234,260	214,456	9.2%	136,097	117,395	97,164	95,794	999	1,267	0	0
Colorado	80,385	71,878	12.0%	66,732	55,217	13,429	16,464	14	0	209	197
Idaho	21,644	22,784	-5.0%	13,011	13,806	7,949	8,486	0	102	684	389
Montana	6,505	5,178	26.0%	5,877	4,702	628	477	0	0	0	0
Nevada	177,608	175,909	1.0%	162,021	159,650	12,926	13,471	567	592	2,094	2,197
New Mexico	70,667	64,574	9.4%	46,428	39,722	23,185	23,709	1,035	1,134	NM	9
Utah	54,579	50,337	8.4%	48,976	44,770	1,478	1,485	717	718	3,407	3,365
Wyoming	4,587	3,972	15.0%	1,646	1,003	NM	7	0	0	2,932	2,962
Pacific Contiguous	759,370	885,237	-14.0%	290,721	318,054	402,098	497,443	12,159	13,441	54,392	56,299
California	595,649	719,707	-17.0%	207,012	234,235	323,798	416,758	11,562	12,925	53,277	55,789
Oregon	92,598	89,997	2.9%	41,617	36,940	49,790	52,321	NM	453	674	283
Washington	71,123	75,532	-5.8%	42,092	46,879	28,510	28,363	80	63	441	227
Pacific Noncontiguous	19,663	25,851	-24.0%	18,811	25,073	0	0	NM	0	NM	777
Alaska	19,663	25,851	-24.0%	18,811	25,073	0	0	NM	0	NM	777
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,998,629	8,442,020	6.6%	4,370,283	3,985,387	4,036,746	3,882,936	57,824	58,874	533,775	514,823

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Table 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, October 2016 and October 2015 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	1,101	950	16.0%	0	0	1,041	900	NM	50	0	0
Connecticut	NM	38	NM	0	0	NM	38	0	0	0	0
Maine	NM	74	NM	0	0	NM	74	0	0	0	0
Massachusetts	407	335	21.0%	0	0	407	335	0	0	0	0
New Hampshire	207	149	39.0%	0	0	NM	99	NM	50	0	0
Rhode Island	293	309	-5.1%	0	0	293	309	0	0	0	0
Vermont	NM	45	NM	0	0	NM	45	0	0	0	0
Middle Atlantic	5,245	4,706	11.0%	0	0	4,980	4,504	148	70	117	132
New Jersey	996	863	15.0%	0	0	949	834	NM	28	0	0
New York	1,708	1,394	23.0%	0	0	1,708	1,394	0	0	0	0
Pennsylvania	2,540	2,449	3.7%	0	0	2,322	2,275	NM	41	117	132
East North Central	7,007	5,697	23.0%	852	625	6,070	4,981	NM	21	NM	70
Illinois	1,532	1,245	23.0%	NM	34	1,486	1,211	0	0	0	0
Indiana	904	691	31.0%	764	573	NM	94	0	0	NM	24
Michigan	2,177	1,700	28.0%	0	0	2,177	1,700	0	0	0	0
Ohio	1,177	986	19.0%	0	0	1,177	986	0	0	0	0
Wisconsin	1,217	1,075	13.0%	NM	18	1,118	990	NM	21	NM	46
West North Central	1,337	896	49.0%	496	231	841	665	0	0	0	0
Iowa	NM	214	NM	0	0	NM	214	0	0	0	0
Kansas	NM	118	NM	0	0	NM	118	0	0	0	0
Minnesota	438	327	34.0%	NM	64	NM	263	0	0	0	0
Missouri	337	129	162.0%	205	59	NM	70	0	0	0	0
Nebraska	NM	108	NM	NM	108	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	5,180	3,997	30.0%	570	444	4,046	3,184	297	173	267	196
Delaware	NM	144	NM	0	0	NM	130	0	0	NM	14
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	627	750	-16.0%	141	131	482	615	NM	1	NM	3
Georgia	460	365	26.0%	0	0	403	327	0	0	NM	38
Maryland	284	210	36.0%	0	0	NM	144	NM	66	0	0
North Carolina	1,236	854	45.0%	0	0	1,045	769	192	85	0	0
South Carolina	641	479	34.0%	418	308	NM	31	0	0	179	140
Virginia	1,731	1,182	46.0%	NM	6	1,688	1,155	NM	22	0	0
West Virginia	NM	NM	NM	0	0	NM	NM	0	0	0	0
East South Central	562	427	32.0%	NM	173	NM	254	0	0	0	0
Alabama	NM	87	NM	0	0	NM	87	0	0	0	0
Kentucky	NM	186	NM	NM	173	NM	13	0	0	0	0
Mississippi	NM	15	NM	0	0	NM	15	0	0	0	0
Tennessee	NM	139	NM	0	0	NM	139	0	0	0	0
West South Central	1,867	987	89.0%	0	0	1,774	951	NM	36	0	0
Arkansas	NM	111	NM	0	0	NM	111	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	27	NM	0	0	NM	27	0	0	0	0
Texas	1,669	849	96.0%	0	0	1,576	814	NM	36	0	0
Mountain	543	472	15.0%	NM	24	441	404	NM	45	0	0
Arizona	NM	86	NM	0	0	NM	86	0	0	0	0
Colorado	NM	109	NM	0	0	NM	109	0	0	0	0
Idaho	NM	85	NM	NM	24	NM	47	NM	14	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	NM	47	NM	0	0	NM	47	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	NM	145	NM	0	0	NM	115	NM	30	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	6,072	5,216	16.0%	680	584	3,826	3,124	1,567	1,509	0	0
California	5,019	4,384	14.0%	206	202	3,299	2,710	1,515	1,472	0	0
Oregon	580	453	28.0%	NM	122	NM	295	NM	37	0	0
Washington	473	379	25.0%	NM	260	NM	119	0	0	0	0
Pacific Noncontiguous	166	87	91.0%	0	0	0	0	166	87	0	0
Alaska	166	87	91.0%	0	0	0	0	166	87	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	29,081	23,435	24.0%	2,862	2,081	23,356	18,967	2,417	1,989	447	398

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Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	10,680	9,574	12.0%	0	0	10,002	9,119	678	455	0	0
Connecticut	451	401	12.0%	0	0	451	401	0	0	0	0
Maine	792	699	13.0%	0	0	792	699	0	0	0	0
Massachusetts	3,754	3,157	19.0%	0	0	3,754	3,157	0	0	0	0
New Hampshire	1,765	1,354	30.0%	0	0	1,087	899	678	455	0	0
Rhode Island	3,474	3,516	-1.2%	0	0	3,474	3,516	0	0	0	0
Vermont	445	447	-0.6%	0	0	445	447	0	0	0	0
Middle Atlantic	51,514	45,619	13.0%	0	0	49,170	43,572	956	677	1,388	1,370
New Jersey	8,743	7,493	17.0%	0	0	8,382	7,245	362	248	0	0
New York	15,689	13,261	18.0%	0	0	15,689	13,261	0	0	0	0
Pennsylvania	27,082	24,864	8.9%	0	0	25,100	23,065	594	429	1,388	1,370
East North Central	66,377	53,832	23.0%	7,859	5,952	57,615	47,030	231	191	672	659
Illinois	14,104	11,092	27.0%	415	302	13,689	10,790	0	0	0	0
Indiana	8,615	6,609	30.0%	7,239	5,479	1,099	897	0	0	278	233
Michigan	20,152	16,713	21.0%	0	0	20,152	16,713	0	0	0	0
Ohio	11,430	9,424	21.0%	0	0	11,430	9,424	0	0	0	0
Wisconsin	12,076	9,994	21.0%	205	172	11,245	9,206	231	191	394	425
West North Central	11,682	8,974	30.0%	3,376	2,405	8,306	6,569	0	0	0	0
Iowa	2,824	2,245	26.0%	0	0	2,824	2,245	0	0	0	0
Kansas	1,483	1,127	32.0%	0	0	1,483	1,127	0	0	0	0
Minnesota	3,708	2,869	29.0%	855	599	2,853	2,270	0	0	0	0
Missouri	2,121	1,708	24.0%	975	780	1,146	928	0	0	0	0
Nebraska	1,546	1,026	51.0%	1,546	1,026	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	46,801	37,520	25.0%	4,773	4,572	37,326	29,534	2,409	1,646	2,293	1,768
Delaware	1,569	1,293	21.0%	0	0	1,381	1,164	0	0	188	130
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,203	7,231	-14.0%	1,424	1,757	4,746	5,443	NM	6	NM	25
Georgia	4,460	3,512	27.0%	0	0	3,973	3,076	0	77	487	359
Maryland	2,348	1,995	18.0%	0	0	1,639	1,366	709	629	0	0
North Carolina	11,424	7,217	58.0%	0	0	10,017	6,499	1,408	718	0	0
South Carolina	5,238	4,292	22.0%	3,270	2,755	374	282	0	0	1,594	1,254
Virginia	15,417	11,858	30.0%	NM	59	15,055	11,583	283	217	0	0
West Virginia	NM	121	NM	0	0	NM	121	0	0	0	0
East South Central	5,239	4,158	26.0%	2,068	1,680	3,172	2,478	0	0	0	0
Alabama	1,033	847	22.0%	0	0	1,033	847	0	0	0	0
Kentucky	2,229	1,806	23.0%	2,068	1,680	NM	126	0	0	0	0
Mississippi	253	165	53.0%	0	0	253	165	0	0	0	0
Tennessee	1,724	1,339	29.0%	0	0	1,724	1,339	0	0	0	0
West South Central	18,008	14,031	28.0%	0	0	17,286	13,508	722	523	0	0
Arkansas	1,694	1,307	30.0%	0	0	1,694	1,307	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	320	242	32.0%	0	0	320	242	0	0	0	0
Texas	15,994	12,481	28.0%	0	0	15,272	11,958	722	523	0	0
Mountain	5,323	4,815	11.0%	292	511	4,489	3,876	542	428	0	0
Arizona	985	1,104	-11.0%	0	281	985	823	0	0	0	0
Colorado	1,102	1,050	5.0%	0	0	1,102	1,050	0	0	0	0
Idaho	943	819	15.0%	292	230	454	452	198	137	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	565	448	26.0%	0	0	565	448	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1,728	1,394	24.0%	0	0	1,383	1,103	345	291	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	58,061	52,958	9.6%	7,201	5,848	36,567	30,841	14,292	16,269	0	0
California	47,673	44,773	6.5%	2,401	2,187	31,442	26,699	13,830	15,887	0	0
Oregon	5,701	4,704	21.0%	1,356	1,262	3,882	3,060	463	382	0	0
Washington	4,687	3,481	35.0%	3,445	2,399	1,242	1,082	0	0	0	0
Pacific Noncontiguous	1,251	926	35.0%	0	0	0	0	1,251	926	0	0
Alaska	1,251	926	35.0%	0	0	0	0	1,251	926	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	274,937	232,407	18.0%	25,568	20,969	223,934	186,526	21,081	21,115	4,354	3,796

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Table 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	283	311	-9.0%	0	0	269	293	14	17	0	0
Connecticut	95	98	-3.3%	0	0	95	98	0	0	0	0
Maine	20	27	-23.0%	0	0	NM	9	14	17	0	0
Massachusetts	160	175	-8.4%	0	0	160	175	0	0	0	0
New Hampshire	NM	11	NM	0	0	NM	11	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	411	447	-8.1%	0	0	336	358	75	88	0	0
New Jersey	109	121	-10.0%	0	0	81	95	27	26	0	0
New York	157	177	-11.0%	0	0	124	132	33	46	0	0
Pennsylvania	145	148	-2.4%	0	0	131	132	14	16	0	0
East North Central	20	23	-12.0%	3	3	0	0	17	19	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	1	1	-30.0%	0	0	0	0	1	1	0	0
Michigan	16	19	-12.0%	0	0	0	0	16	19	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	3	-6.7%	3	3	0	0	0	0	0	0
West North Central	50	57	-11.0%	34	34	NM	20	2	2	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	50	57	-11.0%	34	34	NM	20	2	2	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	397	456	-13.0%	0	0	368	422	29	34	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	262	306	-15.0%	0	0	262	306	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	56	69	-18.0%	0	0	56	69	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	79	80	-2.2%	0	0	50	46	29	34	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	1	1	14.0%	0	0	0	0	0	0	1	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	1	14.0%	0	0	0	0	0	0	1	1
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	NM	0	NM	0	0	NM	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	NM	0	NM	0	0	NM	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	56	63	-12.0%	0	0	56	63	0	0	0	0
California	39	41	-5.5%	0	0	39	41	0	0	0	0
Oregon	NM	8	NM	0	0	NM	8	0	0	0	0
Washington	NM	14	NM	0	0	NM	14	0	0	0	0
Pacific Noncontiguous	43	26	68.0%	0	0	0	0	43	26	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	43	26	68.0%	0	0	0	0	43	26	0	0
U.S. Total	1,260	1,383	-8.9%	37	38	1,043	1,157	179	187	1	1

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Table 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	2,966	3,124	-5.1%	0	0	2,812	2,945	154	179	0	0
Connecticut	1,042	1,068	-2.5%	0	0	1,042	1,054	0	15	0	0
Maine	228	245	-6.9%	0	0	74	81	154	164	0	0
Massachusetts	1,608	1,709	-5.9%	0	0	1,608	1,709	0	0	0	0
New Hampshire	89	101	-13.0%	0	0	89	101	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	4,200	4,410	-4.8%	0	0	3,361	3,480	839	930	0	0
New Jersey	1,112	1,136	-2.1%	0	0	823	848	289	288	0	0
New York	1,542	1,669	-7.6%	0	0	1,193	1,246	349	423	0	0
Pennsylvania	1,546	1,604	-3.7%	0	0	1,345	1,386	201	218	0	0
East North Central	207	214	-3.4%	32	33	0	0	174	181	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	7	9	-19.0%	0	0	0	0	7	9	0	0
Michigan	167	172	-2.8%	0	0	0	0	167	172	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	32	33	-2.6%	32	33	0	0	0	0	0	0
West North Central	524	539	-2.8%	354	349	154	171	17	20	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	524	539	-2.8%	354	349	154	171	17	20	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	4,558	4,508	1.1%	0	0	4,249	4,162	310	346	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	3,100	3,015	2.8%	0	0	3,100	3,015	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	665	670	-0.7%	0	0	665	669	NM	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	793	823	-3.7%	0	0	483	478	309	345	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	7	6	11.0%	0	0	0	0	0	0	7	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	7	6	11.0%	0	0	0	0	0	0	7	6
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	1	2	-16.0%	0	0	1	2	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	1	2	-16.0%	0	0	1	2	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	529	653	-19.0%	0	0	529	653	0	0	0	0
California	343	429	-20.0%	0	0	343	429	0	0	0	0
Oregon	74	95	-22.0%	0	0	74	95	0	0	0	0
Washington	112	129	-13.0%	0	0	112	129	0	0	0	0
Pacific Noncontiguous	372	316	18.0%	0	0	0	0	372	316	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	372	316	18.0%	0	0	0	0	372	316	0	0
U.S. Total	13,365	13,771	-2.9%	386	382	11,106	11,412	1,866	1,971	7	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. Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, October 2016 and October 2015 (Billion Btus)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	3,930	4,822	-18.0%	755	910	2,762	3,372	NM	3	412	537
Connecticut	228	269	-15.0%	0	0	228	269	0	0	0	0
Maine	1,436	2,086	-31.0%	0	0	1,024	1,548	0	1	412	537
Massachusetts	NM	208	NM	0	0	NM	208	0	0	0	0
New Hampshire	1,710	1,622	5.4%	473	465	1,238	1,158	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	417	636	-34.0%	282	445	NM	189	NM	2	0	0
Middle Atlantic	992	964	2.9%	0	0	556	532	0	0	437	432
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	645	606	6.4%	0	0	556	528	0	0	90	78
Pennsylvania	347	358	-3.0%	0	0	0	4	0	0	347	354
East North Central	2,114	2,496	-15.0%	239	576	958	952	0	0	917	968
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,483	1,435	3.4%	0	0	903	864	0	0	580	570
Ohio	180	265	-32.0%	0	0	NM	61	0	0	126	205
Wisconsin	450	796	-43.0%	239	576	0	27	0	0	211	193
West North Central	905	844	7.1%	119	157	473	385	19	23	293	279
Iowa	NM	1	NM	0	0	0	0	NM	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	885	821	7.8%	119	157	473	385	0	0	293	279
Missouri	19	23	-16.0%	0	0	0	0	19	23	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	8,458	8,362	1.1%	1,111	864	2,149	2,357	NM	15	5,182	5,125
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,584	1,120	41.0%	0	0	902	356	0	0	682	764
Georgia	2,273	2,269	0.2%	0	0	463	334	0	0	1,810	1,934
Maryland	81	53	53.0%	0	0	0	0	NM	15	64	38
North Carolina	935	1,429	-35.0%	0	0	318	849	0	0	617	580
South Carolina	2,007	1,886	6.4%	186	317	439	480	0	0	1,381	1,090
Virginia	1,577	1,604	-1.7%	924	548	26	338	0	0	627	719
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,950	3,168	-6.9%	0	0	224	222	0	0	2,726	2,947
Alabama	1,729	1,965	-12.0%	0	0	224	222	0	0	1,505	1,743
Kentucky	114	85	34.0%	0	0	0	0	0	0	114	85
Mississippi	700	717	-2.3%	0	0	0	0	0	0	700	717
Tennessee	407	402	1.4%	0	0	0	0	0	0	407	402
West South Central	3,045	3,284	-7.3%	0	266	0	0	0	0	3,045	3,018
Arkansas	639	675	-5.4%	0	0	0	0	0	0	639	675
Louisiana	1,725	1,698	1.6%	0	0	0	0	0	0	1,725	1,698
Oklahoma	98	112	-13.0%	0	0	0	0	0	0	98	112
Texas	583	798	-27.0%	0	266	0	0	0	0	583	532
Mountain	713	805	-11.0%	0	0	325	319	0	0	388	485
Arizona	263	255	3.2%	0	0	263	255	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	406	501	-19.0%	0	0	62	65	0	0	344	436
Montana	NM	49	NM	0	0	0	0	0	0	NM	49
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	5,491	6,208	-12.0%	452	496	3,435	3,927	0	0	1,604	1,786
California	3,530	3,863	-8.6%	0	0	3,265	3,579	0	0	266	284
Oregon	471	825	-43.0%	0	0	NM	348	0	0	301	478
Washington	1,490	1,520	-2.0%	452	496	0	0	0	0	1,038	1,024
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	28,597	30,952	-7.6%	2,676	3,269	10,881	12,065	37	42	15,003	15,577

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 for 2016 are preliminary. Values for 2015 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 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through October 2016 and October 2015 (Billion Btus)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	50,212	52,361	-4.1%	7,663	7,541	37,592	38,151	21	45	4,937	6,623
Connecticut	3,724	2,240	66.0%	0	0	3,724	2,239	0	2	0	0
Maine	20,606	24,248	-15.0%	0	0	15,664	17,600	NM	25	4,937	6,623
Massachusetts	1,599	1,647	-2.9%	0	0	1,599	1,647	0	0	0	0
New Hampshire	19,000	19,084	-0.4%	4,016	4,126	14,985	14,958	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	5,283	5,142	2.7%	3,648	3,416	1,620	1,708	15	19	0	0
Middle Atlantic	10,500	9,975	5.3%	0	0	5,967	5,480	0	0	4,533	4,495
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	6,895	6,425	7.3%	0	0	5,963	5,448	0	0	933	977
Pennsylvania	3,604	3,550	1.5%	0	0	NM	32	0	0	3,600	3,518
East North Central	23,683	26,726	-11.0%	4,217	4,264	10,175	12,345	0	7	9,291	10,109
Illinois	0	0	-100.0%	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	15,390	15,158	1.5%	NM	0	9,625	9,328	0	7	5,765	5,824
Ohio	1,832	2,514	-27.0%	0	0	550	569	0	0	1,282	1,945
Wisconsin	6,461	9,053	-29.0%	4,217	4,264	0	2,449	0	0	2,244	2,341
West North Central	9,752	9,857	-1.1%	1,740	1,662	5,268	5,547	390	217	2,355	2,430
Iowa	NM	8	NM	0	0	0	0	NM	8	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	9,434	9,652	-2.3%	1,740	1,662	5,268	5,547	71	13	2,355	2,430
Missouri	315	196	61.0%	0	0	0	0	315	196	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	97,217	105,005	-7.4%	17,966	17,641	26,419	33,645	170	179	52,661	53,540
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	13,075	18,774	-30.0%	0	0	5,909	11,161	0	0	7,165	7,614
Georgia	25,042	25,425	-1.5%	0	0	6,030	5,855	0	0	19,011	19,570
Maryland	718	682	5.3%	0	0	0	0	170	179	548	503
North Carolina	12,611	14,100	-11.0%	0	0	6,982	7,953	0	0	5,630	6,147
South Carolina	22,127	21,934	0.9%	3,040	3,316	5,021	5,370	0	0	14,066	13,248
Virginia	23,644	24,089	-1.8%	14,927	14,325	2,476	3,306	0	0	6,241	6,458
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	31,236	31,131	0.3%	0	1	1,999	1,836	0	0	29,237	29,294
Alabama	18,977	18,854	0.7%	0	0	1,999	1,836	0	0	16,978	17,018
Kentucky	1,417	1,363	3.9%	0	0	0	0	0	0	1,417	1,363
Mississippi	6,850	6,901	-0.7%	0	1	0	0	0	0	6,850	6,901
Tennessee	3,992	4,012	-0.5%	0	0	0	0	0	0	3,992	4,012
West South Central	31,736	32,989	-3.8%	337	1,820	1,449	1,132	0	0	29,951	30,037
Arkansas	6,129	6,662	-8.0%	0	0	0	0	0	0	6,129	6,662
Louisiana	16,829	16,481	2.1%	0	0	0	0	0	0	16,829	16,481
Oklahoma	994	975	2.0%	0	0	0	0	0	0	994	975
Texas	7,785	8,871	-12.0%	337	1,820	1,449	1,132	0	0	5,999	5,919
Mountain	7,495	7,492	0.0%	0	0	3,502	3,350	0	0	3,992	4,142
Arizona	2,811	2,698	4.2%	0	0	2,811	2,698	0	0	0	0
Colorado	NM	0	--	0	0	NM	0	0	0	0	0
Idaho	4,185	4,340	-3.6%	0	0	643	651	0	0	3,541	3,688
Montana	451	454	-0.6%	0	0	0	0	0	0	451	454
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	55,447	63,374	-13.0%	3,996	3,755	35,729	41,506	0	0	15,722	18,113
California	36,282	42,528	-15.0%	0	0	33,576	39,383	0	0	2,706	3,145
Oregon	5,016	7,326	-32.0%	0	0	2,153	2,123	0	0	2,863	5,203
Washington	14,149	13,520	4.7%	3,996	3,755	0	0	0	0	10,153	9,764
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	317,279	338,909	-6.4%	35,919	36,685	128,100	142,992	581	449	152,679	158,784

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 for 2016 are preliminary. Values for 2015 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 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2006 - October 2016

Period	Electric Power Sector			Electric Utilities			Independent Power Producers		
	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
2006	140,964	48,216	674	110,277	29,799	456	30,688	18,416	217
2007	151,221	44,433	554	120,504	28,032	253	30,717	16,401	301
2008	161,589	40,804	739	127,463	26,108	468	34,126	14,696	270
2009	189,467	39,210	1,394	154,815	25,811	1,194	34,652	13,399	201
2010	174,917	35,706	1,019	143,744	24,798	850	31,173	10,908	168
2011	172,387	34,847	508	142,103	25,648	404	30,284	9,198	104
2012	185,116	32,224	495	150,942	23,875	414	34,174	8,349	81
2013	147,884	31,673	390	120,792	22,494	303	27,092	9,179	86
2014	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142
2015	195,548	32,884	1,340	153,226	21,443	1,163	42,322	11,441	177
Year 2014, End of Month Stocks									
January	133,705	27,553	298	108,249	20,649	216	25,456	6,904	83
February	119,904	29,158	277	97,363	20,964	202	22,541	8,195	74
March	118,260	29,197	350	96,029	21,341	282	22,231	7,855	67
April	128,925	29,568	515	103,431	21,583	451	25,494	7,985	64
May	136,921	29,376	458	108,064	21,446	374	28,856	7,930	84
June	133,479	29,738	397	103,948	21,568	343	29,531	8,170	54
July	125,870	29,120	381	97,829	20,967	300	28,041	8,152	81
August	121,369	29,346	388	93,552	21,205	289	27,817	8,141	99
Sept	124,546	29,789	389	96,266	21,338	297	28,280	8,451	92
October	136,964	30,883	510	105,094	21,741	394	31,870	9,142	117
November	142,595	32,829	633	110,221	22,103	502	32,374	10,726	131
December	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142
Year 2015, End of Month Stocks									
January	154,390	32,896	892	118,239	22,177	742	36,151	10,718	150
February	149,071	28,446	850	115,271	20,328	723	33,800	8,118	127
March	154,347	29,536	818	120,635	21,165	698	33,712	8,371	120
April	167,063	29,614	912	130,078	21,218	776	36,985	8,396	136
May	172,809	30,184	999	134,499	21,504	856	38,310	8,680	143
June	166,437	30,441	1,031	130,716	21,634	883	35,720	8,807	149
July	157,938	30,119	1,064	124,301	21,365	909	33,638	8,754	156
August	155,952	30,143	1,029	123,296	21,138	891	32,656	9,005	138
Sept	162,109	31,390	1,102	128,351	21,450	973	33,757	9,941	129
October	175,588	32,462	1,151	138,712	21,540	1,026	36,876	10,922	125
November	188,595	33,487	1,290	149,168	21,946	1,159	39,427	11,542	131
December	195,548	32,884	1,340	153,226	21,443	1,163	42,322	11,441	177
Year 2016, End of Month Stocks									
January	187,570	32,397	1,320	146,460	20,980	1,089	41,110	11,417	231
February	187,571	31,637	1,323	146,225	20,670	1,064	41,346	10,967	259
March	192,248	31,486	1,240	149,115	20,603	974	43,133	10,884	266
April	194,004	31,603	1,181	151,375	20,816	901	42,629	10,787	280
May	193,412	31,836	1,071	151,240	21,021	825	42,172	10,816	246
June	183,115	31,593	905	144,848	20,871	689	38,267	10,721	216
July	169,441	31,092	858	135,112	20,555	678	34,329	10,538	180
August	160,428	34,725	780	129,112	20,304	589	31,316	14,421	190
Sept	158,169	34,668	768	128,420	20,279	566	29,749	14,390	201
October	163,474	34,605	812	133,257	20,157	606	30,217	14,448	207

Notes: See Glossary for definitions. Values for 2015 and prior years are final. Values for 2016 are preliminary.

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 3.2 Stocks of Coal, Petroleum Liquids, and Petroleum Coke:
Electric Power Sector, by State, October 2016 and 2015**

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	October 2016	October 2015	Percentage Change	October 2016	October 2015	Percentage Change	October 2016	October 2015	Percentage Change
New England	1,840	1,542	19.4%	4,477	4,462	0.3%	0	0	--
Connecticut	W	W	W	1,602	1,595	0.5%	0	0	--
Maine	0	0	--	W	W	W	0	0	--
Massachusetts	W	W	W	1,821	1,726	5.5%	0	0	--
New Hampshire	W	W	W	W	W	W	0	0	--
Rhode Island	W	0	W	W	W	W	0	0	--
Vermont	0	0	--	49	52	-5.3%	0	0	--
Middle Atlantic	4,895	7,901	-38.0%	9,347	5,433	72.0%	0	W	W
New Jersey	787	950	-17.1%	691	794	-13.0%	0	0	--
New York	W	432	W	7,348	3,216	128.5%	0	0	--
Pennsylvania	W	6,519	W	1,308	1,423	-8.1%	0	W	W
East North Central	37,837	38,433	-1.6%	1,081	1,160	-6.8%	W	111	W
Illinois	7,958	8,864	-10.2%	75	88	-14.5%	0	0	--
Indiana	10,157	10,227	-0.7%	111	116	-3.7%	0	0	--
Michigan	6,281	7,961	-21.1%	303	320	-5.3%	W	W	W
Ohio	9,036	6,711	34.6%	368	395	-7.0%	W	W	W
Wisconsin	4,406	4,670	-5.7%	224	242	-7.1%	W	W	W
West North Central	31,185	28,160	10.7%	987	1,768	-44.2%	0	0	--
Iowa	8,220	5,916	39.0%	128	169	-23.9%	0	0	--
Kansas	4,675	4,135	13.1%	124	689	-81.9%	0	0	--
Minnesota	4,078	4,791	-14.9%	142	171	-16.9%	0	0	--
Missouri	9,242	8,593	7.5%	397	408	-2.9%	0	0	--
Nebraska	3,260	2,766	17.9%	101	234	-56.9%	0	0	--
North Dakota	W	W	W	41	40	2.3%	0	0	--
South Dakota	W	W	W	54	58	-6.5%	0	0	--
South Atlantic	26,048	31,582	-17.5%	11,808	12,308	-4.1%	W	W	W
Delaware	W	W	W	464	465	-0.2%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	4,830	6,220	-22.4%	4,933	5,715	-13.7%	W	158	W
Georgia	4,370	5,430	-19.5%	812	865	-6.1%	0	0	--
Maryland	927	1,794	-48.3%	887	973	-8.8%	0	0	--
North Carolina	4,877	6,812	-28.4%	1,231	1,200	2.6%	0	0	--
South Carolina	5,136	5,429	-5.4%	711	735	-3.3%	0	0	--
Virginia	W	1,401	W	2,632	2,202	19.6%	0	0	--
West Virginia	4,696	W	W	138	154	-10.2%	W	W	W
East South Central	15,442	17,167	-10.0%	1,868	1,830	2.1%	W	W	W
Alabama	3,706	3,654	1.4%	339	268	26.6%	0	0	--
Kentucky	7,474	8,163	-8.4%	238	254	-6.5%	W	W	W
Mississippi	1,174	1,559	-24.7%	570	578	-1.4%	0	0	--
Tennessee	3,087	3,790	-18.6%	721	730	-1.2%	0	0	--
West South Central	23,550	28,334	-16.9%	1,850	1,890	-2.1%	W	W	W
Arkansas	3,950	4,505	-12.3%	W	184	W	0	0	--
Louisiana	2,382	3,346	-28.8%	425	429	-1.0%	W	W	W
Oklahoma	4,966	4,314	15.1%	W	88	W	0	0	--
Texas	12,252	16,169	-24.2%	1,122	1,189	-5.6%	0	0	--
Mountain	21,279	20,672	2.9%	390	438	-11.0%	W	W	W
Arizona	3,854	4,433	-13.1%	138	136	1.2%	0	0	--
Colorado	5,174	5,624	-8.0%	120	137	-12.7%	0	0	--
Idaho	0	0	--	W	W	W	0	0	--
Montana	W	W	W	18	18	-1.6%	W	W	W
Nevada	W	1,092	W	W	W	W	0	0	--
New Mexico	W	W	W	37	54	-30.6%	0	0	--
Utah	5,239	3,990	31.3%	35	45	-22.4%	0	0	--
Wyoming	4,156	3,387	22.7%	28	34	-17.5%	0	0	--
Pacific Contiguous	W	W	W	492	474	3.8%	0	0	--
California	0	0	--	W	W	W	0	0	--
Oregon	W	W	W	W	W	W	0	0	--
Washington	W	W	W	254	241	5.2%	0	0	--
Pacific Noncontiguous	W	W	W	2,305	2,699	-14.6%	0	0	--
Alaska	W	W	W	137	282	-51.5%	0	0	--
Hawaii	W	W	W	2,168	2,416	-10.3%	0	0	--
U.S. Total	163,474	175,588	-6.9%	34,605	32,462	6.6%	812	1,151	-29.4%

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.

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

Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 3.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke:
Electric Power Sector, by Census Division, October 2016 and 2015**

Census Division	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015
Coal (Thousand Tons)							
New England	1,840	1,542	19.4%	W	W	W	W
Middle Atlantic	4,895	7,901	-38.0%	0	0	4,895	7,901
East North Central	37,837	38,433	-1.6%	24,423	25,686	13,414	12,747
West North Central	31,185	28,160	10.7%	31,185	W	0	W
South Atlantic	26,048	31,582	-17.5%	24,333	28,851	1,715	2,731
East South Central	15,442	17,167	-10.0%	15,442	17,167	0	0
West South Central	23,550	28,334	-16.9%	16,102	17,778	7,448	10,556
Mountain	21,279	20,672	2.9%	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	163,474	175,588	-6.9%	133,257	138,712	30,217	36,876
Petroleum Liquids (Thousand Barrels)							
New England	4,477	4,462	0.3%	688	711	3,790	3,752
Middle Atlantic	9,347	5,433	72.0%	2,048	1,823	7,299	3,610
East North Central	1,081	1,160	-6.8%	769	834	312	327
West North Central	987	1,768	-44.2%	963	1,741	24	27
South Atlantic	11,808	12,308	-4.1%	9,470	W	2,338	W
East South Central	1,868	1,830	2.1%	W	1,757	W	73
West South Central	1,850	1,890	-2.1%	1,395	1,405	455	485
Mountain	390	438	-11.0%	W	W	W	W
Pacific Contiguous	492	474	3.8%	397	377	96	97
Pacific Noncontiguous	2,305	2,699	-14.6%	W	W	W	W
U.S. Total	34,605	32,462	6.6%	20,157	21,540	14,448	10,922
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	W	W	0	0	0	W
East North Central	W	111	W	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	W	158	W	W
East South Central	W	W	W	W	W	0	0
West South Central	W	W	W	W	W	0	0
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	0	0	--	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0
U.S. Total	812	1,151	-29.4%	W	1,026	W	125

W = Withheld to avoid disclosure of individual company data.

Notes: See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 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 3.4. Stocks of Coal by Coal Rank: Electric Power Sector, 2006 - October 2016

Period	Electric Power Sector			
	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2006	67,760	68,408	4,797	140,964
2007	63,964	82,692	4,565	151,221
2008	65,818	91,214	4,556	161,589
2009	91,922	92,448	5,097	189,467
2010	81,108	86,915	6,894	174,917
2011	82,056	85,151	5,179	172,387
2012	86,437	93,833	4,846	185,116
2013	73,113	69,720	5,051	147,884
2014	72,771	72,552	6,225	151,548
2015	82,004	108,614	4,931	195,548
Year 2014, End of Month Stocks				
January	63,618	64,709	5,378	133,705
February	56,041	58,418	5,445	119,904
March	55,150	57,657	5,453	118,260
April	60,602	62,266	6,056	128,925
May	63,782	66,827	6,311	136,921
June	62,679	64,378	6,423	133,479
July	60,134	59,514	6,222	125,870
August	60,128	54,787	6,453	121,369
Sept	63,031	55,432	6,082	124,546
October	69,246	61,368	6,350	136,964
November	70,666	66,105	5,824	142,595
December	72,771	72,552	6,225	151,548
Year 2015, End of Month Stocks				
January	70,423	78,424	5,542	154,390
February	64,396	79,411	5,264	149,071
March	65,421	84,013	4,912	154,347
April	70,985	90,919	5,159	167,063
May	74,195	93,538	5,077	172,809
June	72,921	88,835	4,681	166,437
July	68,197	84,988	4,753	157,938
August	67,777	83,691	4,484	155,952
Sept	70,365	87,185	4,559	162,109
October	76,243	94,720	4,626	175,588
November	80,254	103,602	4,738	188,595
December	82,004	108,614	4,931	195,548
Year 2016, End of Month Stocks				
January	77,181	105,749	4,640	187,570
February	76,699	106,337	4,536	187,571
March	80,086	107,365	4,797	192,248
April	81,877	107,059	5,068	194,004
May	82,800	104,651	5,960	193,412
June	78,967	99,102	5,046	183,115
July	72,139	92,579	4,724	169,441
August	68,448	87,594	4,386	160,428
Sept	67,000	87,007	4,163	158,169
October	68,358	91,142	3,974	163,474

Notes: See Glossary for definitions.

Values for 2015 and prior years are final. Values for 2016 are preliminary. 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 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2006 - October 2016

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2006	21,735,101	1,079,943	1.69	34.09	0.97	102.5	406,869	65,002	8.68	54.35	0.73	74.0
2007	21,152,358	1,054,664	1.77	35.48	0.96	98.6	375,260	60,068	9.59	59.93	0.71	62.6
2008	21,280,258	1,069,709	2.07	41.14	0.97	100.5	375,684	61,139	15.52	95.38	0.61	99.6
2009	19,437,966	981,477	2.21	43.74	1.01	102.8	330,043	54,181	10.25	62.47	0.54	104.8
2010	19,289,661	979,918	2.27	44.64	1.16	97.9	275,058	45,472	14.02	84.80	0.51	101.1
2011	18,675,843	956,538	2.39	46.65	1.19	100.0	216,752	36,158	19.94	119.54	0.60	116.1
2012	16,265,578	841,183	2.38	46.09	1.25	99.5	116,937	19,464	21.85	131.28	0.51	75.7
2013	15,906,809	823,222	2.34	45.33	1.29	93.7	123,964	20,413	20.56	124.90	0.46	76.5
2014	16,594,722	854,560	2.37	45.96	1.32	98.0	172,421	28,514	19.87	120.26	0.46	82.3
2015	15,086,208	782,929	2.22	42.86	1.29	103.5	147,647	24,320	11.49	69.79	0.48	75.8
Year 2014												
January	1,319,894	69,313	2.29	43.69	1.25	81.1	27,209	4,554	21.85	130.73	0.43	42.0
February	1,217,895	62,838	2.32	45.04	1.34	80.8	26,164	4,306	21.60	131.42	0.45	124.7
March	1,400,614	71,444	2.36	46.35	1.35	96.8	15,224	2,519	21.94	132.68	0.45	66.7
April	1,339,967	68,102	2.39	46.96	1.33	114.5	8,983	1,487	21.71	131.18	0.42	84.5
May	1,383,924	70,623	2.40	46.93	1.37	107.9	8,655	1,437	21.18	127.58	0.46	77.4
June	1,366,947	70,055	2.38	46.50	1.35	92.5	9,334	1,546	21.41	129.29	0.45	90.4
July	1,431,182	73,973	2.38	45.96	1.27	89.2	8,455	1,399	21.29	128.62	0.50	74.0
August	1,488,018	76,671	2.37	45.95	1.32	92.9	9,182	1,509	20.62	125.46	0.52	77.3
Sept	1,403,234	72,158	2.37	46.16	1.33	102.4	10,222	1,686	19.67	119.51	0.51	92.8
October	1,416,761	72,959	2.31	44.84	1.29	116.8	12,851	2,134	18.49	111.46	0.48	121.4
November	1,372,572	71,000	2.30	44.54	1.29	107.4	17,787	2,959	16.53	99.41	0.43	155.7
December	1,453,713	75,424	2.51	48.34	1.29	108.7	18,356	2,977	13.87	85.54	0.49	155.0
Year 2015												
January	1,417,725	73,633	2.29	44.01	1.28	100.8	13,274	2,193	12.76	77.28	0.57	60.6
February	1,175,859	61,197	2.26	43.43	1.29	89.2	20,116	3,305	12.61	76.83	0.51	36.0
March	1,237,697	63,691	2.26	43.97	1.28	106.4	14,354	2,373	12.54	76.00	0.54	116.0
April	1,183,833	61,120	2.23	43.29	1.32	122.6	9,153	1,520	13.18	79.55	0.43	86.3
May	1,228,784	63,030	2.26	44.13	1.35	107.8	11,636	1,923	12.71	77.02	0.45	99.6
June	1,201,874	62,061	2.25	43.65	1.36	88.3	9,858	1,630	13.57	82.13	0.49	83.0
July	1,302,808	68,352	2.21	42.10	1.25	87.6	8,538	1,410	12.57	76.20	0.44	63.4
August	1,395,614	72,257	2.23	43.11	1.30	96.1	9,362	1,552	12.08	72.92	0.47	77.4
Sept	1,361,468	70,737	2.22	42.67	1.30	107.0	14,105	2,316	9.67	58.83	0.43	124.8
October	1,285,699	67,027	2.15	41.16	1.26	122.1	13,066	2,137	9.10	55.68	0.44	121.0
November	1,170,593	61,257	2.15	41.17	1.25	121.9	14,148	2,306	8.96	55.05	0.54	119.9
December	1,124,253	58,569	2.16	41.43	1.28	113.5	10,037	1,657	8.83	53.52	0.42	92.5
Year 2016												
January	1,017,163	53,248	2.12	40.53	1.32	83.8	8,940	1,494	7.92	47.44	0.46	58.1
February	965,792	49,873	2.11	40.90	1.40	96.0	7,927	1,307	6.98	42.32	0.46	56.0
March	884,181	44,893	2.18	42.88	1.46	108.9	6,862	1,132	6.90	41.82	0.44	73.1
April	791,605	40,051	2.16	42.71	1.46	100.1	8,518	1,402	8.35	50.74	0.41	93.6
May	853,047	43,439	2.17	42.52	1.45	94.2	9,122	1,519	9.79	58.87	0.44	85.9
June	1,008,277	52,327	2.10	40.47	1.35	81.1	7,503	1,245	10.38	62.57	0.49	70.2
July	1,138,678	59,400	2.11	40.53	1.28	78.7	8,993	1,460	11.82	72.81	0.51	59.7
August	1,235,488	63,867	2.11	40.85	1.32	85.1	9,012	1,475	9.43	57.62	0.51	60.8
Sept	1,140,035	59,344	2.12	40.79	1.30	93.5	8,092	1,332	9.40	57.12	0.50	77.6
October	1,125,624	58,752	2.07	39.76	1.28	105.6	8,262	1,370	9.98	60.24	0.53	76.2
Year to Date												
2014	13,768,438	708,136	2.36	45.85	1.32	96.2	136,278	22,577	21.14	127.69	0.46	73.3
2015	12,791,362	663,103	2.24	43.14	1.30	101.3	123,462	20,358	12.00	72.83	0.48	71.8
2016	10,159,891	525,193	2.12	41.07	1.36	91.0	83,232	13,736	9.15	55.48	0.48	69.1
Rolling 12 Months Ending in October												
2015	15,617,647	809,527	2.27	43.75	1.30	102.5	159,605	26,295	12.72	77.25	0.48	81.7
2016	12,454,737	645,019	2.13	41.11	1.34	95.0	107,417	17,698	9.10	55.23	0.48	75.0

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:
 COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.
 PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2006 - October 2016 (continued)

Period	Petroleum Coke							Natural Gas					All Fossil Fuels
	Receipts		Average Cost			Average Sulfur Percent by Weight	Percentage of Consumption	Receipts		Average Cost			Average Cost
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	(Billion Btu)			(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)	
Annual Totals													
2006	203,270	7,193	1.33	37.46	5.15	83.4	6,855,680	6,675,246	6.94	7.13	90.2	3.02	
2007	161,091	5,656	1.51	43.02	5.07	77.5	7,396,233	7,200,316	7.11	7.30	90.4	3.23	
2008	199,724	7,040	2.11	59.72	4.98	111.5	8,089,467	7,879,046	9.01	9.26	102.5	4.12	
2009	197,921	6,954	1.61	45.89	4.63	119.3	8,319,329	8,118,550	4.74	4.86	102.3	3.04	
2010	169,508	5,963	2.28	64.85	4.79	98.5	8,867,396	8,673,070	5.09	5.20	102.0	3.26	
2011	171,100	5,980	3.03	86.78	5.01	98.2	9,250,652	9,056,164	4.72	4.83	103.8	3.29	
2012	119,667	4,180	2.24	64.14	5.55	83.3	9,746,691	9,531,389	3.42	3.50	91.9	2.83	
2013	132,474	4,660	2.18	61.95	5.41	73.5	8,721,114	8,503,424	4.33	4.44	89.7	3.09	
2014	147,310	5,195	1.98	56.23	5.56	91.2	8,679,286	8,431,423	5.00	5.14	89.6	3.31	
2015	138,668	4,897	1.84	52.11	5.25	94.4	10,173,502	9,842,581	3.23	3.34	89.9	2.65	
Year 2014													
January	10,073	357	1.82	51.28	5.26	66.1	708,775	691,024	7.02	7.20	88.4	4.07	
February	10,261	363	W	W	5.47	79.9	588,885	573,618	7.40	7.59	88.4	W	
March	13,196	468	2.02	57.09	5.81	88.8	607,103	591,486	6.00	6.16	89.1	3.52	
April	12,986	459	2.13	60.37	5.94	109.7	594,114	578,726	5.07	5.20	89.5	3.23	
May	12,640	448	2.19	61.62	5.55	89.0	690,306	671,336	4.93	5.07	89.7	3.25	
June	11,659	409	2.07	59.14	5.77	77.7	760,055	738,843	4.84	4.98	89.9	3.27	
July	11,616	407	1.90	54.16	5.69	81.6	887,618	861,696	4.43	4.57	90.4	3.17	
August	12,764	448	1.97	56.12	5.52	90.8	945,250	916,932	4.12	4.24	90.8	3.06	
Sept	11,787	414	1.92	54.55	5.43	85.5	813,131	788,357	4.20	4.33	90.0	3.06	
October	11,011	390	1.79	50.65	5.31	123.3	745,276	722,544	4.10	4.23	89.5	2.96	
November	12,217	431	1.86	52.74	5.45	109.7	648,562	628,693	4.48	4.62	89.3	3.06	
December	17,100	600	2.00	57.09	5.41	111.5	690,212	668,170	4.36	4.50	89.3	3.14	
Year 2015													
January	14,001	495	2.00	56.58	5.22	96.9	751,373	727,845	4.11	4.24	88.3	2.92	
February	9,854	345	1.76	50.27	5.29	67.4	687,566	665,945	4.70	4.85	88.9	3.19	
March	9,700	346	2.00	56.19	5.16	91.9	755,061	731,417	3.55	3.66	89.5	2.78	
April	11,283	401	1.96	55.27	5.00	98.8	717,016	693,722	3.10	3.21	90.7	2.58	
May	12,122	428	2.02	57.16	5.23	98.3	787,887	762,232	3.14	3.25	90.9	2.64	
June	9,569	337	1.87	53.03	5.55	84.8	934,171	902,955	3.12	3.23	90.5	2.66	
July	13,055	461	1.90	53.83	5.07	94.1	1,093,897	1,057,630	3.11	3.22	90.7	2.63	
August	11,554	405	1.82	52.03	5.01	85.3	1,073,001	1,038,464	3.11	3.22	90.4	2.62	
Sept	13,295	468	1.74	49.40	5.12	98.6	938,261	907,211	3.06	3.17	90.0	2.57	
October	11,080	390	1.83	52.05	5.08	101.6	833,330	804,958	2.92	3.02	89.1	2.47	
November	12,117	429	1.59	44.93	5.59	117.3	783,337	758,502	2.65	2.74	89.8	2.38	
December	11,037	393	1.57	44.13	5.73	108.4	818,600	791,698	2.59	2.68	89.1	2.36	
Year 2016													
January	9,639	341	1.38	38.93	5.68	81.2	818,708	791,024	3.01	3.12	89.0	2.52	
February	11,272	408	1.30	35.80	5.53	98.1	731,668	707,054	2.70	2.79	88.9	2.37	
March	10,312	363	1.41	40.14	5.33	76.5	794,734	769,140	2.23	2.31	89.8	2.22	
April	10,307	369	1.35	37.75	5.56	80.0	773,392	748,603	2.42	2.50	89.8	2.31	
May	8,347	299	W	W	5.34	66.8	856,126	829,445	2.40	2.47	90.2	W	
June	6,894	240	1.41	40.48	4.67	52.1	1,019,031	987,362	2.67	2.76	91.0	2.40	
July	10,031	355	1.47	41.45	5.14	72.8	1,185,292	1,147,427	2.97	3.07	90.9	2.56	
August	11,032	398	1.75	48.48	5.42	78.7	1,195,594	1,154,173	2.96	3.06	90.4	2.53	
Sept	10,740	381	2.04	57.51	5.17	85.0	967,740	934,760	3.08	3.19	90.8	2.56	
October	8,843	317	1.98	55.43	5.69	88.3	793,575	767,888	3.13	3.24	90.2	2.51	
Year to Date													
2014	117,993	4,164	1.99	56.47	5.59	87.4	7,340,513	7,134,561	5.10	5.25	89.7	3.35	
2015	115,513	4,075	1.89	53.63	5.17	91.4	8,571,566	8,292,381	3.34	3.46	90.0	2.70	
2016	97,420	3,470	1.54	43.35	5.37	77.5	9,135,858	8,836,876	2.78	2.87	90.2	2.44	
Rolling 12 Months Ending in October													
2015	144,830	5,106	1.90	53.96	5.22	94.7	9,910,339	9,589,244	3.49	3.61	89.9	2.76	
2016	120,575	4,292	W	W	5.43	82.4	10,737,795	10,387,075	2.75	2.85	90.1	W	

Displayed values of zero may represent small values that round to zero.

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

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

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

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.

- See Glossary for definitions.

- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2006 - October 2016

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2006	16,197,852	797,361	1.69	34.26	0.92	105.8	269,033	42,415	8.33	52.80	0.82	79.2
2007	15,561,395	767,377	1.78	36.06	0.92	100.3	216,349	34,026	9.24	58.73	0.77	59.8
2008	15,347,396	764,399	2.06	41.32	0.93	100.5	240,937	38,891	15.83	98.09	0.60	99.7
2009	14,402,019	719,253	2.22	44.47	0.99	103.4	202,598	32,959	10.44	64.18	0.51	103.5
2010	14,226,995	713,094	2.27	45.33	1.14	98.8	189,790	31,099	13.94	85.07	0.48	101.0
2011	13,871,559	699,353	2.40	47.67	1.16	101.5	144,255	23,859	20.30	122.72	0.53	114.5
2012	11,939,543	609,445	2.43	47.51	1.18	99.0	86,030	14,252	22.11	133.44	0.41	81.3
2013	11,595,328	592,772	2.38	46.51	1.23	92.9	78,101	12,814	21.09	128.57	0.43	76.2
2014	12,064,810	614,728	2.39	46.95	1.21	98.3	98,357	16,161	19.90	121.14	0.44	82.0
2015	11,088,631	571,707	2.25	43.71	1.17	105.8	90,041	14,747	11.32	69.13	0.46	79.2
Year 2014												
January	939,850	48,843	2.30	44.18	1.13	79.8	12,001	2,011	21.72	129.64	0.32	44.6
February	870,977	44,490	2.31	45.27	1.23	80.6	12,180	2,005	21.72	131.94	0.49	106.4
March	991,708	50,353	2.37	46.61	1.23	97.5	8,992	1,474	21.53	131.41	0.39	76.6
April	948,645	47,838	2.41	47.72	1.23	116.0	6,691	1,099	21.74	132.35	0.36	85.6
May	1,003,354	50,694	2.42	47.83	1.27	107.4	5,313	885	21.88	131.42	0.34	68.2
June	998,236	50,508	2.40	47.48	1.25	90.8	6,271	1,037	21.65	130.91	0.34	87.9
July	1,059,989	53,961	2.41	47.22	1.19	89.5	5,979	985	21.28	129.22	0.47	75.2
August	1,096,270	55,759	2.40	47.18	1.22	92.5	6,800	1,108	20.61	126.44	0.50	84.5
Sept	1,037,230	52,716	2.41	47.40	1.21	103.8	6,921	1,137	19.90	121.13	0.48	87.7
October	1,047,018	53,419	2.34	45.74	1.20	118.6	6,939	1,148	19.33	117.03	0.48	94.2
November	1,010,559	51,705	2.33	45.51	1.20	110.9	7,512	1,237	17.71	107.56	0.50	100.6
December	1,060,973	54,441	2.60	50.75	1.20	108.8	12,760	2,035	13.22	82.91	0.46	160.4
Year 2015												
January	1,022,724	52,840	2.31	44.72	1.17	103.9	8,679	1,427	11.79	71.76	0.57	69.0
February	853,788	44,181	2.26	43.70	1.17	92.2	8,590	1,404	11.71	71.63	0.47	39.1
March	915,194	47,024	2.26	44.08	1.17	111.2	10,166	1,669	12.11	73.85	0.52	134.1
April	872,141	44,828	2.26	43.98	1.20	124.1	6,581	1,083	13.26	80.57	0.39	87.9
May	918,188	46,827	2.29	44.97	1.21	109.2	7,705	1,259	12.50	76.54	0.46	100.6
June	897,838	45,934	2.28	44.49	1.23	90.6	7,498	1,234	13.66	82.97	0.46	89.4
July	959,033	49,930	2.24	42.94	1.11	88.7	6,138	1,004	12.47	76.21	0.40	67.8
August	1,026,500	52,727	2.26	44.04	1.17	97.5	5,716	944	11.75	71.16	0.42	67.5
Sept	993,558	51,091	2.26	44.03	1.16	109.2	7,097	1,157	9.75	59.76	0.38	94.1
October	941,342	48,715	2.19	42.30	1.13	124.6	5,909	970	9.43	57.50	0.44	79.8
November	862,786	44,830	2.20	42.41	1.14	126.2	8,558	1,386	8.80	54.38	0.57	102.8
December	825,539	42,781	2.21	42.64	1.16	112.7	7,402	1,209	8.52	52.14	0.37	102.7
Year 2016												
January	746,616	38,805	2.17	41.79	1.18	85.0	6,186	1,021	7.88	47.73	0.44	60.6
February	717,946	36,885	2.16	42.04	1.23	97.7	5,810	954	6.92	42.15	0.41	67.6
March	681,849	34,396	2.20	43.57	1.34	110.5	5,220	851	6.69	41.06	0.40	81.4
April	607,488	30,664	2.19	43.47	1.30	106.7	6,891	1,125	8.35	51.19	0.37	110.6
May	651,230	33,180	2.17	42.66	1.26	97.8	6,738	1,114	9.12	55.15	0.40	94.9
June	771,022	39,635	2.15	41.85	1.24	85.3	5,494	905	10.51	63.77	0.44	72.7
July	843,774	43,673	2.18	42.06	1.15	80.4	7,114	1,142	11.54	71.92	0.52	68.0
August	919,918	47,289	2.17	42.27	1.19	87.5	6,713	1,086	9.14	56.53	0.51	66.7
Sept	846,033	43,523	2.18	42.41	1.18	96.8	5,507	895	9.03	55.59	0.49	80.5
October	837,987	43,418	2.13	41.05	1.17	109.7	5,174	845	9.75	59.67	0.52	74.1
Year to Date												
2014	9,993,278	508,582	2.38	46.69	1.22	96.2	78,085	12,889	21.21	128.52	0.42	74.9
2015	9,400,306	484,096	2.26	43.93	1.17	103.7	74,080	12,151	11.89	72.50	0.46	75.5
2016	7,623,862	391,467	2.17	42.26	1.22	94.0	60,849	9,937	8.94	54.77	0.45	75.7
Rolling 12 Months Ending in October												
2015	11,471,838	590,242	2.30	44.69	1.18	104.7	94,352	15,423	12.53	76.68	0.46	82.9
2016	9,312,187	479,079	2.18	42.30	1.21	97.8	76,810	12,532	8.89	54.47	0.46	80.0

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:
 COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.
 PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2006 - October 2016 (continued)

Period	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2006	99,471	3,516	1.49	42.21	5.11	97.2	2,222,289	2,163,113	7.36	7.56	87.3	2.45
2007	84,812	2,964	1.73	49.57	5.09	105.6	2,378,104	2,315,637	7.47	7.67	84.6	2.61
2008	80,987	2,843	2.13	60.51	5.36	123.8	2,856,354	2,784,642	9.15	9.39	102.0	3.33
2009	109,126	3,833	1.68	47.84	5.02	138.8	3,033,133	2,962,640	5.50	5.63	101.8	2.87
2010	103,152	3,628	2.38	67.65	5.03	109.1	3,395,962	3,327,919	5.43	5.54	101.1	2.99
2011	99,208	3,445	3.08	88.73	5.17	99.9	3,571,348	3,507,613	5.00	5.09	101.8	3.08
2012	72,782	2,521	2.30	66.40	5.46	119.8	4,083,579	4,003,457	3.74	3.81	97.6	2.86
2013	99,088	3,463	2.11	60.30	5.34	101.6	3,939,408	3,851,241	4.49	4.59	97.0	2.99
2014	123,793	4,349	1.89	53.77	5.56	126.3	3,876,549	3,772,596	5.17	5.31	96.7	3.16
2015	115,929	4,069	1.77	50.44	5.23	130.1	4,717,748	4,565,040	3.52	3.64	96.0	2.67
Year 2014												
January	8,753	309	1.79	50.66	5.22	88.7	322,118	314,783	6.23	6.37	96.8	3.45
February	8,883	312	2.01	57.15	5.47	113.1	261,721	255,665	7.00	7.16	96.1	3.56
March	11,235	396	1.94	54.97	5.85	119.1	269,374	263,288	5.93	6.06	96.8	3.24
April	11,184	394	2.07	58.69	5.98	186.0	270,455	264,009	5.34	5.47	97.6	3.14
May	10,813	383	2.13	60.11	5.57	121.8	324,319	316,054	5.26	5.40	97.7	3.18
June	9,321	325	1.97	56.35	5.85	95.9	346,749	337,837	5.17	5.31	96.9	3.19
July	9,697	339	1.79	51.25	5.70	113.6	390,076	379,146	4.84	4.98	96.4	3.12
August	10,451	365	1.85	52.89	5.51	122.5	424,307	412,297	4.47	4.60	96.6	3.05
Sept	9,844	345	1.81	51.54	5.40	122.6	353,112	342,647	4.63	4.77	96.2	3.05
October	9,240	326	1.65	46.75	5.25	182.8	323,101	313,490	4.55	4.69	96.8	2.93
November	10,079	354	1.70	48.51	5.43	154.6	288,185	279,556	4.75	4.90	96.6	2.94
December	14,294	499	1.90	54.38	5.40	149.0	303,034	293,825	4.61	4.76	96.6	3.13
Year 2015												
January	11,509	404	1.94	55.36	5.21	129.1	345,262	334,921	4.24	4.37	96.3	2.84
February	8,617	301	1.72	49.17	5.31	90.5	325,811	315,866	4.57	4.72	95.1	2.95
March	7,949	283	1.95	54.67	5.16	144.7	343,696	333,075	3.78	3.90	95.6	2.74
April	8,845	313	1.95	55.11	4.92	146.8	331,639	321,268	3.48	3.60	97.3	2.65
May	10,125	357	1.98	56.26	5.21	136.5	364,935	353,283	3.50	3.61	97.6	2.69
June	7,485	262	1.73	49.60	5.62	111.4	444,769	429,988	3.47	3.59	96.1	2.72
July	11,256	395	1.86	52.91	5.04	118.3	509,115	491,495	3.46	3.59	96.2	2.69
August	9,787	342	1.76	50.54	4.92	109.8	492,323	476,327	3.46	3.57	95.7	2.67
Sept	12,216	429	1.72	49.08	5.09	145.7	428,044	413,887	3.40	3.52	95.5	2.63
October	9,567	334	1.77	50.64	5.05	147.2	380,675	367,001	3.25	3.37	96.2	2.52
November	10,082	354	1.46	41.65	5.64	196.4	365,361	354,358	2.97	3.07	96.5	2.47
December	8,492	297	1.35	38.62	5.76	128.1	386,119	373,572	2.93	3.03	94.8	2.47
Year 2016												
January	7,935	278	1.15	32.96	5.67	91.8	394,006	381,192	3.27	3.38	97.4	2.57
February	9,837	356	1.13	31.18	5.53	131.0	355,300	343,232	2.96	3.07	97.0	2.44
March	8,402	294	1.21	34.47	5.28	103.8	382,382	370,058	2.53	2.61	97.2	2.33
April	8,436	300	1.14	31.95	5.58	92.1	367,443	355,843	2.72	2.80	97.4	2.42
May	7,842	281	1.22	34.16	5.35	94.9	411,449	398,370	2.68	2.77	97.0	2.40
June	6,325	220	1.33	38.34	4.59	71.4	500,006	484,203	2.88	2.97	96.4	2.47
July	9,587	340	1.43	40.50	5.10	104.6	567,863	549,774	3.20	3.31	95.2	2.63
August	9,306	335	1.62	45.01	5.45	99.4	560,293	540,714	3.23	3.35	94.2	2.59
Sept	9,059	320	1.96	55.58	5.12	102.8	456,568	440,900	3.43	3.55	96.9	2.64
October	7,088	253	1.87	52.47	5.71	146.9	368,564	356,539	3.54	3.66	96.6	2.58
Year to Date												
2014	99,420	3,495	1.91	54.21	5.59	121.4	3,285,331	3,199,215	5.26	5.40	96.8	3.18
2015	97,356	3,418	1.84	52.37	5.14	125.8	3,966,269	3,837,110	3.63	3.75	96.1	2.71
2016	83,818	2,976	1.41	39.61	5.35	101.5	4,363,873	4,220,826	3.06	3.16	96.4	2.52
Rolling 12 Months Ending in October												
2015	121,729	4,271	1.83	52.29	5.19	130.2	4,557,487	4,410,491	3.76	3.89	96.2	2.76
2016	102,391	3,628	1.41	39.73	5.41	108.4	5,115,352	4,948,756	3.04	3.15	96.3	2.51

Displayed values of zero may represent small values that round to zero.

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

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

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

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.

- See Glossary for definitions.

- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2006 - October 2016

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2006	5,204,402	266,856	1.69	33.04	1.09	97.7	117,524	19,236	9.65	58.98	0.45	104.9
2007	5,275,454	273,216	1.71	33.11	1.06	97.5	125,025	20,486	10.49	64.01	0.45	85.0
2008	5,395,142	281,258	2.03	38.98	1.04	100.4	82,124	13,657	16.30	98.03	0.41	94.4
2009	4,563,080	240,687	2.11	39.94	1.06	101.1	68,030	11,408	10.02	59.76	0.37	102.0
2010	4,555,898	243,585	2.20	41.15	1.21	96.0	49,598	8,420	14.80	87.19	0.35	89.9
2011	4,292,284	233,295	2.28	41.95	1.25	95.9	41,599	7,096	20.30	119.01	0.50	106.9
2012	4,036,436	218,341	2.21	40.92	1.42	104.9	23,922	4,073	22.34	131.28	0.44	79.8
2013	4,032,431	217,572	2.20	40.95	1.48	99.1	43,432	7,205	19.71	118.88	0.45	110.1
2014	4,243,949	226,600	2.25	42.20	1.61	100.1	71,774	11,980	19.90	119.36	0.45	101.0
2015	3,731,508	198,982	2.10	39.39	1.66	100.5	55,248	9,189	11.69	70.36	0.46	86.5
Year 2014												
January	356,260	19,360	2.25	41.46	1.56	86.8	14,823	2,481	22.05	132.09	0.46	43.7
February	324,520	17,309	2.31	43.39	1.62	83.0	13,652	2,247	21.53	131.09	0.39	189.3
March	383,238	19,906	2.32	44.67	1.66	97.8	6,096	1,023	22.59	134.69	0.52	66.2
April	368,214	19,193	2.29	44.00	1.60	114.9	2,150	365	21.88	129.00	0.48	127.7
May	358,005	18,880	2.30	43.62	1.65	113.3	3,198	529	20.19	121.99	0.52	145.8
June	346,608	18,528	2.29	42.89	1.64	100.1	2,867	477	21.11	126.96	0.51	141.6
July	346,695	18,879	2.24	41.19	1.53	90.0	2,327	391	21.59	128.64	0.50	96.7
August	366,331	19,740	2.22	41.23	1.63	96.0	2,265	382	W	W	0.49	79.5
Sept	342,392	18,355	2.21	41.35	1.70	101.3	3,161	526	19.20	115.97	0.50	156.6
October	345,463	18,416	2.18	40.98	1.57	115.9	5,762	961	17.58	105.43	0.44	279.8
November	338,083	18,186	2.19	40.72	1.58	101.8	10,107	1,695	15.62	93.26	0.38	374.5
December	368,141	19,847	2.20	40.90	1.54	112.9	5,366	904	15.41	91.46	0.53	201.5
Year 2015												
January	370,545	19,679	2.19	41.18	1.57	96.2	4,385	732	15.01	89.69	0.49	59.4
February	302,474	16,111	2.22	41.77	1.63	84.3	11,250	1,857	13.25	80.43	0.51	37.0
March	298,086	15,549	2.21	42.43	1.63	97.3	3,976	670	13.58	80.81	0.49	119.6
April	290,324	15,310	2.11	40.15	1.67	124.1	2,315	394	12.90	76.13	0.46	130.6
May	289,053	15,209	2.13	40.54	1.77	107.3	3,836	648	13.09	77.69	0.41	141.4
June	282,635	15,143	2.14	40.04	1.77	83.3	2,120	356	13.32	79.32	0.48	95.0
July	319,704	17,307	2.09	38.62	1.66	85.8	2,277	386	12.82	75.72	0.47	69.7
August	345,979	18,463	2.11	39.54	1.69	94.3	3,485	581	12.58	75.51	0.48	134.5
Sept	345,305	18,605	2.05	38.03	1.69	103.9	6,857	1,134	9.47	57.12	0.47	242.0
October	323,263	17,340	1.99	37.04	1.62	120.0	6,936	1,131	8.70	53.42	0.41	304.8
November	286,023	15,432	1.97	36.47	1.57	115.6	5,410	891	9.13	55.56	0.45	217.6
December	278,119	14,836	1.96	36.85	1.64	121.7	2,401	409	9.61	56.22	0.45	92.1
Year 2016												
January	256,112	13,800	1.94	35.92	1.72	84.8	2,612	450	7.85	45.69	0.42	67.3
February	235,185	12,416	1.93	36.54	1.93	97.4	1,842	308	6.92	41.44	0.47	43.3
March	187,520	9,832	2.05	39.03	1.91	113.8	1,471	254	7.48	43.40	0.47	68.1
April	171,642	8,833	2.00	38.80	2.01	86.6	1,449	248	W	W	0.50	72.8
May	189,415	9,696	2.10	40.99	2.12	87.9	2,302	391	11.84	69.80	0.48	96.4
June	223,442	12,073	1.88	34.83	1.74	71.9	1,819	308	10.07	59.42	0.47	85.8
July	281,765	15,130	1.90	35.31	1.68	76.2	1,819	309	12.97	76.45	0.45	56.4
August	301,966	15,952	1.90	35.92	1.73	80.8	2,242	380	10.26	60.55	0.48	64.2
Sept	283,296	15,336	1.92	35.53	1.66	88.0	2,465	418	10.16	59.95	0.49	91.2
October	274,749	14,743	1.89	35.14	1.63	98.2	2,860	487	10.39	61.10	0.49	110.6
Year to Date												
2014	3,537,725	188,566	2.26	42.48	1.62	98.8	56,301	9,381	21.13	126.99	0.46	85.6
2015	3,167,367	168,714	2.12	39.88	1.67	97.9	47,438	7,889	12.10	72.86	0.47	80.7
2016	2,405,092	127,810	1.94	36.49	1.79	86.5	20,881	3,553	9.73	57.26	0.47	72.5
Rolling 12 Months Ending in October												
2015	3,873,591	206,748	2.14	40.05	1.65	99.5	62,910	10,488	12.97	77.88	0.46	98.2
2016	2,969,234	158,078	1.95	36.52	1.75	91.2	28,691	4,852	W	W	0.47	84.4

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Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.

PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2006 - October 2016 (continued)

Period	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2006	85,924	3,031	1.07	30.34	5.13	87.1	3,742,865	3,647,102	6.66	6.84	97.4	3.82
2007	56,580	1,994	1.02	28.95	4.88	69.3	4,097,825	3,990,546	6.92	7.11	97.2	4.06
2008	79,122	2,788	1.47	41.85	4.63	98.8	4,061,830	3,956,155	8.93	9.17	100.5	5.07
2009	49,619	1,732	1.31	37.63	3.87	93.6	4,087,573	3,987,721	4.30	4.41	100.7	3.18
2010	30,079	1,050	1.74	49.80	3.84	72.3	4,212,611	4,119,103	4.94	5.05	100.6	3.57
2011	33,643	1,175	2.54	72.85	4.55	84.6	4,252,040	4,158,617	4.62	4.72	100.8	3.52
2012	23,024	801	0.82	23.98	5.49	92.1	4,810,553	4,696,637	3.17	3.25	93.8	2.74
2013	16,150	575	W	W	5.39	65.6	4,025,263	3,917,898	4.25	4.36	92.8	W
2014	13,781	488	2.48	70.31	5.33	70.9	4,054,540	3,934,672	4.90	5.05	92.7	W
2015	14,550	524	2.45	68.22	5.26	67.3	4,683,291	4,530,195	2.94	3.04	93.2	W
Year 2014												
January	922	33	W	W	5.35	52.4	320,157	311,751	8.58	8.81	92.3	W
February	1,039	38	0.00	0.00	5.27	60.8	267,558	260,190	8.33	8.57	91.3	5.10
March	1,127	41	W	W	5.47	62.5	271,937	264,409	6.38	6.56	91.6	W
April	1,047	37	W	W	5.53	57.9	264,781	257,569	4.83	4.96	92.5	W
May	1,419	50	W	W	5.35	88.8	305,484	296,701	4.51	4.65	91.8	W
June	1,349	47	W	W	5.24	102.9	352,539	342,158	4.45	4.58	91.9	W
July	1,124	39	W	W	5.55	67.8	432,673	419,753	3.98	4.10	93.3	W
August	1,401	49	W	W	5.39	83.2	455,652	441,523	3.71	3.83	93.7	W
Sept	946	33	W	W	5.29	47.3	400,187	387,887	3.72	3.84	93.6	W
October	821	29	W	W	5.26	91.2	363,367	352,206	3.58	3.69	92.8	W
November	1,066	36	W	W	5.29	87.9	298,147	289,008	4.27	4.41	92.9	W
December	1,520	53	W	W	5.10	76.9	322,057	311,517	4.04	4.18	93.1	W
Year 2015												
January	1,427	52	W	W	5.10	77.7	341,822	330,761	4.08	4.22	91.0	W
February	562	20	W	W	4.53	30.3	301,145	291,394	5.27	5.45	92.2	W
March	956	34	W	W	4.81	48.8	347,024	336,090	3.37	3.49	93.3	W
April	1,501	54	W	W	4.95	79.8	324,962	313,969	2.65	2.75	94.0	W
May	1,348	48	W	W	5.17	69.5	359,864	347,963	2.75	2.85	93.5	W
June	1,237	44	W	W	5.22	69.1	425,118	410,985	2.68	2.78	93.7	W
July	1,119	40	W	W	5.30	58.9	516,995	500,696	2.71	2.79	93.6	W
August	1,289	45	W	W	5.62	67.7	511,789	495,450	2.71	2.80	93.7	W
Sept	432	16	W	W	5.44	22.4	445,913	431,110	2.69	2.79	93.4	W
October	1,295	47	W	W	5.38	71.8	394,437	381,566	2.55	2.64	93.1	W
November	1,643	59	W	W	5.35	82.8	351,912	340,122	2.31	2.40	93.1	W
December	1,742	65	W	W	5.70	179.6	362,309	350,090	2.21	2.29	93.5	W
Year 2016												
January	1,304	49	W	W	5.70	184.5	359,666	346,896	2.78	2.88	91.4	W
February	1,313	47	W	W	5.44	97.1	318,977	308,255	2.43	2.51	92.6	W
March	1,337	48	W	W	5.37	65.2	350,946	339,456	1.90	1.96	93.4	W
April	1,203	44	W	W	5.30	88.4	344,658	333,290	2.07	2.14	93.2	W
May	505	18	W	W	5.28	30.6	383,827	371,944	2.05	2.11	93.7	W
June	348	12	W	W	5.32	20.5	456,763	442,672	2.42	2.50	94.3	W
July	223	8	W	W	5.67	12.1	551,548	533,794	2.67	2.76	94.6	W
August	1,509	55	W	W	5.24	77.2	568,935	549,400	2.63	2.72	94.6	W
Sept	1,482	53	W	W	5.43	90.6	448,557	433,304	2.63	2.72	94.3	W
October	1,548	56	W	W	5.59	78.5	361,881	350,117	2.62	2.71	94.1	W
Year to Date												
2014	11,194	398	2.48	70.04	5.37	68.9	3,434,336	3,334,147	5.03	5.18	92.6	W
2015	11,166	399	2.44	68.35	5.17	59.5	3,969,069	3,839,983	3.06	3.16	93.2	W
2016	10,772	391	2.50	68.95	5.43	67.0	4,145,758	4,009,129	2.44	2.53	93.7	W
Rolling 12 Months Ending in October												
2015	13,753	488	W	W	5.17	62.5	4,589,273	4,440,508	3.21	3.32	93.2	W
2016	14,156	515	W	W	5.46	74.5	4,859,980	4,699,340	2.42	2.50	93.7	W

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Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2006 - October 2016

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2006	12,207	518	2.63	61.95	2.51	27.5	798	137	13.50	78.70	0.17	15.5
2007	12,419	531	2.67	62.46	2.58	27.6	249	43	14.04	81.93	0.17	6.2
2008	43,997	2,009	2.65	58.12	1.73	99.4	3,800	633	17.84	107.10	0.37	102.0
2009	41,182	1,876	2.90	63.68	1.67	104.3	3,517	583	10.82	65.26	0.45	122.1
2010	37,778	1,747	2.82	61.06	1.77	101.6	2,395	400	15.24	91.25	0.38	106.3
2011	35,892	1,686	2.92	62.24	1.78	101.1	1,959	325	19.67	118.66	0.55	108.0
2012	4,427	192	3.41	78.71	2.75	13.2	247	43	W	W	0.00	11.0
2013	3,507	151	W	W	3.05	11.2	0	0	--	--	--	0.0
2014	4,096	182	W	W	2.50	17.1	0	0	--	--	--	0.0
2015	2,439	109	W	W	2.55	13.6	0	0	--	--	--	0.0
Year 2014												
January	400	18	W	W	3.06	13.3	0	0	--	--	--	0.0
February	407	18	W	W	2.91	13.7	0	0	--	--	--	0.0
March	526	24	2.98	66.22	2.39	20.1	0	0	--	--	--	0.0
April	640	30	2.70	58.40	1.24	36.2	0	0	--	--	--	0.0
May	475	21	W	W	2.54	29.1	0	0	--	--	--	0.0
June	116	5	W	W	2.88	6.3	0	0	--	--	--	0.0
July	261	11	W	W	2.52	13.2	0	0	--	--	--	0.0
August	159	7	W	W	2.96	9.4	0	0	--	--	--	0.0
Sept	306	13	W	W	2.56	21.1	0	0	--	--	--	0.0
October	313	14	W	W	2.72	23.9	0	0	--	--	--	0.0
November	229	10	W	W	3.00	12.3	0	0	--	--	--	0.0
December	264	12	W	W	2.96	13.0	0	0	--	--	--	0.0
Year 2015												
January	309	14	W	W	2.65	14.4	0	0	--	--	--	0.0
February	479	23	2.14	44.32	1.71	23.9	0	0	--	--	--	0.0
March	177	8	W	W	2.93	9.3	0	0	--	--	--	0.0
April	298	13	W	W	2.72	23.8	0	0	--	--	--	0.0
May	102	5	W	W	2.90	9.0	0	0	--	--	--	0.0
June	213	9	W	W	2.30	15.1	0	0	--	--	--	0.0
July	124	5	W	W	2.93	8.3	0	0	--	--	--	0.0
August	187	8	W	W	2.46	13.3	0	0	--	--	--	0.0
Sept	49	2	W	W	3.01	4.3	0	0	--	--	--	0.0
October	130	6	W	W	3.08	11.1	0	0	--	--	--	0.0
November	182	8	W	W	3.00	13.6	0	0	--	--	--	0.0
December	188	8	W	W	2.86	11.5	0	0	--	--	--	0.0
Year 2016												
January	139	6	W	W	2.87	8.1	0	0	--	--	--	0.0
February	124	5	W	W	2.84	7.0	0	0	--	--	--	0.0
March	163	7	W	W	3.03	9.6	0	0	--	--	--	0.0
April	9	0	W	W	2.98	0.8	0	0	--	--	--	0.0
May	0	0	--	--	--	0.0	0	0	--	--	--	0.0
June	0	0	--	--	--	0.0	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	92	4	W	W	3.09	8.0	0	0	--	--	--	0.0
Sept	153	7	W	W	3.14	13.7	0	0	--	--	--	0.0
October	159	7	W	W	3.15	14.1	0	0	--	--	--	0.0
Year to Date												
2014	3,603	160	W	W	2.43	17.9	0	0	--	--	--	0.0
2015	2,070	92	2.88	64.62	2.48	13.8	0	0	--	--	--	0.0
2016	837	37	W	W	3.02	6.6	0	0	--	--	--	0.0
Rolling 12 Months Ending in October												
2015	2,562	114	W	W	2.56	13.6	0	0	--	--	--	0.0
2016	1,207	53	W	W	3.00	7.7	0	0	--	--	--	0.0

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 W = Withheld to avoid disclosure of individual company data.

Notes:
 Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:
 COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.
 PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2006 - October 2016 (continued)

Period	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2006	0	0	--	--	--	0.0	21,369	20,819	8.33	8.55	30.7	6.42
2007	0	0	--	--	--	0.0	23,502	22,955	7.99	8.18	32.8	6.20
2008	370	14	2.14	58.36	5.53	135.3	71,670	69,877	9.01	9.24	105.5	6.94
2009	252	9	1.65	46.54	5.11	102.8	81,134	79,308	5.18	5.30	105.0	4.58
2010	410	15	2.19	60.59	5.67	122.5	92,055	90,130	5.39	5.51	105.1	4.83
2011	268	9	W	W	5.46	147.4	95,287	93,306	5.20	5.31	107.2	W
2012	0	0	--	--	--	0.0	18,315	18,008	5.88	5.98	16.2	W
2013	0	0	--	--	--	0.0	5,497	5,450	W	W	4.6	W
2014	0	0	--	--	--	0.0	5,849	5,795	W	W	4.9	W
2015	0	0	--	--	--	0.0	6,499	6,371	W	W	5.5	W
Year 2014												
January	0	0	--	--	--	0.0	423	418	W	W	3.1	W
February	0	0	--	--	--	0.0	314	310	W	W	3.6	W
March	0	0	--	--	--	0.0	359	355	W	W	4.2	W
April	0	0	--	--	--	0.0	439	435	W	W	5.4	W
May	0	0	--	--	--	0.0	491	486	W	W	5.4	W
June	0	0	--	--	--	0.0	440	437	W	W	4.6	W
July	0	0	--	--	--	0.0	476	472	W	W	4.4	W
August	0	0	--	--	--	0.0	625	619	W	W	5.4	W
Sept	0	0	--	--	--	0.0	555	551	W	W	5.4	W
October	0	0	--	--	--	0.0	580	575	W	W	5.9	W
November	0	0	--	--	--	0.0	476	472	W	W	5.1	W
December	0	0	--	--	--	0.0	672	666	W	W	6.7	W
Year 2015												
January	0	0	--	--	--	0.0	552	545	W	W	5.7	W
February	0	0	--	--	--	0.0	378	372	W	W	4.4	W
March	0	0	--	--	--	0.0	438	432	W	W	4.7	W
April	0	0	--	--	--	0.0	420	413	W	W	5.1	W
May	0	0	--	--	--	0.0	494	488	W	W	5.4	W
June	0	0	--	--	--	0.0	522	513	W	W	5.2	W
July	0	0	--	--	--	0.0	540	528	W	W	4.6	W
August	0	0	--	--	--	0.0	694	680	W	W	6.1	W
Sept	0	0	--	--	--	0.0	632	620	W	W	5.8	W
October	0	0	--	--	--	0.0	530	523	W	W	5.4	W
November	0	0	--	--	--	0.0	775	749	W	W	8.0	W
December	0	0	--	--	--	0.0	524	507	W	W	5.2	W
Year 2016												
January	0	0	--	--	--	0.0	1,241	1,203	W	W	11.6	W
February	0	0	--	--	--	0.0	488	477	W	W	5.2	W
March	0	0	--	--	--	0.0	620	610	W	W	6.4	W
April	0	0	--	--	--	0.0	578	567	W	W	6.1	W
May	0	0	--	--	--	0.0	599	587	W	W	6.4	W
June	0	0	--	--	--	0.0	599	585	W	W	6.0	W
July	0	0	--	--	--	0.0	691	667	W	W	6.2	W
August	0	0	--	--	--	0.0	802	765	W	W	7.0	W
Sept	0	0	--	--	--	0.0	610	591	W	W	6.1	W
October	0	0	--	--	--	0.0	598	575	W	W	6.6	W
Year to Date												
2014	0	0	--	--	--	0.0	4,700	4,658	W	W	4.7	W
2015	0	0	--	--	--	0.0	5,200	5,114	W	W	5.3	W
2016	0	0	--	--	--	0.0	6,825	6,628	W	W	6.8	W
Rolling 12 Months Ending in October												
2015	0	0	--	--	--	0.0	6,349	6,252	W	W	5.4	W
2016	0	0	--	--	--	0.0	8,124	7,884	W	W	6.7	W

Displayed values of zero may represent small values that round to zero.

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

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Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

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

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.

- See Glossary for definitions.

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

- See the Technical Notes for fuel conversion factors.

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2006 - October 2016

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2006	320,640	15,208	2.03	42.76	1.47	60.2	19,514	3,214	7.57	45.95	1.30	21.2
2007	303,091	13,540	2.20	49.16	1.36	60.1	33,637	5,514	8.53	52.06	1.33	38.8
2008	493,724	22,044	2.72	60.96	1.28	100.7	48,822	7,958	12.50	76.69	1.01	109.0
2009	431,686	19,661	2.81	61.68	1.22	99.5	55,899	9,232	9.83	59.52	0.83	112.8
2010	468,991	21,492	2.75	60.08	1.26	87.2	33,276	5,554	13.21	79.15	0.93	125.6
2011	476,108	22,204	2.93	62.86	1.33	99.5	28,939	4,878	17.67	104.83	1.08	144.8
2012	285,172	13,206	3.02	65.24	1.33	65.8	6,739	1,095	W	W	1.52	40.8
2013	275,543	12,727	W	W	1.32	64.4	2,431	394	18.20	112.29	1.43	15.8
2014	281,867	13,050	W	W	1.33	68.4	2,290	373	17.91	109.99	1.43	15.6
2015	263,630	12,132	W	W	1.35	71.4	2,359	385	13.45	82.47	1.42	16.9
Year 2014												
January	23,384	1,093	W	W	1.29	61.0	385	62	18.67	115.30	1.30	15.0
February	21,991	1,020	W	W	1.33	62.5	332	53	20.18	125.46	1.04	19.1
March	25,143	1,161	2.92	63.25	1.41	67.2	135	22	20.74	127.74	1.16	9.3
April	22,469	1,042	3.09	66.66	1.31	70.8	142	23	17.86	110.18	1.60	14.8
May	22,090	1,028	W	W	1.27	66.3	144	23	17.67	109.00	1.70	13.6
June	21,987	1,014	W	W	1.40	65.9	197	32	18.15	111.64	1.79	19.5
July	24,237	1,122	W	W	1.29	70.6	149	24	16.89	103.81	1.54	16.2
August	25,258	1,165	W	W	1.35	73.2	117	19	W	W	1.59	14.2
Sept	23,305	1,073	W	W	1.28	71.5	140	23	17.75	108.43	1.86	14.5
October	23,967	1,110	W	W	1.35	74.9	150	25	16.21	98.83	1.56	14.8
November	23,701	1,098	W	W	1.37	70.7	169	28	17.46	105.26	1.42	15.1
December	24,334	1,125	W	W	1.30	68.4	230	38	14.15	85.81	1.33	22.4
Year 2015												
January	24,148	1,100	W	W	1.36	68.2	210	34	13.50	83.50	1.82	14.2
February	19,118	882	2.77	60.15	1.42	59.5	275	44	15.47	96.51	1.58	12.2
March	24,240	1,110	W	W	1.30	73.7	212	34	14.93	93.02	1.65	17.1
April	21,069	969	W	W	1.42	72.5	257	43	13.30	79.04	0.98	22.1
May	21,441	991	W	W	1.28	71.9	95	16	15.20	90.88	1.05	8.5
June	21,188	975	W	W	1.36	70.6	240	39	13.12	79.91	1.30	22.0
July	23,947	1,110	W	W	1.34	73.7	122	20	13.55	83.51	1.58	12.5
August	22,948	1,059	W	W	1.28	74.6	161	26	13.21	81.06	1.52	18.7
Sept	22,556	1,038	W	W	1.22	74.6	151	25	13.56	82.72	1.38	16.9
October	20,964	967	W	W	1.40	74.6	221	36	12.74	77.23	1.26	21.5
November	21,602	987	W	W	1.51	74.5	180	29	11.49	71.78	1.40	19.1
December	20,408	944	W	W	1.36	69.9	234	38	11.75	72.24	1.52	24.5
Year 2016												
January	14,296	638	W	W	1.51	42.4	142	23	10.87	67.07	1.55	12.2
February	12,538	566	W	W	1.62	40.6	274	45	8.45	51.85	1.10	25.0
March	14,648	658	W	W	1.42	48.0	170	28	8.30	51.02	1.13	23.4
April	12,466	554	W	W	1.59	55.1	177	29	W	W	1.35	24.2
May	12,401	562	2.75	60.76	1.53	49.0	83	14	10.95	66.07	1.65	8.1
June	13,814	619	2.78	62.01	1.38	51.1	190	31	9.59	58.65	1.48	20.3
July	13,139	597	2.77	61.02	1.36	48.4	60	10	10.18	62.12	1.02	5.0
August	13,513	622	W	W	1.29	50.4	58	10	10.89	65.04	0.55	5.4
Sept	10,554	477	W	W	1.37	45.3	120	20	11.04	66.33	1.01	15.4
October	12,729	585	W	W	1.43	58.9	228	37	10.22	62.63	1.14	19.0
Year to Date												
2014	233,831	10,828	W	W	1.33	68.2	1,891	307	18.40	113.40	1.45	15.1
2015	221,619	10,201	2.73	59.31	1.33	71.3	1,944	318	13.84	84.66	1.41	16.1
2016	130,099	5,878	W	W	1.45	48.4	1,502	246	9.65	58.86	1.23	15.1
Rolling 12 Months Ending in October												
2015	269,655	12,424	W	W	1.34	71.0	2,343	384	14.13	86.28	1.41	16.5
2016	172,109	7,809	W	W	1.45	52.7	1,916	313	W	W	1.28	16.2

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Notes:

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 COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.
 PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2006 - October 2016 (continued)

Period	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
2006	17,875	646	1.63	45.05	5.43	42.7	869,157	844,211	7.02	7.22	75.7	5.64
2007	19,700	698	1.96	55.42	5.52	43.6	896,803	871,178	6.97	7.18	82.9	5.78
2008	39,246	1,396	3.34	93.84	4.92	117.9	1,099,613	1,068,372	8.95	9.22	111.9	7.10
2009	38,924	1,381	1.80	50.82	4.51	114.2	1,117,489	1,088,880	4.27	4.38	110.0	4.02
2010	35,866	1,269	2.46	69.38	4.90	100.5	1,166,768	1,135,917	4.64	4.77	110.4	4.24
2011	37,981	1,351	W	W	5.03	108.3	1,331,977	1,296,628	4.28	4.40	122.0	W
2012	23,861	858	2.62	72.96	5.86	42.2	834,245	813,288	2.97	3.05	70.8	W
2013	17,236	623	W	W	5.82	30.5	750,946	728,835	W	W	62.3	W
2014	9,736	358	W	W	5.83	23.2	742,347	718,360	W	W	62.7	W
2015	8,189	304	W	W	5.50	24.1	765,964	740,975	W	W	60.6	W
Year 2014												
January	398	15	W	W	5.87	11.7	66,078	64,072	W	W	60.7	W
February	339	13	W	W	5.95	11.2	59,291	57,453	W	W	64.6	W
March	834	31	W	W	5.76	24.3	65,433	63,434	W	W	67.2	W
April	755	28	W	W	5.88	19.7	58,439	56,714	W	W	63.4	W
May	408	15	W	W	5.78	11.7	60,012	58,094	W	W	63.1	W
June	990	36	W	W	5.66	25.6	60,327	58,411	W	W	64.0	W
July	794	29	W	W	5.79	20.2	64,393	62,325	W	W	62.9	W
August	912	34	W	W	5.80	25.1	64,667	62,493	W	W	62.0	W
Sept	997	36	W	W	5.92	27.6	59,277	57,273	W	W	60.5	W
October	950	34	W	W	5.92	33.0	58,228	56,273	W	W	59.5	W
November	1,071	40	W	W	5.83	33.3	61,753	59,657	W	W	63.3	W
December	1,286	47	W	W	5.86	36.1	64,449	62,162	W	W	62.3	W
Year 2015												
January	1,065	39	W	W	5.45	30.6	63,737	61,619	W	W	59.6	W
February	675	25	W	W	5.72	22.1	60,233	58,313	W	W	63.2	W
March	794	29	W	W	5.66	26.6	63,904	61,821	W	W	62.5	W
April	937	34	W	W	5.81	27.3	59,995	58,072	W	W	62.5	W
May	650	24	W	W	5.58	22.7	62,594	60,498	W	W	63.6	W
June	847	32	W	W	5.41	31.7	63,763	61,470	W	W	60.8	W
July	680	26	W	W	5.28	29.4	67,248	64,911	W	W	59.3	W
August	478	18	W	W	5.34	18.9	68,195	66,008	W	W	59.8	W
Sept	648	24	W	W	5.57	22.0	63,672	61,594	W	W	60.1	W
October	218	9	W	W	4.62	9.6	57,688	55,868	W	W	54.6	W
November	393	15	W	W	5.27	13.3	65,289	63,274	W	W	61.3	W
December	804	30	W	W	5.46	32.7	69,647	67,528	W	W	61.3	W
Year 2016												
January	400	15	W	W	5.94	16.5	63,795	61,733	W	W	57.4	W
February	122	4	W	W	6.10	4.7	56,903	55,089	W	W	55.3	W
March	574	21	W	W	5.88	18.2	60,786	59,017	W	W	57.2	W
April	669	25	W	W	5.81	29.0	60,713	58,903	W	W	58.3	W
May	0	0	--	--	--	0.0	60,251	58,544	W	W	57.3	W
June	222	8	W	W	5.94	8.4	61,662	59,902	W	W	57.6	W
July	222	8	W	W	5.94	8.0	65,190	63,191	W	W	57.9	W
August	217	8	W	W	5.81	8.2	65,565	63,294	W	W	57.5	W
Sept	200	8	W	W	5.64	9.9	62,004	59,964	W	W	57.4	W
October	207	8	W	W	5.66	6.8	62,533	60,657	W	W	59.7	W
Year to Date												
2014	7,379	271	W	W	5.82	20.9	616,146	596,542	W	W	62.7	W
2015	6,992	259	W	W	5.52	24.4	631,028	610,174	W	W	60.5	W
2016	2,831	104	W	W	5.85	10.9	619,402	600,294	W	W	57.5	W
Rolling 12 Months Ending in October												
2015	9,349	346	W	W	5.60	26.4	757,230	731,993	W	W	60.9	W
2016	4,028	149	W	W	5.71	12.9	754,338	731,095	W	W	58.2	W

Displayed values of zero may represent small values that round to zero.

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

W = Withheld to avoid disclosure of individual company data.

Notes:

Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:

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

NATURAL GAS - includes natural gas only. Prior to 2011, includes Other Gases.

- Values for 2015 and prior years are final. Values for 2016 are preliminary.

- See Glossary for definitions.

- Starting in January 2013, there may have been 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 EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.

- See the Technical Notes for fuel conversion factors.

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

Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, October 2016 and 2015
(Thousand Tons)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	91	67	35.0%	37	58	53	8	0	0	1	1
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	9	9	-4.6%	0	0	8	8	0	0	1	1
Massachusetts	45	0	--	0	0	45	0	0	0	0	0
New Hampshire	37	58	-37.0%	37	58	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	1,599	2,271	-30.0%	0	0	1,568	2,197	0	0	31	74
New Jersey	57	80	-29.0%	0	0	57	80	0	0	0	0
New York	72	71	1.5%	0	0	48	38	0	0	25	33
Pennsylvania	1,469	2,119	-31.0%	0	0	1,463	2,079	0	0	6	41
East North Central	11,617	15,455	-25.0%	6,973	8,936	4,434	6,294	0	0	210	225
Illinois	3,418	4,835	-29.0%	493	804	2,754	3,867	0	0	172	164
Indiana	2,385	2,835	-16.0%	2,258	2,609	126	227	0	0	0	0
Michigan	1,914	3,010	-36.0%	1,880	2,992	35	18	0	0	0	1
Ohio	2,163	2,843	-24.0%	645	641	1,518	2,183	0	0	0	20
Wisconsin	1,736	1,931	-10.0%	1,698	1,890	0	0	0	0	39	41
West North Central	10,349	11,596	-11.0%	10,237	11,284	0	0	7	6	105	306
Iowa	1,839	2,057	-11.0%	1,734	1,856	0	0	0	0	105	201
Kansas	1,491	1,385	7.7%	1,491	1,385	0	0	0	0	0	0
Minnesota	1,401	1,456	-3.8%	1,401	1,426	0	0	0	0	0	30
Missouri	2,817	3,318	-15.0%	2,810	3,313	0	0	7	6	0	0
Nebraska	1,045	1,435	-27.0%	1,045	1,361	0	0	0	0	0	74
North Dakota	1,685	1,817	-7.3%	1,685	1,817	0	0	0	0	0	0
South Dakota	71	127	-44.0%	71	127	0	0	0	0	0	0
South Atlantic	8,092	8,793	-8.0%	6,871	7,684	1,142	961	0	0	80	148
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,548	1,538	0.6%	1,535	1,493	13	26	0	0	0	19
Georgia	1,676	1,820	-8.0%	1,651	1,817	0	0	0	0	25	3
Maryland	659	492	34.0%	0	0	641	468	0	0	19	24
North Carolina	1,163	1,549	-25.0%	1,163	1,491	0	23	0	0	0	36
South Carolina	266	430	-38.0%	259	430	0	0	0	0	8	0
Virginia	608	545	12.0%	534	440	46	70	0	0	29	35
West Virginia	2,171	2,418	-10.0%	1,729	2,013	442	374	0	0	0	31
East South Central	6,347	6,889	-7.9%	6,095	6,658	183	124	0	0	69	107
Alabama	1,443	1,664	-13.0%	1,443	1,664	0	0	0	0	0	0
Kentucky	3,584	3,786	-5.3%	3,584	3,786	0	0	0	0	0	0
Mississippi	440	340	29.0%	256	215	183	124	0	0	0	0
Tennessee	880	1,100	-20.0%	812	993	0	0	0	0	69	107
West South Central	11,840	12,515	-5.4%	5,804	6,031	6,029	6,439	0	0	7	45
Arkansas	1,330	1,321	0.7%	1,108	1,156	215	165	0	0	7	0
Louisiana	656	683	-3.9%	442	403	214	280	0	0	0	0
Oklahoma	1,286	1,595	-19.0%	1,179	1,340	108	210	0	0	0	45
Texas	8,568	8,916	-3.9%	3,075	3,132	5,493	5,785	0	0	0	0
Mountain	8,215	8,993	-8.7%	7,288	7,911	909	1,064	0	0	17	18
Arizona	1,529	1,956	-22.0%	1,529	1,956	0	0	0	0	0	0
Colorado	1,441	1,209	19.0%	1,441	1,209	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	865	953	-9.2%	0	21	865	932	0	0	0	0
Nevada	131	153	-15.0%	87	109	44	45	0	0	0	0
New Mexico	1,100	1,036	6.2%	1,100	1,036	0	0	0	0	0	0
Utah	1,192	1,448	-18.0%	1,175	1,388	0	43	0	0	17	18
Wyoming	1,957	2,238	-13.0%	1,957	2,193	0	45	0	0	0	0
Pacific Contiguous	526	361	45.0%	97	125	363	193	0	0	65	44
California	65	44	51.0%	0	0	0	0	0	0	65	44
Oregon	97	125	-22.0%	97	125	0	0	0	0	0	0
Washington	363	193	88.0%	0	0	363	193	0	0	0	0
Pacific Noncontiguous	77	85	-9.7%	15	27	62	58	0	0	0	0
Alaska	15	27	-44.0%	15	27	0	0	0	0	0	0
Hawaii	62	58	6.1%	0	0	62	58	0	0	0	0
U.S. Total	58,752	67,027	-12.0%	43,418	48,715	14,743	17,340	7	6	585	967

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:
 See Glossary for definitions. Values for 2015 are final. Values for 2016 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

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

Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	1,070	1,674	-36.0%	177	551	881	1,096	0	0	13	27
Connecticut	85	251	-66.0%	0	0	85	251	0	0	0	0
Maine	70	91	-23.0%	0	0	57	65	0	0	13	27
Massachusetts	739	781	-5.4%	0	0	739	781	0	0	0	0
New Hampshire	177	551	-68.0%	177	551	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	16,471	27,309	-40.0%	0	0	16,144	26,581	0	0	327	728
New Jersey	529	732	-28.0%	0	0	529	732	0	0	0	0
New York	465	799	-42.0%	0	0	229	539	0	0	236	260
Pennsylvania	15,477	25,778	-40.0%	0	0	15,386	25,310	0	0	91	469
East North Central	112,887	147,085	-23.0%	67,103	84,576	43,844	59,995	0	27	1,940	2,487
Illinois	31,790	46,362	-31.0%	5,750	6,993	24,611	37,529	0	0	1,429	1,840
Indiana	24,023	29,790	-19.0%	22,500	27,417	1,523	2,373	0	0	0	0
Michigan	17,503	24,781	-29.0%	17,281	24,508	212	225	0	27	10	22
Ohio	24,255	26,717	-9.2%	6,605	6,648	17,498	19,868	0	0	152	200
Wisconsin	15,316	19,435	-21.0%	14,967	19,010	0	0	0	0	349	425
West North Central	95,757	117,355	-18.0%	94,671	114,470	0	0	37	65	1,049	2,820
Iowa	14,640	19,211	-24.0%	13,591	17,357	0	0	0	0	1,049	1,854
Kansas	11,883	15,282	-22.0%	11,883	15,282	0	0	0	0	0	0
Minnesota	9,948	14,659	-32.0%	9,948	14,339	0	0	0	14	0	305
Missouri	29,368	34,820	-16.0%	29,331	34,769	0	0	37	51	0	0
Nebraska	10,562	12,757	-17.0%	10,562	12,096	0	0	0	0	0	661
North Dakota	18,274	19,793	-7.7%	18,274	19,793	0	0	0	0	0	0
South Dakota	1,082	835	30.0%	1,082	835	0	0	0	0	0	0
South Atlantic	78,544	95,330	-18.0%	68,484	82,414	9,351	11,265	0	0	709	1,652
Delaware	199	152	31.0%	0	0	199	152	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	12,806	16,607	-23.0%	12,516	15,867	290	540	0	0	0	200
Georgia	14,335	17,194	-17.0%	14,219	17,029	0	0	0	0	116	165
Maryland	4,266	5,626	-24.0%	0	0	4,077	5,400	0	0	189	225
North Carolina	9,559	13,949	-31.0%	9,559	13,422	0	205	0	0	0	322
South Carolina	6,723	9,651	-30.0%	6,641	9,522	0	0	0	0	82	129
Virginia	6,572	6,686	-1.7%	5,943	5,648	376	748	0	0	253	290
West Virginia	24,084	25,466	-5.4%	19,605	20,926	4,410	4,219	0	0	69	320
East South Central	55,809	65,540	-15.0%	52,241	61,632	2,546	2,692	0	0	1,022	1,216
Alabama	13,617	17,165	-21.0%	13,617	17,165	0	0	0	0	0	0
Kentucky	30,781	34,558	-11.0%	30,781	34,558	0	0	0	0	0	0
Mississippi	3,576	4,444	-20.0%	1,030	1,752	2,546	2,692	0	0	0	0
Tennessee	7,836	9,373	-16.0%	6,814	8,157	0	0	0	0	1,022	1,216
West South Central	87,397	114,585	-24.0%	42,677	59,554	44,668	54,529	0	0	52	503
Arkansas	10,180	12,923	-21.0%	8,547	10,829	1,582	2,031	0	0	52	64
Louisiana	5,480	9,054	-39.0%	4,157	5,196	1,323	3,858	0	0	0	0
Oklahoma	8,797	15,550	-43.0%	7,897	13,965	900	1,146	0	0	0	439
Texas	62,940	77,058	-18.0%	22,077	29,563	40,862	47,495	0	0	0	0
Mountain	72,688	89,097	-18.0%	65,064	79,599	7,393	9,271	0	0	231	227
Arizona	12,694	18,248	-30.0%	12,694	18,248	0	0	0	0	0	0
Colorado	13,075	15,558	-16.0%	13,075	15,558	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	6,980	8,195	-15.0%	0	181	6,980	8,015	0	0	0	0
Nevada	835	1,146	-27.0%	423	723	413	422	0	0	0	0
New Mexico	8,730	10,200	-14.0%	8,730	10,200	0	0	0	0	0	0
Utah	10,943	13,415	-18.0%	10,712	12,800	0	388	0	0	231	227
Wyoming	19,432	22,336	-13.0%	19,432	21,890	0	447	0	0	0	0
Pacific Contiguous	3,738	4,548	-18.0%	881	1,199	2,320	2,809	0	0	536	541
California	536	541	-0.8%	0	0	0	0	0	0	536	541
Oregon	881	1,199	-26.0%	881	1,199	0	0	0	0	0	0
Washington	2,320	2,809	-17.0%	0	0	2,320	2,809	0	0	0	0
Pacific Noncontiguous	832	580	43.0%	168	102	663	478	0	0	0	0
Alaska	168	102	65.0%	168	102	0	0	0	0	0	0
Hawaii	663	478	39.0%	0	0	663	478	0	0	0	0
U.S. Total	525,193	663,103	-21.0%	391,467	484,096	127,810	168,714	37	92	5,878	10,201

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 NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
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 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

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

**Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, October 2016 and 2015
(Thousand Barrels)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	86	614	-86.0%	0	0	86	614	0	0	0	0
Connecticut	1	276	-99.0%	0	0	1	276	0	0	0	0
Maine	2	121	-98.0%	0	0	2	121	0	0	0	0
Massachusetts	83	217	-62.0%	0	0	83	217	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	190	180	5.7%	104	13	76	164	0	0	10	3
New Jersey	0	20	-99.0%	0	0	0	20	0	0	0	0
New York	139	130	6.5%	104	13	27	114	0	0	7	3
Pennsylvania	51	29	76.0%	0	0	48	29	0	0	2	0
East North Central	95	95	-0.4%	35	69	59	24	0	0	1	2
Illinois	6	7	-15.0%	1	1	5	6	0	0	0	0
Indiana	14	21	-35.0%	14	21	0	0	0	0	0	0
Michigan	10	8	14.0%	9	8	0	0	0	0	0	0
Ohio	65	49	35.0%	11	29	54	18	0	0	1	2
Wisconsin	0	10	-100.0%	0	10	0	0	0	0	0	0
West North Central	33	44	-26.0%	29	44	4	0	0	0	0	0
Iowa	10	7	41.0%	10	7	0	0	0	0	0	0
Kansas	0	0	-100.0%	0	0	0	0	0	0	0	0
Minnesota	7	4	68.0%	3	4	4	0	0	0	0	0
Missouri	12	11	10.0%	12	11	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	3	0	NM	3	0	0	0	0	0	0	0
South Dakota	0	21	-100.0%	0	21	0	0	0	0	0	0
South Atlantic	185	262	-29.0%	71	97	89	136	0	0	25	29
Delaware	27	0	NM	0	0	27	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	8	21	-64.0%	6	21	2	0	0	0	0	1
Georgia	16	8	101.0%	4	4	0	0	0	0	11	4
Maryland	42	97	-57.0%	0	0	42	97	0	0	0	0
North Carolina	10	23	-59.0%	10	22	0	0	0	0	0	1
South Carolina	10	29	-64.0%	4	9	0	0	0	0	6	21
Virginia	57	44	29.0%	30	2	19	38	0	0	8	3
West Virginia	17	39	-57.0%	17	39	0	0	0	0	0	0
East South Central	30	19	63.0%	30	17	0	0	0	0	1	1
Alabama	3	0	690.0%	3	0	0	0	0	0	0	0
Kentucky	14	15	-10.0%	14	15	0	0	0	0	0	0
Mississippi	2	0	--	2	0	0	0	0	0	0	0
Tennessee	12	3	323.0%	11	2	0	0	0	0	1	1
West South Central	37	9	320.0%	32	6	5	2	0	0	0	0
Arkansas	5	2	181.0%	5	1	0	1	0	0	0	0
Louisiana	3	2	19.0%	3	1	0	1	0	0	0	0
Oklahoma	23	1	NM	23	1	0	0	0	0	0	0
Texas	7	4	55.0%	2	4	5	0	0	0	0	0
Mountain	30	20	48.0%	28	19	1	1	0	0	0	0
Arizona	16	3	527.0%	16	3	0	0	0	0	0	0
Colorado	2	0	--	2	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	1	2	-52.0%	0	2	1	1	0	0	0	0
New Mexico	4	5	-25.0%	4	5	0	0	0	0	0	0
Utah	5	2	246.0%	5	1	0	0	0	0	0	0
Wyoming	1	8	-88.0%	1	8	0	0	0	0	0	0
Pacific Contiguous	1	1	0.0%	0	0	1	1	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	1	0.0%	0	0	1	1	0	0	0	0
Pacific Noncontiguous	683	894	-24.0%	516	705	167	189	0	0	0	0
Alaska	3	2	65.0%	3	2	0	0	0	0	0	0
Hawaii	680	892	-24.0%	513	703	167	189	0	0	0	0
U.S. Total	1,370	2,137	-36.0%	845	970	487	1,131	0	0	37	36

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 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Petroleum Liquids includes distillate and residual fuel oils.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Thousand Barrels)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	360	2,427	-85.0%	73	62	283	2,363	0	0	4	2
Connecticut	30	682	-96.0%	0	0	30	682	0	0	0	0
Maine	21	685	-97.0%	0	0	18	684	0	0	4	2
Massachusetts	293	867	-66.0%	65	5	227	862	0	0	0	0
New Hampshire	8	80	-90.0%	8	57	0	23	0	0	0	0
Rhode Island	8	112	-93.0%	0	0	8	112	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	765	3,423	-78.0%	158	1,019	582	2,393	0	0	26	11
New Jersey	13	112	-89.0%	0	0	13	112	0	0	0	0
New York	440	2,390	-82.0%	158	1,019	263	1,362	0	0	19	9
Pennsylvania	312	921	-66.0%	0	0	306	919	0	0	6	3
East North Central	823	930	-12.0%	423	592	375	303	0	0	25	34
Illinois	98	80	22.0%	3	9	95	71	0	0	0	0
Indiana	156	240	-35.0%	156	240	0	0	0	0	0	0
Michigan	148	154	-3.8%	141	145	0	0	0	0	7	9
Ohio	381	401	-4.9%	87	149	276	228	0	0	18	24
Wisconsin	40	55	-26.0%	36	50	4	4	0	0	0	2
West North Central	290	330	-12.0%	286	330	4	0	0	0	0	0
Iowa	77	55	39.0%	77	55	0	0	0	0	0	0
Kansas	29	58	-50.0%	29	58	0	0	0	0	0	0
Minnesota	34	24	43.0%	31	24	4	0	0	0	0	0
Missouri	95	123	-22.0%	95	123	0	0	0	0	0	0
Nebraska	3	2	83.0%	3	2	0	0	0	0	0	0
North Dakota	48	38	26.0%	48	38	0	0	0	0	0	0
South Dakota	2	30	-92.0%	2	30	0	0	0	0	0	0
South Atlantic	3,164	4,374	-28.0%	2,379	3,073	600	1,035	0	0	185	266
Delaware	78	169	-54.0%	0	0	78	169	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	824	605	36.0%	818	585	7	4	0	0	0	16
Georgia	225	237	-4.8%	142	114	31	75	0	0	52	47
Maryland	242	429	-44.0%	0	0	242	429	0	0	0	0
North Carolina	250	527	-53.0%	189	454	61	39	0	0	0	34
South Carolina	232	407	-43.0%	125	276	0	7	0	0	107	124
Virginia	1,135	1,807	-37.0%	927	1,466	182	295	0	0	26	46
West Virginia	178	194	-8.1%	178	178	0	16	0	0	0	0
East South Central	381	420	-9.5%	363	409	10	7	0	0	7	4
Alabama	58	71	-18.0%	48	64	10	7	0	0	0	0
Kentucky	156	158	-0.7%	156	158	0	0	0	0	0	0
Mississippi	23	45	-49.0%	23	45	0	0	0	0	0	0
Tennessee	143	147	-2.7%	136	143	0	0	0	0	7	4
West South Central	243	305	-20.0%	180	213	63	93	0	0	0	0
Arkansas	53	78	-31.0%	40	59	14	19	0	0	0	0
Louisiana	53	92	-43.0%	51	70	2	23	0	0	0	0
Oklahoma	28	4	652.0%	28	4	0	0	0	0	0	0
Texas	108	132	-18.0%	61	80	47	51	0	0	0	0
Mountain	290	308	-5.7%	266	290	24	17	0	0	0	0
Arizona	85	88	-3.5%	85	88	0	0	0	0	0	0
Colorado	13	6	130.0%	13	6	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	19	10	81.0%	0	0	19	10	0	0	0	0
Nevada	21	26	-20.0%	16	21	5	5	0	0	0	0
New Mexico	69	92	-26.0%	69	92	0	0	0	0	0	0
Utah	24	27	-14.0%	24	26	0	2	0	0	0	0
Wyoming	60	58	3.7%	60	58	0	0	0	0	0	0
Pacific Contiguous	13	10	27.0%	0	1	13	9	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	1	-100.0%	0	1	0	0	0	0	0	0
Washington	13	9	40.0%	0	0	13	9	0	0	0	0
Pacific Noncontiguous	7,409	7,831	-5.4%	5,809	6,162	1,599	1,669	0	0	0	0
Alaska	7	14	-52.0%	7	14	0	0	0	0	0	0
Hawaii	7,402	7,817	-5.3%	5,802	6,148	1,599	1,669	0	0	0	0
U.S. Total	13,736	20,358	-33.0%	9,937	12,151	3,553	7,889	0	0	246	318

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 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Petroleum Liquids includes distillate and residual fuel oils.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State, October 2016 and 2015
(Thousand Tons)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
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	9	-100.0%	0	0	0	0	0	0	0	9
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	9	-100.0%	0	0	0	0	0	0	0	9
East North Central	78	61	27.0%	22	14	56	47	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	4	-100.0%	0	4	0	0	0	0	0	0
Michigan	17	10	70.0%	17	10	0	0	0	0	0	0
Ohio	56	47	20.0%	0	0	56	47	0	0	0	0
Wisconsin	5	1	431.0%	5	1	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	50	122	-59.0%	42	122	0	0	0	0	8	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	42	122	-65.0%	42	122	0	0	0	0	0	0
Georgia	8	0	--	0	0	0	0	0	0	8	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	17	58	-70.0%	17	58	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	17	58	-70.0%	17	58	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	171	140	22.0%	171	140	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	171	140	22.0%	171	140	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	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	317	390	-19.0%	253	334	56	47	0	0	8	9

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 Petroleum Coke includes petroleum coke-derived synthesis gas.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Thousand Tons)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
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	89	-100.0%	0	0	0	0	0	0	0	89
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	89	-100.0%	0	0	0	0	0	0	0	89
East North Central	867	1,048	-17.0%	458	587	391	399	0	0	18	62
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	162	297	-46.0%	162	297	0	0	0	0	0	0
Michigan	260	276	-6.1%	260	264	0	13	0	0	0	0
Ohio	391	386	1.2%	0	0	391	386	0	0	0	0
Wisconsin	55	89	-38.0%	37	27	0	0	0	0	18	62
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,251	948	32.0%	1,165	841	0	0	0	0	86	107
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,165	841	39.0%	1,165	841	0	0	0	0	0	0
Georgia	86	107	-20.0%	0	0	0	0	0	0	86	107
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	65	511	-87.0%	65	511	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	65	511	-87.0%	65	511	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	1,288	1,479	-13.0%	1,288	1,479	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,288	1,479	-13.0%	1,288	1,479	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	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	3,470	4,075	-15.0%	2,976	3,418	391	399	0	0	104	259

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 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Petroleum Coke includes petroleum coke-derived synthesis gas.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State, October 2016 and 2015
(Million Cubic Feet)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	25,160	32,477	-23.0%	45	61	25,115	32,416	0	0	0	0
Connecticut	9,252	10,102	-8.4%	0	0	9,252	10,102	0	0	0	0
Maine	1,792	2,518	-29.0%	0	0	1,792	2,518	0	0	0	0
Massachusetts	8,795	12,624	-30.0%	44	60	8,751	12,563	0	0	0	0
New Hampshire	2,365	3,376	-30.0%	0	1	2,365	3,375	0	0	0	0
Rhode Island	2,955	3,857	-23.0%	0	0	2,955	3,857	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	93,044	94,735	-1.8%	5,993	7,568	86,822	86,983	0	0	229	184
New Jersey	26,222	22,816	15.0%	0	0	26,222	22,816	0	0	0	0
New York	28,828	35,598	-19.0%	5,993	7,568	22,749	27,953	0	0	86	76
Pennsylvania	37,993	36,322	4.6%	0	0	37,851	36,214	0	0	143	108
East North Central	58,048	48,992	18.0%	23,442	22,483	32,971	25,357	484	428	1,151	725
Illinois	10,912	5,778	89.0%	806	213	10,106	5,562	0	0	0	2
Indiana	10,735	8,046	33.0%	9,520	6,213	1,216	1,834	0	0	0	0
Michigan	16,866	14,297	18.0%	5,591	5,382	10,342	8,083	484	428	448	404
Ohio	14,278	13,448	6.2%	3,286	4,146	10,673	9,264	0	0	318	38
Wisconsin	5,256	7,423	-29.0%	4,239	6,528	633	613	0	0	384	281
West North Central	11,001	7,195	53.0%	9,750	6,558	883	541	91	95	277	1
Iowa	2,793	1,631	71.0%	2,516	1,631	0	0	0	0	277	0
Kansas	1,058	435	143.0%	1,058	435	0	0	0	0	0	0
Minnesota	3,260	3,244	0.5%	2,376	2,929	883	313	1	1	0	0
Missouri	2,827	1,498	89.0%	2,737	1,177	0	228	90	94	0	0
Nebraska	389	97	302.0%	389	97	0	0	0	0	0	0
North Dakota	277	30	817.0%	277	30	0	0	0	0	0	0
South Dakota	397	260	53.0%	397	260	0	0	0	0	0	0
South Atlantic	182,191	180,454	1.0%	147,151	148,747	31,059	28,619	0	0	3,981	3,088
Delaware	6,366	3,511	81.0%	0	0	5,038	2,621	0	0	1,328	890
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	94,781	97,260	-2.5%	89,699	91,351	5,083	5,795	0	0	0	114
Georgia	27,025	30,777	-12.0%	21,516	20,894	4,562	8,762	0	0	946	1,121
Maryland	3,230	2,763	17.0%	0	0	3,077	2,738	0	0	153	25
North Carolina	18,534	19,631	-5.6%	14,660	16,721	3,873	2,435	0	0	0	475
South Carolina	10,768	12,485	-14.0%	9,610	11,834	1,011	585	0	0	147	66
Virginia	19,140	12,481	53.0%	11,570	7,924	6,823	4,161	0	0	747	396
West Virginia	2,347	1,547	52.0%	96	25	1,591	1,522	0	0	660	0
East South Central	71,379	64,065	11.0%	48,025	39,317	22,324	23,847	0	0	1,030	900
Alabama	30,798	29,954	2.8%	8,548	7,420	22,250	22,534	0	0	0	0
Kentucky	4,966	6,126	-19.0%	4,907	5,336	59	790	0	0	0	0
Mississippi	28,164	22,516	25.0%	28,150	21,994	15	522	0	0	0	0
Tennessee	7,450	5,468	36.0%	6,420	4,568	0	0	0	0	1,030	900
West South Central	207,602	223,095	-6.9%	58,132	61,625	98,540	114,122	0	0	50,930	47,348
Arkansas	8,670	4,198	107.0%	3,484	1,039	5,073	2,885	0	0	114	274
Louisiana	39,776	45,909	-13.0%	19,479	24,303	3,072	4,228	0	0	17,224	17,379
Oklahoma	19,189	15,987	20.0%	13,313	10,846	5,876	5,086	0	0	0	55
Texas	139,967	157,000	-11.0%	21,856	25,437	84,519	101,923	0	0	33,592	29,641
Mountain	51,257	59,904	-14.0%	36,415	46,552	14,779	13,302	0	0	63	49
Arizona	20,814	24,427	-15.0%	10,049	15,164	10,765	9,262	0	0	0	0
Colorado	5,473	7,432	-26.0%	4,750	6,065	723	1,367	0	0	0	0
Idaho	1,201	2,334	-49.0%	355	1,099	846	1,234	0	0	0	0
Montana	0	390	-100.0%	0	388	0	2	0	0	0	0
Nevada	13,637	16,691	-18.0%	13,637	16,691	0	0	0	0	0	0
New Mexico	6,492	4,656	39.0%	4,183	3,244	2,310	1,413	0	0	0	0
Utah	3,640	3,823	-4.8%	3,442	3,749	135	24	0	0	63	49
Wyoming	0	152	-100.0%	0	152	0	0	0	0	0	0
Pacific Contiguous	67,165	92,764	-28.0%	26,544	32,811	37,624	56,379	0	0	2,997	3,573
California	55,531	74,928	-26.0%	19,409	22,579	33,125	48,776	0	0	2,997	3,573
Oregon	7,841	7,998	-2.0%	4,492	4,499	3,349	3,499	0	0	0	0
Washington	3,793	9,837	-61.0%	2,643	5,733	1,150	4,104	0	0	0	0
Pacific Noncontiguous	1,042	1,279	-18.0%	1,042	1,279	0	0	0	0	0	0
Alaska	1,042	1,279	-18.0%	1,042	1,279	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	767,888	804,958	-4.6%	356,539	367,001	350,117	381,566	575	523	60,657	55,868

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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 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Million Cubic Feet)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	323,209	318,522	1.5%	1,882	2,104	321,327	316,419	0	0	0	0
Connecticut	99,746	95,681	4.2%	0	0	99,746	95,681	0	0	0	0
Maine	20,641	14,954	38.0%	0	0	20,641	14,954	0	0	0	0
Massachusetts	133,155	129,047	3.2%	1,431	1,828	131,724	127,219	0	0	0	0
New Hampshire	28,597	36,208	-21.0%	451	276	28,146	35,933	0	0	0	0
Rhode Island	41,070	42,632	-3.7%	0	0	41,070	42,632	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,040,417	935,149	11.0%	89,561	85,114	948,873	848,346	0	0	1,984	1,689
New Jersey	270,533	222,320	22.0%	0	0	270,533	222,320	0	0	0	0
New York	367,926	365,192	0.7%	89,561	85,114	277,642	279,407	0	0	723	670
Pennsylvania	401,959	347,638	16.0%	0	0	400,698	346,619	0	0	1,261	1,019
East North Central	727,565	534,797	36.0%	323,935	235,568	389,779	289,346	5,369	4,096	8,483	5,788
Illinois	120,264	59,510	102.0%	11,731	4,257	108,505	55,205	0	0	28	48
Indiana	122,683	90,608	35.0%	100,425	72,404	22,258	18,204	0	0	0	0
Michigan	205,316	131,212	56.0%	74,739	40,579	120,582	83,099	5,369	4,096	4,627	3,438
Ohio	178,000	172,321	3.3%	48,380	44,978	128,710	126,559	0	0	910	785
Wisconsin	101,302	81,147	25.0%	88,660	73,351	9,723	6,279	0	0	2,919	1,517
West North Central	149,250	114,790	30.0%	125,049	98,058	22,655	15,443	1,259	1,019	287	270
Iowa	26,740	22,111	21.0%	26,453	22,096	0	0	0	0	287	16
Kansas	14,891	10,864	37.0%	14,891	10,864	0	0	0	0	0	0
Minnesota	56,795	42,986	32.0%	44,860	36,024	11,926	6,639	9	73	0	249
Missouri	40,448	30,582	32.0%	28,468	20,833	10,729	8,804	1,250	945	0	0
Nebraska	3,588	3,258	10.0%	3,588	3,253	0	0	0	0	0	5
North Dakota	1,651	505	227.0%	1,651	505	0	0	0	0	0	0
South Dakota	5,137	4,483	15.0%	5,137	4,483	0	0	0	0	0	0
South Atlantic	2,066,513	1,900,778	8.7%	1,658,689	1,559,720	375,361	306,580	0	0	32,464	34,479
Delaware	56,008	48,735	15.0%	0	0	44,254	37,093	0	0	11,754	11,642
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,001,309	950,379	5.4%	925,649	908,086	75,659	41,573	0	0	0	720
Georgia	338,527	310,678	9.0%	254,848	221,574	75,754	78,722	0	0	7,926	10,383
Maryland	46,457	31,573	47.0%	0	0	44,652	31,296	0	0	1,804	277
North Carolina	247,162	228,341	8.2%	212,560	197,225	34,602	26,367	0	0	0	4,750
South Carolina	109,616	106,480	2.9%	90,243	96,026	17,794	9,940	0	0	1,579	514
Virginia	254,873	212,614	20.0%	174,016	135,464	74,322	70,957	0	0	6,535	6,193
West Virginia	12,562	11,977	4.9%	1,373	1,344	8,323	10,633	0	0	2,865	0
East South Central	802,223	706,977	13.0%	529,376	435,835	263,894	262,725	0	0	8,953	8,417
Alabama	335,074	315,850	6.1%	97,215	78,159	237,859	237,691	0	0	0	0
Kentucky	57,704	45,248	28.0%	52,636	39,312	5,067	5,935	0	0	0	0
Mississippi	324,232	279,307	16.0%	303,264	260,208	20,968	19,099	0	0	0	0
Tennessee	85,213	66,573	28.0%	76,260	58,156	0	0	0	0	8,953	8,417
West South Central	2,480,147	2,462,044	0.7%	766,906	710,049	1,199,020	1,224,786	0	0	514,221	527,210
Arkansas	116,169	96,834	20.0%	45,315	26,727	69,003	66,929	0	0	1,850	3,177
Louisiana	462,733	443,353	4.4%	240,899	249,382	43,851	26,750	0	0	177,983	167,221
Oklahoma	238,154	211,018	13.0%	167,423	138,015	70,731	72,544	0	0	0	459
Texas	1,663,092	1,710,839	-2.8%	313,269	295,924	1,015,435	1,058,563	0	0	334,388	356,352
Mountain	600,929	564,926	6.4%	461,130	423,608	139,149	140,829	0	0	650	489
Arizona	231,321	212,416	8.9%	134,330	116,965	96,991	95,451	0	0	0	0
Colorado	78,434	70,337	12.0%	66,151	55,624	12,283	14,713	0	0	0	0
Idaho	18,605	19,929	-6.6%	11,078	11,846	7,527	8,083	0	0	0	0
Montana	0	3,930	-100.0%	0	3,913	0	17	0	0	0	0
Nevada	162,691	160,354	1.5%	162,691	160,354	0	0	0	0	0	0
New Mexico	62,884	54,786	15.0%	41,527	33,290	21,358	21,496	0	0	0	0
Utah	46,962	42,246	11.0%	45,322	40,696	990	1,061	0	0	650	489
Wyoming	32	927	-97.0%	32	920	0	7	0	0	0	0
Pacific Contiguous	635,559	741,308	-14.0%	253,234	273,965	349,072	435,510	0	0	33,253	31,833
California	497,908	609,860	-18.0%	176,070	196,936	288,584	381,090	0	0	33,253	31,833
Oregon	79,409	68,203	16.0%	41,874	36,722	37,535	31,481	0	0	0	0
Washington	58,243	63,246	-7.9%	35,290	40,307	22,953	22,939	0	0	0	0
Pacific Noncontiguous	11,063	13,089	-15.0%	11,063	13,089	0	0	0	0	0	0
Alaska	11,063	13,089	-15.0%	11,063	13,089	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,836,876	8,292,381	6.6%	4,220,826	3,837,110	4,009,129	3,839,983	6,628	5,114	600,294	610,174

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

**Table 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State, October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015
New England	W	W	W	4.14	3.95	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	W	--	W	--	--	W	--
New Hampshire	4.14	3.95	4.8%	4.14	3.95	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.96	2.20	-11.0%	--	--	1.96	2.20
New Jersey	W	3.45	W	--	--	W	3.45
New York	W	2.47	W	--	--	W	2.47
Pennsylvania	1.86	2.14	-13.0%	--	--	1.86	2.14
East North Central	2.05	2.14	-4.2%	2.19	2.23	1.83	2.01
Illinois	W	1.89	W	1.92	2.04	W	1.86
Indiana	W	W	W	2.29	2.29	W	W
Michigan	W	W	W	2.23	2.29	W	W
Ohio	2.09	W	W	1.95	2.14	2.15	W
Wisconsin	2.19	2.18	0.5%	2.19	2.18	--	--
West North Central	1.69	1.66	1.8%	1.69	1.66	--	--
Iowa	1.54	1.62	-4.9%	1.54	1.62	--	--
Kansas	1.65	1.68	-1.8%	1.65	1.68	--	--
Minnesota	2.02	1.79	13.0%	2.02	1.79	--	--
Missouri	1.90	1.84	3.3%	1.90	1.84	--	--
Nebraska	1.33	1.31	1.5%	1.33	1.31	--	--
North Dakota	1.40	1.43	-2.1%	1.40	1.43	--	--
South Dakota	2.28	2.12	7.5%	2.28	2.12	--	--
South Atlantic	2.70	2.85	-5.3%	2.73	2.89	2.54	2.57
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	2.92	3.14	W	W
Georgia	2.69	2.76	-2.5%	2.69	2.76	--	--
Maryland	2.87	2.83	1.4%	--	--	2.87	2.83
North Carolina	3.08	3.35	-8.1%	3.08	3.35	--	3.43
South Carolina	3.35	3.64	-8.0%	3.35	3.64	--	--
Virginia	W	W	W	2.96	2.70	W	W
West Virginia	W	2.28	W	2.22	2.34	W	1.92
East South Central	W	W	W	2.13	2.27	W	W
Alabama	2.07	2.35	-12.0%	2.07	2.35	--	--
Kentucky	2.11	2.18	-3.2%	2.11	2.18	--	--
Mississippi	W	W	W	2.67	2.88	W	W
Tennessee	2.20	2.36	-6.8%	2.20	2.36	--	--
West South Central	1.93	1.96	-1.5%	2.12	2.13	1.73	1.79
Arkansas	W	W	W	2.09	2.28	W	W
Louisiana	W	W	W	3.25	3.40	W	W
Oklahoma	W	W	W	1.90	1.91	W	W
Texas	1.83	1.84	-0.5%	2.06	2.02	1.70	1.74
Mountain	W	W	W	1.86	1.89	W	W
Arizona	2.10	1.98	6.1%	2.10	1.98	--	--
Colorado	1.77	1.75	1.1%	1.77	1.75	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	1.60	W	W
Nevada	W	W	W	2.00	2.20	W	W
New Mexico	1.99	2.28	-13.0%	1.99	2.28	--	--
Utah	1.91	1.96	-2.6%	1.91	1.96	--	--
Wyoming	1.62	W	W	1.62	1.62	--	W
Pacific Contiguous	W	W	W	2.14	2.36	W	W
California	--	--	--	--	--	--	--
Oregon	2.14	2.36	-9.3%	2.14	2.36	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.04	3.27	W	W
Alaska	3.04	3.27	-7.0%	3.04	3.27	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.07	2.14	-3.3%	2.13	2.19	1.89	1.99

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

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

**Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	3.10	3.59	-14.0%	4.07	3.93	2.86	3.39
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.07	3.93	3.6%	4.07	3.93	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.01	2.37	-15.0%	--	--	2.01	2.37
New Jersey	W	3.85	W	--	--	W	3.85
New York	W	3.00	W	--	--	W	3.00
Pennsylvania	1.94	2.31	-16.0%	--	--	1.94	2.31
East North Central	2.09	2.19	-4.6%	2.18	2.30	1.95	2.04
Illinois	W	1.92	W	2.00	2.06	W	1.90
Indiana	W	W	W	2.25	2.32	W	W
Michigan	W	W	W	2.24	2.41	W	W
Ohio	2.07	W	W	1.90	2.13	2.13	W
Wisconsin	2.22	2.29	-3.1%	2.22	2.29	--	--
West North Central	1.71	1.73	-1.2%	1.71	1.73	--	--
Iowa	1.60	1.65	-3.0%	1.60	1.65	--	--
Kansas	1.69	1.70	-0.6%	1.69	1.70	--	--
Minnesota	2.06	1.91	7.9%	2.06	1.91	--	--
Missouri	1.86	1.91	-2.6%	1.86	1.91	--	--
Nebraska	1.34	1.35	-0.7%	1.34	1.35	--	--
North Dakota	1.53	1.55	-1.3%	1.53	1.55	--	--
South Dakota	2.24	2.16	3.7%	2.24	2.16	--	--
South Atlantic	2.75	2.95	-6.8%	2.79	2.98	2.52	2.69
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.02	3.07	W	W
Georgia	2.81	2.95	-4.7%	2.81	2.95	--	--
Maryland	2.83	2.88	-1.7%	--	--	2.83	2.88
North Carolina	3.09	3.49	-11.0%	3.09	3.49	--	3.56
South Carolina	3.20	3.56	-10.0%	3.20	3.56	--	--
Virginia	W	W	W	2.90	2.88	W	W
West Virginia	W	2.32	W	2.31	2.37	W	2.05
East South Central	W	W	W	2.20	2.33	W	W
Alabama	2.37	2.45	-3.3%	2.37	2.45	--	--
Kentucky	2.12	2.23	-4.9%	2.12	2.23	--	--
Mississippi	W	W	W	2.68	3.12	W	W
Tennessee	2.22	2.40	-7.5%	2.22	2.40	--	--
West South Central	1.91	2.07	-7.7%	2.15	2.19	1.66	1.93
Arkansas	W	W	W	2.19	2.26	W	W
Louisiana	W	W	W	2.84	3.02	W	W
Oklahoma	W	W	W	1.91	1.97	W	W
Texas	1.79	1.99	-10.0%	2.10	2.13	1.62	1.90
Mountain	W	W	W	1.90	1.93	W	W
Arizona	2.14	2.07	3.4%	2.14	2.07	--	--
Colorado	1.88	1.83	2.7%	1.88	1.83	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	1.77	W	W
Nevada	W	W	W	2.02	2.52	W	W
New Mexico	1.85	2.36	-22.0%	1.85	2.36	--	--
Utah	1.95	1.95	0.0%	1.95	1.95	--	--
Wyoming	1.73	W	W	1.73	1.64	--	W
Pacific Contiguous	W	W	W	2.25	2.38	W	W
California	--	--	--	--	--	--	--
Oregon	2.25	2.38	-5.5%	2.25	2.38	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.09	3.18	W	W
Alaska	3.09	3.18	-2.8%	3.09	3.18	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.11	2.23	-5.4%	2.17	2.26	1.94	2.12

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

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

**Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015
New England	W	7.71	W	12.82	--	W	7.71
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	8.28	W	--	--	W	8.28
New Hampshire	12.82	--	--	12.82	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	W	W	7.59	12.09	W	W
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	7.59	12.09	W	W
Pennsylvania	10.68	11.45	-6.7%	--	--	10.68	11.45
East North Central	11.93	13.64	-13.0%	12.43	13.37	11.63	14.41
Illinois	W	W	W	12.01	14.36	W	W
Indiana	12.09	13.76	-12.0%	12.09	13.76	--	--
Michigan	12.39	13.76	-10.0%	12.39	13.76	--	--
Ohio	W	W	W	12.92	13.46	W	W
Wisconsin	--	11.87	--	--	11.87	--	--
West North Central	W	10.89	W	12.34	10.89	W	--
Iowa	12.55	11.93	5.2%	12.55	11.93	--	--
Kansas	--	11.54	--	--	11.54	--	--
Minnesota	W	13.68	W	12.66	13.68	W	--
Missouri	11.89	14.32	-17.0%	11.89	14.32	--	--
Nebraska	13.74	--	--	13.74	--	--	--
North Dakota	12.82	11.79	8.7%	12.82	11.79	--	--
South Dakota	--	8.24	--	--	8.24	--	--
South Atlantic	12.20	W	W	12.06	12.70	12.36	W
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	11.85	W	13.62	11.85	W	--
Georgia	11.71	10.82	8.2%	11.71	10.82	--	--
Maryland	W	9.21	W	--	--	W	9.21
North Carolina	12.01	W	W	12.01	11.43	--	W
South Carolina	12.49	13.77	-9.3%	12.49	13.77	--	--
Virginia	W	W	W	11.73	13.07	W	W
West Virginia	12.15	13.45	-9.7%	12.15	13.45	--	--
East South Central	11.94	13.23	-9.8%	11.94	13.23	--	--
Alabama	12.64	13.11	-3.6%	12.64	13.11	--	--
Kentucky	11.93	13.42	-11.0%	11.93	13.42	--	--
Mississippi	12.11	--	--	12.11	--	--	--
Tennessee	11.74	11.34	3.5%	11.74	11.34	--	--
West South Central	W	W	W	11.96	11.60	W	W
Arkansas	11.97	W	W	11.97	11.98	--	W
Louisiana	12.04	W	W	12.04	10.71	--	W
Oklahoma	12.16	12.43	-2.2%	12.16	12.43	--	--
Texas	W	11.60	W	9.04	11.60	W	--
Mountain	W	W	W	12.21	13.07	W	W
Arizona	11.74	13.86	-15.0%	11.74	13.86	--	--
Colorado	12.55	--	--	12.55	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	W	W	W	--	19.08	W	W
New Mexico	13.05	12.55	4.0%	13.05	12.55	--	--
Utah	13.13	W	W	13.13	14.62	--	W
Wyoming	11.21	11.72	-4.4%	11.21	11.72	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	9.22	8.37	W	W
Alaska	15.57	16.37	-4.9%	15.57	16.37	--	--
Hawaii	W	W	W	9.19	8.36	W	W
U.S. Total	9.97	9.04	10.0%	9.75	9.43	10.39	8.70

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 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 Petroleum Liquids includes distillate and residual fuel oils.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	8.59	W	W	9.60	11.46	8.33	W
Connecticut	9.48	W	W	--	--	9.48	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	12.47	W	9.59	22.01	W	12.42
New Hampshire	9.68	W	W	9.68	10.51	--	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	10.46	12.20	-14.0%	8.41	9.96	11.04	13.35
New Jersey	9.75	14.22	-31.0%	--	--	9.75	14.22
New York	10.61	11.80	-10.0%	8.41	9.96	11.92	13.21
Pennsylvania	10.27	13.52	-24.0%	--	--	10.27	13.52
East North Central	W	13.99	W	10.56	14.03	W	13.90
Illinois	10.68	W	W	11.03	14.72	10.67	W
Indiana	10.36	14.12	-27.0%	10.36	14.12	--	--
Michigan	10.38	13.33	-22.0%	10.38	13.33	--	--
Ohio	W	13.87	W	10.79	14.02	W	13.77
Wisconsin	W	W	W	11.46	15.57	W	W
West North Central	W	12.93	W	10.43	12.93	W	--
Iowa	11.07	13.09	-15.0%	11.07	13.09	--	--
Kansas	10.14	12.95	-22.0%	10.14	12.95	--	--
Minnesota	W	13.81	W	11.26	13.81	W	--
Missouri	10.43	13.34	-22.0%	10.43	13.34	--	--
Nebraska	11.03	22.03	-50.0%	11.03	22.03	--	--
North Dakota	9.16	13.06	-30.0%	9.16	13.06	--	--
South Dakota	7.54	9.48	-20.0%	7.54	9.48	--	--
South Atlantic	9.93	12.96	-23.0%	9.85	12.72	10.30	13.84
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	11.62	14.56	W	W
Georgia	9.08	16.82	-46.0%	9.38	18.29	7.68	14.11
Maryland	9.50	10.79	-12.0%	--	--	9.50	10.79
North Carolina	W	W	W	10.03	13.82	W	W
South Carolina	10.86	15.11	-28.0%	10.86	15.11	--	--
Virginia	W	11.92	W	8.02	10.74	W	18.25
West Virginia	11.04	W	W	11.04	14.14	--	W
East South Central	W	W	W	10.13	13.01	W	W
Alabama	W	W	W	9.71	13.35	W	W
Kentucky	10.36	13.87	-25.0%	10.36	13.87	--	--
Mississippi	9.19	10.49	-12.0%	9.19	10.49	--	--
Tennessee	10.16	12.75	-20.0%	10.16	12.75	--	--
West South Central	10.49	13.28	-21.0%	10.30	13.21	11.02	13.45
Arkansas	W	W	W	9.86	13.59	W	W
Louisiana	W	W	W	9.66	12.53	W	W
Oklahoma	12.14	13.81	-12.0%	12.14	13.81	--	--
Texas	W	W	W	10.29	13.49	W	W
Mountain	W	15.01	W	11.08	15.03	W	14.73
Arizona	10.92	13.98	-22.0%	10.92	13.98	--	--
Colorado	10.12	15.01	-33.0%	10.12	15.01	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	11.79	17.21	W	W
New Mexico	10.82	15.75	-31.0%	10.82	15.75	--	--
Utah	11.65	W	W	11.65	14.90	--	W
Wyoming	11.35	14.73	-23.0%	11.35	14.73	--	--
Pacific Contiguous	W	W	W	--	16.49	W	W
California	--	--	--	--	--	--	--
Oregon	--	16.49	--	--	16.49	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	8.21	11.33	W	W
Alaska	13.95	17.63	-21.0%	13.95	17.63	--	--
Hawaii	W	W	W	8.21	11.32	W	W
U.S. Total	9.14	11.97	-24.0%	8.94	11.89	9.73	12.10

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 Petroleum Liquids includes distillate and residual fuel oils.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	W	W	W	1.41	1.47	W	W
Illinois	--	--	--	--	--	--	--
Indiana	--	0.95	--	--	0.95	--	--
Michigan	1.31	1.66	-21.0%	1.31	1.66	--	--
Ohio	W	W	W	--	--	W	W
Wisconsin	1.76	1.71	2.9%	1.76	1.71	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	1.66	2.01	-17.0%	1.66	2.01	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	1.66	2.01	-17.0%	1.66	2.01	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.46	1.58	-7.6%	1.46	1.58	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.46	1.58	-7.6%	1.46	1.58	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.02	1.66	22.0%	2.02	1.66	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.02	1.66	22.0%	2.02	1.66	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	W	W	W	1.87	1.77	W	W

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 Petroleum Coke includes petroleum coke-derived synthesis gas.
 See the Technical Notes for fuel conversion factors.

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

**Table 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	W	W	W	1.21	1.32	W	W
Illinois	--	--	--	--	--	--	--
Indiana	0.96	0.95	1.1%	0.96	0.95	--	--
Michigan	1.30	W	W	1.30	1.76	--	W
Ohio	W	W	W	--	--	W	W
Wisconsin	1.71	1.66	3.0%	1.71	1.66	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	1.47	2.23	-34.0%	1.47	2.23	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	1.47	2.23	-34.0%	1.47	2.23	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.57	1.71	-8.2%	1.57	1.71	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.57	1.71	-8.2%	1.57	1.71	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	1.41	1.86	-24.0%	1.41	1.86	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	1.41	1.86	-24.0%	1.41	1.86	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	1.53	1.90	-19.0%	1.41	1.84	2.50	2.44

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 See the Technical Notes for fuel conversion factors.

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

**Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016	October 2015	Percentage Change	October 2016	October 2015	October 2016	October 2015
New England	2.77	3.79	-27.0%	3.14	3.13	2.77	3.80
Connecticut	2.39	3.08	-22.0%	--	--	2.39	3.08
Maine	W	W	W	--	--	W	W
Massachusetts	3.27	4.20	-22.0%	3.12	3.11	3.27	4.21
New Hampshire	W	W	W	9.23	3.93	W	W
Rhode Island	W	3.64	W	--	--	W	3.64
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.60	2.06	-22.0%	1.52	2.40	1.61	2.03
New Jersey	1.80	1.95	-7.7%	--	--	1.80	1.95
New York	1.92	2.52	-24.0%	1.52	2.40	2.05	2.56
Pennsylvania	1.24	1.65	-25.0%	--	--	1.24	1.65
East North Central	2.92	2.56	14.0%	3.06	2.64	2.82	2.49
Illinois	3.13	W	W	3.54	4.17	3.09	W
Indiana	W	W	W	3.26	2.60	W	W
Michigan	3.09	2.83	9.2%	3.19	2.86	3.04	2.81
Ohio	2.16	2.05	5.4%	1.64	2.05	2.33	2.05
Wisconsin	W	W	W	3.47	2.82	W	W
West North Central	3.43	W	W	3.37	3.28	4.12	W
Iowa	2.83	2.71	4.4%	2.83	2.71	--	--
Kansas	3.80	4.50	-16.0%	3.80	4.50	--	--
Minnesota	W	W	W	3.99	3.40	W	W
Missouri	W	W	W	3.21	3.30	W	W
Nebraska	3.30	3.01	9.6%	3.30	3.01	--	--
North Dakota	3.11	8.79	-65.0%	3.11	8.79	--	--
South Dakota	3.19	2.74	16.0%	3.19	2.74	--	--
South Atlantic	3.82	3.65	4.7%	3.94	3.81	2.85	2.48
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	4.17	W	4.06	4.21	W	2.48
Georgia	3.47	W	W	3.48	2.80	3.38	W
Maryland	2.65	2.92	-9.2%	--	--	2.65	2.92
North Carolina	W	W	W	4.11	4.26	W	W
South Carolina	W	W	W	3.37	2.68	W	W
Virginia	W	W	W	4.19	2.56	W	W
West Virginia	1.60	W	W	2.95	1.97	1.51	W
East South Central	3.18	2.65	20.0%	3.17	2.65	3.24	2.64
Alabama	W	W	W	3.31	2.84	W	W
Kentucky	W	W	W	3.57	2.87	W	W
Mississippi	W	W	W	3.06	2.58	W	W
Tennessee	3.13	2.46	27.0%	3.13	2.46	--	--
West South Central	3.16	2.60	22.0%	3.25	2.70	3.10	2.53
Arkansas	W	W	W	3.49	4.06	W	W
Louisiana	W	W	W	3.22	2.65	W	W
Oklahoma	W	W	W	3.24	2.77	W	W
Texas	3.15	2.57	23.0%	3.24	2.66	3.12	2.55
Mountain	3.39	W	W	3.47	3.03	2.81	W
Arizona	W	W	W	3.68	3.10	W	W
Colorado	W	W	W	3.61	2.89	W	W
Idaho	4.78	2.92	64.0%	4.78	2.92	--	--
Montana	--	W	W	--	2.07	--	W
Nevada	3.37	3.10	8.7%	3.37	3.10	--	--
New Mexico	3.16	2.95	7.1%	3.16	2.95	--	--
Utah	W	W	W	3.21	2.85	W	W
Wyoming	4893.63	4.27	NM	4893.63	4.27	--	--
Pacific Contiguous	3.25	3.03	7.3%	3.52	3.27	3.04	2.84
California	3.33	3.09	7.8%	3.66	3.37	3.12	2.91
Oregon	W	W	W	2.63	2.68	W	W
Washington	W	W	W	4.20	3.42	W	W
Pacific Noncontiguous	6.83	5.42	26.0%	6.83	5.42	--	--
Alaska	6.83	5.42	26.0%	6.83	5.42	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.14	2.94	6.8%	3.54	3.25	2.62	2.55

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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 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) October 2016 and 2015
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2016 YTD	October 2015 YTD	Percentage Change	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	3.05	4.36	-30.0%	3.50	3.90	3.04	4.36
Connecticut	3.41	4.52	-25.0%	--	--	3.41	4.52
Maine	W	W	W	--	--	W	W
Massachusetts	2.82	4.35	-35.0%	3.38	3.77	2.81	4.36
New Hampshire	W	W	W	3.91	4.69	W	W
Rhode Island	W	3.71	W	--	--	W	3.71
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.06	3.09	-33.0%	2.46	3.79	2.01	3.00
New Jersey	1.99	3.10	-36.0%	--	--	1.99	3.10
New York	2.47	3.52	-30.0%	2.46	3.79	2.47	3.42
Pennsylvania	1.71	2.60	-34.0%	--	--	1.71	2.60
East North Central	2.56	2.95	-13.0%	2.70	3.09	2.45	2.83
Illinois	2.75	3.22	-15.0%	3.00	3.83	2.72	3.17
Indiana	W	W	W	2.84	3.06	W	W
Michigan	2.64	3.31	-20.0%	2.82	3.31	2.53	3.31
Ohio	2.14	2.36	-9.3%	2.16	2.51	2.13	2.31
Wisconsin	W	W	W	2.70	3.30	W	W
West North Central	2.85	W	W	2.85	3.52	2.80	W
Iowa	2.56	3.09	-17.0%	2.56	3.09	--	--
Kansas	3.28	3.75	-13.0%	3.28	3.75	--	--
Minnesota	W	W	W	2.97	3.75	W	W
Missouri	W	W	W	2.78	3.38	W	W
Nebraska	3.06	3.74	-18.0%	3.06	3.74	--	--
North Dakota	2.72	8.39	-68.0%	2.72	8.39	--	--
South Dakota	2.43	3.28	-26.0%	2.43	3.28	--	--
South Atlantic	3.36	4.08	-18.0%	3.47	4.22	2.57	2.97
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	3.70	4.39	-16.0%	3.73	4.42	2.84	2.91
Georgia	2.89	3.29	-12.0%	2.95	3.33	2.68	3.14
Maryland	2.83	4.08	-31.0%	--	--	2.83	4.08
North Carolina	W	W	W	3.62	4.83	W	W
South Carolina	W	W	W	3.23	3.52	W	W
Virginia	W	3.52	W	2.82	3.96	W	2.23
West Virginia	W	W	W	2.42	2.84	W	W
East South Central	2.73	3.04	-10.0%	2.74	3.03	2.72	3.06
Alabama	W	W	W	2.83	3.14	W	W
Kentucky	W	W	W	3.06	3.71	W	W
Mississippi	W	W	W	2.71	2.96	W	W
Tennessee	2.50	2.81	-11.0%	2.50	2.81	--	--
West South Central	2.57	2.93	-12.0%	2.67	3.05	2.49	2.85
Arkansas	W	W	W	3.00	3.39	W	W
Louisiana	W	3.03	W	2.63	3.05	W	2.83
Oklahoma	W	W	W	2.67	3.11	W	W
Texas	2.54	2.89	-12.0%	2.64	2.98	2.51	2.86
Mountain	2.88	W	W	2.90	3.33	2.74	W
Arizona	W	3.40	W	3.08	3.51	W	3.04
Colorado	W	3.64	W	3.02	3.52	W	4.33
Idaho	2.80	2.96	-5.4%	2.80	2.96	--	--
Montana	--	W	W	--	2.35	--	W
Nevada	2.81	3.27	-14.0%	2.81	3.27	--	--
New Mexico	2.83	3.20	-12.0%	2.83	3.20	--	--
Utah	W	W	W	2.54	3.01	W	W
Wyoming	7.51	W	W	7.51	4.80	--	W
Pacific Contiguous	2.91	3.29	-12.0%	3.17	3.54	2.68	3.06
California	3.03	3.38	-10.0%	3.41	3.71	2.77	3.12
Oregon	W	W	W	2.25	2.82	W	W
Washington	W	W	W	3.28	3.52	W	W
Pacific Noncontiguous	6.54	5.36	22.0%	6.54	5.36	--	--
Alaska	6.54	5.36	22.0%	6.54	5.36	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.79	3.38	-17.0%	3.06	3.63	2.44	3.06

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:
 See Glossary for definitions. Values for 2015 are final. Values for 2016 are preliminary.
 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 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, October 2016

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	91	1.55	7.2	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	9	0.75	8.0	0	--	--	0	--	--
Massachusetts	45	0.48	6.5	0	--	--	0	--	--
New Hampshire	37	2.84	7.7	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,535	3.35	9.0	0	--	--	0	--	--
New Jersey	57	1.78	6.7	0	--	--	0	--	--
New York	72	2.95	8.5	0	--	--	0	--	--
Pennsylvania	1,405	3.44	9.2	0	--	--	0	--	--
East North Central	5,496	3.04	10.0	6,121	0.25	4.9	0	--	--
Illinois	803	3.60	20.3	2,616	0.23	4.7	0	--	--
Indiana	2,281	2.77	8.4	103	0.23	4.6	0	--	--
Michigan	186	2.52	7.5	1,728	0.28	4.8	0	--	--
Ohio	2,133	3.23	9.1	31	0.23	4.7	0	--	--
Wisconsin	93	2.46	8.1	1,644	0.26	5.1	0	--	--
West North Central	45	3.24	9.4	8,633	0.28	5.1	1,671	0.85	9.9
Iowa	23	3.40	7.5	1,816	0.25	4.9	0	--	--
Kansas	15	3.03	12.6	1,476	0.30	4.9	0	--	--
Minnesota	0	--	--	1,401	0.38	6.2	0	--	--
Missouri	7	3.15	8.8	2,810	0.24	4.8	0	--	--
Nebraska	0	--	--	1,045	0.28	5.3	0	--	--
North Dakota	0	--	--	15	0.34	5.1	1,671	0.85	9.9
South Dakota	0	--	--	71	0.31	5.0	0	--	--
South Atlantic	7,169	2.36	9.8	890	0.34	5.0	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,548	2.24	8.4	0	--	--	0	--	--
Georgia	785	2.56	8.0	890	0.34	5.0	0	--	--
Maryland	659	2.38	9.1	0	--	--	0	--	--
North Carolina	1,163	1.82	9.9	0	--	--	0	--	--
South Carolina	266	1.31	9.7	0	--	--	0	--	--
Virginia	608	1.00	10.3	0	--	--	0	--	--
West Virginia	2,138	3.19	11.3	0	--	--	0	--	--
East South Central	3,462	2.66	8.9	2,702	0.27	5.1	183	0.43	13.6
Alabama	386	1.69	10.3	1,058	0.24	5.2	0	--	--
Kentucky	2,438	3.03	8.9	1,145	0.29	5.2	0	--	--
Mississippi	118	0.88	6.5	139	0.26	4.9	183	0.43	13.6
Tennessee	520	2.04	8.4	360	0.26	4.8	0	--	--
West South Central	85	2.32	18.1	8,249	0.27	5.2	3,506	1.06	16.8
Arkansas	7	0.64	8.1	1,323	0.25	5.1	0	--	--
Louisiana	39	3.26	9.9	356	0.26	5.0	261	0.52	15.7
Oklahoma	39	1.62	29.5	1,247	0.25	4.9	0	--	--
Texas	0	--	--	5,323	0.28	5.4	3,245	1.10	16.9
Mountain	2,461	0.59	14.1	5,754	0.51	9.3	0	--	--
Arizona	534	0.57	10.7	995	0.65	11.3	0	--	--
Colorado	153	0.51	11.4	1,288	0.34	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	865	0.65	9.7	0	--	--
Nevada	87	0.43	6.5	44	0.34	5.3	0	--	--
New Mexico	578	0.71	22.5	522	0.73	22.2	0	--	--
Utah	1,109	0.57	12.6	83	1.05	8.7	0	--	--
Wyoming	0	--	--	1,957	0.43	7.1	0	--	--
Pacific Contiguous	65	0.53	10.2	460	0.38	7.8	0	--	--
California	65	0.53	10.2	0	--	--	0	--	--
Oregon	0	--	--	97	0.24	4.4	0	--	--
Washington	0	--	--	363	0.42	8.7	0	--	--
Pacific Noncontiguous	0	--	--	62	0.12	3.3	10	0.15	10.0
Alaska	0	--	--	0	--	--	10	0.15	10.0
Hawaii	0	--	--	62	0.12	3.3	0	--	--
U.S. Total	20,407	2.47	10.1	32,872	0.32	5.9	5,370	0.97	14.5

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:
 Bituminous coal includes anthracite coal and coal-derived synthesis gas.
 See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilities by State, October 2016

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	37	2.84	7.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	37	2.84	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	3,241	2.88	8.6	3,732	0.26	4.9	0	--	--
Illinois	210	3.05	11.8	282	0.22	4.7	0	--	--
Indiana	2,155	2.71	8.4	103	0.23	4.6	0	--	--
Michigan	152	2.68	7.6	1,728	0.28	4.8	0	--	--
Ohio	645	3.40	8.7	0	--	--	0	--	--
Wisconsin	79	2.75	7.8	1,618	0.26	5.1	0	--	--
West North Central	15	3.03	12.6	8,551	0.28	5.1	1,671	0.85	9.9
Iowa	0	--	--	1,734	0.25	4.9	0	--	--
Kansas	15	3.03	12.6	1,476	0.30	4.9	0	--	--
Minnesota	0	--	--	1,401	0.38	6.2	0	--	--
Missouri	0	--	--	2,810	0.24	4.8	0	--	--
Nebraska	0	--	--	1,045	0.28	5.3	0	--	--
North Dakota	0	--	--	15	0.34	5.1	1,671	0.85	9.9
South Dakota	0	--	--	71	0.31	5.0	0	--	--
South Atlantic	5,980	2.28	9.7	890	0.34	5.0	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,535	2.26	8.4	0	--	--	0	--	--
Georgia	761	2.61	7.8	890	0.34	5.0	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,163	1.82	9.9	0	--	--	0	--	--
South Carolina	259	1.32	9.9	0	--	--	0	--	--
Virginia	534	1.04	10.6	0	--	--	0	--	--
West Virginia	1,729	2.99	11.2	0	--	--	0	--	--
East South Central	3,393	2.70	9.0	2,702	0.27	5.1	0	--	--
Alabama	386	1.69	10.3	1,058	0.24	5.2	0	--	--
Kentucky	2,438	3.03	8.9	1,145	0.29	5.2	0	--	--
Mississippi	118	0.88	6.5	139	0.26	4.9	0	--	--
Tennessee	452	2.25	8.6	360	0.26	4.8	0	--	--
West South Central	39	3.26	9.9	4,915	0.26	5.1	851	1.25	19.8
Arkansas	0	--	--	1,108	0.25	5.0	0	--	--
Louisiana	39	3.26	9.9	143	0.24	5.0	261	0.52	15.7
Oklahoma	0	--	--	1,179	0.24	4.9	0	--	--
Texas	0	--	--	2,485	0.28	5.3	590	1.63	21.8
Mountain	2,443	0.59	14.1	4,845	0.49	9.3	0	--	--
Arizona	534	0.57	10.7	995	0.65	11.3	0	--	--
Colorado	153	0.51	11.4	1,288	0.34	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	87	0.43	6.5	0	--	--	0	--	--
New Mexico	578	0.71	22.5	522	0.73	22.2	0	--	--
Utah	1,092	0.57	12.7	83	1.05	8.7	0	--	--
Wyoming	0	--	--	1,957	0.43	7.1	0	--	--
Pacific Contiguous	0	--	--	97	0.24	4.4	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	97	0.24	4.4	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	10	0.15	10.0
Alaska	0	--	--	0	--	--	10	0.15	10.0
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	15,149	2.26	9.9	25,732	0.32	5.9	2,531	0.98	13.1

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Notes:
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 See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, October 2016

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	53	0.52	6.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	8	0.74	7.9	0	--	--	0	--	--
Massachusetts	45	0.48	6.5	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,504	3.37	9.1	0	--	--	0	--	--
New Jersey	57	1.78	6.7	0	--	--	0	--	--
New York	48	3.06	8.9	0	--	--	0	--	--
Pennsylvania	1,399	3.44	9.2	0	--	--	0	--	--
East North Central	2,135	3.29	12.4	2,298	0.22	4.7	0	--	--
Illinois	486	3.87	28.1	2,268	0.22	4.7	0	--	--
Indiana	126	3.67	8.7	0	--	--	0	--	--
Michigan	35	1.73	6.7	0	--	--	0	--	--
Ohio	1,488	3.16	9.3	31	0.23	4.7	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	1,109	2.91	10.0	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	13	0.99	8.4	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	641	2.40	8.8	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	46	0.78	9.4	0	--	--	0	--	--
West Virginia	409	4.07	12.2	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	183	0.43	13.6
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	183	0.43	13.6
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	39	1.62	29.5	3,334	0.28	5.4	2,656	1.00	15.9
Arkansas	0	--	--	215	0.26	5.5	0	--	--
Louisiana	0	--	--	214	0.27	5.1	0	--	--
Oklahoma	39	1.62	29.5	69	0.36	4.8	0	--	--
Texas	0	--	--	2,837	0.28	5.5	2,656	1.00	15.9
Mountain	0	--	--	909	0.63	9.5	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	865	0.65	9.7	0	--	--
Nevada	0	--	--	44	0.34	5.3	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	363	0.42	8.7	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	363	0.42	8.7	0	--	--
Pacific Noncontiguous	0	--	--	62	0.12	3.3	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	62	0.12	3.3	0	--	--
U.S. Total	4,840	3.18	10.8	6,967	0.31	5.8	2,839	0.97	15.8

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Notes:
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 See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Sector by State, October 2016

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	0	--	--	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	7	3.15	8.8	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	7	3.15	8.8	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	7	3.15	8.8	0	--	--	0	--	--

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:
 Bituminous coal includes anthracite coal and coal-derived synthesis gas.
 See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Sector by State, October 2016

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	0.79	8.3	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	1	0.79	8.3	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	31	2.58	8.3	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	25	2.75	7.7	0	--	--	0	--	--
Pennsylvania	6	1.82	11.1	0	--	--	0	--	--
East North Central	119	3.33	8.7	91	0.66	6.3	0	--	--
Illinois	106	3.70	8.5	66	0.82	6.8	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	14	0.50	10.4	25	0.26	5.2	0	--	--
West North Central	23	3.40	7.5	82	0.18	4.4	0	--	--
Iowa	23	3.40	7.5	82	0.18	4.4	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	80	1.03	12.1	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	25	1.16	14.3	0	--	--	0	--	--
Maryland	19	1.70	21.6	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	8	0.73	5.5	0	--	--	0	--	--
Virginia	29	0.65	6.9	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	69	0.80	7.1	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	69	0.80	7.1	0	--	--	0	--	--
West South Central	7	0.64	8.1	0	--	--	0	--	--
Arkansas	7	0.64	8.1	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	17	0.52	9.8	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	17	0.52	9.8	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	65	0.53	10.2	0	--	--	0	--	--
California	65	0.53	10.2	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	411	1.74	9.3	173	0.43	5.4	0	--	--

Displayed values of zero may represent small values that round to zero.
 NM = Not meaningful due to large relative standard error or excessive percentage change.
 W = Withheld to avoid disclosure of individual company data.

Notes:
 Bituminous coal includes anthracite coal and coal-derived synthesis gas.
 See Glossary for definitions. Values for 2016 are preliminary. Values for 2015 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

**Table 5.1. Sales of Electricity to Ultimate Customers:
Total by End-Use Sector, 2006 - October 2016 (Thousand Megawatthours)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2006	1,351,520	1,299,744	1,011,298	7,358	3,669,919
2007	1,392,241	1,336,315	1,027,832	8,173	3,764,561
2008	1,380,662	1,336,133	1,009,516	7,653	3,733,965
2009	1,364,758	1,306,853	917,416	7,768	3,596,795
2010	1,445,708	1,330,199	971,221	7,712	3,754,841
2011	1,422,801	1,328,057	991,316	7,672	3,749,846
2012	1,374,515	1,327,101	985,714	7,320	3,694,650
2013	1,394,812	1,337,079	985,352	7,625	3,724,868
2014	1,407,208	1,352,158	997,576	7,758	3,764,700
2015	1,404,096	1,360,752	986,508	7,637	3,758,992
Year 2014					
January	146,511	113,866	80,149	712	341,238
February	128,475	104,353	75,413	700	308,941
March	114,233	106,968	80,539	648	302,388
April	92,290	102,459	80,505	640	275,894
May	95,727	109,666	85,383	646	291,421
June	118,049	118,423	85,711	609	322,792
July	137,028	125,434	88,417	645	351,524
August	135,830	125,603	89,808	642	351,883
Sept	120,741	120,049	85,489	628	326,907
October	98,038	113,023	84,994	625	296,680
November	99,486	104,245	81,044	637	285,413
December	120,801	108,070	80,123	626	309,620
Year 2015					
January	137,765	111,620	79,609	673	329,666
February	123,838	105,482	76,749	699	306,768
March	117,167	107,796	79,709	679	305,352
April	90,199	104,168	80,489	620	275,475
May	95,161	109,406	82,916	609	288,091
June	120,300	119,270	86,218	609	326,397
July	146,038	128,504	87,747	648	362,938
August	144,515	128,519	88,373	625	362,032
Sept	125,417	122,195	84,730	615	332,958
October	99,349	112,821	83,249	636	296,055
November	92,678	104,140	78,495	604	275,917
December	111,670	106,829	78,224	619	297,344
Year 2016					
January	130,727	109,874	75,892	660	317,153
February	115,871	102,890	73,916	647	293,323
March	100,134	105,159	75,882	610	281,785
April	88,097	101,454	75,826	595	265,973
May	93,980	107,897	78,249	582	280,708
June	124,887	119,670	80,185	632	325,374
July	153,975	129,261	83,319	648	367,203
August	155,859	134,229	85,336	630	376,055
Sept	129,114	122,960	79,666	637	332,378
October	101,138	112,314	77,919	613	291,985
Year to Date					
2014	1,186,922	1,139,843	836,409	6,494	3,169,668
2015	1,199,748	1,149,782	829,789	6,413	3,185,732
2016	1,193,784	1,145,708	786,191	6,253	3,131,935
Rolling 12 Months Ending in October					
2015	1,420,035	1,362,098	990,955	7,677	3,780,765
2016	1,398,132	1,356,677	942,910	7,477	3,705,195

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 for 2015 and prior years are final. Values for 2016 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month. Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report; Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 5.2. Revenue from Sales of Electricity to Ultimate Customers:
Total by End-Use Sector, 2006 - October 2016 (Million Dollars)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2006	140,582	122,914	62,308	702	326,506
2007	148,295	128,903	65,712	792	343,703
2008	155,496	137,036	70,231	820	363,583
2009	157,044	132,747	62,670	828	353,289
2010	166,778	135,554	65,772	814	368,918
2011	166,714	135,927	67,606	803	371,049
2012	163,280	133,898	65,761	747	363,687
2013	169,131	137,188	67,934	805	375,058
2014	176,178	145,253	70,855	810	393,096
2015	177,624	144,781	68,166	771	391,342
Year 2014					
January	17,075	11,790	5,596	78	34,539
February	15,338	11,142	5,370	73	31,922
March	13,996	11,390	5,632	68	31,087
April	11,365	10,715	5,451	65	27,596
May	12,300	11,555	5,833	65	29,753
June	15,337	12,974	6,335	65	34,710
July	17,943	14,014	6,742	69	38,767
August	17,708	13,876	6,748	64	38,396
Sept	15,639	13,399	6,299	69	35,406
October	12,352	12,239	6,007	64	30,663
November	12,417	10,967	5,470	65	28,920
December	14,707	11,192	5,372	66	31,336
Year 2015					
January	16,665	11,506	5,310	70	33,552
February	15,215	11,204	5,277	73	31,768
March	14,450	11,460	5,441	69	31,419
April	11,379	10,802	5,323	60	27,564
May	12,300	11,457	5,589	60	29,405
June	15,537	12,993	6,133	62	34,725
July	18,904	14,229	6,538	67	39,738
August	18,659	14,065	6,493	63	39,280
Sept	16,347	13,420	6,107	63	35,937
October	12,633	12,100	5,728	63	30,524
November	11,775	10,722	5,185	58	27,740
December	13,759	10,825	5,043	61	29,688
Year 2016					
January	15,662	11,006	4,861	62	31,591
February	14,066	10,493	4,721	61	29,341
March	12,586	10,680	4,907	58	28,230
April	10,955	10,274	4,852	56	26,136
May	12,023	11,055	5,134	53	28,266
June	15,882	12,677	5,635	61	34,255
July	19,522	13,733	6,026	62	39,344
August	20,104	14,367	6,158	62	40,691
Sept	16,611	13,156	5,698	63	35,528
October	12,595	11,755	5,237	58	29,645
Year to Date					
2014	149,054	123,094	60,013	680	332,841
2015	152,089	123,234	57,939	652	333,913
2016	150,007	119,196	53,228	596	323,026
Rolling 12 Months Ending in October					
2015	179,213	145,393	68,781	782	394,169
2016	175,541	140,743	63,455	715	380,454

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 for 2015 and prior years are final. Values for 2016 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report; Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 5.3. Average Price of Electricity to Ultimate Customers:
Total by End-Use Sector, 2006 - October 2016 (Cents per Kilowatthour)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2006	10.40	9.46	6.16	9.54	8.90
2007	10.65	9.65	6.39	9.70	9.13
2008	11.26	10.26	6.96	10.71	9.74
2009	11.51	10.16	6.83	10.66	9.82
2010	11.54	10.19	6.77	10.56	9.83
2011	11.72	10.24	6.82	10.46	9.90
2012	11.88	10.09	6.67	10.21	9.84
2013	12.13	10.26	6.89	10.55	10.07
2014	12.52	10.74	7.10	10.45	10.44
2015	12.65	10.64	6.91	10.09	10.41
Year 2014					
January	11.65	10.35	6.98	10.93	10.12
February	11.94	10.68	7.12	10.41	10.33
March	12.25	10.65	6.99	10.43	10.28
April	12.31	10.46	6.77	10.23	10.00
May	12.85	10.54	6.83	10.06	10.21
June	12.99	10.96	7.39	10.60	10.75
July	13.09	11.17	7.62	10.68	11.03
August	13.04	11.05	7.51	10.02	10.91
Sept	12.95	11.16	7.37	11.02	10.83
October	12.60	10.83	7.07	10.27	10.34
November	12.48	10.52	6.75	10.20	10.13
December	12.17	10.36	6.70	10.48	10.12
Year 2015					
January	12.10	10.31	6.67	10.45	10.18
February	12.29	10.62	6.88	10.49	10.36
March	12.33	10.63	6.83	10.12	10.29
April	12.62	10.37	6.61	9.76	10.01
May	12.93	10.47	6.74	9.87	10.21
June	12.92	10.89	7.11	10.15	10.64
July	12.94	11.07	7.45	10.34	10.95
August	12.91	10.94	7.35	10.14	10.85
Sept	13.03	10.98	7.21	10.29	10.79
October	12.72	10.73	6.88	9.91	10.31
November	12.71	10.30	6.61	9.63	10.05
December	12.32	10.13	6.45	9.81	9.98
Year 2016					
January	11.98	10.02	6.41	9.41	9.96
February	12.14	10.20	6.39	9.49	10.00
March	12.57	10.16	6.47	9.43	10.02
April	12.43	10.13	6.40	9.41	9.83
May	12.79	10.25	6.56	9.13	10.07
June	12.72	10.59	7.03	9.59	10.53
July	12.68	10.62	7.23	9.63	10.71
August	12.90	10.70	7.22	9.90	10.82
Sept	12.87	10.70	7.15	9.83	10.69
October	12.45	10.47	6.72	9.44	10.15
Year to Date					
2014	12.56	10.80	7.18	10.47	10.50
2015	12.68	10.72	6.98	10.16	10.48
2016	12.57	10.40	6.77	9.53	10.31
Rolling 12 Months Ending in October					
2015	12.62	10.67	6.94	10.19	10.43
2016	12.56	10.37	6.73	9.56	10.27

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 for 2015 and prior years are final. Values for 2016 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report; Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	3,209	3,291	4,215	4,321	1,398	1,655	42	42	8,864	9,309
Connecticut	821	847	995	1,013	256	301	13	13	2,085	2,175
Maine	329	344	309	328	246	352	0	0	885	1,023
Massachusetts	1,377	1,401	2,101	2,155	551	653	26	27	4,055	4,236
New Hampshire	317	323	360	366	170	167	0	0	846	856
Rhode Island	219	227	286	295	59	64	2	2	566	589
Vermont	146	150	165	164	116	117	0	0	426	430
Middle Atlantic	9,111	9,119	12,687	12,658	5,879	6,089	312	337	27,990	28,202
New Jersey	1,886	1,817	3,096	3,047	611	614	24	27	5,616	5,506
New York	3,711	3,776	6,113	6,169	1,341	1,499	222	240	11,386	11,684
Pennsylvania	3,514	3,526	3,479	3,441	3,928	3,976	67	70	10,988	11,013
East North Central	12,140	11,781	15,048	14,733	15,181	16,298	42	45	42,412	42,857
Illinois	2,972	2,857	4,053	3,999	3,484	3,476	38	41	10,547	10,373
Indiana	2,082	2,042	1,987	1,936	3,302	3,967	1	2	7,373	7,946
Michigan	2,360	2,221	3,240	3,142	2,341	2,581	0	0	7,941	7,945
Ohio	3,243	3,208	3,843	3,767	4,007	4,260	2	2	11,095	11,238
Wisconsin	1,484	1,453	1,924	1,890	2,047	2,013	0	0	5,455	5,356
West North Central	6,722	6,547	8,323	8,111	7,045	7,567	4	3	22,094	22,228
Iowa	879	873	1,019	974	1,816	1,804	0	0	3,714	3,651
Kansas	886	821	1,287	1,241	856	911	0	0	3,029	2,973
Minnesota	1,471	1,519	1,878	1,905	1,712	1,762	2	2	5,063	5,188
Missouri	2,211	2,059	2,468	2,353	995	1,439	2	2	5,676	5,852
Nebraska	647	661	778	758	817	811	0	0	2,242	2,230
North Dakota	327	309	509	497	621	608	0	0	1,457	1,414
South Dakota	301	306	385	382	227	232	0	0	913	920
South Atlantic	25,457	24,601	25,345	25,502	11,370	12,053	112	101	62,284	62,256
Delaware	310	291	337	386	184	200	0	0	831	877
District of Columbia	174	154	656	573	15	21	31	25	875	773
Florida	10,241	10,023	8,056	8,181	1,336	1,386	7	8	19,641	19,599
Georgia	4,070	3,710	3,854	3,799	2,631	2,732	13	13	10,568	10,254
Maryland	1,595	1,552	2,376	2,421	304	306	44	37	4,318	4,316
North Carolina	3,587	3,552	3,817	3,911	2,188	2,303	1	1	9,593	9,768
South Carolina	2,019	1,898	1,667	1,744	2,206	2,440	0	0	5,892	6,081
Virginia	2,805	2,739	3,967	3,860	1,424	1,564	16	18	8,212	8,180
West Virginia	657	681	614	627	1,083	1,101	0	0	2,354	2,409
East South Central	8,511	7,663	7,666	7,415	8,141	8,485	0	0	24,318	23,562
Alabama	2,277	2,041	1,896	1,879	2,673	2,786	0	0	6,846	6,705
Kentucky	1,690	1,591	1,569	1,551	2,303	2,451	0	0	5,562	5,592
Mississippi	1,539	1,363	1,251	1,230	1,380	1,359	0	0	4,170	3,952
Tennessee	3,005	2,668	2,949	2,756	1,786	1,888	0	0	7,741	7,312
West South Central	17,859	16,795	16,996	16,903	14,400	15,571	17	18	49,273	49,286
Arkansas	1,410	1,272	1,071	1,029	1,314	1,394	0	0	3,795	3,695
Louisiana	2,698	2,436	2,239	2,133	2,776	2,888	1	1	7,714	7,457
Oklahoma	1,647	1,414	1,705	1,643	1,391	1,497	0	0	4,743	4,555
Texas	12,104	11,673	11,982	12,098	8,919	9,792	16	17	33,021	33,580
Mountain	6,823	7,128	8,025	7,930	6,852	7,042	11	11	21,711	22,112
Arizona	2,601	2,556	2,508	2,460	1,242	1,330	0	1	6,351	6,347
Colorado	1,340	1,426	1,696	1,724	1,292	1,307	5	5	4,333	4,462
Idaho	547	522	499	504	573	592	0	0	1,619	1,618
Montana	336	316	403	394	336	363	0	0	1,075	1,074
Nevada	712	949	946	808	1,144	1,153	1	1	2,802	2,912
New Mexico	473	497	716	752	624	649	0	0	1,812	1,897
Utah	626	680	924	983	750	751	5	5	2,304	2,419
Wyoming	188	181	333	306	891	898	0	0	1,412	1,384
Pacific Contiguous	10,913	12,031	13,512	14,747	7,201	8,050	73	79	31,698	34,906
California	7,110	8,418	9,789	11,049	4,227	4,786	70	76	21,196	24,329
Oregon	1,340	1,279	1,360	1,328	960	1,069	2	2	3,662	3,678
Washington	2,462	2,333	2,362	2,370	2,015	2,194	1	0	6,840	6,899
Pacific Noncontiguous	394	393	498	502	451	440	0	0	1,342	1,335
Alaska	165	163	223	224	120	117	0	0	507	504
Hawaii	229	230	275	278	331	323	0	0	835	831
U.S. Total	101,138	99,349	112,314	112,821	77,919	83,249	613	636	291,985	296,055

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

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Notes: - See Glossary for definitions. - Values for 2015 are final. Values for 2016 are preliminary estimates based on a cutoff model sample.

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

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

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

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

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

Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through October 2016 and 2015 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	39,167	40,475	44,170	45,105	14,319	15,772	459	483	98,115	101,835
Connecticut	10,717	11,048	10,767	10,985	2,717	2,898	151	164	24,352	25,094
Maine	3,809	3,908	3,348	3,384	2,376	2,698	0	0	9,533	9,990
Massachusetts	16,590	17,238	21,512	22,118	5,734	6,648	285	297	44,120	46,301
New Hampshire	3,736	3,856	3,776	3,803	1,677	1,670	0	0	9,189	9,329
Rhode Island	2,621	2,669	3,076	3,117	641	669	23	22	6,360	6,477
Vermont	1,695	1,756	1,691	1,700	1,174	1,189	0	0	4,560	4,645
Middle Atlantic	113,067	115,472	133,114	134,809	59,339	61,322	3,209	3,267	308,729	314,869
New Jersey	25,016	25,241	32,414	32,818	5,833	6,169	252	255	63,515	64,484
New York	43,131	43,654	64,175	65,062	14,231	15,150	2,292	2,362	123,828	126,227
Pennsylvania	44,919	46,577	36,526	36,929	39,275	40,003	665	649	121,385	124,158
East North Central	157,270	154,960	156,549	154,921	155,264	165,453	482	496	469,564	475,830
Illinois	38,895	37,780	42,803	42,456	35,379	36,495	427	442	117,504	117,173
Indiana	27,364	27,682	20,489	20,397	35,040	40,450	17	18	82,911	88,547
Michigan	28,933	28,016	33,013	32,381	25,144	25,705	4	4	87,094	86,106
Ohio	44,047	43,843	40,220	39,894	39,629	42,657	34	33	123,930	126,427
Wisconsin	18,030	17,639	20,022	19,793	20,073	20,145	0	0	58,125	57,577
West North Central	85,559	85,670	86,062	85,586	70,682	76,811	37	38	242,341	248,105
Iowa	11,544	11,556	10,190	10,083	17,946	17,819	0	0	39,680	39,458
Kansas	11,557	11,403	13,282	13,049	8,893	9,437	0	0	33,732	33,889
Minnesota	17,758	18,065	19,467	19,657	16,653	18,067	20	20	53,896	55,809
Missouri	29,072	28,971	26,096	25,853	10,079	14,360	18	17	65,265	69,202
Nebraska	8,158	7,966	8,016	7,797	8,803	9,005	0	0	24,977	24,767
North Dakota	3,709	3,940	4,990	5,171	6,062	5,782	0	0	14,761	14,893
South Dakota	3,761	3,770	4,020	3,976	2,249	2,343	0	0	10,030	10,088
South Atlantic	305,715	308,837	264,046	263,540	115,218	120,153	1,119	1,137	686,098	693,667
Delaware	4,052	4,207	3,578	3,610	1,735	2,011	0	0	9,366	9,828
District of Columbia	2,169	2,173	7,072	6,960	166	191	283	286	9,690	9,611
Florida	104,613	104,784	80,074	80,366	13,724	14,077	80	80	198,490	199,308
Georgia	49,563	48,932	40,344	40,091	26,571	27,058	143	143	116,622	116,224
Maryland	23,020	23,684	25,008	25,199	3,148	3,234	451	453	51,627	52,570
North Carolina	49,096	49,889	41,148	40,894	22,506	23,074	6	8	112,756	113,865
South Carolina	26,187	26,033	18,751	18,720	22,322	24,656	0	0	67,259	69,409
Virginia	37,665	39,456	41,505	41,072	14,301	14,826	156	167	93,627	95,521
West Virginia	9,350	9,677	6,566	6,627	10,745	11,027	0	0	26,661	27,331
East South Central	102,039	102,710	77,904	78,592	81,289	86,701	0	0	261,233	268,003
Alabama	27,629	27,671	19,703	19,953	27,255	28,300	0	0	74,587	75,924
Kentucky	22,360	22,570	16,441	16,648	22,762	25,779	0	0	61,563	64,997
Mississippi	16,055	16,197	11,885	12,250	13,784	13,162	0	0	41,724	41,609
Tennessee	35,995	36,272	29,875	29,742	17,488	19,459	0	0	83,358	85,473
West South Central	187,346	190,276	164,686	165,412	143,367	150,080	161	160	495,559	505,928
Arkansas	15,300	15,938	10,287	10,360	13,342	13,523	0	0	38,929	39,821
Louisiana	26,514	27,552	21,073	21,196	27,876	29,215	10	10	75,474	77,973
Oklahoma	19,805	19,590	17,160	17,626	14,187	15,019	0	0	51,152	52,235
Texas	125,727	127,196	116,166	116,230	87,962	92,323	150	150	330,005	335,898
Mountain	82,530	80,552	80,042	80,000	70,138	71,194	112	112	232,822	231,858
Arizona	29,571	28,766	25,195	24,990	12,499	12,413	5	5	67,270	66,174
Colorado	15,849	15,287	17,116	17,091	12,831	12,766	54	53	45,851	45,197
Idaho	6,481	6,404	5,161	5,193	7,575	7,768	0	0	19,216	19,365
Montana	3,905	3,904	4,080	4,067	3,534	3,749	0	0	11,519	11,720
Nevada	11,019	10,851	8,322	8,167	11,527	11,799	7	7	30,875	30,824
New Mexico	5,690	5,584	7,473	7,483	6,224	6,311	0	0	19,387	19,378
Utah	7,805	7,593	9,585	9,739	7,583	7,803	47	46	25,019	25,182
Wyoming	2,209	2,163	3,110	3,271	8,365	8,584	0	0	13,684	14,018
Pacific Contiguous	117,315	116,968	134,251	136,894	72,331	78,108	675	722	324,573	332,692
California	74,885	75,153	96,547	99,290	42,238	44,596	650	698	214,320	219,737
Oregon	14,922	14,576	13,337	13,317	9,706	10,958	20	20	37,985	38,871
Washington	27,508	27,240	24,367	24,287	20,387	22,554	5	4	72,268	74,084
Pacific Noncontiguous	3,777	3,829	4,883	4,923	4,243	4,194	0	0	12,902	12,946
Alaska	1,606	1,642	2,273	2,279	1,131	1,124	0	0	5,011	5,045
Hawaii	2,170	2,187	2,610	2,644	3,111	3,069	0	0	7,891	7,901
U.S. Total	1,193,784	1,199,748	1,145,708	1,149,782	786,191	829,789	6,253	6,413	3,131,935	3,185,732

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

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

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

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

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

Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, October 2016 and 2015 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	603	611	639	651	167	196	3	4	1,412	1,462
Connecticut	164	170	158	160	33	38	1	1	357	371
Maine	54	55	38	41	21	29	0	0	113	125
Massachusetts	258	258	324	329	72	88	1	2	656	676
New Hampshire	60	57	52	53	21	21	0	0	133	131
Rhode Island	41	45	41	43	8	8	0	0	91	96
Vermont	26	26	24	24	12	12	0	0	62	62
Middle Atlantic	1,473	1,471	1,596	1,644	404	438	33	38	3,506	3,592
New Jersey	288	276	367	369	55	61	2	3	712	709
New York	678	691	909	946	80	94	26	30	1,693	1,762
Pennsylvania	506	504	321	329	269	283	5	5	1,101	1,120
East North Central	1,617	1,596	1,510	1,469	1,063	1,124	3	3	4,193	4,193
Illinois	373	388	360	364	229	230	3	3	965	984
Indiana	255	249	200	188	243	267	0	0	698	703
Michigan	372	330	353	328	167	174	0	0	892	832
Ohio	398	418	389	382	269	302	0	0	1,057	1,102
Wisconsin	219	212	208	207	154	152	0	0	581	571
West North Central	791	762	766	739	479	505	0	0	2,036	2,006
Iowa	108	100	89	84	98	102	0	0	296	286
Kansas	116	102	133	124	63	67	0	0	312	293
Minnesota	195	191	186	180	125	125	0	0	506	496
Missouri	230	232	207	207	64	87	0	0	501	527
Nebraska	70	70	67	64	58	58	0	0	195	191
North Dakota	36	32	47	45	53	48	0	0	136	125
South Dakota	37	36	37	36	17	17	0	0	91	89
South Atlantic	2,978	2,927	2,349	2,398	728	778	9	8	6,064	6,111
Delaware	48	42	36	39	15	16	0	0	100	97
District of Columbia	23	21	79	67	1	2	3	2	107	93
Florida	1,147	1,150	736	771	106	112	1	1	1,990	2,035
Georgia	451	414	370	371	147	152	1	1	968	938
Maryland	242	236	266	263	24	24	3	3	536	526
North Carolina	423	429	336	347	139	153	0	0	898	929
South Carolina	250	244	163	173	132	146	0	0	545	563
Virginia	316	316	303	310	93	106	1	1	713	733
West Virginia	78	75	59	57	71	66	0	0	208	197
East South Central	952	854	789	754	488	495	0	0	2,229	2,103
Alabama	286	243	218	201	170	158	0	0	673	602
Kentucky	183	173	150	147	127	135	0	0	460	456
Mississippi	164	153	123	126	84	86	0	0	371	365
Tennessee	319	284	298	280	107	116	0	0	725	680
West South Central	1,904	1,846	1,342	1,358	768	843	1	1	4,015	4,048
Arkansas	139	127	87	86	78	83	0	0	304	296
Louisiana	252	235	189	186	147	162	0	0	588	583
Oklahoma	182	159	135	129	70	77	0	0	387	365
Texas	1,332	1,325	931	958	473	521	1	1	2,736	2,804
Mountain	806	847	778	773	444	451	1	1	2,029	2,072
Arizona	316	311	267	258	79	81	0	0	662	650
Colorado	161	169	169	171	93	97	1	1	424	438
Idaho	56	54	39	39	35	35	0	0	131	128
Montana	38	35	42	40	17	19	0	0	97	94
Nevada	86	123	76	74	76	69	0	0	238	266
New Mexico	60	63	72	76	34	41	0	0	165	180
Utah	67	71	83	86	47	46	1	0	196	205
Wyoming	22	21	31	29	62	62	0	0	115	112
Pacific Contiguous	1,374	1,619	1,877	2,202	608	810	7	8	3,866	4,639
California	991	1,259	1,553	1,885	455	649	7	7	3,006	3,801
Oregon	147	140	123	118	61	64	0	0	330	322
Washington	236	220	202	198	92	97	0	0	530	516
Pacific Noncontiguous	98	98	109	111	88	88	0	0	295	298
Alaska	35	33	41	39	20	17	0	0	95	89
Hawaii	63	65	68	72	69	72	0	0	200	209
U.S. Total	12,595	12,633	11,755	12,100	5,237	5,728	58	63	29,645	30,524

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 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through October 2016 and 2015 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	7,400	7,917	6,703	7,033	1,732	1,955	38	50	15,874	16,955
Connecticut	2,157	2,335	1,696	1,768	354	377	16	22	4,224	4,503
Maine	601	611	406	423	213	245	0	0	1,220	1,279
Massachusetts	3,175	3,441	3,353	3,526	752	905	18	23	7,298	7,896
New Hampshire	685	716	544	572	207	213	0	0	1,436	1,501
Rhode Island	490	515	459	497	87	93	4	4	1,039	1,108
Vermont	293	299	245	247	118	122	0	0	656	668
Middle Atlantic	17,868	18,470	16,812	17,913	4,189	4,538	352	386	39,220	41,306
New Jersey	3,958	4,005	4,064	4,244	596	667	22	27	8,640	8,943
New York	7,599	8,144	9,358	10,116	865	971	278	309	18,100	19,539
Pennsylvania	6,310	6,321	3,390	3,552	2,728	2,900	51	51	12,479	12,824
East North Central	20,299	20,059	15,400	15,461	10,707	11,580	33	35	46,440	47,135
Illinois	4,755	4,724	3,750	3,852	2,266	2,449	28	30	10,800	11,055
Indiana	3,096	3,196	1,978	1,997	2,426	2,783	2	2	7,501	7,977
Michigan	4,424	4,033	3,506	3,426	1,764	1,816	0	0	9,694	9,275
Ohio	5,419	5,603	3,963	4,014	2,691	2,991	3	3	12,076	12,611
Wisconsin	2,606	2,504	2,202	2,172	1,560	1,542	0	0	6,368	6,218
West North Central	10,143	9,898	8,226	8,013	5,051	5,351	4	3	23,423	23,265
Iowa	1,440	1,366	971	918	1,138	1,079	0	0	3,549	3,363
Kansas	1,504	1,404	1,371	1,320	662	721	0	0	3,536	3,446
Minnesota	2,271	2,204	1,930	1,873	1,216	1,275	2	2	5,419	5,353
Missouri	3,211	3,263	2,395	2,392	692	937	2	1	6,300	6,593
Nebraska	899	856	718	683	673	695	0	0	2,290	2,234
North Dakota	385	386	459	461	501	470	0	0	1,345	1,316
South Dakota	432	421	382	366	170	174	0	0	984	960
South Atlantic	35,755	36,362	24,540	25,109	7,411	7,978	88	93	67,794	69,542
Delaware	546	561	364	368	140	168	0	0	1,050	1,097
District of Columbia	279	281	829	833	15	17	26	25	1,149	1,155
Florida	11,757	12,157	7,292	7,658	1,071	1,165	7	7	20,127	20,987
Georgia	5,739	5,733	3,898	4,012	1,509	1,626	7	8	11,154	11,379
Maryland	3,279	3,239	2,739	2,788	247	279	35	38	6,301	6,344
North Carolina	5,512	5,646	3,581	3,585	1,417	1,516	0	1	10,510	10,747
South Carolina	3,267	3,280	1,900	1,918	1,348	1,502	0	0	6,514	6,699
Virginia	4,331	4,497	3,327	3,381	961	1,036	12	14	8,630	8,928
West Virginia	1,045	967	611	567	702	670	0	0	2,359	2,204
East South Central	10,986	11,096	7,828	8,064	4,716	5,240	0	0	23,530	24,400
Alabama	3,322	3,254	2,179	2,174	1,652	1,739	0	0	7,153	7,167
Kentucky	2,288	2,297	1,536	1,569	1,244	1,416	0	0	5,068	5,282
Mississippi	1,685	1,826	1,133	1,297	809	873	0	0	3,627	3,996
Tennessee	3,692	3,719	2,980	3,023	1,011	1,213	0	0	7,683	7,955
West South Central	19,818	20,910	12,885	13,601	7,451	8,491	9	9	40,164	43,011
Arkansas	1,519	1,566	839	864	794	849	0	0	3,152	3,279
Louisiana	2,413	2,585	1,778	1,844	1,385	1,600	1	1	5,577	6,030
Oklahoma	2,017	2,002	1,294	1,370	688	820	0	0	4,000	4,191
Texas	13,869	14,757	8,974	9,524	4,584	5,222	8	8	27,435	29,511
Mountain	9,699	9,644	7,713	7,855	4,498	4,786	11	11	21,921	22,296
Arizona	3,643	3,542	2,679	2,636	766	797	0	1	7,089	6,976
Colorado	1,907	1,867	1,654	1,697	911	951	5	5	4,477	4,520
Idaho	653	643	404	409	507	521	0	0	1,563	1,573
Montana	433	428	416	418	177	202	0	0	1,026	1,048
Nevada	1,257	1,388	671	761	713	832	1	1	2,641	2,982
New Mexico	688	706	738	781	355	409	0	0	1,781	1,897
Utah	870	831	857	853	489	490	5	5	2,221	2,179
Wyoming	248	238	294	300	580	583	0	0	1,121	1,122
Pacific Contiguous	17,113	16,747	18,039	19,064	6,662	7,134	61	65	41,875	43,010
California	12,944	12,724	14,820	15,908	5,142	5,494	59	63	32,965	34,190
Oregon	1,585	1,560	1,181	1,174	598	656	2	2	3,366	3,392
Washington	2,584	2,463	2,038	1,982	921	983	0	0	5,544	5,428
Pacific Noncontiguous	924	986	1,051	1,122	812	885	0	0	2,786	2,994
Alaska	330	327	414	399	174	164	0	0	918	890
Hawaii	593	659	637	723	637	721	0	0	1,868	2,104
U.S. Total	150,007	152,089	119,196	123,234	53,228	57,939	596	652	323,026	333,913

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

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

Notes: - See Glossary for definitions. - Values for 2015 are final. Values for 2016 are preliminary estimates based on a cutoff model sample.

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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 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, October 2016 and 2015 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	18.78	18.58	15.16	15.06	11.94	11.84	7.52	8.72	15.93	15.70
Connecticut	19.95	20.13	15.93	15.84	12.94	12.78	10.03	10.65	17.11	17.05
Maine	16.28	15.98	12.44	12.54	8.58	8.22	--	--	12.80	12.21
Massachusetts	18.74	18.42	15.42	15.27	13.14	13.40	5.29	7.01	16.17	15.97
New Hampshire	18.93	17.74	14.57	14.41	12.27	12.52	--	--	15.74	15.30
Rhode Island	18.89	19.68	14.40	14.58	13.28	12.98	19.13	18.96	16.03	16.39
Vermont	17.78	17.44	14.81	14.85	9.98	10.04	--	--	14.52	14.44
Middle Atlantic	16.16	16.13	12.58	12.99	6.87	7.20	10.64	11.42	12.53	12.74
New Jersey	15.29	15.22	11.85	12.11	9.02	10.00	8.23	9.31	12.68	12.88
New York	18.28	18.30	14.87	15.33	5.95	6.30	11.84	12.73	14.87	15.08
Pennsylvania	14.40	14.28	9.22	9.56	6.85	7.11	7.53	7.75	10.02	10.17
East North Central	13.32	13.55	10.03	9.97	7.00	6.90	7.02	6.87	9.89	9.78
Illinois	12.54	13.58	8.89	9.10	6.58	6.61	6.77	6.67	9.15	9.49
Indiana	12.24	12.17	10.05	9.69	7.36	6.73	10.39	9.67	9.46	8.85
Michigan	15.77	14.86	10.89	10.45	7.14	6.73	11.91	10.77	11.24	10.47
Ohio	12.28	13.03	10.12	10.15	6.72	7.08	8.18	7.90	9.52	9.81
Wisconsin	14.76	14.58	10.81	10.95	7.54	7.57	15.33	13.33	10.66	10.67
West North Central	11.77	11.65	9.20	9.11	6.80	6.67	8.50	8.33	9.22	9.03
Iowa	12.27	11.42	8.76	8.61	5.42	5.68	--	--	7.96	7.83
Kansas	13.12	12.39	10.33	9.99	7.38	7.40	--	--	10.31	9.86
Minnesota	13.24	12.55	9.91	9.47	7.30	7.07	9.78	9.19	9.99	9.56
Missouri	10.40	11.29	8.37	8.79	6.45	6.07	7.20	7.40	8.82	9.00
Nebraska	10.80	10.53	8.60	8.38	7.11	7.13	--	--	8.69	8.56
North Dakota	10.90	10.43	9.28	9.02	8.52	7.83	--	--	9.32	8.81
South Dakota	12.18	11.85	9.62	9.33	7.65	7.46	--	--	9.97	9.69
South Atlantic	11.70	11.90	9.27	9.40	6.40	6.46	8.00	7.78	9.74	9.82
Delaware	15.50	14.35	10.83	10.06	8.27	8.14	--	--	12.01	11.05
District of Columbia	13.50	13.92	12.05	11.73	8.76	9.24	9.37	9.22	12.18	12.02
Florida	11.20	11.48	9.14	9.43	7.95	8.11	8.56	8.99	10.13	10.38
Georgia	11.07	11.16	9.60	9.77	5.58	5.57	4.80	4.53	9.16	9.15
Maryland	15.19	15.23	11.21	10.85	7.75	7.93	8.02	7.71	12.41	12.19
North Carolina	11.78	12.07	8.81	8.88	6.34	6.64	7.77	7.92	9.36	9.51
South Carolina	12.39	12.84	9.78	9.95	5.98	5.97	--	--	9.25	9.25
Virginia	11.25	11.53	7.63	8.03	6.54	6.79	7.71	7.80	8.68	8.96
West Virginia	11.89	10.99	9.61	9.01	6.52	6.01	--	--	8.83	8.20
East South Central	11.19	11.14	10.29	10.17	5.99	5.83	--	--	9.17	8.92
Alabama	12.56	11.92	11.49	10.68	6.35	5.66	--	--	9.84	8.97
Kentucky	10.83	10.90	9.53	9.51	5.53	5.51	--	--	8.27	8.15
Mississippi	10.66	11.24	9.82	10.23	6.09	6.34	--	--	8.89	9.24
Tennessee	10.63	10.65	10.12	10.17	5.99	6.12	--	--	9.36	9.30
West South Central	10.66	10.99	7.90	8.04	5.33	5.41	5.59	5.42	8.15	8.21
Arkansas	9.85	9.98	8.09	8.32	5.95	5.97	10.73	9.50	8.01	8.00
Louisiana	9.33	9.65	8.45	8.72	5.29	5.62	8.34	7.66	7.62	7.82
Oklahoma	11.03	11.27	7.93	7.85	5.03	5.13	--	--	8.16	8.02
Texas	11.00	11.35	7.77	7.92	5.30	5.32	5.40	5.27	8.29	8.35
Mountain	11.81	11.88	9.69	9.75	6.48	6.41	10.02	9.93	9.34	9.37
Arizona	12.16	12.16	10.63	10.49	6.39	6.11	9.80	10.02	10.43	10.24
Colorado	12.01	11.88	9.99	9.91	7.22	7.44	10.41	9.96	9.79	9.82
Idaho	10.31	10.25	7.84	7.69	6.14	6.00	--	--	8.07	7.90
Montana	11.35	11.19	10.31	10.16	5.07	5.20	--	--	9.00	8.79
Nevada	12.06	12.98	7.98	9.14	6.67	5.98	7.91	9.06	8.48	9.14
New Mexico	12.59	12.61	10.01	10.13	5.43	6.30	--	--	9.11	9.47
Utah	10.69	10.47	8.94	8.80	6.21	6.18	9.90	10.01	8.53	8.46
Wyoming	11.56	11.56	9.41	9.51	7.00	6.90	--	--	8.17	8.09
Pacific Contiguous	12.59	13.46	13.89	14.93	8.44	10.06	9.85	9.63	12.20	13.29
California	13.94	14.96	15.86	17.07	10.77	13.56	9.87	9.66	14.18	15.62
Oregon	10.98	10.93	9.01	8.91	6.31	5.95	9.34	8.81	9.02	8.75
Washington	9.58	9.44	8.54	8.37	4.58	4.42	8.96	8.56	7.75	7.47
Pacific Noncontiguous	24.81	24.96	21.95	22.21	19.59	20.05	--	--	22.00	22.31
Alaska	21.02	20.36	18.31	17.61	16.29	14.15	--	--	18.71	17.69
Hawaii	27.54	28.20	24.90	25.92	20.79	22.19	--	--	24.00	25.10
U.S. Total	12.45	12.72	10.47	10.73	6.72	6.88	9.44	9.91	10.15	10.31

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 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through October 2016 and 2015 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD	October 2016 YTD	October 2015 YTD
New England	18.89	19.56	15.18	15.59	12.09	12.40	8.36	10.28	16.18	16.65
Connecticut	20.13	21.14	15.75	16.10	13.05	13.01	10.87	13.60	17.35	17.94
Maine	15.77	15.64	12.14	12.50	8.98	9.09	--	--	12.80	12.81
Massachusetts	19.14	19.96	15.59	15.94	13.12	13.62	6.20	7.86	16.54	17.05
New Hampshire	18.35	18.58	14.41	15.05	12.32	12.75	--	--	15.63	16.09
Rhode Island	18.68	19.29	14.91	15.94	13.54	13.85	18.73	18.48	16.34	17.11
Vermont	17.29	17.03	14.48	14.53	10.08	10.26	--	--	14.39	14.38
Middle Atlantic	15.80	16.00	12.63	13.29	7.06	7.40	10.96	11.82	12.70	13.12
New Jersey	15.82	15.87	12.54	12.93	10.21	10.81	8.79	10.46	13.60	13.87
New York	17.62	18.65	14.58	15.55	6.08	6.41	12.15	13.07	14.62	15.48
Pennsylvania	14.05	13.57	9.28	9.62	6.95	7.25	7.68	7.83	10.28	10.33
East North Central	12.91	12.94	9.84	9.98	6.90	7.00	6.89	6.97	9.89	9.91
Illinois	12.23	12.50	8.76	9.07	6.41	6.71	6.67	6.75	9.19	9.43
Indiana	11.31	11.54	9.66	9.79	6.92	6.88	9.59	9.93	9.05	9.01
Michigan	15.29	14.39	10.62	10.58	7.02	7.06	11.55	11.40	11.13	10.77
Ohio	12.30	12.78	9.85	10.06	6.79	7.01	7.76	7.69	9.74	9.97
Wisconsin	14.46	14.20	11.00	10.97	7.77	7.65	14.54	14.19	10.96	10.80
West North Central	11.85	11.55	9.56	9.36	7.15	6.97	9.42	9.11	9.67	9.38
Iowa	12.47	11.82	9.53	9.11	6.34	6.06	--	--	8.94	8.52
Kansas	13.01	12.31	10.32	10.12	7.44	7.64	--	--	10.48	10.17
Minnesota	12.79	12.20	9.91	9.53	7.30	7.05	10.14	9.56	10.05	9.59
Missouri	11.05	11.26	9.18	9.25	6.87	6.53	8.61	8.58	9.65	9.53
Nebraska	11.02	10.75	8.96	8.76	7.65	7.72	--	--	9.17	9.02
North Dakota	10.39	9.78	9.19	8.91	8.26	8.12	--	--	9.11	8.83
South Dakota	11.50	11.16	9.49	9.20	7.57	7.41	--	--	9.82	9.51
South Atlantic	11.70	11.77	9.29	9.53	6.43	6.64	7.90	8.15	9.88	10.03
Delaware	13.49	13.34	10.16	10.18	8.08	8.37	--	--	11.21	11.17
District of Columbia	12.85	12.91	11.72	11.96	9.00	8.71	9.36	8.86	11.86	12.02
Florida	11.24	11.60	9.11	9.53	7.81	8.27	8.31	8.90	10.14	10.53
Georgia	11.58	11.72	9.66	10.01	5.68	6.01	5.14	5.47	9.56	9.79
Maryland	14.24	13.68	10.95	11.06	7.85	8.61	7.84	8.42	12.20	12.07
North Carolina	11.23	11.32	8.70	8.77	6.29	6.57	7.79	7.86	9.32	9.44
South Carolina	12.48	12.60	10.13	10.24	6.04	6.09	--	--	9.69	9.65
Virginia	11.50	11.40	8.02	8.23	6.72	6.99	7.75	8.18	9.22	9.35
West Virginia	11.18	10.00	9.31	8.55	6.54	6.08	--	--	8.85	8.06
East South Central	10.77	10.80	10.05	10.26	5.80	6.04	--	--	9.01	9.10
Alabama	12.02	11.76	11.06	10.90	6.06	6.14	--	--	9.59	9.44
Kentucky	10.23	10.18	9.34	9.43	5.47	5.49	--	--	8.23	8.13
Mississippi	10.50	11.27	9.53	10.59	5.87	6.64	--	--	8.69	9.60
Tennessee	10.26	10.25	9.97	10.17	5.78	6.23	--	--	9.22	9.31
West South Central	10.58	10.99	7.82	8.22	5.20	5.66	5.64	5.52	8.10	8.50
Arkansas	9.93	9.83	8.15	8.34	5.95	6.28	10.13	11.51	8.10	8.23
Louisiana	9.10	9.38	8.44	8.70	4.97	5.48	8.95	8.39	7.39	7.73
Oklahoma	10.19	10.22	7.54	7.77	4.85	5.46	--	--	7.82	8.02
Texas	11.03	11.60	7.73	8.19	5.21	5.66	5.40	5.32	8.31	8.79
Mountain	11.75	11.97	9.64	9.82	6.41	6.72	9.69	10.02	9.42	9.62
Arizona	12.32	12.31	10.63	10.55	6.13	6.42	9.49	9.57	10.54	10.54
Colorado	12.03	12.21	9.67	9.93	7.10	7.45	9.73	10.14	9.76	10.00
Idaho	10.08	10.04	7.82	7.87	6.69	6.71	--	--	8.14	8.12
Montana	11.10	10.96	10.19	10.29	5.01	5.39	--	--	8.91	8.95
Nevada	11.41	12.79	8.06	9.32	6.18	7.05	7.91	9.24	8.55	9.67
New Mexico	12.08	12.65	9.88	10.44	5.71	6.49	--	--	9.19	9.79
Utah	11.15	10.95	8.94	8.76	6.45	6.27	9.94	10.06	8.88	8.65
Wyoming	11.23	11.01	9.44	9.17	6.93	6.80	--	--	8.20	8.00
Pacific Contiguous	14.59	14.32	13.44	13.93	9.21	9.13	9.03	9.01	12.90	12.93
California	17.29	16.93	15.35	16.02	12.17	12.32	9.02	9.01	15.38	15.56
Oregon	10.62	10.70	8.86	8.81	6.16	5.99	9.26	9.13	8.86	8.73
Washington	9.39	9.04	8.36	8.16	4.52	4.36	8.95	8.03	7.67	7.33
Pacific Noncontiguous	24.46	25.75	21.52	22.80	19.13	21.11	--	--	21.59	23.12
Alaska	20.57	19.90	18.19	17.51	15.41	14.61	--	--	18.33	17.64
Hawaii	27.34	30.14	24.41	27.35	20.49	23.49	--	--	23.67	26.63
U.S. Total	12.57	12.68	10.40	10.72	6.77	6.98	9.53	10.16	10.31	10.48

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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 5.7. Number of Ultimate Customers Served by Sector:
2008 - October 2016**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	125,037,870	17,582,277	774,817	726	143,395,691
2009	125,208,777	17,562,150	757,497	703	143,529,126
2010	125,717,767	17,674,167	747,691	238	144,139,862
2011	126,143,072	17,637,928	727,889	92	144,508,982
2012	126,832,252	17,728,903	732,344	83	145,293,583
2013	127,776,941	17,679,466	831,734	74	146,288,214
2014	128,680,294	17,853,836	839,154	79	147,373,362
2015	129,811,667	17,985,582	835,527	78	148,632,855
Year 2014					
January	128,080,045	17,756,185	824,418	82	146,660,730
February	127,760,935	17,694,926	810,164	79	146,266,104
March	128,398,293	17,795,435	817,663	79	147,011,470
April	128,347,095	17,795,240	829,796	80	146,972,211
May	128,428,131	17,834,341	840,580	84	147,103,136
June	128,562,601	17,810,020	838,886	77	147,211,584
July	129,055,781	17,937,858	865,715	78	147,859,432
August	128,924,140	17,889,944	856,377	77	147,670,538
Sept	128,788,358	17,922,008	856,589	78	147,567,033
October	129,521,707	17,993,992	860,902	76	148,376,677
November	128,640,689	17,827,317	824,992	76	147,293,074
December	129,655,750	17,988,765	843,760	76	148,488,351
Year 2015					
January	129,177,100	17,924,312	814,536	77	147,916,025
February	128,836,192	17,854,428	808,801	77	147,499,498
March	129,858,190	17,975,571	823,107	78	148,656,946
April	129,607,349	17,955,904	823,833	78	148,387,164
May	129,550,528	17,675,632	828,518	79	148,054,757
June	129,833,960	18,042,403	851,608	79	148,728,050
July	130,322,224	18,099,332	860,552	79	149,282,187
August	129,696,710	18,013,711	849,033	78	148,559,532
Sept	130,004,031	18,059,742	851,435	78	148,915,286
October	130,277,004	18,087,524	851,293	78	149,215,899
November	129,722,466	17,995,604	825,647	78	148,543,795
December	130,854,255	18,142,822	837,966	78	149,835,121
Year 2016					
January	130,338,137	17,991,441	804,014	77	149,133,669
February	130,108,723	18,008,622	799,802	80	148,917,227
March	131,347,367	18,177,658	810,369	86	150,335,480
April	130,487,878	18,048,728	797,992	83	149,334,681
May	131,044,615	18,110,086	813,820	86	149,968,607
June	131,330,880	18,162,552	827,317	86	150,320,835
July	131,138,611	18,138,233	821,498	82	150,098,424
August	131,378,687	18,232,121	833,219	82	150,444,109
Sept	131,392,219	18,200,554	820,959	82	150,413,814
October	131,335,608	18,195,532	813,568	83	150,344,791
Rolling 12 Months Ending in October					
2015	129,621,644	17,958,720	835,956	78	148,416,397
2016	130,873,287	18,116,996	817,181	82	149,807,546

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 for 2015 and prior years are final. Values for 2016 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.

Sources: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report; Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

**Table 5.8. Number of Ultimate Customers Served by Sector by State:
October 2016 and 2015**

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	6,275,859	6,332,013	876,204	873,707	25,881	26,880	6	7	7,177,950	7,232,607
Connecticut	1,490,177	1,470,588	152,631	150,914	4,419	4,398	3	3	1,647,230	1,625,903
Maine	685,544	703,478	95,800	98,080	2,939	3,028	0	0	784,283	804,586
Massachusetts	2,730,276	2,793,500	405,675	405,435	13,225	14,105	2	3	3,149,178	3,213,043
New Hampshire	615,564	612,021	107,418	106,657	3,268	3,289	0	0	726,250	721,967
Rhode Island	440,971	439,792	59,188	58,859	1,816	1,831	1	1	501,976	500,483
Vermont	313,327	312,634	55,492	53,762	214	229	0	0	369,033	366,625
Middle Atlantic	15,971,041	15,894,772	2,287,699	2,263,691	42,470	43,361	20	NM	18,301,230	18,201,843
New Jersey	3,513,089	3,504,644	516,529	513,386	11,837	12,161	6	NM	4,041,461	4,030,197
New York	7,117,438	7,085,540	1,074,463	1,059,037	7,519	7,647	8	7	8,199,428	8,152,231
Pennsylvania	5,340,514	5,304,588	696,707	691,268	23,114	23,553	6	6	6,060,341	6,019,415
East North Central	20,021,917	19,824,091	2,476,735	2,457,704	52,109	55,108	8	8	22,550,769	22,336,911
Illinois	5,250,889	5,188,432	606,434	604,168	5,509	6,007	3	3	5,862,835	5,798,610
Indiana	2,819,471	2,807,711	348,362	351,024	17,461	18,260	1	1	3,185,295	3,176,996
Michigan	4,342,304	4,289,493	545,401	534,012	NM	6,078	1	1	4,893,432	4,829,584
Ohio	4,931,522	4,887,867	623,551	621,090	18,658	19,121	2	2	5,573,733	5,528,080
Wisconsin	2,677,731	2,650,588	352,987	347,410	NM	5,642	1	1	3,035,474	3,003,641
West North Central	9,379,707	9,279,251	1,438,569	1,414,715	113,648	126,133	3	2	10,931,927	10,820,101
Iowa	1,369,893	1,357,958	240,159	231,806	NM	7,762	0	0	1,616,869	1,597,526
Kansas	1,257,918	1,230,445	234,182	229,835	25,525	24,096	0	0	1,517,625	1,484,376
Minnesota	2,368,237	2,363,043	285,596	286,204	NM	9,845	1	1	2,661,968	2,659,093
Missouri	2,766,552	2,734,048	375,556	374,186	8,306	10,178	2	1	3,150,416	3,118,413
Nebraska	845,944	828,960	158,500	150,780	53,912	61,517	0	0	1,058,356	1,041,257
North Dakota	375,798	375,017	72,485	71,680	7,925	8,913	0	0	456,208	455,610
South Dakota	395,365	389,780	72,091	70,224	NM	3,822	0	0	470,485	463,826
South Atlantic	27,256,294	26,811,114	3,753,151	3,701,253	79,842	79,879	13	11	31,089,300	30,592,257
Delaware	419,342	415,666	53,213	53,021	1,119	859	0	0	473,674	469,546
District of Columbia	261,266	251,442	25,933	25,776	1	1	3	1	287,203	277,220
Florida	9,087,195	8,937,299	1,212,610	1,185,140	20,618	19,674	2	2	10,320,425	10,142,115
Georgia	4,279,788	4,202,964	577,292	564,137	19,295	20,618	1	1	4,876,376	4,787,720
Maryland	2,295,373	2,264,171	250,906	249,620	8,826	8,738	5	5	2,555,110	2,522,534
North Carolina	4,450,382	4,347,967	697,420	672,050	9,939	10,259	1	1	5,157,742	5,030,277
South Carolina	2,232,350	2,195,250	360,325	359,632	4,567	4,201	0	0	2,597,242	2,559,083
Virginia	3,372,657	3,338,877	432,345	450,417	3,771	3,701	1	1	3,808,774	3,792,996
West Virginia	857,941	857,478	143,107	141,460	11,706	11,828	0	0	1,012,754	1,010,766
East South Central	8,333,335	8,199,020	1,383,697	1,374,099	23,662	26,082	0	0	9,740,694	9,599,201
Alabama	2,224,779	2,187,188	368,689	364,402	8,141	7,267	0	0	2,601,609	2,558,857
Kentucky	1,973,572	1,950,339	298,423	299,881	7,617	7,529	0	0	2,279,612	2,257,749
Mississippi	1,298,499	1,272,943	237,659	232,492	6,564	10,039	0	0	1,542,722	1,515,474
Tennessee	2,836,485	2,788,550	478,926	477,324	1,340	1,247	0	0	3,316,751	3,267,121
West South Central	15,673,388	15,524,160	2,198,353	2,202,850	181,549	186,228	6	6	18,053,296	17,913,244
Arkansas	1,373,755	1,359,372	190,543	188,885	38,135	38,355	2	2	1,602,435	1,586,614
Louisiana	2,070,227	2,048,992	291,383	299,309	18,517	19,704	1	1	2,380,128	2,368,006
Oklahoma	1,753,389	1,728,031	282,724	278,921	17,991	18,551	0	0	2,054,104	2,025,503
Texas	10,476,017	10,387,765	1,433,703	1,435,735	106,906	109,618	3	3	12,016,629	11,933,121
Mountain	9,543,894	9,423,983	1,369,970	1,375,482	88,651	96,420	4	4	11,002,519	10,895,889
Arizona	2,721,084	2,694,109	316,598	315,479	6,782	7,793	1	1	3,044,465	3,017,382
Colorado	2,264,550	2,233,831	358,667	366,675	14,194	16,344	1	1	2,637,412	2,616,851
Idaho	716,795	704,366	107,322	106,616	28,216	27,799	0	0	852,333	838,781
Montana	500,800	493,599	107,358	104,652	NM	10,784	0	0	616,640	609,035
Nevada	1,144,434	1,128,241	161,689	160,100	NM	3,829	1	1	1,309,337	1,292,171
New Mexico	889,559	873,471	138,326	142,223	8,555	9,427	0	0	1,036,440	1,025,121
Utah	1,036,061	1,027,411	121,714	122,041	9,502	9,769	1	1	1,167,278	1,159,222
Wyoming	270,611	268,955	58,296	57,696	9,707	10,675	0	0	338,614	337,326
Pacific Contiguous	18,163,856	18,275,848	2,296,874	2,312,534	203,591	209,101	23	21	20,664,344	20,797,504
California	13,464,514	13,614,795	1,682,912	1,713,815	148,680	152,564	15	13	15,296,121	15,481,187
Oregon	1,721,278	1,694,135	235,874	230,093	26,270	26,689	2	2	1,983,424	1,950,919
Washington	2,978,064	2,966,918	378,088	368,626	28,641	29,848	6	6	3,384,799	3,365,398
Pacific Noncontiguous	716,317	712,752	114,280	111,489	NM	NM	0	0	832,762	826,342
Alaska	285,285	284,050	52,969	50,912	NM	NM	0	0	339,623	336,294
Hawaii	431,032	428,702	61,311	60,577	796	769	0	0	493,139	490,048
U.S. Total	131,335,608	130,277,004	18,195,532	18,087,524	813,568	851,293	83	78	150,344,791	149,215,899

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

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

Notes: - See Glossary for definitions. - Values for 2015 are final. Values for 2016 are preliminary estimates based on a cutoff model sample.

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

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

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

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

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

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

Table 6.1. Electric Generating Summer Capacity Changes (MW), September 2016 to October 2016

Technology	Capacity Source	As of End of	Activity During October 2016			As of End of	Net Change in Capacity - Current Month and			Changes in and Total Net Summer Capacity -- Outlook Based on Reports to EIA						
		September	as Reported to EIA		October 2016	Prior Periods			Planned Capacity Additions		Planned Capacity Reductions		Planned Net Change		Planned Total Net Summer	
		2016	Total In-Service Capacity	Actual Capacity Additions	Actual Capacity Reductions	Total In-Service Capacity	Current Month	Year to Date	Past 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	At End of Next Month
..... Onshore Wind (Summer Capacity)	Utility Scale Facilities	74,823.6	603.5	0.0	75,427.1	603.5	2,853.7	5,459.3	1,109.1	7,109.6	0.0	0.0	1,109.1	7,109.6	76,536.2	82,536.7
..... Offshore Wind (Summer Capacity)	Utility Scale Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3	0.0	0.0	29.3	29.3	29.3	29.3
..... Wind (Summer Capacity)	Utility Scale Facilities	74,823.6	603.5	0.0	75,427.1	603.5	2,853.7	5,459.3	1,138.4	7,138.9	0.0	0.0	1,138.4	7,138.9	76,565.5	82,566.0
..... Solar Photovoltaic	Utility Scale Facilities	15,595.6	555.1	0.0	16,150.7	555.1	4,245.3	5,994.0	1,408.7	5,422.6	0.0	0.0	1,408.7	5,422.6	17,559.4	21,573.3
..... Solar Thermal without Energy Storage	Utility Scale Facilities	1,352.5	0.0	0.0	1,352.5	0.0	0.0	-43.8	0.0	0.0	0.0	0.0	0.0	0.0	1,352.5	1,352.5
..... Solar Thermal with Energy Storage	Utility Scale Facilities	405.4	0.0	0.0	405.4	0.0	0.0	110.0	0.0	0.0	0.0	0.0	0.0	0.0	405.4	405.4
..... Solar Subtotal	Utility Scale Facilities	17,353.5	555.1	0.0	17,908.6	555.1	4,245.3	6,060.2	1,408.7	5,422.6	0.0	0.0	1,408.7	5,422.6	19,317.3	23,331.2
..... Conventional Hydroelectric	Utility Scale Facilities	79,942.8	6.5	0.0	79,949.3	6.5	285.1	293.1	2.0	315.8	0.0	109.2	2.0	206.6	79,951.3	80,155.9
..... Wood/Wood Waste Biomass	Utility Scale Facilities	8,936.3	7.0	0.0	8,943.3	7.0	-25.6	-101.1	62.0	105.5	0.0	10.5	62.0	95.0	9,005.3	9,038.3
..... Landfill Gas	Utility Scale Facilities	2,108.6	1.8	0.0	2,110.4	1.8	33.5	22.6	15.6	22.1	0.0	10.4	15.6	11.7	2,126.0	2,122.1
..... Municipal Solid Waste	Utility Scale Facilities	2,247.1	0.0	0.0	2,247.1	0.0	-1.1	-1.1	0.0	0.0	0.0	2.0	0.0	-2.0	2,247.1	2,245.1
..... Other Waste Biomass	Utility Scale Facilities	808.7	0.0	0.0	808.7	0.0	9.3	9.3	15.2	23.2	0.0	0.8	15.2	22.4	823.9	831.1
..... Biomass Sources Subtotal	Utility Scale Facilities	14,100.7	8.8	0.0	14,109.5	8.8	16.1	-70.3	92.8	150.8	0.0	23.7	92.8	127.1	14,202.3	14,236.6
..... Geothermal	Utility Scale Facilities	2,541.5	0.0	0.0	2,541.5	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	-30.0	2,541.5	2,511.5
... Renewable Sources Subtotal	Utility Scale Facilities	188,762.1	1,173.9	0.0	189,936.0	1,173.9	7,400.2	11,742.3	2,641.9	13,028.1	0.0	162.9	2,641.9	12,865.2	192,577.9	202,801.2
..... Natural Gas Fired Combined Cycle	Utility Scale Facilities	239,394.5	10.5	0.0	239,405.0	10.5	5,386.6	5,868.9	44.6	9,994.0	0.0	0.0	44.6	9,994.0	239,449.6	249,399.0
..... Natural Gas Fired Combustion Turbine	Utility Scale Facilities	124,790.2	0.0	0.0	124,790.2	0.0	1,204.7	1,254.2	654.2	1,162.5	0.0	91.3	654.2	1,071.2	125,444.4	125,861.4
..... Natural Gas Steam Turbine	Utility Scale Facilities	79,357.6	0.0	0.0	79,357.6	0.0	1,326.4	113.4	0.0	1.2	0.0	453.5	0.0	-452.3	79,357.6	78,905.3
..... Natural Gas Internal Combustion Engine	Utility Scale Facilities	3,810.3	0.0	3.3	3,807.0	-3.3	231.3	226.2	0.0	502.2	0.9	0.9	-0.9	501.3	3,806.1	4,308.3
..... Natural Gas with Compressed Air Storage	Utility Scale Facilities	110.0	0.0	0.0	110.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	110.0	110.0
..... Other Natural Gas	Utility Scale Facilities	107.1	5.6	0.0	112.7	5.6	8.1	13.3	0.0	1.4	0.0	0.0	0.0	1.4	112.7	114.1
..... Natural Gas Subtotal	Utility Scale Facilities	447,569.7	16.1	3.3	447,582.5	12.8	8,157.1	7,476.0	698.8	11,661.3	0.9	545.7	697.9	11,115.6	448,280.4	458,698.1
..... Conventional Steam Coal	Utility Scale Facilities	270,827.9	0.0	0.0	270,827.9	0.0	-8,077.0	-10,699.3	0.0	11.0	10.0	3,192.1	-10.0	-3,181.1	270,817.9	267,646.8
..... Coal Integrated Gasification Combined Cycle	Utility Scale Facilities	815.0	0.0	0.0	815.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	815.0	815.0
..... Coal Subtotal	Utility Scale Facilities	271,642.9	0.0	0.0	271,642.9	0.0	-8,077.0	-10,699.3	0.0	11.0	10.0	3,192.1	-10.0	-3,181.1	271,632.9	268,461.8
..... Petroleum Coke	Utility Scale Facilities	1,540.3	0.0	0.0	1,540.3	0.0	-204.0	-204.0	0.0	0.0	0.0	0.0	0.0	0.0	1,540.3	1,540.3
..... Petroleum Liquids	Utility Scale Facilities	34,868.8	0.0	16.0	34,852.8	-16.0	-233.2	-334.8	25.0	27.3	0.7	605.0	24.3	-577.7	34,877.1	34,275.1
..... Other Gases	Utility Scale Facilities	2,497.2	0.0	0.0	2,497.2	0.0	-3.2	-33.2	0.0	0.0	0.0	0.0	0.0	0.0	2,497.2	2,497.2
... Fossil Fuels Subtotal	Utility Scale Facilities	758,118.9	16.1	19.3	758,115.7	-3.2	-360.3	-3,795.3	723.8	11,699.6	11.6	4,342.8	712.2	7,356.8	758,827.9	765,472.5
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,670.1	0.0	0.0	22,670.1	0.0	95.0	95.0	0.0	114.0	0.0	0.0	0.0	114.0	22,670.1	22,784.1
..... Flywheels	Utility Scale Facilities	42.0	0.0	0.0	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	42.0
..... Batteries	Utility Scale Facilities	331.2	38.0	0.0	369.2	38.0	77.0	92.5	0.0	58.6	0.0	0.0	0.0	58.6	369.2	427.8
... Energy Storage Subtotal	Utility Scale Facilities	23,043.3	38.0	0.0	23,081.3	38.0	172.0	187.5	0.0	172.6	0.0	0.0	0.0	172.6	23,081.3	23,253.9
... Nuclear	Utility Scale Facilities	99,794.0	0.0	478.1	99,315.9	-478.1	643.9	643.9	0.0	20.0	0.0	1,901.8	0.0	-1,881.8	99,315.9	97,434.1
... All Other	Utility Scale Facilities	1,484.8	0.0	0.0	1,484.8	0.0	23.4	23.4	0.0	1.5	0.0	0.0	0.0	1.5	1,484.8	1,486.3
TOTAL	UTILITY SCALE FACILITIES	1,071,203.1	1,228.0	497.4	1,071,933.7	730.6	7,879.2	8,801.8	3,365.7	24,921.8	11.6	6,407.5	3,354.1	18,514.3	1,075,287.8	1,090,448.0
..... Estimated Distributed Solar Photovoltaic	Distributed Facilities	12,302.1			12,575.5	273.3	2,796.9	3,387.0								
..... Estimated Total Solar Photovoltaic	All Facilities	27,897.7			28,726.2	828.4	7,042.2	9,381.0								
... Estimated Total Solar	All Facilities	29,655.6			30,484.1	828.4	7,042.2	9,447.2								

NOTES:
 Planned Capacity Additions reflect plans to begin operating new units and plans to uprate existing units.
 Planned Capacity Reductions reflect plans to retire or derate existing units.
 Actual Capacity Additions reflect new units, uprates to existing units, corrections to previously reported capacities, and additions not previously reported.
 Actual Capacity Reductions reflect retirements of and derates to existing units, corrections to previously reported capacities, and reductions not previously reported.
 Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.

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

**Table 6.1.A. Net Summer Capacity for Utility Scale Solar Photovoltaic and Distributed Solar Photovoltaic Capacity (Megawatts)
2008 - October 2016**

Period	Utility Solar Photovoltaic	Estimated Distributed Solar Photovoltaic	Estimated Total Solar Photovoltaic
Annual Totals			
2008	70.8	N/A	N/A
2009	145.5	N/A	N/A
2010	393.4	N/A	N/A
2011	1,052.0	N/A	N/A
2012	2,694.1	N/A	N/A
2013	5,336.1	N/A	N/A
2014	8,656.6	7,326.6	15,983.2
2015	11,905.4	9,778.5	21,683.9
Year 2014			
January	5,688.0	5,612.6	11,300.6
February	5,839.2	5,728.2	11,567.4
March	5,967.9	5,853.0	11,820.9
April	6,188.0	5,978.9	12,166.9
May	6,368.8	6,111.6	12,480.4
June	6,564.1	6,227.2	12,791.3
July	6,706.3	6,369.2	13,075.5
August	7,105.0	6,603.0	13,708.0
Sept	7,215.1	6,749.8	13,964.9
October	7,575.3	6,922.0	14,497.3
November	8,005.3	7,078.0	15,083.3
December	8,656.6	7,326.6	15,983.2
Year 2015			
January	8,873.2	7,369.4	16,242.6
February	9,027.0	7,529.1	16,556.1
March	9,088.1	7,696.7	16,784.8
April	9,154.4	7,860.3	17,014.7
May	9,368.0	8,050.6	17,418.6
June	9,638.9	8,235.9	17,874.8
July	9,714.8	8,479.1	18,193.9
August	9,945.4	8,700.9	18,646.3
Sept	10,050.2	8,951.5	19,001.7
October	10,156.7	9,188.4	19,345.1
November	10,478.7	9,416.7	19,895.4
December	11,905.4	9,778.5	21,683.9
Year 2016			
January	12,113.5	10,238.4	22,351.9
February	12,242.9	10,499.1	22,742.0
March	12,415.2	10,825.8	23,241.0
April	12,947.2	11,083.7	24,030.9
May	13,051.1	11,326.7	24,377.8
June	13,226.4	11,584.6	24,811.0
July	13,947.6	11,800.5	25,748.1
August	14,862.2	12,083.9	26,946.1
Sept	15,595.6	12,302.1	27,897.7
October	16,150.7	12,575.5	28,726.2

Values for 2015 are final. Values for 2016 are preliminary.

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

Table 6.1.B. Net Summer Capacity for Estimated Distributed Solar Photovoltaic Capacity by Sector (Megawatts): 2014 - October 2016

Period	Residential	Commercial	Industrial	Total
Annual Totals				
2014	3,346.3	3,279.7	700.6	7,326.6
2015	5,191.5	3,706.7	880.3	9,778.5
Year 2014				
January	2,285.2	2,766.5	561.0	5,612.6
February	2,354.4	2,804.9	568.9	5,728.2
March	2,428.2	2,848.7	576.2	5,853.0
April	2,506.9	2,883.8	588.2	5,978.9
May	2,588.3	2,930.2	593.0	6,111.6
June	2,677.6	2,946.1	603.5	6,227.2
July	2,765.0	2,989.0	615.1	6,369.2
August	2,873.0	3,096.4	633.6	6,603.0
Sept	2,980.3	3,128.7	640.9	6,749.8
October	3,092.8	3,162.3	667.0	6,922.0
November	3,191.8	3,203.2	683.0	7,078.0
December	3,346.3	3,279.7	700.6	7,326.6
Year 2015				
January	3,424.8	3,227.0	717.6	7,369.4
February	3,550.2	3,245.1	733.7	7,529.1
March	3,689.3	3,268.3	739.1	7,696.7
April	3,816.3	3,294.6	749.4	7,860.3
May	3,949.5	3,336.6	764.5	8,050.6
June	4,110.7	3,356.2	768.9	8,235.9
July	4,275.5	3,414.5	789.1	8,479.1
August	4,440.5	3,455.9	804.5	8,700.9
Sept	4,635.1	3,498.9	817.4	8,951.5
October	4,815.7	3,540.5	832.2	9,188.4
November	4,972.5	3,593.4	850.8	9,416.7
December	5,191.5	3,706.7	880.3	9,778.5
Year 2016				
January	5,373.5	3,975.7	889.2	10,238.4
February	5,572.5	4,017.1	909.5	10,499.1
March	5,798.1	4,088.7	939.0	10,825.8
April	5,996.6	4,130.3	956.8	11,083.7
May	6,184.1	4,169.7	973.0	11,326.7
June	6,377.9	4,219.9	986.9	11,584.6
July	6,538.9	4,255.5	1,006.2	11,800.5
August	6,732.3	4,326.7	1,025.0	12,083.9
Sept	6,875.5	4,398.9	1,027.7	12,302.1
October	7,059.9	4,477.6	1,038.0	12,575.5

Values for 2015 are final. Values for 2016 are preliminary.

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.'

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

Table 6.2.A. Net Summer Capacity of Utility Scale Units by Technology and by State, October 2016 and 2015 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
New England	5,089.8	4,969.4	22,712.1	22,744.9	1,797.4	1,775.4	2.0	2.0	4,018.0	4,018.0	48.0	48.0	33,667.3	33,557.7
Connecticut	333.6	331.4	6,312.7	6,306.8	29.4	29.4	0.0	0.0	2,087.8	2,087.8	26.0	26.0	8,789.5	8,781.4
Maine	2,197.4	2,159.5	2,442.5	2,442.5	0.0	0.0	0.0	0.0	0.0	0.0	22.0	22.0	4,661.9	4,624.0
Massachusetts	995.8	947.7	9,795.0	9,833.7	1,768.0	1,746.0	2.0	2.0	682.3	682.3	0.0	0.0	13,243.1	13,211.7
New Hampshire	932.5	918.9	2,270.9	2,270.9	0.0	0.0	0.0	0.0	1,247.9	1,247.9	0.0	0.0	4,451.3	4,437.7
Rhode Island	69.3	56.3	1,791.3	1,791.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,860.6	1,847.6
Vermont	561.2	555.6	99.7	99.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	660.9	655.3
Middle Atlantic	10,691.9	10,657.6	69,297.3	67,425.7	3,409.1	3,409.1	40.0	40.0	19,224.5	19,224.5	11.2	11.2	102,674.0	100,768.1
New Jersey	727.6	682.6	13,584.3	12,955.5	420.0	420.0	0.0	0.0	4,107.9	4,107.9	11.2	11.2	18,851.0	18,177.2
New York	7,110.1	7,109.1	25,956.4	26,300.6	1,406.1	1,406.1	20.0	20.0	5,397.6	5,397.6	0.0	0.0	39,890.2	40,233.4
Pennsylvania	2,854.2	2,865.9	29,756.6	28,169.6	1,583.0	1,583.0	20.0	20.0	9,719.0	9,719.0	0.0	0.0	43,932.8	42,357.5
East North Central	10,235.1	10,089.9	113,815.9	116,595.5	2,037.0	1,964.0	137.6	98.6	18,896.1	18,896.1	110.1	110.1	145,231.8	147,754.2
Illinois	3,977.0	3,987.8	29,437.2	29,988.2	0.0	0.0	72.6	72.6	11,589.6	11,589.6	0.0	0.0	45,076.4	45,638.2
Indiana	2,179.7	1,982.5	23,353.9	24,263.4	0.0	0.0	20.0	0.0	0.0	0.0	89.0	89.0	25,642.6	26,334.9
Michigan	2,253.1	2,253.5	20,874.7	21,871.2	2,037.0	1,964.0	0.0	0.0	3,976.5	3,976.5	0.0	0.0	29,141.3	30,065.2
Ohio	715.6	715.6	25,800.0	25,865.0	0.0	0.0	45.0	26.0	2,134.0	2,134.0	0.0	0.0	28,694.6	28,740.6
Wisconsin	1,109.7	1,150.5	14,350.1	14,607.7	0.0	0.0	0.0	0.0	1,196.0	1,196.0	21.1	21.1	16,676.9	16,975.3
West North Central	21,850.6	20,409.6	60,621.4	61,615.9	657.0	657.0	2.0	2.0	5,377.4	5,855.5	24.5	24.5	88,532.9	88,564.5
Iowa	6,439.7	6,121.2	9,567.2	9,950.1	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	16,608.3	16,672.7
Kansas	3,863.7	3,191.6	9,716.8	9,934.6	0.0	0.0	0.0	0.0	1,175.0	1,175.0	0.8	0.8	14,756.3	14,302.0
Minnesota	4,116.0	3,913.7	10,132.6	10,241.7	0.0	0.0	1.0	1.0	1,647.0	1,647.0	18.4	18.4	15,915.0	15,821.8
Missouri	1,035.2	1,032.2	18,659.1	18,946.6	657.0	657.0	1.0	1.0	1,190.0	1,190.0	0.0	0.0	21,542.3	21,826.8
Nebraska	1,218.7	1,178.9	6,239.9	6,237.1	0.0	0.0	0.0	0.0	764.0	1,242.1	0.0	0.0	8,222.6	8,658.1
North Dakota	2,741.5	2,634.0	4,615.5	4,615.5	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	7,362.3	7,254.8
South Dakota	2,435.8	2,338.0	1,690.3	1,690.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,126.1	4,028.3
South Atlantic	14,976.2	13,278.2	159,760.1	159,339.9	7,905.2	7,905.2	76.5	65.5	24,578.6	24,578.6	509.7	509.7	207,806.3	205,677.1
Delaware	44.9	44.9	3,359.0	3,358.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,403.9	3,403.0
District of Columbia	12.0	12.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	21.0
Florida	1,443.9	1,423.9	54,112.4	53,477.6	0.0	0.0	0.0	0.0	3,572.0	3,572.0	348.7	348.7	59,477.0	58,822.2
Georgia	3,626.2	3,014.5	26,956.9	27,190.9	1,862.2	1,862.2	0.0	0.0	4,061.0	4,061.0	0.0	0.0	36,506.3	36,128.6
Maryland	1,009.0	972.4	9,556.7	9,681.7	0.0	0.0	11.0	0.0	1,707.8	1,707.8	0.0	0.0	12,284.5	12,361.9
North Carolina	4,280.2	3,379.1	22,021.3	22,021.3	86.0	86.0	0.0	0.0	5,113.6	5,113.6	161.0	161.0	31,662.1	30,761.0
South Carolina	1,790.4	1,790.4	11,633.0	11,687.2	2,716.0	2,716.0	0.0	0.0	6,556.2	6,556.2	0.0	0.0	22,695.6	22,749.8
Virginia	1,839.6	1,755.0	17,948.5	17,170.8	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	26,597.1	25,734.8
West Virginia	930.0	886.0	14,163.3	14,743.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	15,158.8	15,694.8
East South Central	8,288.6	8,009.4	65,848.3	68,056.3	1,616.3	1,616.3	0.0	0.0	10,990.1	9,868.1	1.4	1.4	86,744.7	87,551.5
Alabama	4,014.9	3,941.6	20,214.5	21,398.5	0.0	0.0	0.0	0.0	5,066.4	5,066.4	0.0	0.0	29,295.8	30,406.5
Kentucky	1,109.9	904.0	19,004.5	19,158.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,114.4	20,062.5
Mississippi	274.7	274.7	14,315.4	14,407.4	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	15,992.5	16,084.5
Tennessee	2,889.1	2,889.1	12,313.9	13,091.9	1,616.3	1,616.3	0.0	0.0	4,522.7	3,400.7	0.0	0.0	21,342.0	20,998.0
West South Central	29,207.7	25,555.5	145,608.0	145,932.5	286.0	286.0	41.0	40.0	8,896.2	8,896.2	527.2	512.2	184,566.1	181,222.4
Arkansas	1,590.6	1,578.6	11,279.6	11,279.6	28.0	28.0	0.0	0.0	1,808.5	1,808.5	0.0	0.0	14,706.7	14,694.7
Louisiana	687.1	687.1	23,201.8	23,144.6	0.0	0.0	0.0	0.0	2,127.7	2,127.7	290.9	275.9	26,307.5	26,235.3
Oklahoma	6,389.5	5,268.7	18,218.2	18,734.4	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	24,865.7	24,261.1
Texas	20,540.5	18,021.1	92,908.4	92,773.9	0.0	0.0	41.0	40.0	4,960.0	4,960.0	236.3	236.3	118,686.2	116,031.3
Mountain	23,657.8	21,344.2	64,087.8	64,088.2	778.8	778.8	2.6	2.6	3,937.0	3,937.0	119.8	111.4	92,583.8	90,262.2
Arizona	4,602.6	4,496.4	19,382.4	19,382.0	216.3	216.3	0.0	0.0	3,937.0	3,937.0	0.0	0.0	28,138.3	28,031.7
Colorado	4,035.1	3,673.0	11,363.0	11,423.0	562.5	562.5	0.0	0.0	0.0	0.0	9.3	9.3	15,969.9	15,667.8
Idaho	3,816.1	3,776.1	1,157.5	1,157.5	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	4,988.4	4,948.4
Montana	3,439.1	3,414.1	2,740.4	2,722.2	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,223.5	6,180.3
Nevada	2,887.5	2,403.0	8,258.7	8,258.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11,146.2	10,661.7
New Mexico	1,654.4	1,174.8	6,936.9	6,895.9	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.0	8,593.9	8,073.3
Utah	1,428.6	692.4	7,462.4	7,462.4	0.0	0.0	0.0	0.0	0.0	0.0	40.2	31.8	8,931.2	8,186.6
Wyoming	1,794.4	1,714.4	6,786.5	6,786.5	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,592.4	8,512.4
Pacific Contiguous	64,844.5	62,808.3	52,205.4	51,986.7	4,183.3	4,183.3	55.5	14.0	3,398.0	3,398.0	106.3	106.3	124,793.0	122,496.6
California	28,015.9	26,036.3	43,017.9	43,319.2	3,869.3	3,869.3	46.5	8.0	2,240.0	2,240.0	106.3	106.3	77,295.9	75,579.1
Oregon	12,077.5	12,050.2	4,372.8	3,859.8	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,455.3	15,915.0
Washington	24,751.1	24,721.8	4,814.7	4,807.7	314.0	314.0	4.0	1.0	1,158.0	1,158.0	0.0	0.0	31,041.8	31,002.5
Pacific Noncontiguous	1,093.8	1,071.6	4,159.4	4,125.4	0.0	0.0	54.0	54.0	0.0	0.0	26.6	26.6	5,333.8	5,277.6
Alaska	515.2	508.7	2,102.2	2,053.2	0.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	2,644.4	2,588.9
Hawaii	578.6	562.9	2,057.2	2,072.2	0.0	0.0	27.0	27.0	0.0	0.0	26.6	26.6	2,689.4	2,688.7
U.S. Total	189,936.0	178,193.7	758,115.7	761,911.0	22,670.1	22,575.1	411.2	318.7	99,315.9	98,672.0	1,484.8	1,461.4	1,071,933.7	1,063,131.9

NM = Not meaningful due to large relative standard error.
 Values for 2015 are final. Values for 2016 are preliminary.

NOTES:
 Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report. This exclusion may represent a significant portion of capacity for some technologies such as solar photovoltaic generation.
 Concentrated Solar Power Energy Storage is included in 'Renewable sources'; it is not included in 'Other Energy Storage'

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

Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, October 2016 and 2015 (Megawatts)

Census Division and State	Summer Capacity at Utility Scale Facilities														Distributed Capacity Estimated Distributed Solar Photovoltaic Capacity		Summer Capacity From Utility Scale Facilities and Distributed Capacity			
	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Total Solar Photovoltaic Capacity		Estimated Total Solar Capacity			
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015		
New England	1,066.0	994.1	412.9	370.3	0.0	0.0	1,955.2	1,948.8	1,655.7	1,656.2	0.0	0.0	5,089.8	4,969.4	1,322.0	940.8	1,734.9	1,311.1	1,734.9	1,311.1
Connecticut	0.0	0.0	12.2	10.0	0.0	0.0	122.2	122.2	199.2	199.2	0.0	0.0	333.6	331.4	252.3	162.8	264.5	172.8	264.5	172.8
Maine	652.7	612.8	0.0	0.0	0.0	0.0	728.9	728.9	815.8	817.8	0.0	0.0	2,197.4	2,159.5	21.5	15.7	21.5	15.7	21.5	15.7
Massachusetts	90.5	82.6	356.1	318.7	0.0	0.0	265.9	263.1	283.3	283.3	0.0	0.0	995.8	947.7	924.1	685.2	1,280.2	1,003.9	1,280.2	1,003.9
New Hampshire	183.1	171.0	0.0	0.0	0.0	0.0	504.8	504.8	244.6	243.1	0.0	0.0	932.5	918.9	47.0	20.4	47.0	20.4	47.0	20.4
Rhode Island	19.5	7.5	10.2	9.2	0.0	0.0	2.7	2.7	36.9	36.9	0.0	0.0	69.3	56.3	15.5	9.4	25.7	18.6	25.7	18.6
Vermont	120.2	120.2	34.4	32.4	0.0	0.0	330.7	327.1	75.9	75.9	0.0	0.0	561.2	555.6	61.7	47.3	96.1	79.7	96.1	79.7
Middle Atlantic	3,088.1	3,098.5	615.1	551.1	0.0	0.0	5,623.5	5,623.5	1,365.2	1,384.5	0.0	0.0	10,691.9	10,657.6	2,147.7	1,650.2	2,762.8	2,201.3	2,762.8	2,201.3
New Jersey	7.6	7.6	478.6	433.6	0.0	0.0	12.3	12.3	229.1	229.1	0.0	0.0	727.6	682.6	1,227.6	994.4	1,706.2	1,428.0	1,706.2	1,428.0
New York	1,747.0	1,747.0	94.3	75.3	0.0	0.0	4,711.6	4,711.6	557.2	575.2	0.0	0.0	7,110.1	7,109.1	706.6	479.3	800.9	554.6	800.9	554.6
Pennsylvania	1,333.5	1,343.9	42.2	42.2	0.0	0.0	899.6	899.6	578.9	580.2	0.0	0.0	2,854.2	2,865.9	213.5	176.5	255.7	218.7	255.7	218.7
East North Central	7,814.1	7,655.1	239.5	183.4	0.0	0.0	913.2	910.3	1,268.3	1,341.1	0.0	0.0	10,235.1	10,089.9	170.4	142.7	409.9	326.1	409.9	326.1
Illinois	3,799.8	3,799.8	32.8	32.8	0.0	0.0	34.1	34.1	110.3	121.1	0.0	0.0	3,977.0	3,987.8	25.7	18.7	58.5	51.5	58.5	51.5
Indiana	1,889.7	1,739.7	155.1	107.9	0.0	0.0	60.4	60.4	74.5	74.5	0.0	0.0	2,179.7	1,982.5	9.8	8.9	164.9	116.8	164.9	116.8
Michigan	1,360.1	1,360.1	7.9	2.0	0.0	0.0	324.6	330.9	560.5	560.5	0.0	0.0	2,253.1	2,253.5	31.7	26.7	39.6	28.7	39.6	28.7
Ohio	433.1	424.1	42.7	39.7	0.0	0.0	101.9	101.9	137.9	149.9	0.0	0.0	715.6	715.6	78.0	68.7	120.7	108.4	120.7	108.4
Wisconsin	331.4	331.4	1.0	1.0	0.0	0.0	392.2	383.0	383.1	435.1	0.0	0.0	1,109.7	1,150.5	25.2	19.7	26.2	20.7	26.2	20.7
West North Central	17,998.1	16,566.4	23.5	14.2	0.0	0.0	3,278.1	3,278.1	550.9	550.9	0.0	0.0	21,850.6	20,409.6	182.8	145.1	206.3	159.3	206.3	159.3
Iowa	6,271.6	5,953.1	0.0	0.0	0.0	0.0	144.9	144.9	23.2	23.2	0.0	0.0	6,439.7	6,121.2	38.4	28.6	38.4	28.6	38.4	28.6
Kansas	3,846.7	3,174.6	1.0	1.0	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	3,863.7	3,191.6	6.6	2.9	7.6	3.9	7.6	3.9
Minnesota	3,440.7	3,240.7	4.0	1.7	0.0	0.0	194.6	194.6	476.7	476.7	0.0	0.0	4,116.0	3,913.7	27.7	18.9	31.7	20.6	31.7	20.6
Missouri	458.5	458.5	14.5	11.5	0.0	0.0	545.7	545.7	16.5	16.5	0.0	0.0	1,035.2	1,032.2	107.7	93.3	122.2	104.8	122.2	104.8
Nebraska	921.1	885.3	4.0	0.0	0.0	0.0	277.9	277.9	15.7	15.7	0.0	0.0	1,218.7	1,178.9	1.7	0.9	5.7	0.9	5.7	0.9
North Dakota	2,221.7	2,114.2	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	2,741.5	2,634.0	0.2	0.2	0.2	0.2	0.2	0.2
South Dakota	837.8	740.0	0.0	0.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,435.8	2,338.0	0.6	0.3	0.6	0.3	0.6	0.3
South Atlantic	775.3	745.3	2,773.5	1,152.0	0.0	0.0	7,251.7	7,207.7	4,175.7	4,173.2	0.0	0.0	14,976.2	13,278.2	1,073.7	606.0	3,847.2	1,758.0	3,847.2	1,758.0
Delaware	2.0	2.0	30.7	30.7	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	44.9	44.9	79.3	53.4	110.0	84.1	110.0	84.1
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	12.0	0.0	0.0	12.0	12.0	38.4	20.3	38.4	20.3	38.4	20.3
Florida	0.0	0.0	100.8	80.8	0.0	0.0	54.5	54.5	1,288.6	1,288.6	0.0	0.0	1,443.9	1,423.9	150.8	99.5	251.6	180.3	251.6	180.3
Georgia	0.0	0.0	680.9	71.2	0.0	0.0	2,047.5	2,047.5	897.8	895.8	0.0	0.0	3,626.2	3,014.5	NM	NM	NM	NM	NM	NM
Maryland	190.0	160.0	87.0	79.3	0.0	0.0	590.0	590.0	142.0	143.1	0.0	0.0	1,009.0	972.4	537.2	279.3	624.2	358.6	624.2	358.6
North Carolina	0.0	0.0	1,788.6	887.5	0.0	0.0	2,004.1	2,004.1	487.5	487.5	0.0	0.0	4,280.2	3,379.1	102.1	64.0	1,890.7	951.5	1,890.7	951.5
South Carolina	0.0	0.0	2.5	2.5	0.0	0.0	1,345.1	1,345.1	442.8	442.8	0.0	0.0	1,790.4	1,790.4	32.6	4.8	35.1	7.3	35.1	7.3
Virginia	0.0	0.0	83.0	0.0	0.0	0.0	866.0	866.0	890.6	889.0	0.0	0.0	1,839.6	1,755.0	29.4	20.7	112.4	20.7	112.4	20.7
West Virginia	583.3	583.3	0.0	0.0	0.0	0.0	344.5	300.5	2.2	2.2	0.0	0.0	930.0	886.0	4.2	3.1	4.2	3.1	4.2	3.1
East South Central	29.1	29.1	130.2	45.2	0.0	0.0	6,919.8	6,724.9	1,209.5	1,210.2	0.0	0.0	8,288.6	8,009.4	56.2	48.9	186.4	94.1	186.4	94.1
Alabama	0.0	0.0	75.0	0.0	0.0	0.0	3,271.0	3,271.0	668.9	670.6	0.0	0.0	4,014.9	3,941.6	2.4	1.9	77.4	1.9	77.4	1.9
Kentucky	0.0	0.0	10.0	0.0	0.0	0.0	1,030.2	835.3	69.7	68.7	0.0	0.0	1,109.9	904.0	11.1	9.0	21.1	9.0	21.1	9.0
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.7	274.7	0.0	0.0	274.7	274.7	3.2	1.0	3.2	1.0	3.2	1.0
Tennessee	29.1	29.1	45.2	45.2	0.0	0.0	2,618.6	2,618.6	196.2	196.2	0.0	0.0	2,889.1	2,889.1	39.5	36.9	84.7	82.1	84.7	82.1
West South Central	24,414.8	20,979.6	433.4	220.4	0.0	0.0	2,986.5	2,982.5	1,373.0	1,373.0	0.0	0.0	29,207.7	25,555.5	359.3	256.9	792.7	477.3	792.7	477.3
Arkansas	0.0	0.0	12.0	0.0	0.0	0.0	1,266.2	1,266.2	312.4	312.4	0.0	0.0	1,590.6	1,578.6	4.7	3.4	16.7	3.4	16.7	3.4
Louisiana	0.0	0.0	0.0	0.0	0.0	0.0	192.0	192.0	495.1	495.1	0.0	0.0	687.1	687.1	118.8	108.1	118.8	108.1	118.8	108.1
Oklahoma	5,451.2	4,328.4	2.5	2.5	0.0	0.0	859.6	861.6	76.2	76.2	0.0	0.0	6,389.5	5,268.7	3.1	1.9	5.6	4.4	5.6	4.4
Texas	18,963.6	16,651.2	418.9	217.9	0.0	0.0	668.7	662.7	489.3	489.3	0.0	0.0	20,540.5	18,021.1	232.7	143.4	651.6	361.3	651.6	361.3
Mountain	8,008.1	7,414.6	3,892.9	2,284.0	473.9	363.9	10,561.7	10,560.5	176.4	176.4	544.8	544.8	23,657.8	21,344.2	1,586.0	1,248.9	5,478.9	3,532.9	5,952.8	3,896.8
Arizona	267.3	267.3	1,288.3	1,182.1	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	4,602.6	4,496.4	883.0	742.8	2,171.3	1,924.9	2,466.7	2,220.3
Colorado	2,961.8	2,837.1	368.2	132.0	0.0	0.0	677.7	676.5	27.4	27.4	0.0	0.0	4,035.1	3,673.0	281.4	243.3	649.6	375.3	649.6	375.3
Idaho	962.7	962.7	40.0	0.0	0.0	0.0	2,707.7	2,707.7	95.7	95.7	10.0	10.0	3,816.1	3,776.1	6.7	4.3	46.7	4.3	46.7	4.3
Montana	678.5	653.5	0.0	0.0	0.0	0.0	2,757.6	2,757.6	3.0	3.0	0.0	0.0	3,439.1	3,414.1	7.7	5.8	7.7	5.8	7.7	5.8
Nevada	150.0	150.0	1,044.2	669.7	178.5	68.5	1,051.4	1,051.4	3.2	3.2	460.2	460.2	2,887.5	2,403.0	207.7	132.6	1,251.9	802.3	1,430.4	870.8
New Mexico	1,112.3	812.3	455.4	275.8	0.0	0.0	82.9	82.9	2.2	2.2	1.6	1.6	1,654.4	1,174.8	91.5	73.8	546.9	349.6	546.9	349.6
Utah	388.2	324.4	696.8	24.4	0.0	0.0	256.4	256.4	14.2	14.2	73.0	73.0	1,428.6	692.4	105.5	44.4	802.3	68.8	802.3	68.8
Wyoming	1,487.3	1,407.3	0.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,794.4	1,714.4	2.4	1.8	2.4	1.8	2.4	1.8
Pacific Contiguous	11,967.3	12,218.9	7,579.0	5,291.9	1,284.0	1,327.8	39,986.1	39,953.8	2,074.4	2,062.2	1,953.7	1,953.7	64,844.5	62,808.3	5,241.2	3,770.0	12,820.2	9,061.9	14,104.2	10,389.7
California	5,726.8	5,988.4	7,530.9	5,277.5	1,284.0	1,327.8	10,186.2	10,186.2	1,353.8	1,322.2	1,934.2	1,934.2	28,015.9	26,036.3	5,081.4	3,652.2	12,612.3	8,929.7	13,896.3	10,257.5
Oregon	3,167.4	3,157.4	47.6	13.9	0.0	0.0	8,525.4	8,525.4	317.6	334.0	19.5	19.5	12,077.5	12,050.2	86.6	69.0	134.2	82.9	134.2	82.9
Washington	3,073.1	3,073.1	0.5	0.5	0.0	0.0	21,274.5	21,242.2	403.0	406.0	0.0	0.0	24,751.1	24,721.8	73.2	48.8	73.7	49.		

Table 6.2.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, October 2016 and 2015 (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	
	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015	October 2016	October 2015
	New England	11,893.0	11,893.0	1,115.5	1,106.1	647.1	641.5	1,955.3	1,988.3	0.0	0.0	7,101.2	7,116.0	0.0	0.0	22,712.1
Connecticut	2,547.5	2,547.5	479.3	479.3	422.2	416.3	383.4	383.4	0.0	0.0	2,480.3	2,480.3	0.0	0.0	6,312.7	6,306.8
Maine	1,250.0	1,250.0	297.1	297.1	14.5	14.5	0.0	0.0	0.0	0.0	880.9	880.9	0.0	0.0	2,442.5	2,442.5
Massachusetts	5,098.6	5,098.6	335.3	325.9	198.0	198.3	1,038.0	1,071.0	0.0	0.0	3,125.1	3,139.9	0.0	0.0	9,795.0	9,833.7
New Hampshire	1,235.2	1,235.2	3.8	3.8	0.0	0.0	533.9	533.9	0.0	0.0	498.0	498.0	0.0	0.0	2,270.9	2,270.9
Rhode Island	1,761.7	1,761.7	0.0	0.0	12.4	12.4	0.0	0.0	0.0	0.0	17.2	17.2	0.0	0.0	1,791.3	1,791.3
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.7	99.7	0.0	0.0	99.7	99.7
Middle Atlantic	26,270.2	24,091.2	7,599.7	7,539.7	13,533.8	13,207.8	16,308.0	16,993.0	78.6	78.6	5,383.2	5,391.6	123.8	123.8	69,297.3	67,425.7
New Jersey	8,104.3	7,527.5	2,817.1	2,757.1	1,109.2	1,109.2	1,245.0	1,245.0	11.6	11.6	273.7	281.7	23.4	23.4	13,584.3	12,955.5
New York	8,095.4	8,059.2	3,105.2	3,105.2	9,522.0	9,522.0	1,749.6	2,129.6	0.0	0.0	3,484.2	3,484.6	0.0	0.0	25,956.4	26,300.6
Pennsylvania	10,070.5	8,504.5	1,677.4	1,677.4	2,902.6	2,576.6	13,313.4	13,618.4	67.0	67.0	1,625.3	1,625.3	100.4	100.4	29,756.6	28,169.6
East North Central	17,043.4	17,001.6	25,915.5	25,528.0	3,901.4	3,283.4	62,768.3	66,347.9	317.6	521.6	2,729.8	2,739.9	1,139.9	1,173.1	113,815.9	116,595.5
Illinois	3,549.8	3,543.0	10,164.4	10,164.4	278.2	278.2	14,644.6	15,204.6	0.0	0.0	685.7	680.3	114.5	117.7	29,437.2	29,988.2
Indiana	2,480.2	2,480.2	3,127.6	3,142.6	706.1	88.1	16,111.4	17,416.9	70.0	274.0	270.3	273.3	588.3	588.3	23,353.9	24,263.4
Michigan	4,296.5	4,296.5	3,833.7	3,431.2	2,465.8	2,465.8	9,451.0	10,837.5	47.2	47.2	530.5	543.0	250.0	250.0	20,874.7	21,871.2
Ohio	4,076.0	4,041.0	5,427.7	5,427.7	131.4	131.4	15,189.9	15,259.9	142.0	142.0	645.9	645.9	187.1	217.1	25,800.0	25,865.0
Wisconsin	2,640.9	2,640.9	3,362.1	3,362.1	319.9	319.9	7,371.4	7,629.0	58.4	58.4	597.4	597.4	0.0	0.0	14,350.1	14,607.7
West North Central	6,034.9	5,917.9	11,415.8	11,393.8	3,901.8	3,793.1	35,132.4	36,376.1	32.0	32.0	4,096.1	4,094.6	8.4	8.4	60,621.4	61,615.9
Iowa	1,125.8	1,125.8	1,140.6	1,105.6	572.8	467.4	5,681.7	6,205.9	32.0	32.0	1,014.3	1,013.4	0.0	0.0	9,567.2	9,950.1
Kansas	266.0	149.0	2,171.8	2,184.8	2,054.5	2,200.0	4,687.2	4,865.2	0.0	0.0	537.3	535.6	0.0	0.0	9,716.8	9,934.6
Minnesota	2,173.2	2,173.2	2,534.1	2,534.1	325.8	353.8	4,300.1	4,380.1	0.0	0.0	799.4	800.5	0.0	0.0	10,132.6	10,241.7
Missouri	1,837.3	1,837.3	3,395.2	3,395.2	349.9	349.9	11,932.0	12,219.5	0.0	0.0	1,144.7	1,144.7	0.0	0.0	18,659.1	18,946.6
Nebraska	342.6	342.6	1,151.5	1,151.5	590.1	413.3	3,842.0	4,016.0	0.0	0.0	313.7	313.7	0.0	0.0	6,239.9	6,237.1
North Dakota	0.0	0.0	328.0	328.0	0.0	0.0	4,214.4	4,214.4	0.0	0.0	64.7	64.7	8.4	8.4	4,615.5	4,615.5
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	475.0	475.0	0.0	0.0	222.0	222.0	0.0	0.0	1,690.3	1,690.3
South Atlantic	51,253.3	48,598.2	31,111.9	31,110.1	7,071.1	7,176.8	58,322.6	60,166.6	83.8	83.8	11,782.4	12,069.4	135.0	135.0	159,760.1	159,339.9
Delaware	1,512.0	1,512.0	311.0	311.0	876.9	876.0	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,359.0	3,358.1
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	27,505.6	26,293.6	7,500.2	7,481.4	3,027.7	3,138.7	10,234.0	10,591.0	0.0	0.0	5,844.9	5,972.9	0.0	0.0	54,112.4	53,477.6
Georgia	7,953.2	7,953.2	7,840.0	7,857.0	789.4	789.4	9,353.5	9,508.5	83.8	83.8	937.0	999.0	0.0	0.0	26,956.9	27,190.9
Maryland	250.0	250.0	1,581.0	1,581.0	1,415.8	1,489.8	4,712.0	4,712.0	0.0	0.0	1,597.9	1,648.9	0.0	0.0	9,556.7	9,681.7
North Carolina	4,766.0	4,766.0	6,049.7	6,049.7	0.0	0.0	10,802.8	10,802.8	0.0	0.0	402.8	402.8	0.0	0.0	22,021.3	22,021.3
South Carolina	2,409.0	2,409.0	2,855.6	2,855.6	296.0	296.0	5,547.0	5,547.0	0.0	0.0	525.4	577.4	0.0	0.0	11,633.0	11,687.2
Virginia	6,857.5	5,414.4	3,894.1	3,894.1	583.3	584.7	4,264.3	4,934.3	0.0	0.0	2,349.3	2,343.3	0.0	0.0	17,948.5	17,170.8
West Virginia	0.0	0.0	1,071.3	1,071.3	82.0	0.0	12,999.0	13,661.0	0.0	0.0	11.0	11.0	0.0	0.0	14,163.3	14,743.3
East South Central	19,040.8	19,040.8	13,003.3	13,003.3	4,055.0	3,887.0	29,432.4	31,808.4	0.0	0.0	217.0	217.0	99.8	99.8	65,848.3	68,056.3
Alabama	9,397.8	9,397.8	2,530.6	2,530.6	636.3	636.3	7,507.4	8,691.4	0.0	0.0	42.6	42.6	99.8	99.8	20,214.5	21,398.5
Kentucky	663.3	663.3	4,976.6	4,976.6	260.0	0.0	13,027.7	13,441.7	0.0	0.0	76.9	76.9	0.0	0.0	19,004.5	19,158.5
Mississippi	7,576.7	7,576.7	1,718.9	1,718.9	3,155.5	3,247.5	1,820.0	1,820.0	0.0	0.0	44.3	44.3	0.0	0.0	14,315.4	14,407.4
Tennessee	1,403.0	1,403.0	3,777.2	3,777.2	3.2	3.2	7,077.3	7,855.3	0.0	0.0	53.2	53.2	0.0	0.0	12,313.9	13,091.9
West South Central	58,971.1	58,937.1	13,388.9	12,809.9	35,015.1	34,964.6	36,432.5	37,420.5	959.3	959.3	181.3	181.3	659.8	659.8	145,608.0	145,932.5
Arkansas	4,602.9	4,602.9	725.8	725.8	816.3	816.3	5,122.4	5,122.4	0.0	0.0	12.2	12.2	0.0	0.0	11,279.6	11,279.6
Louisiana	7,521.4	7,525.4	2,359.1	2,358.1	9,117.8	9,057.6	2,855.1	2,855.1	895.5	895.5	45.5	45.5	407.4	407.4	23,201.8	23,144.6
Oklahoma	6,720.2	6,720.2	1,292.2	1,292.2	5,264.9	5,321.1	4,866.5	5,326.5	0.0	0.0	74.4	74.4	0.0	0.0	18,218.2	18,734.4
Texas	40,126.6	40,088.6	9,011.8	8,433.8	19,816.1	19,769.6	23,588.5	24,116.5	63.8	63.8	49.2	49.2	252.4	252.4	92,908.4	92,773.9
Mountain	22,487.3	22,486.9	8,926.6	8,885.6	3,196.9	3,238.7	28,942.6	28,942.6	52.0	52.0	370.8	370.8	111.6	111.6	64,087.8	64,088.2
Arizona	9,866.7	9,866.3	2,367.6	2,367.6	1,147.6	1,147.6	5,910.0	5,910.0	0.0	0.0	90.5	90.5	0.0	0.0	19,382.4	19,382.0
Colorado	3,240.5	3,240.5	2,535.3	2,535.3	329.0	389.0	5,089.8	5,089.8	0.0	0.0	168.4	168.4	0.0	0.0	11,363.0	11,423.0
Idaho	568.5	568.5	562.1	562.1	4.3	4.3	17.2	17.2	0.0	0.0	5.4	5.4	0.0	0.0	1,157.5	1,157.5
Montana	0.0	0.0	321.6	321.6	72.2	54.0	2,293.1	2,293.1	52.0	52.0	0.0	0.0	1.5	1.5	2,740.4	2,722.2
Nevada	5,418.6	5,418.6	1,385.6	1,385.6	451.1	451.1	997.4	997.4	0.0	0.0	6.0	6.0	0.0	0.0	8,258.7	8,258.7
New Mexico	1,469.0	1,469.0	1,080.6	1,039.6	849.4	849.4	3,471.0	3,471.0	0.0	0.0	66.9	66.9	0.0	0.0	6,936.9	6,895.9
Utah	1,830.0	1,830.0	520.2	520.2	330.4	330.4	4,754.0	4,754.0	0.0	0.0	27.8	27.8	0.0	0.0	7,462.4	7,462.4
Wyoming	94.0	94.0	153.6	153.6	12.9	12.9	6,410.1	6,410.1	0.0	0.0	5.8	5.8	110.1	110.1	6,786.5	6,786.5
Pacific Contiguous	25,993.0	25,151.4	11,658.7	11,505.2	11,890.1	12,666.5	2,015.0	2,015.0	17.0	17.0	422.3	422.3	209.3	209.3	52,205.4	51,986.7
California	19,892.9	19,571.3	10,763.5	10,610.0	11,638.1	12,414.5	90.0	90.0	17.0	17.0	407.1	407.1	209.3	209.3	43,017.9	43,319.2
Oregon	3,429.6	2,916.6	133.8	133.8	224.4	224.4	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	4,372.8	3,859.8
Washington	2,670.5	2,663.5	761.4	761.4	27.6	27.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	4,814.7	4,807.7
Pacific Noncontiguous	418.0	418.0	654.3	654.3	175.0	175.0	333.8	283.8	0.0	0.0	2,568.7	2,584.7	9.6	9.6	4,159.4	4,125.4
Alaska	418.0	418.0	654.3	654.3	175.0	175.0	153.8	103.8	0.0	0.0	701.1	702.1				

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2016

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	
2016	1	40577	American Mun Power-Ohio, Inc	Electric Utility	Cannelton Hydroelectric Plant	KY	57399	CG1	29.3	Conventional Hydroelectric	WAT	HY	
2016	1	40577	American Mun Power-Ohio, Inc	Electric Utility	Willow Island Hydroelectric Plant	WV	57401	WIG1	22.0	Conventional Hydroelectric	WAT	HY	
2016	1	59247	Bearford Solar II LLC	IPP	Bearford Solar II	NC	59488	BEARF	4.9	Solar Photovoltaic	SUN	PV	
2016	1	58562	Blueberry One, LLC	IPP	Blueberry One	NC	58605	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	1	59858	Chei Solar LLC	IPP	Chei Solar	NC	59508	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	1	7977	City of Hamilton - (OH)	Electric Utility	Meldahl Hydroelectric Project	KY	56872		2	35.0	Conventional Hydroelectric	WAT	HY
2016	1	59693	Cline Solar Farm LLC	IPP	Cline Solar Farm, LLC	NC	59929	NB007	4.9	Solar Photovoltaic	SUN	PV	
2016	1	59692	Coats Solar Farm LLC	IPP	Coats Solar Farm, LLC	NC	59937	NB006	4.9	Solar Photovoltaic	SUN	PV	
2016	1	5109	DTE Electric Company	Electric Utility	Greenwood Solar Farm	MI	60019		1	1.9	Solar Photovoltaic	SUN	PV
2016	1	57170	EDF Renewable Asset Holdings, Inc.	IPP	Milo Wind Project LLC	NM	59838	GEN1	50.0	Onshore Wind Turbine	WND	WT	
2016	1	58873	Green Energy Team LLC	IPP	Biomass to Energy Facility, Kauai	HI	59035	MKA1	8.3	Other Waste Biomass	AB	ST	
2016	1	59835	Green Farm Solar LLC	IPP	Green Farm	NC	59148	GREEN	5.0	Solar Photovoltaic	SUN	PV	
2016	1	59853	Happy Solar LLC	IPP	Happy Solar	NC	59512	PV1	4.0	Solar Photovoltaic	SUN	PV	
2016	1	9267	Hoosier Energy R E C, Inc	Electric Utility	New Castle Solar RES	IN	59981	PV1	1.1	Solar Photovoltaic	SUN	PV	
2016	1	9324	Indiana Michigan Power Co	Electric Utility	Deer Creek PV	IN	59855	DCPV1	2.5	Solar Photovoltaic	SUN	PV	
2016	1	59285	Innovative Solar 6, LLC	IPP	Innovative Solar 6	NC	59542	IS6	3.6	Solar Photovoltaic	SUN	PV	
2016	1	59447	Innovative Solar 64, LLC	IPP	Innovative Solar 64	NC	59677	IS064	4.9	Solar Photovoltaic	SUN	PV	
2016	1	59851	Jacob Solar LLC	IPP	Jacob Solar	NC	59503	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	1	58891	Jericho Power LLC	IPP	Jericho Power	NH	59070	WT 1	12.1	Onshore Wind Turbine	WND	WT	
2016	1	59850	Kenneth Solar LLC	IPP	Kenneth Solar	NC	59507	PV1	3.0	Solar Photovoltaic	SUN	PV	
2016	1	58679	Kirkwall Holdings, LLC	IPP	Kirkwall Holdings	NC	58791	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	1	59245	Lanier Solar	IPP	Lanier Solar	NC	59486	LANIE	4.9	Solar Photovoltaic	SUN	PV	
2016	1	58451	McCoy Solar, LLC	IPP	McCoy Solar Energy Project	CA	58462	BLK7	41.9	Solar Photovoltaic	SUN	PV	
2016	1	59691	Meadowbrook Solar Farm LLC	IPP	Meadowbrook Solar Farm	NC	59936	NB008	4.9	Solar Photovoltaic	SUN	PV	
2016	1	12341	MidAmerican Energy Co	Electric Utility	Adams Wind	IA	59637	ADWF4	46.9	Onshore Wind Turbine	WND	WT	
2016	1	59857	Murdock Solar LLC	IPP	Murdock Solar	NC	59509	PV1	4.0	Solar Photovoltaic	SUN	PV	
2016	1	59262	NRG Solar Oasis, LLC	IPP	NRG Solar Oasis LLC	CA	59528	OASIS	20.0	Solar Photovoltaic	SUN	PV	
2016	1	59899	OEE XVII, LLC	Commercial	Harpster Wind	OH	60126	H1	1.5	Onshore Wind Turbine	WND	WT	
2016	1	56545	Pattern Operators LP	IPP	Fowler Ridge IV Wind Farm LLC	IN	59547		1	150.0	Onshore Wind Turbine	WND	WT
2016	1	59514	River Mountains Solar, LLC	IPP	River Mountains Solar	NV	59747		1	14.4	Solar Photovoltaic	SUN	PV
2016	1	59363	Silver State Solar Power South, LLC	IPP	Silver State Solar Power South	NV	58644	BLK4	35.7	Solar Photovoltaic	SUN	PV	
2016	1	59836	Simons Solar Farm LLC	IPP	Simons Farm	NC	59149	SIMON	5.0	Solar Photovoltaic	SUN	PV	
2016	1	60183	SolNCPower10, LLC	IPP	Herford Solar Farm	NC	60384	HERT	5.0	Solar Photovoltaic	SUN	PV	
2016	1	58674	Sonne One, LLC	IPP	Sonne One	NC	58782	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	1	60212	South Winston Farm, LLC	IPP	South Winston Farm, LLC	NC	60409	SWFFPV	5.2	Solar Photovoltaic	SUN	PV	
2016	1	17650	Southern Power Co	IPP	Stalene Solar	CA	58646	STL3	37.9	Solar Photovoltaic	SUN	PV	
2016	1	58661	Sustainable Power Group, LLC	IPP	SEPV 18	CA	59730	SPV18	2.0	Solar Photovoltaic	SUN	PV	
2016	1	59412	Tarboro Solar LLC	IPP	Tarboro Solar	NC	59648	5MWPV	5.0	Solar Photovoltaic	SUN	PV	
2016	1	59690	Vance Solar Farm LLC	IPP	Vance Solar Farm, LLC	NC	59928	NB007	4.9	Solar Photovoltaic	SUN	PV	
2016	1	56948	Waverly Wind Farm LLC	IPP	Waverly Wind Farm LLC	KS	57614	GEN1	199.0	Onshore Wind Turbine	WND	WT	
2016	2	59841	70SM1 8ME LLC	IPP	Calipatria Solar Farm	CA	59088	GEN 1	20.0	Solar Photovoltaic	SUN	PV	
2016	2	40577	American Mun Power-Ohio, Inc	Electric Utility	Willow Island Hydroelectric Plant	WV	57401	WIG2	22.0	Conventional Hydroelectric	WAT	HY	
2016	2	7977	City of Hamilton - (OH)	Electric Utility	Meldahl Hydroelectric Project	KY	56872		1	35.0	Conventional Hydroelectric	WAT	HY
2016	2	10908	City of Lenox - (IA)	Electric Utility	Lenox	IA	1158		5	1.8	Petroleum Liquids	DFO	IC
2016	2	56769	Consolidated Edison Development Inc.	IPP	Corcoran Solar 3	CA	59900	C3CA	20.0	Solar Photovoltaic	SUN	PV	
2016	2	57365	Consolidated Edison Solutions Inc	IPP	CES Cherry Hill Solar	NJ	60201	CHNJ	1.2	Solar Photovoltaic	SUN	PV	
2016	2	16064	Graphic Packaging International	Industrial	Plant 31 Paper Mill	LA	50028	GEN7	32.0	Natural Gas Fired Combined Cycle	NG	CC	
2016	2	59784	Innovative Solar 63, LLC	IPP	Innovative Solar 63, LLC	NC	60053	FLS1	4.9	Solar Photovoltaic	SUN	PV	
2016	2	59937	Lemoore PV1, LLC	IPP	Lemoore 1	CA	60142	LEPV1	1.5	Solar Photovoltaic	SUN	PV	
2016	2	59791	Lindberg Field Solar I LLC	IPP	Lindberg Field Solar	CA	60060	SDIA2	2.1	Solar Photovoltaic	SUN	PV	
2016	2	59996	Long Farm 46 Solar, LLC	IPP	Long Farm 46 Solar, LLC	NC	60208	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	2	17470	PUD 1 of Snohomish County	Electric Utility	MESA 1	WA	60016	B	1.0	Batteries	MWH	BA	
2016	2	57313	SolarCity Corporation	IPP	Onondaga County - Metro Water Board	NY	60097	PV1	1.0	Solar Photovoltaic	SUN	PV	
2016	2	57313	SolarCity Corporation	IPP	Town of Needham VNEM	MA	60110	PV1	3.0	Solar Photovoltaic	SUN	PV	
2016	2	57313	SolarCity Corporation	IPP	Williamsburg Solar LLC VNEM	MA	60111	PV1	2.2	Solar Photovoltaic	SUN	PV	
2016	2	17650	Southern Power Co	IPP	Butler Solar Farm 20	GA	59891		1	20.0	Solar Photovoltaic	SUN	PV
2016	2	17650	Southern Power Co	IPP	Stalene Solar	CA	58646	STL4	37.9	Solar Photovoltaic	SUN	PV	
2016	2	59788	Steel Bridge Solar, LLC	IPP	Steel Bridge Solar, LLC	OR	60057	STEEL	2.3	Solar Photovoltaic	SUN	PV	
2016	2	59885	UIL Distributed Resources, LLC	IPP	UDR Glastonbury Fuel Cell	CT	60109	UDRFC	2.5	Other Natural Gas	NG	FC	
2016	2	59969	Whitethorn Solar LLC	IPP	Whitethorn Solar LLC	CA	60193	GEN1	3.3	Solar Photovoltaic	SUN	PV	
2016	2	58984	Winton Solar LLC	IPP	Winton Solar	NC	59177	5MWPV	5.0	Solar Photovoltaic	SUN	PV	
2016	3	40577	American Mun Power-Ohio, Inc	Electric Utility	Cannelton Hydroelectric Plant	KY	57399	CG2	29.3	Conventional Hydroelectric	WAT	HY	
2016	3	59789	Avalon Solar Partners II, LLC	IPP	Avalon Solar II	AZ	60062	ASII	16.0	Solar Photovoltaic	SUN	PV	
2016	3	59842	Blythe Solar 110, LLC	IPP	Blythe Solar 110, LLC	CA	60093	BLCK1	38.7	Solar Photovoltaic	SUN	PV	
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		10	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		11	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		5	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		6	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		7	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		8	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	298	City of Alexandria - (LA)	Electric Utility	D G Hunter	LA	6558		9	8.6	Natural Gas Internal Combustion Engine	NG	IC
2016	3	20069	City of Wamego - (KS)	Electric Utility	Wamego	KS	1328		10	2.9	Natural Gas Internal Combustion Engine	NG	IC
2016	3	60250	DG Bethlehem Solar, LLC	IPP	Bethlehem - East	NY	60477	BE	1.7	Solar Photovoltaic	SUN	PV	
2016	3	60250	DG Bethlehem Solar, LLC	IPP	Bethlehem - West	NY	60478	BW	1.0	Solar Photovoltaic	SUN	PV	
2016	3	60054	Duke Energy Florida Solar Solutions	Electric Utility	Walt Disney World Solar Facility	FL	59973	WDS1	4.9	Solar Photovoltaic	SUN	PV	
2016	3	6455	Duke Energy Florida, Inc	Electric Utility	Osceola Solar Facility	FL	59954	XXXX	3.8	Solar Photovoltaic	SUN	PV	
2016	3	3046	Duke Energy Progress - (NC)	Electric Utility	Elm City Solar Facility	NC	59164	NSC 1	17.6	Solar Photovoltaic	SUN	PV	
2016	3	57249	EPP Renewable Energy	IPP	Nashua Plant	NH	55006	UNT3	1.5	Landfill Gas	LFG	IC	
2016	3	59735	Enerparc CA2, LLC	IPP	Enerparc CA2, LLC	CA	59978	ECA22	1.5	Solar Photovoltaic	SUN	PV	
2016	3	59402	Garysburg Solar LLC	IPP	Garysburg Solar	NC	59641	5MWPV	5.0	Solar Photovoltaic	SUN	PV	
2016	3	7353	Golden Valley Elec Assn Inc	Electric Utility	Healy	AK	6288		2	50.0	Conventional Steam Coal	LIG	ST
2016	3	59209	Half Moon Ventures, LLC	IPP	HMV Minster Energy Storage System	OH	60299	MIN02	7.0	Batteries	MWH	BA	
2016	3	59971	Kenansville Solar 2 LLC	IPP	Kenansville Solar 2, LLC	NC	58803	INV1	0.5	Solar Photovoltaic	SUN	PV	
2016	3	59971	Kenansville Solar 2 LLC	IPP	Kenansville Solar 2, LLC	NC	58803	INV2	0.5	Solar Photovoltaic	SUN	PV	
2016	3	59971	Kenansville Solar 2 LLC	IPP	Kenansville Solar 2, LLC	NC	58803	INV3	0.5	Solar Photovoltaic	SUN	PV	
2016	3	59971	Kenansville Solar 2 LLC	IPP	Kenansville Solar 2, LLC	NC	58803	INV4	0.5	Solar Photovoltaic	SUN	PV	
2016	3	58773	Kingfisher Wind LLC	IPP	Kingfisher Wind LLC	OK	58902	KNG1	298.0	Onshore Wind Turbine	WND	WT	
2016	3	58451	McCoy Solar, LLC	IPP	McCoy Solar Energy Project	CA	58462		1	41.9	Solar Photovoltaic	SUN	PV
2016	3	12320	Merck & Co Inc	Industrial	Elkton	VA	52148	GEN3	1.0	Natural Gas Internal Combustion Engine	NG	IC	
2016	3	12320	Merck & Co Inc	Industrial	Elkton	VA	52148	GEN4	0.3	Natural Gas Internal Combustion Engine	NG	IC	
2016	3	60161	Snow Camp, LLC	IPP	Snow Camp Solar, LLC	NC	60367	SCSPV	5.2	Solar Photovoltaic	SUN	PV	
2016	3	17650	Southern Power Co	IPP	Pawpaw Solar Plant	GA	59894		1	30.0	Solar Photovoltaic	SUN	PV
2016	3	59139	SunEdison LLC	IPP	SunE - E Philadelphia Ontario	CA	59916	12307	1.0	Solar Photovoltaic	SUN	PV	
2016	3	58661	Sustainable Power Group, LLC	IPP	Latigo Wind Park	UT	59965	LTIGO	62.1	Onshore Wind Turbine	WND	WT	
2016	3	19876	Virginia Electric & Power Co	Electric Utility	Philip Morris	VA	59911		1	2.0	Solar Photovoltaic	SUN	PV
2016	4	59912	Amethyst Solar LLC	IPP	Amethyst Solar	NC	58730	PV1	3.0	Solar Photovoltaic	SUN	PV	
2016	4	59910	Audrey Solar LLC	IPP	Audrey Solar	NC	58732	PV1	3.0	Solar Photovoltaic	SUN	PV	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 1	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 2	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 3	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 5	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 6	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 7	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 8	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 9	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 10	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 11	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN 12	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Ball Mountain Hydro	VT	59040	GEN4	0.2	Conventional Hydroelectric	WAT	HY	
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN1	0.1	Conventional Hydroelectric	WAT	HY	

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2016

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN10	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN11	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN12	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN2	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN3	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN4	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN5	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN6	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN7	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN8	0.1	Conventional Hydroelectric	WAT	HY
2016	4	58877	Blue Heron Hydro LLC	IPP	Townshend Hydro	VT	59089	GEN9	0.1	Conventional Hydroelectric	WAT	HY
2016	4	59842	Blythe Solar 110, LLC	IPP	Blythe Solar 110, LLC	CA	60093	BLCK2	36.3	Solar Photovoltaic	SUN	PV
2016	4	59842	Blythe Solar 110, LLC	IPP	Blythe Solar 110, LLC	CA	60093	BLCK3	34.8	Solar Photovoltaic	SUN	PV
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN01	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN02	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN03	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN04	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN05	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN06	3.4	Landfill Gas	LFG	IC
2016	4	59228	Bowerman Power LFG, LLC	IPP	Bowerman Power LFG, LLC	CA	59461	GEN07	3.4	Landfill Gas	LFG	IC
2016	4	57260	CSOLAR IV West LLC	IPP	Imperial Solar Energy Center West	CA	57491	56819	148.7	Solar Photovoltaic	SUN	PV
2016	4	7977	City of Hamilton - (OH)	Electric Utility	Meldahl Hydroelectric Project	KY	56872	3	35.0	Conventional Hydroelectric	WAT	HY
2016	4	4254	Consumers Energy Co	Electric Utility	Grand Valley Solar Gardens	MI	60118	1	3.0	Solar Photovoltaic	SUN	PV
2016	4	59745	First Solar Asset Management	IPP	Kingbird A Solar LLC	CA	59868	GEN01	20.0	Solar Photovoltaic	SUN	PV
2016	4	59745	First Solar Asset Management	IPP	Kingbird B Solar, LLC	CA	60091	GEN01	20.0	Solar Photovoltaic	SUN	PV
2016	4	6452	Florida Power & Light Co	Electric Utility	Port Everglades	FL	617	5A	1,260.0	Natural Gas Fired Combined Cycle	NG	CT
2016	4	6452	Florida Power & Light Co	Electric Utility	Port Everglades	FL	617	5B		Natural Gas Fired Combined Cycle	NG	CT
2016	4	6452	Florida Power & Light Co	Electric Utility	Port Everglades	FL	617	5C		Natural Gas Fired Combined Cycle	NG	CT
2016	4	6452	Florida Power & Light Co	Electric Utility	Port Everglades	FL	617	5T		Natural Gas Fired Combined Cycle	NG	CA
2016	4	59403	Gaston Solar LLC	IPP	Gaston Solar	NC	59642	5MWV	5.0	Solar Photovoltaic	SUN	PV
2016	4	59462	Heelstone Energy Holdings, LLC	IPP	Crestwood Solar Center LLC	NC	59914	CREST	5.0	Solar Photovoltaic	SUN	PV
2016	4	49893	Invenery Services LLC	IPP	Prairie Breeze III	NE	60314	GEN1	35.8	Onshore Wind Turbine	WND	WT
2016	4	58451	McCoy Solar, LLC	IPP	McCoy Solar Energy Project	CA	58462	BLK2	21.0	Solar Photovoltaic	SUN	PV
2016	4	12524	Midwest Energy Inc	Electric Utility	Goodman Energy Center	KS	56497	10	9.2	Natural Gas Internal Combustion Engine	NG	IC
2016	4	12524	Midwest Energy Inc	Electric Utility	Goodman Energy Center	KS	56497	11	9.2	Natural Gas Internal Combustion Engine	NG	IC
2016	4	12524	Midwest Energy Inc	Electric Utility	Goodman Energy Center	KS	56497	12	9.2	Natural Gas Internal Combustion Engine	NG	IC
2016	4	59911	Milo Solar LLC	IPP	Milo Solar	NC	58739	PV1	3.0	Solar Photovoltaic	SUN	PV
2016	4	59913	Minnie Solar LLC	IPP	Minnie Solar	NC	58740	PV1	3.0	Solar Photovoltaic	SUN	PV
2016	4	12199	Montana-Dakota Utilities Co	Electric Utility	Lewis & Clark	MT	6089	2	9.1	Natural Gas Internal Combustion Engine	NG	IC
2016	4	12199	Montana-Dakota Utilities Co	Electric Utility	Lewis & Clark	MT	6089	3	9.1	Natural Gas Internal Combustion Engine	NG	IC
2016	4	60211	Nash 97 Solar, LLC	IPP	Nash 97 Solar, LLC	NC	60408	97PV	5.2	Solar Photovoltaic	SUN	PV
2016	4	59916	Owen Solar LLC	IPP	Owen Solar	NC	58742	PV1	5.0	Solar Photovoltaic	SUN	PV
2016	4	59713	Potrero Hills Energy Producers, LLC	IPP	Potrero Hills Energy Producers	CA	59952	1	1.6	Landfill Gas	LFG	IC
2016	4	59713	Potrero Hills Energy Producers, LLC	IPP	Potrero Hills Energy Producers	CA	59952	2	1.6	Landfill Gas	LFG	IC
2016	4	59713	Potrero Hills Energy Producers, LLC	IPP	Potrero Hills Energy Producers	CA	59952	3	1.6	Landfill Gas	LFG	IC
2016	4	59713	Potrero Hills Energy Producers, LLC	IPP	Potrero Hills Energy Producers	CA	59952	4	1.6	Landfill Gas	LFG	IC
2016	4	59713	Potrero Hills Energy Producers, LLC	IPP	Potrero Hills Energy Producers	CA	59952	5	1.6	Landfill Gas	LFG	IC
2016	4	59363	Silver State Solar Power South, LLC	IPP	Silver State Solar Power South	NV	58644	BLK5	35.0	Solar Photovoltaic	SUN	PV
2016	4	59363	Silver State Solar Power South, LLC	IPP	Silver State Solar Power South	NV	58644	BLK6	36.6	Solar Photovoltaic	SUN	PV
2016	4	57313	SolarCity Corporation	IPP	Genentech-Oceanside	CA	60231	PV1	4.5	Solar Photovoltaic	SUN	PV
2016	4	59914	Sophie Solar LLC	IPP	Sophie Solar	NC	58745	PV1	4.5	Solar Photovoltaic	SUN	PV
2016	4	17609	Southern California Edison Co	Electric Utility	Tehachapi Energy Storage Project	CA	59661	TSP1	8.0	Batteries	MWH	BA
2016	4	17650	Southern Power Co	IPP	Grant Wind, LLC	OK	60013	GRANT	151.8	Onshore Wind Turbine	WND	WT
2016	4	17650	Southern Power Co	IPP	Stateline Solar	CA	58646	STL5	37.9	Solar Photovoltaic	SUN	PV
2016	4	59915	Star Solar LLC	IPP	Star Solar	NC	58746	PV1	5.0	Solar Photovoltaic	SUN	PV
2016	4	58661	Sustainable Power Group, LLC	Commercial	Southbridge Solar	MA	60278	SBRDG	1.9	Solar Photovoltaic	SUN	PV
2016	4	19497	United Illuminating Co	Electric Utility	UI RCP Bridgeport Seaside	CT	60054	BPPV	2.2	Solar Photovoltaic	SUN	PV
2016	4	19876	Virginia Electric & Power Co	Electric Utility	Brunswick County Power Station	VA	58260	CT01	263.9	Natural Gas Fired Combined Cycle	NG	CT
2016	4	19876	Virginia Electric & Power Co	Electric Utility	Brunswick County Power Station	VA	58260	CT02	263.9	Natural Gas Fired Combined Cycle	NG	CT
2016	4	19876	Virginia Electric & Power Co	Electric Utility	Brunswick County Power Station	VA	58260	CT03	263.9	Natural Gas Fired Combined Cycle	NG	CT
2016	4	19876	Virginia Electric & Power Co	Electric Utility	Brunswick County Power Station	VA	58260	ST01	579.4	Natural Gas Fired Combined Cycle	NG	CA
2016	4	19876	Virginia Electric & Power Co	Electric Utility	Western Branch High School	VA	59904	1	1.0	Solar Photovoltaic	SUN	PV
2016	4	58982	Woodland Solar LLC	IPP	Woodland Solar	NC	59175	5MWV	5.0	Solar Photovoltaic	SUN	PV
2016	4	60059	ZGlobal Inc	IPP	Castor Solar	CA	60277	CASTR	1.5	Solar Photovoltaic	SUN	PV
2016	5	60281	Altus Power America Management, LLC	IPP	Rail Trail	MA	60492	PV1	2.0	Solar Photovoltaic	SUN	PV
2016	5	60281	Altus Power America Management, LLC	IPP	Rising Paper	MA	60493	1	2.5	Solar Photovoltaic	SUN	PV
2016	5	59359	BHE Renewables, LLC	IPP	Marshall Wind Farm	KS	59084	RPMA	73.8	Onshore Wind Turbine	WND	WT
2016	5	60157	Battleboro Farm, LLC	IPP	Battleboro Farm	NC	60369	BFPV	5.2	Solar Photovoltaic	SUN	PV
2016	5	58468	Dominion Renewable Energy	IPP	Marin Carport	CA	59703	1	1.0	Solar Photovoltaic	SUN	PV
2016	5	56215	E ON Climate Renewables N America LLC	IPP	Colbec's Corner, LLC	TX	59068	GV11	200.0	Onshore Wind Turbine	WND	WT
2016	5	49942	Eagle Point Power Generation LLC	IPP	Eagle Point Power Generation	NJ	50561	STG2	26.8	Natural Gas Fired Combined Cycle	NG	CA
2016	5	58135	Ecos Energy LLC	IPP	Sudbury Solar	VT	60344	SUD	2.0	Solar Photovoltaic	SUN	PV
2016	5	5701	El Paso Electric Co	Electric Utility	Montana Power Station	TX	58562	GT-3	100.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	5860	Empire District Electric Co	Electric Utility	Riverton	KS	1239	12-2	117.0	Natural Gas Fired Combined Cycle	NG	CA
2016	5	6452	Florida Power & Light Co	Electric Utility	Daytona International Speedway Solar	FL	60005	1	0.8	Solar Photovoltaic	SUN	PV
2016	5	6452	Florida Power & Light Co	Electric Utility	FIU Solar	FL	60006	1	0.8	Solar Photovoltaic	SUN	PV
2016	5	7349	Golden Spread Electric Cooperative, Inc	Electric Utility	Elk Station	TX	58835	ELK2	189.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	7349	Golden Spread Electric Cooperative, Inc	Electric Utility	Elk Station	TX	58835	ELK3	189.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	60187	Granger Energy of Morgantown	IPP	Granger Energy of Morgantown	PA	60388	GEMT	1.6	Landfill Gas	LFG	IC
2016	5	10171	Kentucky Utilities Co	Electric Utility	E W Brown	KY	1355	SOLAR	10.0	Solar Photovoltaic	SUN	PV
2016	5	56990	NJR Clean Energy Ventures Corporation	IPP	East Amwell	NJ	60327	AMWEL	1.8	Solar Photovoltaic	SUN	PV
2016	5	56990	NJR Clean Energy Ventures Corporation	IPP	Junction Road	NJ	60265	JUNCT	4.4	Solar Photovoltaic	SUN	PV
2016	5	56990	NJR Clean Energy Ventures Corporation	IPP	Sharon Station	NJ	60267	SHRN1	2.7	Solar Photovoltaic	SUN	PV
2016	5	59893	Northern Water Hydropower Enterprise	Commercial	Granby Hydro	CO	60119	GEN1	1.2	Conventional Hydroelectric	WAT	HY
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG1	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG10	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG2	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG3	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG4	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG5	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG6	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG7	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG8	0.6	Petroleum Liquids	DFO	IC
2016	5	40229	Old Dominion Electric Coop	Electric Utility	Monterey Diesel Generation Facility	VA	59614	MDG9	0.6	Petroleum Liquids	DFO	IC
2016	5	59766	SR Jenkins, LLC	IPP	SR Jenkins Ft Lupton	CO	60023	FTLUP	13.0	Solar Photovoltaic	SUN	PV
2016	5	58544	Sierra Nevada Brewing Co	Industrial	Sierra Nevada Brewing Co	CA	58585	COGN	1.7	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	59363	Silver State Solar Power South, LLC	IPP	Silver State Solar Power South	NV	58644	BLK7	35.0	Solar Photovoltaic	SUN	PV
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT1	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT2	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT3	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT4	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT5	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	59698	Sky Global Power One Pledgor, LLC	IPP	Sky Global Power One	TX	59938	UNIT6	8.3	Natural Gas Internal Combustion Engine	NG	IC
2016	5	60117	SunShare	IPP	Jeffco Community Solar Gardens, LLC	CO	60320	SSCO1	1.2	Solar Photovoltaic	SUN	PV
2016	5	58661	Sustainable Power Group, LLC	IPP	Central Antelope Dry Ranch C	CA	59963	CADRC	20.0	Solar Photovoltaic	SUN	PV
2016	5	59570	TWE Kelford Solar Project, LLC	IPP	Kelford	NC	59796	FLS1	4.7	Solar Photovoltaic	SUN	PV
2016	5	40575	Utah Associated Mun Power Sys	Electric Utility	Veyo Heat Recovery Project	UT	60421	WHR1	8.4	All Other	WH	ST
2016	5	60067	Westside Assets LLC	IPP	Westside Solar Power PV1	CA	60275	WSPV1	2.0	Solar Photovoltaic	SUN	PV
2016	6	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	5A	0.8	Petroleum Liquids	DFO	IC
2016	6	40577	American Mun Power-Ohio, Inc	Electric Utility	Cannelton Hydroelectric Plant	KY	57399	CG3	29.3	Conventional Hydroelectric	WAT	HY

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2016

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	
2016	6	58685	Beaver Dam Energy LLC	IPP	Beaver Dam	PA	58811	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	
2016	6	58685	Beaver Dam Energy LLC	IPP	Beaver Dam	PA	58811	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	
2016	6	58685	Beaver Dam Energy LLC	IPP	Beaver Dam	PA	58811	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	
2016	6	58685	Beaver Dam Energy LLC	IPP	Beaver Dam	PA	58811	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	
2016	6	58685	Beaver Dam Energy LLC	IPP	Beaver Dam	PA	58811	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	
2016	6	58695	Coronal Development Services	IPP	Holdrege Solar Center	NE	59713	HDS	4.0	Solar Photovoltaic	SUN	PV	
2016	6	59263	Fresh Air Energy XVIII, LLC	IPP	Meadows PV 1	NC	59513	MEAD1	20.0	Solar Photovoltaic	SUN	PV	
2016	6	59776	Frontier Solar, LLC	IPP	Frontier Solar LLC	CA	60039	FTRS	20.0	Solar Photovoltaic	SUN	PV	
2016	6	9273	Indianapolis Power & Light Co	Electric Utility	Harding Street	IN	990	BAT1	20.0	Batteries	MWH	BA	
2016	6	49893	Invenery Services LLC	IPP	Gunsight Mountain Wind Energy LLC	TX	56776		1	120.0	Onshore Wind Turbine	WND	WT
2016	6	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Greenwood (MO)	MO	6074		5	3.0	Solar Photovoltaic	SUN	PV
2016	6	26253	Louisiana Energy & Power Authority	Electric Utility	LEPA Unit No. 1	LA	58478	LEPA1	59.0	Natural Gas Fired Combined Cycle	NG	CC	
2016	6	58451	McCoy Solar, LLC	IPP	McCoy Solar Energy Project	CA	58462	BLK3	39.6	Solar Photovoltaic	SUN	PV	
2016	6	12397	Metropolitan Water District of S CA	Electric Utility	Weymouth Solar Plant	CA	60255		1	2.0	Solar Photovoltaic	SUN	PV
2016	6	12397	Metropolitan Water District of S CA	Electric Utility	Weymouth Solar Plant	CA	60255		2	1.0	Solar Photovoltaic	SUN	PV
2016	6	58417	Panda Liberty O&M LLC	IPP	Panda Liberty Generation Plant	PA	58420	GEN1	376.0	Natural Gas Fired Combined Cycle	NG	CS	
2016	6	16179	Rochelle Municipal Utilities	Electric Utility	South Main Street	IL	961		16	1.8	Petroleum Liquids	DFO	IC
2016	6	16179	Rochelle Municipal Utilities	Electric Utility	South Main Street	IL	961		17	1.8	Petroleum Liquids	DFO	IC
2016	6	16179	Rochelle Municipal Utilities	Electric Utility	South Main Street	IL	961		18	1.8	Petroleum Liquids	DFO	IC
2016	6	59404	Seaboard Solar LLC	IPP	Seaboard Solar LLC	NC	59643	5MWPV8	5.0	Solar Photovoltaic	SUN	PV	
2016	6	59363	Silver State Solar Power South, LLC	IPP	Silver State Solar Power South	NV	58644	BLK8	16.2	Solar Photovoltaic	SUN	PV	
2016	6	60206	Solar Star California XL, LLC	IPP	RCWD PV Project	CA	60426	RCWD	1.9	Solar Photovoltaic	SUN	PV	
2016	6	59837	South Plains Wind Energy II, LLC	IPP	South Plains II	TX	60087	SP11	300.0	Onshore Wind Turbine	WND	WT	
2016	6	17650	Southern Power Co	IPP	Stateline Solar	CA	58646	STL6	37.9	Solar Photovoltaic	SUN	PV	
2016	6	58661	Sustainable Power Group, LLC	IPP	Leavenworth Greenworks LLC	NY	59276	LEAVG	9.5	Solar Photovoltaic	SUN	PV	
2016	6	58661	Sustainable Power Group, LLC	IPP	SEPV Mojave West	CA	59740	SPVMW	20.0	Solar Photovoltaic	SUN	PV	
2016	6	59328	Tart Farm, LLC	IPP	Tart Farm	NC	59583	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	6	18642	Tennessee Valley Authority	Electric Utility	Watts Bar Nuclear Plant	TN	7722		2	1,122.0	Nuclear	NUC	ST
2016	6	20910	Wolverine Power Supply Coop	Electric Utility	Alpine Power Plant	MI	59926	AI1	202.6	Natural Gas Fired Combustion Turbine	NG	GT	
2016	7	59273	62SK 8me, LLC	IPP	Springbok Solar Farm 1	CA	59532	SB1	100.0	Solar Photovoltaic	SUN	PV	
2016	7	59050	Algonquin Power Co	IPP	Odell Wind Farm	MN	58657		1	200.0	Onshore Wind Turbine	WND	WT
2016	7	59843	Blythe Solar II, LLC	IPP	Blythe Solar II, LLC	CA	60092	BLCK4	33.2	Solar Photovoltaic	SUN	PV	
2016	7	60204	CB Bladen Solar, LLC	IPP	CB Bladen Solar, LLC	NC	60402	CBPV	5.2	Solar Photovoltaic	SUN	PV	
2016	7	57044	Constellation Solar New Jersey, LLC	IPP	NHA at Mansfield NJ	NJ	60378	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	7	58468	Dominion Renewable Energy	IPP	Enterprise Solar, LLC	UT	59386	ENTS1	80.0	Solar Photovoltaic	SUN	PV	
2016	7	59765	Eight Flags Energy LLC	Electric CHP	Eight Flags Energy	FL	60025	01	19.8	Natural Gas Fired Combustion Turbine	NG	GT	
2016	7	59939	Floyd Solar, LLC	IPP	Floyd Solar, LLC	NC	60147	FLS1	6.5	Solar Photovoltaic	SUN	PV	
2016	7	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404		4	214.4	Natural Gas Fired Combined Cycle	NG	CT
2016	7	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404		5	107.2	Natural Gas Fired Combined Cycle	NG	CA
2016	7	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404		6	105.8	Natural Gas Fired Combustion Turbine	NG	GT
2016	7	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404		7	105.8	Natural Gas Fired Combustion Turbine	NG	GT
2016	7	59120	Los Vientos Windpower IV, LLC	IPP	Los Vientos Windpower IV	TX	59321	GEN1	200.0	Onshore Wind Turbine	WND	WT	
2016	7	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	UAJ16	1.2	Landfill Gas	LFG	IC	
2016	7	60145	NRG Solar Las Vegas MB 2	IPP	NRG Solar Las Vegas MB 2, LLC	NV	60350	LVMB2	1.5	Solar Photovoltaic	SUN	PV	
2016	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	6A	122.0	Conventional Hydroelectric	WAT	HY	
2016	7	58417	Panda Liberty O&M LLC	IPP	Panda Liberty Generation Plant	PA	58420	GEN2	382.5	Natural Gas Fired Combined Cycle	NG	CS	
2016	7	58421	Panda Patriot O&M LLC	IPP	Panda Patriot Generation Plant	PA	58426	GEN1	382.5	Natural Gas Fired Combined Cycle	NG	CS	
2016	7	58421	Panda Patriot O&M LLC	IPP	Panda Patriot Generation Plant	PA	58426	GEN2	382.5	Natural Gas Fired Combined Cycle	NG	CS	
2016	7	59016	Passadumkeag Windpark LLC	IPP	Passadumkeag Windpark LLC	ME	59222	Q357	39.9	Onshore Wind Turbine	WND	WT	
2016	7	15248	Portland General Electric Co	Electric Utility	Carty Generating Station	OR	58503	GEN1	300.0	Natural Gas Fired Combined Cycle	NG	CT	
2016	7	15248	Portland General Electric Co	Electric Utility	Carty Generating Station	OR	58503	GEN2	200.0	Natural Gas Fired Combined Cycle	NG	CA	
2016	7	60068	Red Horse III	IPP	Red Horse III	AZ	60285	RH3	30.0	Solar Photovoltaic	SUN	PV	
2016	7	57313	SolarCity Corporation	IPP	Chesapeake College	MD	60465	PV1	1.5	Solar Photovoltaic	SUN	PV	
2016	7	57313	SolarCity Corporation	IPP	Jackson Board of Education-Liberty HS	NJ	60113	PV1	1.2	Solar Photovoltaic	SUN	PV	
2016	7	57313	SolarCity Corporation	IPP	Oregon Convention Center	OR	60112	PV1	1.4	Solar Photovoltaic	SUN	PV	
2016	7	17650	Southern Power Co	IPP	RE Tranquility	CA	59939	TQ	205.3	Solar Photovoltaic	SUN	PV	
2016	7	17650	Southern Power Co	IPP	Stateline Solar	CA	58646	STL7	37.9	Solar Photovoltaic	SUN	PV	
2016	7	18125	Stillwater Utilities Authority	Electric Utility	Stillwater Energy Center	OK	59647		1	18.6	Natural Gas Internal Combustion Engine	NG	IC
2016	7	18125	Stillwater Utilities Authority	Electric Utility	Stillwater Energy Center	OK	59647		2	18.6	Natural Gas Internal Combustion Engine	NG	IC
2016	7	18125	Stillwater Utilities Authority	Electric Utility	Stillwater Energy Center	OK	59647		3	18.6	Natural Gas Internal Combustion Engine	NG	IC
2016	7	58661	Sustainable Power Group, LLC	IPP	Summer Solar, LLC	CA	60280	SUMSL	20.0	Solar Photovoltaic	SUN	PV	
2016	7	59598	Tooele Army Depot	IPP	Tooele Wind Turbine	UT	59817	GEN03	1.7	Onshore Wind Turbine	WND	WT	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-1	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-2	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-3	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-4	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-5	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-6	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-7	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-8	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV-9	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58600	Waihonu North LLC	IPP	Waihonu North Solar	HI	58655	INV10	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58601	Waihonu South LLC	IPP	Honbushin Solar Blessings Park	HI	58656	INV-1	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58601	Waihonu South LLC	IPP	Honbushin Solar Blessings Park	HI	58656	INV-2	0.5	Solar Photovoltaic	SUN	PV	
2016	7	58601	Waihonu South LLC	IPP	Honbushin Solar Blessings Park	HI	58656	INV-3	0.5	Solar Photovoltaic	SUN	PV	
2016	7	60237	Whitakers Farm, LLC	IPP	Whitakers Farm (Fisher Rd)	NC	60438		1	3.4	Solar Photovoltaic	SUN	PV
2016	7	59831	White Oak Solar, LLC	IPP	White Oak Solar, LLC	GA	60082	WHTOK	76.5	Solar Photovoltaic	SUN	PV	
2016	7	59803	White Pine Solar, LLC	IPP	White Pine Solar, LLC	GA	60064	WHTPN	101.2	Solar Photovoltaic	SUN	PV	
2016	7	60234	Williamston West Farm, LLC	IPP	Williamston West Farm, LLC	NC	60484		1	4.9	Solar Photovoltaic	SUN	PV
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (WI)	WI	59836		11	4.6	Conventional Hydroelectric	WAT	HY
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (WI)	WI	59836		12	4.6	Conventional Hydroelectric	WAT	HY
2016	7	20910	Wolverine Power Supply Coop	Electric Utility	Alpine Power Plant	MI	59926	AI2	202.6	Natural Gas Fired Combustion Turbine	NG	GT	
2016	8	60281	Altus Power America Management, LLC	IPP	Shirley Water	MA	60498		1	2.0	Solar Photovoltaic	SUN	PV
2016	8	59843	Blythe Solar II, LLC	IPP	Blythe Solar II, LLC	CA	60092	BLCK5	33.9	Solar Photovoltaic	SUN	PV	
2016	8	59903	Candace Solar LLC	IPP	Candace Solar	NC	59499	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	8	58519	Clean Energy Collective LLC	IPP	CPS 1	TX	60472	CPS1	1.0	Solar Photovoltaic	SUN	PV	
2016	8	59938	Cohen Farm Solar, LLC	IPP	Cohen Farm Solar, LLC	NC	60146	FLS1	6.5	Solar Photovoltaic	SUN	PV	
2016	8	56769	Consolidated Edison Development Inc.	IPP	CED Westfield Solar, LLC	MA	60274	WFMA	2.0	Solar Photovoltaic	SUN	PV	
2016	8	56769	Consolidated Edison Development Inc.	IPP	OCI Alamo 7 LLC	TX	59207	OCIA7	100.0	Solar Photovoltaic	SUN	PV	
2016	8	57365	Consolidated Edison Solutions Inc	IPP	Future Generation Wind	MA	59622	FGMA	7.9	Onshore Wind Turbine	WND	WT	
2016	8	4254	Consumers Energy Co	Electric Utility	Western Michigan Solar Gardens	MI	60117		1	1.0	Solar Photovoltaic	SUN	PV
2016	8	58468	Dominion Renewable Energy	IPP	Escalante Solar I, LLC	UT	59387	ESCS1	80.0	Solar Photovoltaic	SUN	PV	
2016	8	58468	Dominion Renewable Energy	IPP	Escalante Solar II, LLC	UT	59388	ESCS2	80.0	Solar Photovoltaic	SUN	PV	
2016	8	58468	Dominion Renewable Energy	IPP	Escalante Solar III, LLC	UT	59389	ESCS3	80.0	Solar Photovoltaic	SUN	PV	
2016	8	58468	Dominion Renewable Energy	IPP	Iron Springs Solar	UT	59941	ISS	80.0	Solar Photovoltaic	SUN	PV	
2016	8	6455	Duke Energy Florida, Inc	Electric Utility	Perry Solar Facility	FL	60071	XXXXX	5.1	Solar Photovoltaic	SUN	PV	
2016	8	59745	First Solar Asset Management	IPP	Rancho Seco Solar, LLC	CA	60226	GEN01	10.8	Solar Photovoltaic	SUN	PV	
2016	8	60235	ID Solar 1, LLC	IPP	ID Solar	ID	60445	INV1	40.0	Solar Photovoltaic	SUN	PV	
2016	8	9324	Indiana Michigan Power Co	Electric Utility	OlvePV	IN	59854	OLPV1	5.0	Solar Photovoltaic	SUN	PV	
2016	8	9324	Indiana Michigan Power Co	Electric Utility	Twin Branch PV	IN	59861	TBPV1	2.6	Solar Photovoltaic	SUN	PV	
2016	8	59897	LKL Goldfinch, LLC	IPP	Goldfinch	FL	60124	GFNCH	3.0	Solar Photovoltaic	SUN	PV	
2016	8	60190	MC1 Solar Farm, LLC	IPP	MC1 Solar	NC	60395	MC1PV	5.0	Solar Photovoltaic	SUN	PV	
2016	8	60213	Modlin Solar, LLC	IPP	Modlin Solar Farm	NC	60417	MSFPV	4.9	Solar Photovoltaic	SUN	PV	
2016	8	9436	Mosaic Phosphates Co.	Industrial	Mosaic Phosphates Uncle Sam	LA	10198	GEN3	15.0	All Other	OTH	ST	
2016	8	58489	OCI Solar Power	IPP	OCI Alamo Solar I	TX	58537	ASTRO	1.0	Batteries	MWH	BA	
2016	8	58838	Parrey, LLC	IPP	Henrietta Solar Project	CA	58975	PV1	100.0	Solar Photovoltaic	SUN	PV	
2016	8	60191	RE Barren Ridge 1, LLC	IPP	RE Barren Ridge 1	CA	60389	REBR1	60.0	Solar Photovoltaic	SUN	PV	
2016	8	58968	RE Mustang LLC	IPP	RE Mustang LLC	CA	59150	PV1	100.0	Solar Photovoltaic	SUN	PV	
2016	8	60280	River Road Solar, LLC	IPP	River Road Solar, LLC	NC	60487	PV1	5.0	Solar Photovoltaic	SUN	PV	
2016	8	59662	Riverside Fuel Cell, LLC	Commercial	Riverside RWQCP Fuel Cell	CA	59877	MB20	1.4	Other Waste Biomass	OBG	FC	

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2016

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2016	8	60209	Roswell Solar, LLC	IPP	Roswell Solar, LLC	NM	60406	RSPV	70.0	Solar Photovoltaic	SUN	PV
2016	8	57313	SolarCity Corporation	IPP	The Clorox Company	MD	60461	PV1	1.6	Solar Photovoltaic	SUN	PV
2016	8	59773	SunE Solar XVI Lessor, LLC	IPP	SunE Rochester	CA	60032	RCHTR	1.0	Solar Photovoltaic	SUN	PV
2016	8	58661	Sustainable Power Group, LLC	IPP	Antelope Big Sky Ranch	CA	60279	ABSR	20.0	Solar Photovoltaic	SUN	PV
2016	8	59963	TWE New Bern Solar Project, LLC	IPP	TWE New Bern Solar Project, LLC	NC	60191	FLS1	4.0	Solar Photovoltaic	SUN	PV
2016	8	59108	WED Coventry Four, LLC	IPP	WED Coventry 4	RI	59306	WEDC4	1.5	Onshore Wind Turbine	WND	WT
2016	8	59117	WED Coventry Six, LLC	IPP	WED Coventry 6	RI	59314	COV6	1.5	Onshore Wind Turbine	WND	WT
2016	8	59117	WED Coventry Six, LLC	IPP	WED Coventry 6	RI	59314	COV6A	1.5	Onshore Wind Turbine	WND	WT
2016	8	59117	WED Coventry Six, LLC	IPP	WED Coventry 6	RI	59314	COV6B	1.5	Onshore Wind Turbine	WND	WT
2016	8	59107	WED Coventry Three, LLC	IPP	WED Coventry 3	RI	59305	WEDC3	1.5	Onshore Wind Turbine	WND	WT
2016	8	59106	WED Coventry Two, LLC	IPP	WED Coventry 2	RI	59302	COV2	1.5	Onshore Wind Turbine	WND	WT
2016	8	59106	WED Coventry Two, LLC	IPP	WED Coventry 2	RI	59302	COV2A	1.5	Onshore Wind Turbine	WND	WT
2016	8	59106	WED Coventry Two, LLC	IPP	WED Coventry 2	RI	59302	COV2B	1.5	Onshore Wind Turbine	WND	WT
2016	8	60156	White Farm Solar, LLC	IPP	White Farm Solar, LLC	NC	60363	WFSPV	5.2	Solar Photovoltaic	SUN	PV
2016	9	59616	63SU 8me, LLC	IPP	Springbok Solar Farm 2	CA	59840	SB2	155.0	Solar Photovoltaic	SUN	PV
2016	9	772	Archer Daniels Midland Co	Industrial	Archer Daniels Midland Cedar Rapids	IA	10864	GEN7	35.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	9	59843	Blythe Solar II, LLC	IPP	Blythe Solar II, LLC	CA	60092	BLCK6	32.0	Solar Photovoltaic	SUN	PV
2016	9	58519	Clean Energy Collective LLC	IPP	Carver MA 1	MA	60442	CMA1	2.0	Solar Photovoltaic	SUN	PV
2016	9	58519	Clean Energy Collective LLC	IPP	Wareham MA 1	MA	60443	WMA1	2.0	Solar Photovoltaic	SUN	PV
2016	9	58519	Clean Energy Collective LLC	IPP	Westport MA 1	MA	60473	WPMA1	1.3	Solar Photovoltaic	SUN	PV
2016	9	58519	Clean Energy Collective LLC	IPP	Westport MA 2	MA	60476	WPMA2	1.2	Solar Photovoltaic	SUN	PV
2016	9	59429	Comanche LLC	IPP	Comanche Solar	CO	59656	COMCH	120.0	Solar Photovoltaic	SUN	PV
2016	9	59595	Copper Mountain Solar 4, LLC	IPP	Copper Mountain Solar 4, LLC	NV	59814	PV02	41.8	Solar Photovoltaic	SUN	PV
2016	9	58695	Coronal Development Services	IPP	County Home Solar Center, LLC	NC	60199	CHSC1	2.0	Solar Photovoltaic	SUN	PV
2016	9	58695	Coronal Development Services	IPP	Grove Solar Center, LLC	OR	60330	GSC1	6.0	Solar Photovoltaic	SUN	PV
2016	9	58695	Coronal Development Services	IPP	Mariposa Solar Center LLC	NC	59162	MSC 1	5.0	Solar Photovoltaic	SUN	PV
2016	9	58695	Coronal Development Services	IPP	Open Range Solar Center, LLC	OR	60332	ORS1	10.0	Solar Photovoltaic	SUN	PV
2016	9	58468	Dominion Renewable Energy	IPP	Granite Mountain Solar East	UT	59946	GMSE	80.0	Solar Photovoltaic	SUN	PV
2016	9	58468	Dominion Renewable Energy	IPP	Granite Mountain Solar West	UT	59945	GMSW	50.4	Solar Photovoltaic	SUN	PV
2016	9	5701	El Paso Electric Co	Electric Utility	Montana Power Station	TX	58562	GT-4	100.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	9	59258	Five Points Solar Park, LLC	IPP	Five Points Solar Park	CA	59253	FRFSP	60.0	Solar Photovoltaic	SUN	PV
2016	9	60158	Flint Hill Solar, LLC	IPP	Flint Hill Solar, LLC	NC	60370	FLHSPV	5.2	Solar Photovoltaic	SUN	PV
2016	9	57104	Golden Springs Development Company LLC	IPP	Building G	CA	60153	BLDGG	1.2	Solar Photovoltaic	SUN	PV
2016	9	57104	Golden Springs Development Company LLC	IPP	Dulles	CA	60182	DULLE	2.0	Solar Photovoltaic	SUN	PV
2016	9	60215	Hardison Farm Solar, LLC	IPP	Hardison Farm Solar, LLC	NC	60415	HFSVPV	5.2	Solar Photovoltaic	SUN	PV
2016	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Henryville Solar RES	IN	59986	PV1	1.1	Solar Photovoltaic	SUN	PV
2016	9	9267	Hoosier Energy R E C, Inc	Electric Utility	New Haven Solar RES	IN	59983	PV1	1.1	Solar Photovoltaic	SUN	PV
2016	9	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Huntingburg Solar Park	IN	60251	SHUNT	2.0	Solar Photovoltaic	SUN	PV
2016	9	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Washington Solar Park	IN	60252	SWASH	4.0	Solar Photovoltaic	SUN	PV
2016	9	59245	Lanier Solar	IPP	Lanier Solar	NC	59486	LANIE	4.9	Solar Photovoltaic	SUN	PV
2016	9	60214	Maxton Solar, LLC	IPP	Maxton Solar, LLC	NC	60416	MSPV	4.9	Solar Photovoltaic	SUN	PV
2016	9	12341	MidAmerican Energy Co	Electric Utility	Ida Grove Wind	IA	60342	IGWF	28.6	Onshore Wind Turbine	WND	WT
2016	9	12341	MidAmerican Energy Co	Electric Utility	O'Brien Wind	IA	60326	OBWF	61.9	Onshore Wind Turbine	WND	WT
2016	9	56990	NJR Clean Energy Ventures Corporation	IPP	Bernards Solar	NJ	60437	BERNS	2.9	Solar Photovoltaic	SUN	PV
2016	9	60185	Nicolis, LLC	IPP	Nicolis Solar PV Plant	CA	59600	GEN1	19.0	Solar Photovoltaic	SUN	PV
2016	9	15500	Puget Sound Energy Inc	Electric Utility	Glacier Battery Storage	WA	60444	GLA	2.0	Batteries	MWH	BA
2016	9	59790	River Bend Solar, LLC	IPP	River Bend Solar, LLC	AL	60058	RVRBN	75.0	Solar Photovoltaic	SUN	PV
2016	9	60263	SR Skylark B, LLC	IPP	SR Skylark B	CO	60497	SKY B	2.0	Solar Photovoltaic	SUN	PV
2016	9	59605	South Louisburg Solar LLC	IPP	South Louisburg Solar	NC	59825	5MWPV	5.0	Solar Photovoltaic	SUN	PV
2016	9	60045	Stainback Solar Farm, LLC	IPP	Stainback Solar Farm	NC	60257	INV1	5.0	Solar Photovoltaic	SUN	PV
2016	9	60216	Sullivan Solar, LLC	IPP	Sullivan Solar, LLC	IN	60410	SULPV	5.2	Solar Photovoltaic	SUN	PV
2016	9	60184	Tropico, LLC	IPP	Tropico Solar PV Plant	CA	59599	GEN1	13.0	Solar Photovoltaic	SUN	PV
2016	9	60142	Worham Solar Farm, LLC	IPP	Worham Solar Farm	NC	60361	INV1	5.0	Solar Photovoltaic	SUN	PV
2016	10	60242	Athens Energy, LLC	IPP	Athens Energy	ME	60457	1	7.0	Wood/Wood Waste Biomass	WDS	OT
2016	10	57421	BayWa r.e Wind LLC	IPP	Chopin Wind LLC	OR	59076	WT1	10.0	Onshore Wind Turbine	WND	WT
2016	10	60143	Bison Solar LLC	IPP	Bison Solar LLC	CO	60351	BSPV1	30.0	Solar Photovoltaic	SUN	PV
2016	10	59843	Blythe Solar II, LLC	IPP	Blythe Solar II, LLC	CA	60092	BLCK7	32.1	Solar Photovoltaic	SUN	PV
2016	10	60208	Chaves Solar LLC	IPP	Chaves Solar, LLC	NM	60405	CSPV	70.0	Solar Photovoltaic	SUN	PV
2016	10	60094	Clinton Battery Utility, LLC	IPP	Clinton Battery	OH	60297	1	10.0	Batteries	MWH	BA
2016	10	59595	Copper Mountain Solar 4, LLC	IPP	Copper Mountain Solar 4, LLC	NV	59814	PV01	51.8	Solar Photovoltaic	SUN	PV
2016	10	4329	Copper Valley Elec Assn, Inc	Electric Utility	Allison Creek Hydro	AK	59882	GEN1	6.5	Conventional Hydroelectric	WAT	HY
2016	10	58695	Coronal Development Services	IPP	Hyline Solar Center, LLC	OR	60331	HSC1	9.0	Solar Photovoltaic	SUN	PV
2016	10	60293	DG Colorado Solar, LLC	IPP	Clear Spring Ranch PV Project	CO	60511	PV1	10.0	Solar Photovoltaic	SUN	PV
2016	10	58468	Dominion Renewable Energy	IPP	Eastern Shore Solar, LLC	VA	60127	PV1	80.0	Solar Photovoltaic	SUN	PV
2016	10	58135	Ecos Energy LLC	IPP	Munro Valley Solar	CA	60412	MUN	4.0	Solar Photovoltaic	SUN	PV
2016	10	7140	Georgia Power Co	Electric Utility	Fort Gordon Solar Facility	GA	59863	1	30.0	Solar Photovoltaic	SUN	PV
2016	10	7140	Georgia Power Co	Electric Utility	Fort Stewart Solar Facility	GA	59865	1	30.0	Solar Photovoltaic	SUN	PV
2016	10	57104	Golden Springs Development Company LLC	IPP	Freeway Springs	CA	60183	FSPR1	2.0	Solar Photovoltaic	SUN	PV
2016	10	60279	Greenfield Wind, LLC	IPP	Greenfield Wind - MT	MT	60486	1	25.0	Onshore Wind Turbine	WND	WT
2016	10	60195	Groton Fuel Cell 1, LLC	Electric CHP	Pfizer Groton Fuel Cell	CT	60392	MM-24	2.8	Other Natural Gas	NG	FC
2016	10	60195	Groton Fuel Cell 1, LLC	Electric CHP	Pfizer Groton Fuel Cell	CT	60392	MM-25	2.8	Other Natural Gas	NG	FC
2016	10	59462	Heelstone Energy Holdings, LLC	IPP	Cornwall Solar Center, LLC	NC	59663	CSC1	5.0	Solar Photovoltaic	SUN	PV
2016	10	9267	Hoosier Energy R E C, Inc	Electric Utility	Ellettsville Solar RES	IN	59985	PV1	1.1	Solar Photovoltaic	SUN	PV
2016	10	9267	Hoosier Energy R E C, Inc	Electric Utility	Johnson Co. Solar RES	IN	59990	PV1	1.1	Solar Photovoltaic	SUN	PV
2016	10	60129	Horse Creek Wind, LLC	IPP	Horse Creek Wind Farm	TX	60339	HCWF	230.0	Onshore Wind Turbine	WND	WT
2016	10	9216	Imperial Irrigation District	Electric Utility	EI Centro	CA	389	BESS	28.0	Batteries	MWH	BA
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A1	0.3	Landfill Gas	LFG	IC
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A2	0.3	Landfill Gas	LFG	IC
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A3	0.3	Landfill Gas	LFG	IC
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A4	0.3	Landfill Gas	LFG	IC
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A5	0.3	Landfill Gas	LFG	IC
2016	10	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	A6	0.3	Landfill Gas	LFG	IC
2016	10	49893	Invenergy Services LLC	IPP	Wake Wind Energy Center	TX	58766	1	257.0	Onshore Wind Turbine	WND	WT
2016	10	58815	KDC Solar RTC LLC	IPP	Delilah Road Landfill	NJ	58951	DRLS	8.5	Solar Photovoltaic	SUN	PV
2016	10	59600	Mohave Sunrise Solar I, LLC	IPP	Mohave Electric at Fort Mohave	AZ	59819	PV2	15.2	Solar Photovoltaic	SUN	PV
2016	10	56990	NJR Clean Energy Ventures Corporation	IPP	Cedar Branch	NJ	60266	CEDAR	5.9	Solar Photovoltaic	SUN	PV
2016	10	57313	SolarCity Corporation	IPP	BJ's Wholesale Club, Inc.-Burlington, NJ	NJ	60227	PV1	1.4	Solar Photovoltaic	SUN	PV
2016	10	17650	Southern Power Co	IPP	Taylor County Solar	GA	59897	1	148.0	Solar Photovoltaic	SUN	PV
2016	10	58661	Sustainable Power Group, LLC	IPP	Pioneer Wind Park, LLC	WY	60259	PWP1	80.0	Onshore Wind Turbine	WND	WT
2016	10	59105	WED Coventry One, LLC	IPP	WED Coventry 1	RI	59301	WEDC1	1.5	Onshore Wind Turbine	WND	WT

NOTES:

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.
 Entity ID and Plant ID are official, unique identification numbers assigned by EIA; Generator IDs are assigned by plant owners and/or operators.
 Descriptions for the Energy Source Codes and the Prime Mover Codes listed in the table can be found in the Technical Notes.

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2016

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2016	1	9231	City of Independence - (MO)	Electric Utility	Missouri City	MO	2171	1	19.0	Conventional Steam Coal	BIT	ST
2016	1	9231	City of Independence - (MO)	Electric Utility	Missouri City	MO	2171	2	19.0	Conventional Steam Coal	BIT	ST
2016	2	3900	City of Coggon - (IA)	Electric Utility	Coggon	IA	1132	IC1	0.6	Petroleum Liquids	DFO	IC
2016	2	9996	City of Kansas City - (KS)	Electric Utility	Quindaro	KS	1295	GT1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	2	11142	City of Logansport - (IN)	Electric Utility	Logansport	IN	1032	4	16.5	Conventional Steam Coal	BIT	ST
2016	2	11142	City of Logansport - (IN)	Electric Utility	Logansport	IN	1032	5	22.0	Conventional Steam Coal	BIT	ST
2016	2	11142	City of Logansport - (IN)	Electric Utility	Logansport	IN	1032	6	15.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	2	17872	City of St Francis - (KS)	Electric Utility	St Francis	KS	1321	3	0.8	Petroleum Liquids	DFO	IC
2016	2	4161	Constellation Power Source Gen	IPP	Perryman	MD	1556	GT2	51.0	Petroleum Liquids	DFO	GT
2016	3	6455	Duke Energy Florida, Inc	Electric Utility	G E Turner	FL	629	P1	10.0	Petroleum Liquids	DFO	GT
2016	3	6455	Duke Energy Florida, Inc	Electric Utility	G E Turner	FL	629	P2	10.0	Petroleum Liquids	DFO	GT
2016	3	6455	Duke Energy Florida, Inc	Electric Utility	G E Turner	FL	629	P4	59.0	Petroleum Liquids	DFO	GT
2016	3	6455	Duke Energy Florida, Inc	Electric Utility	Rio Pinar	FL	637	P1	12.0	Petroleum Liquids	DFO	GT
2016	3	49770	Energy Recovery Operations, Inc	Commercial	Harford Waste to Energy Facility	MD	54935	001	1.1	Municipal Solid Waste	MSW	ST
2016	3	7801	Gulf Power Co	Electric Utility	Lansing Smith	FL	643	1	162.0	Conventional Steam Coal	BIT	ST
2016	3	7801	Gulf Power Co	Electric Utility	Lansing Smith	FL	643	2	195.0	Conventional Steam Coal	BIT	ST
2016	3	13168	NRG Huntley Operations Inc	IPP	C R Huntley Generating Station	NY	2549	67	190.0	Conventional Steam Coal	SUB	ST
2016	3	13168	NRG Huntley Operations Inc	IPP	C R Huntley Generating Station	NY	2549	S68	190.0	Conventional Steam Coal	SUB	ST
2016	3	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	2	87.0	Conventional Steam Coal	SUB	ST
2016	3	56690	Town of Portsmouth	IPP	Portsmouth Wind Turbine	RI	57350	WTG-1	1.5	Onshore Wind Turbine	WND	WT
2016	4	4045	City of Columbia - (MO)	Electric Utility	Columbia (MO)	MO	2123	5	16.5	Conventional Steam Coal	BIT	ST
2016	4	4254	Consumers Energy Co	Electric Utility	B C Cobb	MI	1695	4	156.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	B C Cobb	MI	1695	5	156.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	J C Weadock	MI	1720	7	152.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	J C Weadock	MI	1720	8	151.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	J R Whiting	MI	1723	1	102.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	J R Whiting	MI	1723	2	95.0	Conventional Steam Coal	SUB	ST
2016	4	4254	Consumers Energy Co	Electric Utility	J R Whiting	MI	1723	3	122.0	Conventional Steam Coal	SUB	ST
2016	4	5109	DTE Electric Company	Electric Utility	Trenton Channel	MI	1745	7	110.0	Conventional Steam Coal	SUB	ST
2016	4	15470	Duke Energy Indiana, LLC	Electric Utility	Wabash River	IN	1010	2	85.0	Conventional Steam Coal	BIT	ST
2016	4	15470	Duke Energy Indiana, LLC	Electric Utility	Wabash River	IN	1010	3	85.0	Conventional Steam Coal	BIT	ST
2016	4	15470	Duke Energy Indiana, LLC	Electric Utility	Wabash River	IN	1010	4	85.0	Conventional Steam Coal	BIT	ST
2016	4	15470	Duke Energy Indiana, LLC	Electric Utility	Wabash River	IN	1010	5	95.0	Conventional Steam Coal	BIT	ST
2016	4	5580	East Kentucky Power Coop, Inc	Electric Utility	Dale	KY	1385	3	74.0	Conventional Steam Coal	BIT	ST
2016	4	5580	East Kentucky Power Coop, Inc	Electric Utility	Dale	KY	1385	4	75.0	Conventional Steam Coal	BIT	ST
2016	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	3	40.0	Conventional Steam Coal	BIT	ST
2016	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	4	56.0	Conventional Steam Coal	BIT	ST
2016	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	5	62.0	Conventional Steam Coal	BIT	ST
2016	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	6	99.0	Conventional Steam Coal	BIT	ST
2016	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	IC1	3.0	Petroleum Liquids	DFO	IC
2016	4	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	1	170.0	Conventional Steam Coal	SUB	ST
2016	4	12341	MidAmerican Energy Co	Electric Utility	George Neal North	IA	1091	1	134.3	Conventional Steam Coal	SUB	ST
2016	4	12341	MidAmerican Energy Co	Electric Utility	George Neal North	IA	1091	2	283.7	Conventional Steam Coal	SUB	ST
2016	4	26840	Port Townsend Paper Co	Industrial	Port Townsend Paper	WA	50544	GEN4	3.0	Wood/Wood Waste Biomass	BLQ	ST
2016	4	15474	Public Service Co of Oklahoma	Electric Utility	Northeastern	OK	2963	4	460.0	Conventional Steam Coal	SUB	ST
2016	4	17698	Southwestern Electric Power Co	Electric Utility	Welsh	TX	6139	2	528.0	Conventional Steam Coal	SUB	ST
2016	4	18642	Tennessee Valley Authority	Electric Utility	Colbert	AL	47	1	178.0	Conventional Steam Coal	BIT	ST
2016	4	18642	Tennessee Valley Authority	Electric Utility	Colbert	AL	47	2	178.0	Conventional Steam Coal	BIT	ST
2016	4	18642	Tennessee Valley Authority	Electric Utility	Colbert	AL	47	3	178.0	Conventional Steam Coal	BIT	ST
2016	4	18642	Tennessee Valley Authority	Electric Utility	Colbert	AL	47	4	178.0	Conventional Steam Coal	BIT	ST
2016	4	18642	Tennessee Valley Authority	Electric Utility	Colbert	AL	47	5	472.0	Conventional Steam Coal	BIT	ST
2016	4	20847	Wisconsin Electric Power Co	Electric Utility	Milwaukee County	WI	7549	1	7.0	Conventional Steam Coal	SUB	ST
2016	5	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	4	74.0	Natural Gas Steam Turbine	NG	ST
2016	5	5517	Dynegy Midwest Generation Inc	IPP	Wood River	IL	898	4	89.5	Conventional Steam Coal	SUB	ST
2016	5	5517	Dynegy Midwest Generation Inc	IPP	Wood River	IL	898	5	375.5	Conventional Steam Coal	SUB	ST
2016	5	12807	Michigan South Central Pwr Agy	Electric Utility	Endicott Station	MI	4259	1	55.0	Conventional Steam Coal	BIT	ST
2016	5	14165	NRG Power Midwest LP	IPP	Avon Lake	OH	2836	7	70.0	Conventional Steam Coal	BIT	ST
2016	5	56217	Portsmouth Operating Services LLC	IPP	Portsmouth Genco LLC	VA	10071	GEN1	57.5	Conventional Steam Coal	BIT	ST
2016	5	56217	Portsmouth Operating Services LLC	IPP	Portsmouth Genco LLC	VA	10071	GEN2	57.5	Conventional Steam Coal	BIT	ST
2016	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	IC1	2.0	Petroleum Liquids	DFO	IC
2016	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	IC2	2.0	Petroleum Liquids	DFO	IC
2016	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	IC3	2.0	Petroleum Liquids	DFO	IC
2016	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	IC4	2.0	Petroleum Liquids	DFO	IC
2016	5	7726	Sharp Grossmont Hospital	Commercial	Grossmont Hospital	CA	10115	GEN1	0.8	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	7726	Sharp Grossmont Hospital	Commercial	Grossmont Hospital	CA	10115	GEN2	0.8	Natural Gas Fired Combustion Turbine	NG	GT
2016	5	40211	Wabash Valley Power Assn, Inc	Electric Utility	Wabash Valley Power IGCC	IN	57842	1	85.0	Petroleum Coke	SGP	CA
2016	6	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	5	0.5	Petroleum Liquids	DFO	IC
2016	6	1009	City of Austin - (MN)	Electric Utility	Austin Northeast	MN	1961	1	28.0	Natural Gas Steam Turbine	NG	ST
2016	6	8198	City of Harrisonburg - (VA)	Electric Utility	Harrisonburg Power Plant	VA	56006	ST-1	2.7	Natural Gas Steam Turbine	NG	ST
2016	6	8723	City of Holland	Electric Utility	James De Young	MI	1830	3	10.5	Conventional Steam Coal	BIT	ST
2016	6	4329	Copper Valley Elec Assn, Inc	Electric Utility	Valdez	AK	6306	1	0.5	Petroleum Liquids	DFO	IC
2016	6	4329	Copper Valley Elec Assn, Inc	Electric Utility	Valdez	AK	6306	2	0.5	Petroleum Liquids	DFO	IC
2016	6	4329	Copper Valley Elec Assn, Inc	Electric Utility	Valdez	AK	6306	3	0.5	Petroleum Liquids	DFO	IC
2016	6	5109	DTE Electric Company	Electric Utility	River Rouge	MI	1740	2	251.0	Conventional Steam Coal	SUB	ST
2016	6	5701	EI Paso Electric Co	Electric Utility	Hueco Mountain Wind Ranch	TX	55578	EXIS	1.3	Onshore Wind Turbine	WND	WT
2016	6	50128	Georgia-Pacific Consr Ops LLC-Palatka	Industrial	Georgia-Pacific Palatka Operations	FL	10611	GEN2	7.0	Natural Gas Steam Turbine	NG	ST
2016	6	17578	South Orange Co Wastewtr Auth	Commercial	Aliso Water Management Agency	CA	10820	GEN3	0.4	Other Waste Biomass	OBG	IC
2016	6	18125	Stillwater Utilities Authority	Electric Utility	Boomer Lake Station	OK	3000	2	13.0	Natural Gas Steam Turbine	NG	ST
2016	7	18947	City of Tipton - (IA)	Electric Utility	Tipton	IA	8106	4	0.3	Petroleum Liquids	DFO	IC
2016	7	12686	Mississippi Power Co	Electric Utility	Sweatt	MS	2048	1	46.0	Natural Gas Steam Turbine	NG	ST
2016	7	12686	Mississippi Power Co	Electric Utility	Sweatt	MS	2048	2	46.0	Natural Gas Steam Turbine	NG	ST
2016	7	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	U4J08	1.4	Landfill Gas	LFG	IC
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (MI)	MI	1784	1	1.3	Conventional Hydroelectric	WAT	HY
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (MI)	MI	1784	2	1.3	Conventional Hydroelectric	WAT	HY
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (MI)	MI	1784	3	1.3	Conventional Hydroelectric	WAT	HY
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (MI)	MI	1784	4	1.2	Conventional Hydroelectric	WAT	HY
2016	7	20847	Wisconsin Electric Power Co	Electric Utility	Twin Falls (MI)	MI	1784	5	1.2	Conventional Hydroelectric	WAT	HY
2016	8	7140	Georgia Power Co	Electric Utility	Kraft	GA	733	PWA	17.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	8	7140	Georgia Power Co	Electric Utility	Mitchell (GA)	GA	727	3	155.0	Conventional Steam Coal	BIT	ST
2016	8	7140	Georgia Power Co	Electric Utility	Mitchell (GA)	GA	727	4A	31.0	Petroleum Liquids	DFO	GT
2016	8	7140	Georgia Power Co	Electric Utility	Mitchell (GA)	GA	727	4B	31.0	Petroleum Liquids	DFO	GT
2016	8	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	U3J98	1.0	Landfill Gas	LFG	IC
2016	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	3	103.8	Conventional Hydroelectric	WAT	HY
2016	8	57433	ReEnergy Chateaugay LLC	IPP	ReEnergy Chateaugay Power Station	NY	50277	GEN1	18.0	Wood/Wood Waste Biomass	WDS	ST
2016	9	5347	Dow Chemical Co	Industrial	LaO Energy Systems	LA	52006	GEN7	95.0	Natural Gas Fired Combined Cycle	NG	CT
2016	9	5347	Dow Chemical Co	Industrial	LaO Energy Systems	LA	52006	GEN7	95.0	Natural Gas Fired Combined Cycle	NG	CT
2016	10	6035	Exelon Power	IPP	Exelon L Street	MA	1587	GT1	16.0	Petroleum Liquids	DFO	GT
2016	10	14127	Omaha Public Power District	Electric Utility	Fort Calhoun	NE	2289	1	478.1	Nuclear	NUC	ST
2016	10	20838	Win-Sam Inc	Commercial	University of Texas at San Antonio	TX	54606	GEN1	3.3	Natural Gas Internal Combustion Engine	NG	IC

NOTES:

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.
 Entity ID and Plant ID are official, unique identification numbers assigned by EIA; Generator IDs are assigned by plant owners and/or operators.
 Descriptions for the Energy Source Codes and the Prime Mover Codes listed in the table can be found in the Technical Notes.

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2016	11	60019	96WI 8ME, LLC	IPP	Midway Solar Farm II	CA	60237	MSF2	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2016	11	213	Alaska Electric Light&Power Co	Electric Utility	Industrial Plant	AK	59793	15	25.0	Petroleum Liquids	DFO	GT	(V) Under construction, more than 50 percent complete	25.0
2016	11	57369	Apple, Inc	IPP	Bonnybrook PV	AZ	60413	AZPV1	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2016	11	60148	Brady Wind, LLC	IPP	Brady Wind Energy Center	ND	60355	BWEC1	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2016	11	11268	City of Lowell - (MI)	Electric Utility	Chatham	MI	58254	CT02R	3.2	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	3.6
2016	11	14534	City of Pasadena - (CA)	Electric Utility	Glenarm	CA	422	ST1		Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	16.0
2016	11	58695	Coronal Development Services	IPP	Freemont Solar Center LLC	NC	59912	FREE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	11	58695	Coronal Development Services	IPP	Railroad Solar Center, LLC	OR	60333	RSC1	4.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.5
2016	11	58695	Coronal Development Services	IPP	Thunderegg Solar Center, LLC	OR	60334	TSC1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2016	11	58695	Coronal Development Services	IPP	Vale Air Solar Center, LLC	OR	60335	VASC1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2016	11	57406	Deepwater Wind Block Island LLC	IPP	Block Island Wind Farm	RI	58035	BIWF	29.3	Offshore Wind Turbine	WND	WS	(TS) Construction complete, but not yet in commercial operation	30.0
2016	11	60128	Electra Wind, LLC	IPP	Electra Wind Farm	TX	60338	EWF	230.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	230.0
2016	11	60201	Exum Farm Solar, LLC	IPP	Exum Farm Solar, LLC	NC	60400	FLS1	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2016	11	6452	Florida Power & Light Co	Electric Utility	Babcock Solar Energy Center	FL	59933	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2016	11	6452	Florida Power & Light Co	Electric Utility	Citrus Solar Energy Center	FL	60061	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2016	11	59481	Franklinton Solar LLC	IPP	Franklinton Solar	NC	59708	SMWV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	11	7140	Georgia Power Co	Electric Utility	King's Bay Solar Facility	GA	59864	1	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2016	11	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	4TG	62.0	Wood/Wood Waste Biomass	BLQ	ST	(V) Under construction, more than 50 percent complete	75.0
2016	11	57104	Golden Springs Development Company LLC	IPP	Building L	CA	60154	BLDG1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2016	11	57104	Golden Springs Development Company LLC	IPP	Building F	CA	60151	BLDGF	1.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.3
2016	11	59806	Grand View PV Solar Two, LLC	IPP	Grand View Solar Two	ID	60068	GVS2	60.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	60.0
2016	11	59806	Grand View PV Solar Two, LLC	IPP	Grand View Solar Two	ID	60068	GVS5	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	11	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP1	2.5	Other Waste Biomass	OBL	IC	(V) Under construction, more than 50 percent complete	2.5
2016	11	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP2	2.5	Other Waste Biomass	OBL	IC	(V) Under construction, more than 50 percent complete	2.5
2016	11	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP3	2.5	Other Waste Biomass	OBL	IC	(V) Under construction, more than 50 percent complete	2.5
2016	11	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP4	2.5	Other Waste Biomass	OBL	IC	(V) Under construction, more than 50 percent complete	2.5
2016	11	56946	Hidalgo Wind Farm LLC	IPP	Hidalgo Wind Farm LLC	TX	57617	GEN1	250.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	250.0
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	1	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	2	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	3	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	4	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	5	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9267	Hoosier Energy R E C, Inc	Electric Utility	Orchard Hills Renewable Energy Station	IL	59792	6	2.3	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	2.7
2016	11	9324	Indiana Michigan Power Co	Electric Utility	Watervliet PV	MI	59853	WV1	4.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.6
2016	11	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park	IN	60253	SANDE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B1	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B2	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B3	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B4	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B5	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	59452	Ingenco Renewable Development, LLC	IPP	Bristol Plant	VA	60222	B6	0.3	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	0.3
2016	11	60199	Innovative Solar 65, LLC	IPP	Innovative Solar 65	NC	60398	FLS1	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2016	11	59022	Leonardo Wind 1 LLC	IPP	Leonardo Wind 1 LLC	IA	59228	WT1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2016	11	58849	Mariah del Este LLC	IPP	Mariah North	TX	59005	MAR1	230.4	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	230.4
2016	11	59691	Meadowbrook Solar Farm LLC	IPP	Meadowbrook Solar Farm	NC	59836	NB008	4.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2016	11	59027	Michelangelo Wind 4 LLC	IPP	Michelangelo Wind 4 LLC	IA	59232	WT1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2016	11	12341	MidAmerican Energy Co	Electric Utility	Ida Grove Wind	IA	60342	IGWF3	102.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	102.0
2016	11	56990	NJR Clean Energy Ventures Corporation	IPP	Ringer Hill Wind Farm, LLC	PA	60329	RINGER	39.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	39.9
2016	11	59634	North Star Solar PV LLC	IPP	North Star Solar Project	MN	59852	NSSP1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2016	11	58489	OCI Solar Power	IPP	OCI Alamo 6 LLC	TX	59206	OCA16	105.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	105.0
2016	11	58589	Orbit Energy Charlotte	IPP	Orbit Energy Charlotte	NC	58638	1	5.2	Other Waste Biomass	OBG	IC	(TS) Construction complete, but not yet in commercial operation	5.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG11	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG12	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG13	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG14	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG15	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60048	PHR Holdings LLC	IPP	Baciff	TX	60264	CLG16	60.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	71.2
2016	11	60258	Paulding Wind Farm III LLC	IPP	Paulding Wind Farm III	OH	60470	1	100.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100.8
2016	11	60238	Pavant Solar II LLC	IPP	Pavant Solar II LLC	UT	60449	PSII	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2016	11	56895	Pio Pico Energy Center LLC	IPP	Pio Pico Energy Center	CA	57555	CTG1	97.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	107.0
2016	11	56895	Pio Pico Energy Center LLC	IPP	Pio Pico Energy Center	CA	57555	CTG2	97.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	107.0
2016	11	56895	Pio Pico Energy Center LLC	IPP	Pio Pico Energy Center	CA	57555	CTG3	97.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	107.0
2016	11	60189	SJA Solar, LLC	IPP	SJA Solar LLC-Solterra Monastery	MA	60391	SJAPV	20.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.1
2016	11	60097	San Isabel Solar, LLC	IPP	San Isabel Solar, LLC	CO	60304	SISPV	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2016	11	57313	SolarCity Corporation	IPP	Greene County Meter #1	NY	60463	PV1	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2016	11	57313	SolarCity Corporation	IPP	Hewlett-Packard (HP) - Andover, MA	MA	60099	PV1	1.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.7
2016	11	57313	SolarCity Corporation	IPP	Onondaga County- Clearwater	NY	60462	PV1	2.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.4
2016	11	17650	Southern Power Co	IPP	RE Garland	CA	60233	PV2	185.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	185.0
2016	11	17650	Southern Power Co	IPP	RE Roserock	TX	59994	ROSEK	160.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	160.0
2016	11	58658	Sunlight Partners	IPP	Husky Solar	NC	59510	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Antelope DSR 1	CA	60186	DSR1	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Antelope DSR 2	CA	60187	DSR2	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Elevation Solar C	CA	59964	ELVSC	40.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	40.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Hecate Energy Beacon Solar 4	CA	59317	BEAC4	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Solverde 1	CA	60185	SOLV1	85.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	85.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Western Antelope Blue Sky B	CA	59961	WABSB	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	11	58661	Sustainable Power Group, LLC	IPP	Western Antelope Dry Ranch	CA	58627	WADR	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2016	11	60245	Three Peaks Power LLC	IPP	Three Peaks Power	UT	60432	TPP	80.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	80.0
2016	11	24211	Tucson Electric Power Co	Electric Utility	Fort Huachuca Solar PV Project	AZ	58972	FHUA2	4.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.1
2016	11	60282	Valley Center	IPP	Valley Center									

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2016	12	17845	City of Springville - (UT)	Electric Utility	Whitehead	UT	7028	K7CA1	2.5	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	2.5
2016	12	56769	Consolidated Edison Development Inc.	IPP	CED Avenal	CA	60077	AVCA	15.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	15.8
2016	12	56769	Consolidated Edison Development Inc.	IPP	CED Ducor 1	CA	60078	DU1CA	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	56769	Consolidated Edison Development Inc.	IPP	CED Ducor 2	CA	60079	DU2CA	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	56769	Consolidated Edison Development Inc.	IPP	CED Ducor 3	CA	60080	DU3CA	15.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	15.0
2016	12	56769	Consolidated Edison Development Inc.	IPP	CED Ducor 4	CA	60081	DU4CA	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	56769	Consolidated Edison Development Inc.	IPP	Oro Loma	CA	59915	ORCA	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	59997	Customized Energy Solutions	IPP	ESS Lewes	DE	60216	ESSLS	8.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	8.0
2016	12	5109	DTE Electric Company	Electric Utility	Echo Wind Park	MI	58121	GEN3	50.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	50.0
2016	12	5416	Duke Energy Carolinas, LLC	IPP	Mocksville Solar	NC	59570	PV1	7.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	15.4
2016	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Monroe Solar Facility	NC	60383	MONPV	27.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	59.4
2016	12	58970	Ecoplexus, Inc	IPP	Baker PV 1	NC	59517	BAKE1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2016	12	58970	Ecoplexus, Inc	IPP	Benthall Bridge PV 1	NC	59515	BENT1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2016	12	58970	Ecoplexus, Inc	IPP	Turkey Creek PV1	NC	60000	TRKCK	13.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	13.5
2016	12	58720	Enbridge	IPP	New Creek Wind	WV	60132	NCG01	103.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	103.0
2016	12	59380	Enel Green Power NA, Inc.	IPP	Drift Sand Wind Project LLC	OK	59065	WT1	109.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	109.8
2016	12	59380	Enel Green Power NA, Inc.	IPP	Lindahl Wind Project, LLC	ND	59684	LWPO1	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2016	12	59380	Enel Green Power NA, Inc.	IPP	South Fork Wind Farm	MN	58691	STFK1	13.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	13.0
2016	12	31719	FPL Energy Wyman LLC	IPP	William F Wyman	ME	1507	BESS	16.2	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	16.7
2016	12	59745	First Solar Asset Management	IPP	Moapa Southern Paiute	NV	57859	1	250.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	250.0
2016	12	56615	First Solar Project Development	IPP	Portal Ridge Solar C, LLC	CA	60311	GEN01	11.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	11.4
2016	12	59155	First Wind O&M, LLC	IPP	Bingham Wind	ME	57531	1	186.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	186.0
2016	12	59155	First Wind O&M, LLC	IPP	Hancock Wind Plant	ME	58686	HANC1	51.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	51.0
2016	12	6452	Florida Power & Light Co	Electric Utility	Manatee Solar Energy Center	FL	60014	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2016	12	25438	Friant Power Authority	IPP	Friant Hydro Facility	CA	50393	RO2	9.0	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	6.9
2016	12	59998	Frontier Windpower, LLC	IPP	Frontier Windpower	OK	60218	FC1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2016	12	59977	Hemlock Solar LLC	IPP	Hemlock Solar	NC	60207	HEMLK	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	12	60164	ILR Landfill	IPP	ILR Landfill	NJ	60375	ILR1	7.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.7
2016	12	4361	Ingredion Inc - Stockton	Industrial	Ingredion Stockton	CA	52115	GEN2	6.5	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	7.2
2016	12	59941	Innovative Solar 43, LLC	IPP	Innovative Solar 43, LLC	NC	60149	FLS1	50.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.8
2016	12	59441	Innovative Solar 46, LLC	IPP	Innovative Solar 46	NC	59671	IS046	78.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	78.5
2016	12	49893	Invenergy Services LLC	IPP	Bethel Wind Farm LLC	TX	60414	GEN1	276.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	276.0
2016	12	60198	Kennedy Solar, LLC	IPP	Kennedy Solar, LLC	NC	60397	FLS1	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2016	12	60200	Lincoln Solar, LLC	IPP	Lincoln Solar, LLC (NC)	NC	60399	FLS1	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2016	12	59802	Live Oak Solar, LLC	IPP	Live Oak Solar, LLC	GA	60063	LVEOK	51.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	51.0
2016	12	60271	Longboat Solar, LLC	IPP	Longboat Solar, LLC	CA	60485	PV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	11208	Los Angeles Department of Water & Power	Electric Utility	Maclay Solar Project	CA	57308	1	2.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.2
2016	12	60106	Mesquite Solar 2, LLC	IPP	Mesquite Solar 2, LLC	AZ	60307	1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2016	12	60107	Mesquite Solar 3, LLC	IPP	Mesquite Solar 3, LLC	AZ	60308	1	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2016	12	59483	Metropolitan Airports Commission	IPP	St. Paul Intl Airport Red & Blue Parking	MN	59709	PV2	0.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	0.9
2016	12	12341	MidAmerican Energy Co	Electric Utility	Ida Grove Wind	IA	60342	IGWF2	119.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	119.6
2016	12	12341	MidAmerican Energy Co	Electric Utility	Ida Grove Wind	IA	60342	IGWF4	18.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	18.4
2016	12	12341	MidAmerican Energy Co	Electric Utility	O'Brien Wind	IA	60326	OBWF2	108.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	108.7
2016	12	12341	MidAmerican Energy Co	Electric Utility	O'Brien Wind	IA	60326	OBWF3	79.7	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	79.7
2016	12	13511	New York State Elec & Gas Corp	Electric Utility	Harris Lake	NY	2528	2	2.3	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.5
2016	12	13781	Northern States Power Co - Minnesota	IPP	Courtenay Wind Farm	ND	58658	1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2016	12	59025	Optimum Wind 3 LLC	IPP	Optimum Wind 3 LLC	IA	59227	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2016	12	59024	Optimum Wind 4 LLC	IPP	Optimum Wind 4 LLC	IA	59226	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2016	12	59017	Optimum Wind 5 LLC	IPP	Optimum Wind 5 LLC	IA	59223	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2016	12	59018	Optimum Wind 6 LLC	IPP	Optimum Wind 6 LLC	IA	59224	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2016	12	59019	Optimum Wind 7 LLC	IPP	Optimum Wind 7 LLC	IA	59225	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2016	12	60207	Pisgah Mountain, LLC	IPP	Pisgah Mountain Wind	ME	60404	PISGA	9.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	9.1
2016	12	59682	Pollockville Solar LLC	IPP	Pollockville Solar	NC	59917	5MWPV	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2016	12	40307	Prairie Power, Inc	Electric Utility	Aley	IL	7818	6	42.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	48.0
2016	12	60125	Providence Solar Center, LLC	IPP	Providence Solar	TN	60337	PROV	16.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	16.0
2016	12	59728	RE Astoria 2 LLC	IPP	RE Astoria 2	CA	59977	ASTR2	75.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	75.0
2016	12	59727	RE Astoria LLC	IPP	RE Astoria	CA	59976	ASTR1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2016	12	59334	Rutherford Farm, LLC	IPP	Rutherford Farm	NC	59589	PV1	61.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	61.0
2016	12	60060	SR Mavericks, LLC	IPP	SR Mavericks	CO	60283	MVRKS	6.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	6.5
2016	12	60182	SRJFC, LLC	Electric CHP	Santa Rita Jail Fuel Cell	CA	60385	MB-18	1.4	Other Natural Gas	NG	FC	(TS) Construction complete, but not yet in commercial operation	1.4
2016	12	60257	Solar Glynn LLC	IPP	Solar Glynn	GA	60469	INV1	18.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	18.0
2016	12	60177	Solar Star Arizona XIII, LLC	IPP	Sulphur Springs	AZ	60381	SSSP	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2016	12	57313	SolarCity Corporation	IPP	AVS Lancaster 1	CA	60085	PV1	3.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.7
2016	12	57313	SolarCity Corporation	IPP	Connecticut Municipal Electric Energy Co	CT	60225	PV1	2.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.5
2016	12	57313	SolarCity Corporation	IPP	Connecticut Municipal Electric Energy Co	CT	60228	PV1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2016	12	57313	SolarCity Corporation	IPP	Oneida County- DPW	NY	60114	PV1	1.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.4
2016	12	57313	SolarCity Corporation	IPP	Onondaga County- Jamesville	NY	60232	PV1	1.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.9
2016	12	57313	SolarCity Corporation	IPP	Orange County Solar Farm (NY)	NY	60229	PV1	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2016	12	57313	SolarCity Corporation	IPP	US-TOPCO (Soccer Center)	CA	60086	PV1	3.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.0
2016	12	58704	Sonne Two LLC	IPP	Sonne Two	NC	58829	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG01	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG02	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG03	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG04	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG05	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG06	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG07	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG08	18.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2016	12	17583	South Texas Electric Coop, Inc	Electric Utility	Red Gate Power Plant	TX	59391	ENG09	18.3	Natural Gas Internal Combustion Engine	NG	IC</		

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2016	12	24211	Tucson Electric Power Co	Electric Utility	Demoss Petrie	AZ	124	BA1	10.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	10.0
2016	12	60273	Tyler Bluff Wind Project, LLC	IPP	Tyler Bluff Wind Project, LLC	TX	60502	GEN1	125.6	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	125.6
2016	12	58153	US Magnesium	Industrial	US Magnesium	UT	58191	GT4	24.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	30.0
2016	12	19876	Virginia Electric & Power Co	Electric Utility	Scott Solar Farm	VA	60316	1	6.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	17.0
2016	12	19876	Virginia Electric & Power Co	Electric Utility	Whitehouse Solar Farm	VA	60319	1	8.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2016	12	19876	Virginia Electric & Power Co	Electric Utility	Woodland Solar Farm	VA	60318	1	7.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	19.0
2016	12	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED1	2.0	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	2.0
2016	12	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED2	2.0	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	2.0
2016	12	59330	Wommack Farm, LLC	IPP	Wommack Farm	NC	59585	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	1	55918	Acciona Wind Energy USA LLC	IPP	San Roman Wind I, LLC	TX	59712	SRW1	95.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	95.3
2017	1	59050	Algonquin Power Co	IPP	Algonquin SKIC 10 Solar, LLC	CA	60242	SK10	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	1	58603	Aloha Solar Energy Fund I LLC	IPP	Aloha Solar Energy Fund 1 PK1	HI	58659	PK-1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	1	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	59758	American Falls Solar II, LLC	IPP	American Falls Solar II	ID	60012	IPAF2	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	1	59757	American Falls Solar LLC	IPP	American Falls Solar	ID	60011	IPAF	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	1	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG1	25.3	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	25.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	04	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	60.5
2017	1	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	05	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	60.5
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	11	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	12	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	13	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	14	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	15	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	16	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	17	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	18	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	19	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	20	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	21	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	22	9.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.3
2017	1	56146	Black Hills/Colorado Elec.Util	Electric Utility	Peak View Wind Farm	CO	60143	WTG	60.8	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	60.8
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	10	18.7	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	8	18.7	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2017	1	3892	City of Coffeyville - (KS)	Electric Utility	CML&P Generating Facility No. 2	KS	59726	9	18.7	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	18.7
2017	1	5109	DTE Electric Company	Electric Utility	Demille Solar Farm	MI	60346	1	28.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	28.4
2017	1	5109	DTE Electric Company	Electric Utility	O'Shea Solar Farm	MI	60348	1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2017	1	5109	DTE Electric Company	Electric Utility	Turrill Solar Farm	MI	60347	1	19.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	19.6
2017	1	56615	First Solar Project Development	IPP	Portal Ridge Solar B, LLC	CA	60310	GEN01	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	1	59973	Marshall Solar Energy Project	IPP	Marshall Solar Energy Project	MN	59875	PV1	62.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	62.3
2017	1	59026	Michelangelo Wind 1 LLC	IPP	Michelangelo Wind 1 LLC	IA	59231	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	1	58887	Michelangelo Wind 3 LLC	IPP	Michelangelo Wind 3 LLC	IA	59053	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	1	58689	Milan Energy LLC	IPP	Milan	PA	58818	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	58689	Milan Energy LLC	IPP	Milan	PA	58818	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	58689	Milan Energy LLC	IPP	Milan	PA	58818	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	7.0
2017	1	59323	Monroe Moore Farm, LLC	IPP	Monroe Moore Farm	NC	59578	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	1	59469	Mt. Home Solar 1, LLC	IPP	Mountain Home Solar	ID	59695	MHPV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2017	1	59755	Murphy Flat Power, LLC	IPP	Murphy Flat Solar	ID	60009	IPMF	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	1	59756	Orchard Ranch Solar, LLC	IPP	Orchard Ranch Solar	ID	60010	IPOR	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	1	59338	Spring Valley Farm 2, LLC	IPP	Spring Valley Farm 2, LLC	NC	59593	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	1	58661	Sustainable Power Group, LLC	IPP	Lancaster WAD B	CA	59739	LWADB	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	1	60046	TPE Alta Luna, LLC	IPP	Alta Luna	NM	60258	ALPV1	28.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	28.1
2017	1	18454	Tampa Electric Co	Electric Utility	Polk	FL	7242	2CC	459.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	463.0
2017	1	59116	WED Coventry Five, LLC	IPP	WED Coventry 5	RI	59313	COV5	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2017	2	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG2	25.3	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	25.3
2017	2	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG3	25.3	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	25.3
2017	2	59861	Benson Creek	IPP	Benson Creek Windfarm	OR	59491	BCW	10.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	215.0
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG2	205.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	215.0
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	STGEN	316.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	316.0
2017	2	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	10	43.1	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	53.1
2017	2	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	11	43.1	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	53.1
2017	2	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	12	40.9	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	43.2
2017	2	58695	Coronal Development Services	IPP	Gulf Coast Solar Center I	FL	59689	GCSC1	30.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	30.0
2017	2	58695	Coronal Development Services	IPP	Gulf Coast Solar Center II	FL	59690	GCSC2	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2017	2	58695	Coronal Development Services	IPP	Gulf Coast Solar Center III	FL	59691	GCSC3	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2017	2	59979	Cotton Plains Wind I, LLC	IPP	Cotton Plains Wind Farm	TX	60210	CPWF	50.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	50.4
2017	2	15470	Duke Energy Indiana, LLC	Electric Utility	Crane Solar Facility	IN	60435	XXXXX	7.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	17.0
2017	2	59862	Durbin Creek	IPP	Durbin Creek Windfarm	OR	59492	DCW	10.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	2	59860	Jett Creek	IPP	Jett Creek Windfarm	OR	59490	JCW	10.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 4	0.6	Natural Gas Steam Turbine	NG	ST	(V) Under construction, more than 50 percent complete	2.9
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 5	0.6	Natural Gas Steam Turbine	NG	ST	(V) Under construction, more than 50 percent complete	2.2
2017	2	59863	Prospector	IPP	Prospector Windfarm	OR	59493	PW	10.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	2	59337	Sedberry Farm, LLC	IPP	Sedberry Farm	NC	59592	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	2	57313	SolarCity Corporation	IPP	Maricopa County Community Colleges- Estr	AZ	60230	PV1	1.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.7
2017	2	57313	SolarCity Corporation	IPP	Town of Halfmoon	NY	60115	PV1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	2	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	1	19.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	19.0
2017	2	59021	Venus Wind 3 LLC	IPP	Venus Wind 3 LLC	IA	59230	WT1	3.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	2	59864	Willow Spring	IPP	Willow Spring Windfarm	OR	59494	WSW	10.0</					

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	3	17470	PUD 1 of Snohomish County	Electric Utility	Calligan Creek Hydroelectric Project	WA	60418	CC6MW	6.0	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	6.0
2017	3	17470	PUD 1 of Snohomish County	Electric Utility	MESA 2	WA	60021	MESA2	2.4	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.4
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy JN, LLC	NM	60145	1	181.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	181.7
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy KW, LLC	NM	60152	1	142.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	142.6
2017	3	59967	Phoenix Energy	Electric CHP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	2.0
2017	3	59336	Schell Solar Farm, LLC	IPP	Schell Solar Farm	NC	59591	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	3	57313	SolarCity Corporation	IPP	Onondaga County - Oak Orchard WWTP	NY	60098	PV1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2017	3	56694	Thermo No 1 BE 01 LLC	IPP	Thermo Solar PV-01	UT	59883	SOLAR	2.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.9
2017	3	59011	Tiburon Holdings	IPP	Tiburon Holdings	NC	59217	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	3	57341	Veolia Energy	Electric CHP	Univ Minnesota CHP Plant	MN	59197	CTG-1	17.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	21.0
2017	3	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2017	3	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSPV	3.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.4
2017	4	57369	Apple, Inc	Industrial	Apple Campus 2 PV	CA	59473	AC2PV	14.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	14.4
2017	4	59308	Bearford Farm, LLC	IPP	Bearford Farm Solar Project	NC	59567	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	4	59257	Giffen Solar Park, LLC	IPP	Giffen Solar Park	CA	59522	FRGSP	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN1	230.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.0
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN2	230.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.0
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN3	314.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	338.0
2017	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT1	207.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	207.0
2017	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT2	207.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	207.0
2017	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	STG1	230.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	230.0
2017	4	59435	Innovative Solar 37, LLC	IPP	Innovative Solar 37	NC	59665	IS037	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG1	219.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	222.7
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG2	219.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	222.7
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	STG1	224.1	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	260.5
2017	4	59680	Lillington Solar LLC	IPP	Lillington Solar	NC	59921	5MWV	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	4	60159	RES America Developments Inc	IPP	Lamesa Solar	TX	60372	LSPV1	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2017	4	59779	Shoreham Solar Commons	IPP	Shoreham Solar Commons	NY	60045	GEN1	24.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	24.9
2017	4	58658	Sunlight Partners	IPP	Alexis Solar	NC	60139	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Anna Solar	NC	60176	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Blue Bird Solar	NC	60177	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2017	4	58658	Sunlight Partners	IPP	Bonnie Solar	NC	60175	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Brooke Solar	NC	60140	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2017	4	58658	Sunlight Partners	IPP	Cardinal Solar	NC	60174	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Carter Solar	NC	60167	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Christina Solar	NC	60172	PV1	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2017	4	58658	Sunlight Partners	IPP	Clayton Solar	NC	60171	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Daystar Solar	NC	60179	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2017	4	58658	Sunlight Partners	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Hawk Solar	NC	60163	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Heedeh Solar	NC	60157	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2017	4	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Icarus Solar	NC	60169	PV1	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2017	4	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Jordan Solar	NC	60164	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	June Solar	NC	60158	PV1	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2017	4	58658	Sunlight Partners	IPP	Kathleen Solar	NC	60180	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Longleaf Solar	NC	60173	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Roman Solar	NC	60159	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Sadie Solar	NC	60168	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Shelter Solar	NC	60156	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Signature Solar	NC	60155	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58658	Sunlight Partners	IPP	Willork Solar	NC	60162	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	4	58661	Sustainable Power Group, LLC	IPP	Aspiration G	CA	59737	ASPRG	9.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	9.0
2017	4	58661	Sustainable Power Group, LLC	IPP	Hecate Energy Beacon Solar 1	CA	59315	BEAC1	56.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	56.0
2017	5	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2017	5	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2017	5	59007	Clipperton Holdings LLC	IPP	Clipperton Holdings	NC	59213	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	5	58970	Ecoplexus, Inc	IPP	Flat Meeks PV 1	NC	59514	FLAT1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	5	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT4	307.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	360.0
2017	5	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CGT5	307.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	360.0
2017	5	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	STG6	454.9	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	511.2
2017	5	59745	First Solar Asset Management	IPP	Playa Solar 2	NV	60261	GEN1	100.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	100.0
2017	5	59155	First Wind O&M, LLC	IPP	Milliani South PV	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	14.7
2017	5	60252	Friendswood Energy Genco, LLC	IPP	Friendswood Energy	TX	60469	GT-1	117.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	121.5
2017	5	59446	Innovative Solar 55, LLC	IPP	Innovative Solar 55	NC	59676	IS044	6.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.5
2017	5	59898	Kawailoa Solar, LLC	IPP	Kawailoa Solar	HI	60125	KAWS	49.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	49.0
2017	5	12258	Medical Area Total Epy Pll Inc	Commercial	Medical Area Total Energy Plant	MA	10883	CT3	12.8	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	13.8
2017	5	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT1	310.3	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2017	5	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT2	310.3	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2017	5	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	ST1	493.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	493.0
2017	5	60246	Sunray Energy 2, LLC	IPP	Sunray 2	CA	10437	SUN2	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2017	5	60247	Sunray Energy 3 LLC	IPP	Sunray 3	CA	10438	SUN3	13.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	13.8
2017	5	58661	Sustainable Power Group, LLC	IPP	Central Antelope Dry Ranch B LLC	CA	60281	CADRB	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	5	24211	Tucson Electric Power Co	Electric Utility	UASTP II	AZ	57717	UABA	10.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	10.0
2017	5	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	45.9
2017	6	60248	Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH1	43.0	Natural Gas Fired Combustion Turbine				

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	6	5701	El Paso Electric Co	Electric Utility	Montana Solar Facility	TX	60300	IMPV1	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT7	313.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	360.9
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT8	313.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	360.9
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	STG9	461.4	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	508.5
2017	6	59745	First Solar Asset Management	IPP	CA Flats Solar 130, LLC	CA	60033	GEN01	130.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	130.0
2017	6	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG2	10.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	10.5
2017	6	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor	MA	1626	5	147.5	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	158.4
2017	6	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor	MA	1626	6	147.5	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	158.4
2017	6	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor	MA	1626	7	217.5	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	240.7
2017	6	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor	MA	1626	8	217.5	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	240.7
2017	6	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3CT	324.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	365.5
2017	6	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3ST	191.8	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	204.0
2017	6	59633	Great Bay Solar I LLC	IPP	Great Bay Solar 1	MD	59851	GBS01	57.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	150.0
2017	6	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	478.0
2017	6	59436	Innovative Solar 47, LLC	IPP	Innovative Solar 47	NC	59666	IS047	33.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	33.8
2017	6	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2017	6	59099	New Dimension Energy Company, LLC	IPP	Westwind Trust	CA	54258	WTGS	15.6	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	15.6
2017	6	58477	OZenergies, Inc.	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2017	6	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG11	256.5	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	328.0
2017	6	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG12	256.5	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	328.0
2017	6	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	STG10	334.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	404.0
2017	6	60070	Organ Church Solar	IPP	Organ Church Solar	NC	60284	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	6	57313	SolarCity Corporation	IPP	BJ's Wholesale Club, Inc- Uxbridge	MA	60116	PV1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2017	6	59696	Soluga Farms IV	IPP	Soluga Farms IV	NC	59934	SFIV	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.9
2017	6	60073	St. Matthews Solar, LLC	IPP	St. Matthews Solar	NC	60293	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	6	59840	Wallace Solar 2, LLC	IPP	Wallace Solar 2	SC	60090	2MWPV	1.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.9
2017	6	60192	Warbler Holdings, LLC	IPP	Warbler Holdings	NC	60393	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2017	6	60079	Whiteville Solar 2, LLC	IPP	Whiteville Solar 2	NC	60292	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	6	59731	Windham Solar LLC	IPP	Lebanon Solar 1	CT	59991	LEB1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	6	59731	Windham Solar LLC	IPP	Lebanon Solar 2	CT	59992	LEB2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	7	60078	Bladen Solar Farm, LLC	IPP	Bladen Solar Farm	NC	60296	PV1	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	7	60179	Duroc Holdings, LLC	IPP	Duroc Holdings	NC	60379	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	7	59362	Jericho Rise Wind Farm LLC	IPP	Jericho Rise Wind Farm LLC	NY	59629	GEN1	77.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	77.7
2017	7	59342	Maricopa West Solar PV 2, LLC	IPP	Maricopa West Solar 2	CA	59608	MWS2	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	3A	122.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2017	7	60193	Tamworth Holdings, LLC	IPP	Tamworth Holdings	NC	60394	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	8	60112	97WI 8ME, LLC	IPP	Midway Solar Farm III	CA	60315	MSF3	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2017	8	60042	Fluvanna Wind Energy LLC	IPP	Fluvanna	TX	59245	FLUV1	152.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	152.0
2017	8	58849	Mariah del Este LLC	IPP	Mariah East	TX	59006	MARN	230.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	230.4
2017	8	56987	RRE Austin Solar LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	120.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	120.0
2017	8	57313	SolarCity Corporation	IPP	Broome County	NY	60507	NORTH	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	8	57313	SolarCity Corporation	IPP	Broome County	NY	60507	SOUTH	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2017	9	60292	Advanced Solar Power Holdings, Inc	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.2
2017	9	15399	Avangrid Renewables Inc	IPP	Tule Wind LLC	CA	57913	1	143.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	143.0
2017	9	6175	City of Falls City - (NE)	Electric Utility	Falls City	NE	2237	9	9.3	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	9.3
2017	9	59745	First Solar Asset Management	IPP	Playa Solar	NV	59827	GEN01	79.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	79.0
2017	9	60099	MS Solar 3, LLC	IPP	Sumrall II Solar Farm	MS	60303	SUM2	52.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	52.0
2017	9	59109	SUNE BEACON SITE 2, LLC	IPP	Beacon Solar Plant Site 2	CA	59309	BEAC2	48.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	48.0
2017	9	59110	SUNE BEACON SITE 5, LLC	IPP	Beacon Solar Plant Site 5	CA	59308	BEAC5	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2017	10	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2017	10	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2017	10	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	STG2	395.1	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	419.6
2017	10	58695	Coronal Development Services	IPP	Fusion Solar Center LLC	CT	58876	PV	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2017	10	9267	Hoosier Energy R E C, Inc	Electric Utility	Decatur Co. Solar RES (IN)	IN	59988	PV1	1.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.1
2017	10	9267	Hoosier Energy R E C, Inc	Electric Utility	Jackson Co. Solar RES	IN	59989	PV1	1.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.1
2017	10	9267	Hoosier Energy R E C, Inc	Electric Utility	Spring Mill Solar RES	IN	59987	PV1	1.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.1
2017	10	59669	Louisburg Solar LLC	IPP	Louisburg Solar	NC	59895	5MWPV	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	10	58850	Mariah del Sur LLC	IPP	Mariah South	TX	59007	MAR S	230.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	230.4
2017	10	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2017	10	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2017	10	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2017	10	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2017	10	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2017	10	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT1	9.7	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	9.7
2017	10	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT2	9.7	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	9.7
2017	10	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT3	9.7	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	9.7
2017	10	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT4	9.7	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	9.7
2017	10	59056	Tri Global Energy, LLC	IPP	Fiber Winds	TX	59244	FIBE1	80.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	80.0
2017	10	59056	Tri Global Energy, LLC	IPP	Goodnight	TX	59246	GOOD1	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2017	10	19876	Virginia Electric & Power Co	Electric Utility	Remington Solar Facility	VA	59685	01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	10	57028	West Butte Wind Power LLC	IPP	West Butte Wind Power Project	OR	57704	WB-1	104.5	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	104.5
2017	11	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2017	11	58574	Canton Mountain Wind LLC	IPP	Canton Mountain Wind	ME	58620	1	22.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	22.8
2017	11	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT11	243.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	243.0
2017	11	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT12	243.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	243.0
2017	11	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	ST10	362.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	362.0
2017	11	57170	EDF Renewable Asset Holdings, Inc.	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	79.9
2017	11	60221	North Slope LLC	IPP	North Slope, LLC	NY	60420	NSPV	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2017	12	60074	Ajax Solar, LLC	IPP	Ajax Solar	NC	60288	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	12	58794	American Wind Energy Management Corp.	IPP	Sangamon Wind One LLC	IL	58925	SAN1	30.0	Onshore Wind Turbine	WND	WT		

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	12	59365	Capital Power Corporation	IPP	Hopeful Solar LLC	GA	59892	GEN	20.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.7
2017	12	59365	Capital Power Corporation	IPP	New Frontier Wind	ND	59903	GEN	99.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	99.0
2017	12	59365	Capital Power Corporation	IPP	Poplars Ranch Solar LLC	OR	59890	GEN	16.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	16.0
2017	12	58508	Carolina Solar Energy II LLC	IPP	Cabaniss Solar	NC	60430	PV1	4.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.2
2017	12	58508	Carolina Solar Energy II LLC	IPP	McGrigor Farm Solar	NC	60440	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	12	58508	Carolina Solar Energy II LLC	IPP	Sellers Farm Solar	NC	60439	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	12	58508	Carolina Solar Energy II LLC	IPP	Tides Lane Farm	NC	60429	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT1	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.5
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT2	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.5
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	SGT1	288.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	361.3
2017	12	58998	Chapman Ranch Wind LLC	IPP	Chapman Ranch Wind I	TX	59193	CHA1	236.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	236.0
2017	12	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS1	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2017	12	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS2	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2017	12	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB001	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2017	12	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB002	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2017	12	59319	Cotton Solar, LLC	IPP	Cotton Solar	SC	59572	PV1	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2017	12	59464	Current Energy Group	IPP	Hickory	NC	59829	5515	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5501	3.0	All Other	OTH	OT	(U) Under construction, less than or equal to 50 percent complete	3.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5502	1.3	All Other	OTH	OT	(U) Under construction, less than or equal to 50 percent complete	1.3
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5511	1.7	All Other	OTH	OT	(U) Under construction, less than or equal to 50 percent complete	1.7
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5EG	1.0	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	1.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STA	40.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	65.0
2017	12	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STB	40.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	65.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Grandview Wind Farm III LLC	TX	59067	GVIII	188.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	188.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Magic Valley Wind Farm II	TX	59066	MVII	230.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	230.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Twin Forks Wind Farm LLC	IL	59061	WT1	351.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	351.0
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Vici Wind Farm	OK	59062	VICI	104.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	104.4
2017	12	58970	Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	12	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	16.0
2017	12	58970	Ecoplexus, Inc	IPP	Manning PV 1	NC	59520	MANN	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	12	58970	Ecoplexus, Inc	IPP	Round Hill PV1	NC	59998	RNDHL	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2017	12	58970	Ecoplexus, Inc	IPP	Vaughn Creek PV1	NC	60001	VNCRK	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	12	58970	Ecoplexus, Inc	IPP	Willoughby PV1	NC	60003	WILL1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	12	59380	Enel Green Power NA, Inc.	IPP	Apple Blossom Wind Farm	MI	58690	APLB1	100.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	100.0
2017	12	60147	Enerparc Solar Development, LLC	IPP	Hilly Branch	NC	60358	28941	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2017	12	60147	Enerparc Solar Development, LLC	IPP	Neal Hawkins Rd	NC	60359	60916	4.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.3
2017	12	60147	Enerparc Solar Development, LLC	IPP	Pike Road Solar	NC	60360	51116	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Buckeye Wind Farm	OH	58776	1	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Coyote Crest Wind Farm	WA	58778	1	126.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	126.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Horse Thief Wind Project, LLC	MT	59758	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Mason Dixon Wind Farm	PA	60212	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Mud Springs Wind Project, LLC	MT	59756	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Pnyor Caves Wind Project, LLC	MT	59757	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Scioto Ridge Wind Farm	OH	58780	1	300.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	300.0
2017	12	58672	Everpower Wind Holdings Inc	IPP	Terrapin Hills Wind Farm	MD	60211	1	50.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	50.0
2017	12	56615	First Solar Project Development	IPP	Aiya Solar Project	NV	59869	GEN01	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2017	12	59155	First Wind O&M, LLC	IPP	Bowers Wind Project	ME	57088	1	48.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	48.0
2017	12	58692	Florey Knob LLC	IPP	Florey Knob	PA	58821	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58692	Florey Knob LLC	IPP	Florey Knob	PA	58821	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58692	Florey Knob LLC	IPP	Florey Knob	PA	58821	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	2	156.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	170.0
2017	12	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	3	156.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	170.0
2017	12	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	4	390.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	390.0
2017	12	60222	Haida Energy, Inc.	Electric Utility	Hiliangaay Hydro	AK	59037	GEN 1	5.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2017	12	60095	High Pockets Solar, LLC	IPP	High Pockets Solar	NC	60305	PV1	1.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.9
2017	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	5.3
2017	12	59439	Innovative Solar 54, LLC	IPP	Innovative Solar 54	NC	59669	IS054	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2017	12	59448	Innovative Solar 67, LLC	IPP	Innovative Solar 67	NC	59678	IS067	33.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	33.3
2017	12	60069	Jester Solar LLC	IPP	Jester Solar	NC	60290	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2017	12	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	22.0
2017	12	56911	Kalaeloa Solar One LLC	IPP	Kalaeloa Solar One	HI	57569	KS1-A	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2017	12	60223	Ketchikan Electric Company	Electric Utility	Mahoney Lake Hydroelectric	AK	59027	GEN 1	9.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	9.6
2017	12	56939	Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL	57622	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2017	12	56940	Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2017	12	11204	Los Alamos County	Electric Utility	Los Alamos PV Site	NM	58256	4	1.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.0
2017	12	59343	Maricopa East Solar PV, LLC	IPP	Maricopa East Solar	CA	59609	MES	18.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	18.0
2017	12	59761	McLean Homestead, LLC	IPP	McLean Homestead	NC	60020	PV1	4.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.9
2017	12	56941	Meadow Lake Wind Farm V LLC	IPP	Meadow Lake Wind Farm V LLC	IN	57628	GEN1	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2017	12	60035	Michigan Wind 3, LLC	IPP	Michigan Wind 3	MI	60246	1	152.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	152.8
2017	12	58718	Na Pua Makani Power Partners LLC	IPP	Na Pua Makani Wind Project	HI	58837	WT1	25.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	25.0
2017	12	56935	Number Nine Wind Farm LLC	IPP	Number Nine Wind Farm	ME	57612	GEN1	250.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	250.0
2017	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2017	12	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	110.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.8
2017	12	56949	Paulding Wind Farm LLC	IPP	Paulding Wind Farm LLC	OH	57611	GEN1	49.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayside Solar C, LLC	CA	60475	BSHRC	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2017	12	60071	Trinity Solar, LLC	IPP	Trinity Solar	NC	60291	PV1	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2017	12	58796	Trishe Wind Colorado	IPP	Trishe Wind Colorado	CO	58928	1	30.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30.0
2017	12	56633	Trishe Wind Minnesota	IPP	Trishe Wind Minnesota	MN	57255	1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2017	12	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH1	100.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	100.0
2017	12	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH2	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2017	12	58761	White Camp Solar LLC	IPP	White Camp Solar	TX	58888	WCAMP	100.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	100.0
2017	12	59316	Whitetail Solar LLC	IPP	Whitetail Solar	NC	59569	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2017	12	60072	Willard Solar, LLC	IPP	Willard Solar	SC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	1	60277	54 KR 8me LLC	IPP	Redwood 4 Solar Farm	CA	60490	RW4SF	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	1	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Landfill	NC	57492	GEN7	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2018	1	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Landfill	NC	57492	GEN8	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2018	1	2719	CalWind Resources Inc	IPP	Tehachapi Wind Resource II	CA	54909	PLAN	15.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	15.5
2018	1	56204	Diamond Generating Corporation - Operations, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG1	198.2	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.0
2018	1	56204	Diamond Generating Corporation - Operations, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG2	198.2	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	235.0
2018	1	56204	Diamond Generating Corporation - Operations, LLC	IPP	CPV Valley Energy Center	NY	56940	STG	308.7	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	300.0
2018	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	CA1	388.9	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	382.5
2018	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	G11	219.7	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	208.3
2018	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	G12	219.7	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	208.3
2018	1	58783	Marselles Land and Water Company	IPP	Marselles Lock and Dam Hydro	IL	58903	UNIT1	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2018	1	58783	Marselles Land and Water Company	IPP	Marselles Lock and Dam Hydro	IL	58903	UNIT2	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2018	1	58783	Marselles Land and Water Company	IPP	Marselles Lock and Dam Hydro	IL	58903	UNIT3	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2018	1	58783	Marselles Land and Water Company	IPP	Marselles Lock and Dam Hydro	IL	58903	UNIT4	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G11	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G12	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G13	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G14	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G15	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G16	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	G17	57.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	66.0
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG1	226.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.2
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG2	226.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.2
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG3	226.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.2
2018	1	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	STG	417.6	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	460.0
2018	1	60159	RES America Developments Inc	IPP	Lamesa Solar	TX	60372	LSPV2	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2018	1	16534	Sacramento Municipal Util Dist	Electric Utility	White Rock/Slab Creek	CA	435	H3	2.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.6
2018	1	58846	Southeast Renewable Fuels, LLC	Industrial	SRF Sorghum to Ethanol Advanced Biorefin	FL	58997	G1001	12.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	15.0
2018	2	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	G15	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2018	2	59686	Coronado Power Ventures LLC	IPP	Pincrest Energy Center	TX	59923	CTG-1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2018	2	59686	Coronado Power Ventures LLC	IPP	Pincrest Energy Center	TX	59923	CTG-2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2018	2	59686	Coronado Power Ventures LLC	IPP	Pincrest Energy Center	TX	59923	STG	289.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	289.0
2018	2	56615	First Solar Project Development	IPP	Little Bear Solar 1, LLC	CA	59870	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	2	56615	First Solar Project Development	IPP	Little Bear Solar 2, LLC	CA	59885	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	2	56615	First Solar Project Development	IPP	Windhub Solar A, LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	2	56615	First Solar Project Development	IPP	Windhub Solar B, LLC	CA	59969	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2018	2	58959	Freeport LNG Development LP	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	97.0
2018	2	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE2	24.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	24.0
2018	2	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT11	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2018	2	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT12	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2018	2	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	STG11	436.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	436.0
2018	3	59272	41MB 8me, LLC	IPP	Borden Solar Farm	CA	59531	BRDN	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2018	3	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	G16	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2018	3	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-1	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2018	3	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-2	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2018	3	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	STG-1	300.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	311.0
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN8	150.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	187.0
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN9	150.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	187.0
2018	3	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	CA1	388.9	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	382.5
2018	3	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	G11	219.7	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	208.3
2018	3	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	G12	219.7	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	208.3
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S1	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S2	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S3	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S4	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S5	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S6	8.4	Other Waste Biomass	OBL	IC	(U) Under construction, less than or equal to 50 percent complete	8.4
2018	3	13781	Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904	6-1	215.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	238.0
2018	3	59260	Wright Solar Park, LLC	IPP	Wright Solar Park	CA	59525	FRWSP	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2018	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	G17	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	161.9
2018	4	59683	Rockwood Energy Center LLC	IPP	Rockwood Energy Center LLC	TX	59918	ROCKW	1,068.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,068.0
2018	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	CTG	11.6	Other Waste Biomass	OBS	CT	(U) Under construction, less than or equal to 50 percent complete	12.0
2018	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	STG	7.4	Other Waste Biomass	OBS	CA	(U) Under construction, less than or equal to 50 percent complete	9.0
2018	4	59056	Tri Global Energy, LLC	IPP	Changing Winds	TX	59243	CHAN1	288.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	288.0
2018	4	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	1	27.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	18.2
2018	4	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	2	27.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	18.2
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG1	235.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	285.0
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG2	235.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	285.0
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	STG	280.5	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	280.5
2018	5	6455	Duke Energy Florida, Inc	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	1GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	310.3
2018	5	6455	Duke Energy Florida, Inc	Electric Utility	Citrus County Combined Cycle Plant	FL	60138							

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	6	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG1	257.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	269.5
2018	6	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG2	257.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	269.5
2018	6	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	STG1	336.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	337.0
2018	6	58597	Environmission, Inc	IPP	La Paz Solar Tower	AZ	58652	1	200.0	Solar Thermal without Energy Storage	SUN	OT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2018	6	6035	Exelon Power	IPP	Exelon West Midway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	100.0
2018	6	6035	Exelon Power	IPP	Exelon West Midway II LLC	MA	59882	5	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	100.0
2018	6	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	93.5	Wood/Wood Waste Biomass	WDS	ST	(T) Regulatory approvals received. Not under construction	93.5
2018	6	58880	Gallegos Wind Farm LLC	IPP	Gallegos Wind Farm, Phase 1	NM	59047	GEN 1	180.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	180.0
2018	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2018	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2018	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2018	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2018	6	49893	Invenery Services LLC	IPP	Invenery Nelson Expansion LLC	IL	60387	GEN3	157.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	190.0
2018	6	49893	Invenery Services LLC	IPP	Invenery Nelson Expansion LLC	IL	60387	GEN4	157.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	190.0
2018	6	49805	Kennecott Utah Copper	Industrial	Kennecott Power Plant	UT	56163	5CTG	176.9	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	207.9
2018	6	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC1	244.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	301.5
2018	6	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC2	208.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	234.0
2018	6	59101	NTE Texas, LLC	IPP	Pecan Creek Energy Center	TX	59298	PCEC1	133.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	171.8
2018	6	59101	NTE Texas, LLC	IPP	Pecan Creek Energy Center	TX	59298	PCEC2	133.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	171.8
2018	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-2	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-3	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-1	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Seward Generating Station	NJ	2411	701	321.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	430.0
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Seward Generating Station	NJ	2411	702	219.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	287.0
2018	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	G1	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	106.0
2018	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	G2	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	106.0
2018	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	G3	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	106.0
2018	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	G4	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	106.0
2018	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	238.0
2018	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	238.0
2018	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST1	245.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	260.0
2018	6	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG6	45.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2018	6	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG7	45.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2018	7	56615	First Solar Project Development	IPP	CA Flats Solar 150, LLC	CA	60034	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
2018	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4A	122.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2018	7	59056	Tr Global Energy, LLC	IPP	Bearkat	TX	59972	BRKAT	360.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	360.0
2018	7	59056	Tr Global Energy, LLC	IPP	Blue Cloud Renewable Energy Project, LLC	TX	60270	WT1	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2018	7	54863	U S Power Generating Company LLC	IPP	Gowanus Gas Turbines Generating	NY	2494	SS	90.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	93.0
2018	7	58996	Uppo Power 1, LLC	IPP	Castle Gap Solar	TX	60123	CGAP	117.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	117.3
2018	8	56615	First Solar Project Development	IPP	Snow Mountain Solar, LLC	NV	59835	GEN01	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2018	10	6455	Duke Energy Florida, Inc	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	ZGTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	310.3
2018	10	6455	Duke Energy Florida, Inc	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	ZGTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	310.3
2018	10	6455	Duke Energy Florida, Inc	Electric Utility	Citrus County Combined Cycle Plant	FL	60138	CC2ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	364.7
2018	10	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC1	244.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	301.5
2018	10	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC2	208.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	234.0
2018	10	59056	Tr Global Energy, LLC	IPP	Tex-Mex Renewable Energy Project, LLC	TX	60269	WT1	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 6	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 7	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 8	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 9	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC10	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC11	105.3	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	105.3
2018	12	58794	American Wind Energy Management Corp.	IPP	Sangamon Wind Two LLC	IL	58926	SAN2	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2018	12	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	02B	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	40.0
2018	12	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	03A	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	40.0
2018	12	58662	Blue Mountain Power Partners	IPP	Blue Mountain Wind Farm	UT	58764	BM1	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2018	12	59992	Caprock Solar 2, LLC	IPP	Caprock Solar 2, LLC	NM	59846	PV1	30.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	30.0
2018	12	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	1	76.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	76.5
2018	12	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	2	76.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	76.5
2018	12	59432	Clear Creek Power	IPP	Highland Park Project	CO	59659	HPWT	198.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	198.0
2018	12	56769	Consolidated Edison Development Inc.	IPP	Panoche Valley Solar Farm	CA	57340	1	240.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	240.0
2018	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT1	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2018	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT2	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2018	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	ST	191.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	227.7
2018	12	56215	E ON Climate Renewables N America LLC	IPP	Stella Wind Farm	TX	59063	WT1	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
2018	12	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	8.9
2018	12	58970	Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	17.0
2018	12	58672	Everpower Wind Holdings Inc	IPP	Cassadaga Wind Farm	NY	58777	1	126.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.0
2018	12	59745	First Solar Asset Management	IPP	Cuyama Solar, LLC	CA	60043	GEN01	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2018	12	56615	First Solar Project Development	IPP	Portal Ridge Solar A, LLC	CA	60309	GEN01	18.5	Solar Photovoltaic				

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58763	LotusWorks-Summit Ridge I, LLC	IPP	Summit Ridge I Wind Farm	OR	58894	SRWF	192.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	192.0
2018	12	55983	Luminant Generation Company LLC	IPP	Horseshoe Bend	TX	59806	SOLAR	140.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	140.0
2018	12	4202	Phillips 66-Ponca City Refinery	Industrial	Ponca City Refinery	OK	52188	G1A	3.0	Other Gases	OG	ST	(P) Planned for installation, but regulatory approvals not initiated	5.0
2018	12	56069	SunCoke Energy, Inc.	Industrial	SunCoke Energy South Shore Facility	KY	60373	SSST6	60.0	Conventional Steam Coal	BIT	ST	(T) Regulatory approvals received. Not under construction	90.0
2018	12	59138	SunPower Corporation, Systems	IPP	Aragonne Solar LLC	NM	59252	PV1	38.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	40.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG1	276.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG2	276.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	STG1	374.0	Natural Gas Steam Turbine	NG	ST	(T) Regulatory approvals received. Not under construction	394.0
2018	12	2782	Terra-Gen Operating Company	IPP	Dixie Valley Power Partnership	NV	10681	GEN1	25.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	28.0
2018	12	59056	Tri Global Energy, LLC	IPP	Canyon Wind Project, LLC	TX	60271	WT1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2018	12	59056	Tri Global Energy, LLC	IPP	Cone Renewable Energy Project, LLC	TX	60272	WT1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2018	12	19511	University of Alaska	Commercial	University of Alaska Fairbanks	AK	50711	GEN5	17.0	Conventional Steam Coal	SUB	ST	(U) Under construction, less than or equal to 50 percent complete	17.0
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT01	324.4	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT02	324.4	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT03	324.4	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	ST01	611.8	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	663.9
2019	1	56794	CE Obsidian Energy LLC	IPP	Black Rock 1	CA	57477	G3201	60.0	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	70.0
2019	1	49893	Invenery Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN3	465.0	Natural Gas Fired Combined Cycle	NG	CS	(U) Under construction, less than or equal to 50 percent complete	555.0
2019	3	59056	Tri Global Energy, LLC	IPP	Crosby County Wind Farm, LLC	TX	60273	WT1	160.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	160.0
2019	4	58409	Future Power PA	IPP	Good Spring NGCC Facility	PA	58409	G11	232.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2019	4	58409	Future Power PA	IPP	Good Spring NGCC Facility	PA	58409	ST1	108.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	108.0
2019	4	15473	Public Service Co of NM	Electric Utility	La Luz Energy Center	NM	58284	0002	40.2	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	42.3
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT1	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT2	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT3	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	2172	Brazos Electric Power Coop Inc	Electric Utility	Hill County Generation Facility	TX	60194	CT4	205.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	232.0
2019	5	59111	Crawford Renewable Energy, LLC	IPP	Crawford Renewable Energy - Meadville Po	PA	59307	MPS	93.5	All Other	TDF	ST	(U) Under construction, less than or equal to 50 percent complete	99.5
2019	5	59677	Middlesex Energy Center LLC	IPP	Middlesex Energy Center LLC	NJ	59909	CT001	560.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	560.0
2019	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG1	41.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	41.0
2019	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG2	41.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	41.0
2019	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG3	41.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	41.0
2019	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG1	75.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	75.0
2019	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG2	75.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	75.0
2019	6	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC1	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2019	6	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC2	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2019	6	7277	Calpine Corporation	IPP	Wild Horse Power Plant	CA	57181	1	40.0	Geothermal	GEO	ST	(T) Regulatory approvals received. Not under construction	48.0
2019	6	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	CT1	235.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	242.0
2019	6	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	ST1	198.5	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	214.0
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1A	376.6	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1B	376.6	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1C	376.6	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1ST	593.3	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	593.3
2019	6	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2019	6	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCA1	224.9	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	321.6
2019	6	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT1	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2019	6	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT2	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2019	6	21461	NRG Canal LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	330.0
2019	6	54866	Robinson Power Company LLC	IPP	Robinson Power Company LLC	PA	56453	CTG1	950.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	1,025.0
2019	6	17539	South Carolina Electric&Gas Company	Electric Utility	V C Summer	SC	6127	2	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG1	172.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	200.0
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG2	172.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	200.0
2019	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	ST1	215.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	255.0
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG01	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG02	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG03	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG04	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG05	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	59235	Cogenrix Development Holdings, LLC	IPP	Buckeye Generation Center, LLC	AZ	59471	CTG06	104.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	108.7
2019	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8A	122.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2019	7	59137	Palmer Renewable Energy	IPP	Palmer Renewable Energy	MA	59336	PRE	42.0	Wood/Waste Biomass	WDS	ST	(L) Regulatory approvals pending. Not under construction	42.0
2019	9	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	PVGEN	70.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	70.0
2019	10	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	CPEC1	680.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	680.0
2019	10	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U001	345.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	390.0
2019	10	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U002	345.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	390.0
2019	10	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U003	345.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	390.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT5	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT7	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST6	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST8	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	12	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	90.0
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	SD	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	59365	Capital Power Corporation	IPP	Garrison Butte Wind, LLC	ND	60066	GEN	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	CT1	301.5	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	319.5
2019	12	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	CT2	301.5	N				

Table 6.5. Planned U.S. Electric Generating Unit Additions

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	12	59646	Summit Texas Clean Energy	IPP	Texas Clean Energy Project	TX	59859	TCE1B	126.0	Other Gases	OG	CA	(T) Regulatory approvals received. Not under construction	126.0
2019	12	56709	Turning Point Solar LLC	IPP	Turning Point Solar	OH	57371	TPS50	44.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	44.0
2020	1	56794	CE Obsidian Energy LLC	IPP	Black Rock II	CA	57478	G3202	60.0	Geothermal	GEO	ST	(T) Regulatory approvals received. Not under construction	70.0
2020	1	60131	South Field Energy, LLC	IPP	South Field Energy	OH	60356	SFECC	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	1,105.0
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.0
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG4	225.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.0
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	PV1	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	STG2	250.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	250.0
2020	5	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT5	42.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.0
2020	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	4	282.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	321.0
2020	5	18454	Tampa Electric Co	Electric Utility	Tampa Electric Co NA 2	FL	56352	1	204.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	220.0
2020	6	60118	83WI 8ME, LLC	IPP	Midway Solar Farm 1	CA	60336	MSF1	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2020	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	49846	Covanta Honolulu Resource Recovery	Commercial	H Power	HI	10334	PV1	2.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.1
2020	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCA1	261.2	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	280.5
2020	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT1	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2020	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT2	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2020	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCCA1	205.4	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	207.4
2020	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCC11	319.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	371.5
2020	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCA1	302.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	331.5
2020	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT1	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2020	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT2	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2020	6	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	4	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	6	56167	Imperial Valley Solar, LLC	IPP	Imperial Valley Solar, LLC	CA	56917	2	400.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	400.0
2020	6	59588	Lake Creek 3 Power Company LLC	IPP	Lake Creek	TX	3502	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT5	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT6	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	17539	South Carolina Electric&Gas Company	Electric Utility	V C Summer	SC	6127	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	6	56883	Tradinghouse Power Company LLC	IPP	Tradinghouse	TX	3506	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	56883	Tradinghouse Power Company LLC	IPP	Tradinghouse	TX	3506	CT2	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	7	58758	CPV Smyth Generation Company LLC	IPP	CPV Smyth Generation Company LLC	VA	58878	1	989.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	1,017.0
2020	8	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	9	7277	Calpine Corporation	IPP	Buckeye Geothermal Power Plant	CA	57180	1	49.9	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	56.9
2020	10	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	5580	East Kentucky Power Coop, Inc	Electric Utility	Green Valley LFGTE	KY	56278	4	0.8	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	0.8
2020	12	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	7277	Calpine Corporation	IPP	Telephone Flat	CA	55846	1	42.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	49.9
2020	12	59365	Capital Power Corporation	IPP	Nolin Hills Wind, LLC	OR	60070	GEN	350.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	350.0
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	8	209.5	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	209.5
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	9	209.5	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	108.8
2020	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-B	813.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	813.0
2020	12	19316	Two Elk Generation Partners LP	IPP	Two Elk Generating Station	WY	55360	GEN1	275.0	Conventional Steam Coal	WC	ST	(U) Under construction, less than or equal to 50 percent complete	320.0
2021	1	56794	CE Obsidian Energy LLC	IPP	Black Rock III	CA	57479	G303	60.0	Geothermal	GEO	ST	(T) Regulatory approvals received. Not under construction	70.0
2021	1	19876	Virginia Electric & Power Co	Electric Utility	VA Offshore Wind Project (VOWTAP)	VA	59693	OSW1	12.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	12.0
2021	4	55927	Power4Georgians LLC	Electric Utility	Plant Washington	GA	56675	MAIN	850.0	Conventional Steam Coal	SUB	ST	(T) Regulatory approvals received. Not under construction	850.0
2021	5	16572	Salt River Project	Electric Utility	Copper Crossing Gen Station	AZ	58413	COGS1	97.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	116.0
2021	5	16572	Salt River Project	Electric Utility	Copper Crossing Gen Station	AZ	58413	COGS3	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	228.0
2022	5	16572	Salt River Project	Electric Utility	Copper Crossing Gen Station	AZ	58413	COGS2	97.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	116.0
2022	5	16572	Salt River Project	Electric Utility	Copper Crossing Gen Station	AZ	58413	COGS4	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	228.0
2022	6	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	CT1	224.9	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.5
2022	6	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	CT2	224.9	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.5
2022	6	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	ST1	344.4	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	382.5
2022	12	56943	Blackstone Wind Farm III LLC	IPP	Blackstone Wind Farm III	IL	57618	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	12	56944	Blackstone Wind Farm IV LLC	IPP	Blackstone Wind Farm IV	IL	57619	GEN1	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2022	12	7277	Calpine Corporation	IPP	Four Mile Hill	CA	55845	1	42.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	49.9
2022	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-A	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2022	12	56425	Simpson Ridge Wind Farm LLC	IPP	Simpson Ridge Wind Farm LLC	WY	57117	GEN 1	50.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2023	5	16572	Salt River Project	Electric Utility	Copper Crossing Gen Station	AZ	58413	COGS5	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	228.0
2023	5	18454	Tampa Electric Co	Electric Utility	Tampa Electric Co NA 2	FL	56352	2	204.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	220.0
2023	12	57470	Noble Energy Systems, Inc.	IPP	Pea Patch Wind Farm	MD	58087	PEAP	50.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	50.0
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-B	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0

NOTES:

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.

Entity ID and Plant ID are official, unique identification numbers assigned by EIA; Generator IDs are assigned by plant owners and/or operators.

Table 6.6. Planned U.S. Electric Generating Unit Retirements

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2016	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2016	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2016	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	1	200.0	Conventional Steam Coal	BIT	ST
2016	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	2	200.0	Conventional Steam Coal	BIT	ST
2016	12	14534	City of Pasadena - (CA)	Electric Utility	Broadway (CA)	CA	420	B3	71.0	Natural Gas Steam Turbine	NG	ST
2016	12	6455	Duke Energy Florida, Inc	Electric Utility	Suwannee River	FL	638	1	28.0	Natural Gas Steam Turbine	NG	ST
2016	12	6455	Duke Energy Florida, Inc	Electric Utility	Suwannee River	FL	638	2	29.0	Natural Gas Steam Turbine	NG	ST
2016	12	6455	Duke Energy Florida, Inc	Electric Utility	Suwannee River	FL	638	3	71.0	Natural Gas Steam Turbine	NG	ST
2016	12	7160	Geysers Power Co LLC	IPP	West Ford Flat Power Plant	CA	10199	WFF1	15.0	Geothermal	GEO	ST
2016	12	7160	Geysers Power Co LLC	IPP	West Ford Flat Power Plant	CA	10199	WFF2	15.0	Geothermal	GEO	ST
2016	12	13960	NRG Cabrillo Power Ops Inc	IPP	EI Cajon	CA	301	ENCI	16.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	ST1	106.0	Natural Gas Steam Turbine	NG	ST
2016	12	13960	NRG Cabrillo Power Ops Inc	IPP	Miramar	CA	305	MRGT	36.0	Natural Gas Fired Combustion Turbine	NG	GT
2016	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	GT7	7.3	Natural Gas Fired Combustion Turbine	NG	GT
2016	12	17578	South Orange Co Wastewtr Auth	Commercial	Aliso Water Management Agency	CA	10820	GEN1	0.4	Other Waste Biomass	OBG	IC
2016	12	17578	South Orange Co Wastewtr Auth	Commercial	Aliso Water Management Agency	CA	10820	GEN2	0.4	Other Waste Biomass	OBG	IC
2017	1	5943	Entergy Nuc Fitzpatrick LLC	IPP	James A Fitzpatrick	NY	6110	1	836.8	Nuclear	NUC	ST
2017	1	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	1TG	10.5	Wood/Wood Waste Biomass	BLQ	ST
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2017	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2017	2	57440	SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	1	3.0	Conventional Steam Coal	BIT	ST
2017	3	54843	WM Illinois Renewable Energy LLC	IPP	Lake Gas Recovery	IL	50575	GEN2	2.9	Landfill Gas	LFG	GT
2017	3	54843	WM Illinois Renewable Energy LLC	IPP	Lake Gas Recovery	IL	50575	GEN3	2.9	Landfill Gas	LFG	GT
2017	3	54842	WM Renewable Energy LLC	IPP	BJ Gas Recovery	GA	54392	GEN1	0.8	Landfill Gas	LFG	IC
2017	3	54842	WM Renewable Energy LLC	IPP	BJ Gas Recovery	GA	54392	GEN3	0.8	Landfill Gas	LFG	IC
2017	3	54842	WM Renewable Energy LLC	IPP	Monroe Livingston Gas Recovery	NY	50565	GEN2	0.8	Landfill Gas	LFG	IC
2017	4	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT1	12.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	1	628.0	Conventional Steam Coal	BIT	ST
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	2	602.0	Conventional Steam Coal	BIT	ST
2017	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2017	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2017	5	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2017	5	7570	Great River Energy	Electric Utility	Stanton	ND	2824	1	188.1	Conventional Steam Coal	SUB	ST
2017	5	7570	Great River Energy	Electric Utility	Stanton	ND	2824	2	1.0	Petroleum Liquids	DFO	IC
2017	5	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	4	16.9	Petroleum Liquids	KER	GT
2017	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	3	148.0	Petroleum Liquids	RFO	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	1	225.2	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	2	237.8	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	3	575.0	Conventional Steam Coal	BIT	ST
2017	6	58534	Brayton Point Energy LLC	IPP	Brayton Point	MA	1619	4	435.0	Petroleum Liquids	RFO	ST
2017	6	55951	Exelon Nuclear	IPP	Clinton Power Station	IL	204	1	1,065.0	Nuclear	NUC	ST
2017	6	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	3	31.1	Natural Gas Steam Turbine	NG	ST
2017	6	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	4	37.5	Natural Gas Steam Turbine	NG	ST
2017	6	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC1	2.0	Petroleum Liquids	DFO	IC
2017	6	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC2	1.4	Petroleum Liquids	DFO	IC
2017	6	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	1	17.5	Natural Gas Steam Turbine	NG	ST
2017	6	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	2	17.4	Natural Gas Steam Turbine	NG	ST
2017	6	54842	WM Renewable Energy LLC	IPP	New Milford Gas Recovery	CT	50564	GEN4	0.8	Landfill Gas	LFG	IC
2017	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2017	10	18445	City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	18445	City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT1	0.5	Landfill Gas	LFG	IC
2017	10	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT2	0.3	Landfill Gas	LFG	IC
2017	10	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT3	0.3	Landfill Gas	LFG	IC
2017	10	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT4	0.3	Landfill Gas	LFG	IC
2017	12	463	Ameresco FFG 1 Inc	IPP	Al Turi	NY	10549	3010	0.8	Landfill Gas	LFG	IC
2017	12	56730	Cedar Bay Operating Services LLC	Electric CHP	Cedar Bay Generating Company LP	FL	10672	GEN1	250.0	Conventional Steam Coal	BIT	ST
2017	12	3989	City of Colorado Springs - (CO)	Electric Utility	Martin Drake	CO	492	5	46.0	Conventional Steam Coal	SUB	ST
2017	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	4	83.0	Natural Gas Fired Combined Cycle	NG	CA
2017	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT1	72.0	Natural Gas Fired Combined Cycle	NG	CT
2017	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT2	72.0	Natural Gas Fired Combined Cycle	NG	CT
2017	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0	Natural Gas Steam Turbine	NG	ST
2017	12	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	286	U10	30.0	Geothermal	GEO	ST
2017	12	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	286	U9	30.0	Geothermal	GEO	ST
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	15.2	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	13.4	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	16.1	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	1	2.1	Petroleum Liquids	DFO	IC
2017	12	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	2	1.8	Petroleum Liquids	DFO	IC
2017	12	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	3	1.9	Petroleum Liquids	DFO	IC
2017	12	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT1	21.6	Petroleum Liquids	DFO	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT2	25.7	Petroleum Liquids	DFO	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	1	13.2	Natural Gas Steam Turbine	NG	ST
2017	12	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	3	85.2	Natural Gas Steam Turbine	NG	ST
2017	12	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	1	23.7	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	2	20.6	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	1	27.9	Natural Gas Steam Turbine	NG	ST
2017	12	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	3	80.8	Natural Gas Steam Turbine	NG	ST
2017	12	58100	Middle Tennessee State University	Commercial	MTSU Power Co-Gen Plant	TN	58179	SG-01	2.0	Petroleum Liquids	DFO	IC
2017	12	58100	Middle Tennessee State University	Commercial	MTSU Power Co-Gen Plant	TN	58179	SG-02	2.0	Petroleum Liquids	DFO	IC
2017	12	58100	Middle Tennessee State University	Commercial	MTSU Power Co-Gen Plant	TN	58179	SG-03	2.0	Petroleum Liquids	DFO	IC
2017	12	58100	Middle Tennessee State University	Commercial	MTSU Power Co-Gen Plant	TN	58179	SG-04	2.0	Petroleum Liquids	DFO	IC
2017	12	58100	Middle Tennessee State University	Commercial	MTSU Power Co-Gen Plant	TN	58179	SG-05	2.0	Petroleum Liquids	DFO	IC
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0	Natural Gas Steam Turbine	NG	ST
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Kearny	CA	303	KEA3	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	13407	Nevada Power Co	Electric Utility	Reid Gardner	NV	2324	4	257.0	Conventional Steam Coal	BIT	ST
2017	12	59099	New Dimension Energy Company, LLC	IPP	Altamont Midway Ltd	CA	50001	WTGS	10.9	Onshore Wind Turbine	WND	WT
2017	12	59099	New Dimension Energy Company, LLC	IPP	Dyer Road	CA	50818	GEN1	10.5	Onshore Wind Turbine	WND	WT
2017	12	59099	New Dimension Energy Company, LLC	IPP	Santa Clara (85C)	CA	50534	WGN5	18.0	Onshore Wind Turbine	WND	WT
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	3	121.0	Natural Gas Steam Turbine	NG	ST
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	4	259.0	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN1	1.6	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN2	1.6	Natural Gas Steam Turbine	NG	ST
2017	12	14030	Oklahoma State University	Commercial	Oklahoma State University	OK	54779	GEN4	5.2	Natural Gas Steam Turbine	NG	ST
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Balch 2	CA	218	2	52.5	Conventional Hydroelectric	WAT	HY
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Balch 2	CA	218	3	52.5	Conventional Hydroelectric	WAT	HY
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2017	12	14328	Pacific Gas & Electric Co	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2017	12	15466	Public Service Co of Colorado	Electric Utility	Valmont	CO	477	5	184.0	Conventional Steam Coal	BIT	ST

Table 6.6. Planned U.S. Electric Generating Unit Retirements

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2017	12	15473	Public Service Co of NM	Electric Utility	San Juan	NM	2451	2	340.0	Conventional Steam Coal	BIT	ST
2017	12	15473	Public Service Co of NM	Electric Utility	San Juan	NM	2451	3	497.0	Conventional Steam Coal	BIT	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	1	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	2	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	3	107.0	Conventional Steam Coal	SUB	ST
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	4	107.0	Conventional Steam Coal	SUB	ST
2018	1	12541	City of Milford - (IA)	Electric Utility	Milford	IA	1164	1	0.6	Petroleum Liquids	DFO	IC
2018	1	12541	City of Milford - (IA)	Electric Utility	Milford	IA	1164	4	0.5	Petroleum Liquids	DFO	IC
2018	1	17891	City of St Marys - (OH)	Electric Utility	St Marys	OH	2942	7	12.0	Petroleum Liquids	DFO	GT
2018	4	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT2	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	6455	Duke Energy Florida, Inc	Electric Utility	Crystal River	FL	628	1	370.0	Conventional Steam Coal	BIT	ST
2018	4	6455	Duke Energy Florida, Inc	Electric Utility	Crystal River	FL	628	2	499.0	Conventional Steam Coal	BIT	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewart Generating Station	NJ	2411	1	102.8	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewart Generating Station	NJ	2411	2	118.0	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewart Generating Station	NJ	2411	3	106.2	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewart Generating Station	NJ	2411	4	123.6	Natural Gas Steam Turbine	NG	ST
2018	6	55951	Exelon Nuclear	IPP	Quad Cities Generating Station	IL	880	1	908.0	Nuclear	NUC	ST
2018	6	55951	Exelon Nuclear	IPP	Quad Cities Generating Station	IL	880	2	911.0	Nuclear	NUC	ST
2018	6	9397	International Turbine Res Inc	IPP	Dinosaur Point	CA	10005	WTGS	17.0	Onshore Wind Turbine	WND	WT
2018	7	7308	Hawkeye Energy Greenport LLC	IPP	Hawkeye Energy Greenport LLC	NY	55969	U-01	52.7	Petroleum Liquids	KER	GT
2018	7	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	1	0.8	Conventional Hydroelectric	WAT	HY
2018	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8	103.8	Conventional Hydroelectric	WAT	HY
2018	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	1	113.0	Natural Gas Steam Turbine	NG	ST
2018	10	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	2LOT7	0.5	Solar Photovoltaic	SUN	PV
2018	10	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG1	163.0	Natural Gas Fired Combined Cycle	NG	CT
2018	10	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG2		Natural Gas Fired Combined Cycle	NG	CT
2018	10	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG3		Natural Gas Fired Combined Cycle	NG	CT
2018	10	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	STG1		Natural Gas Fired Combined Cycle	NG	CA
2018	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	1	420.0	Conventional Steam Coal	SUB	ST
2018	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	2	420.0	Conventional Steam Coal	SUB	ST
2018	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	884	4	510.0	Conventional Steam Coal	SUB	ST
2018	12	13781	Northern States Power Co - Minnesota	Electric Utility	Northern States Flambeau	WI	3984	1	12.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	20856	Wisconsin Power & Light Co	Electric Utility	Edgewater	WI	4050	4	302.4	Conventional Steam Coal	SUB	ST
2019	6	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	682.3	Nuclear	NUC	ST
2019	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	1	2.0	Petroleum Liquids	DFO	IC
2019	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	2	2.0	Petroleum Liquids	DFO	IC
2019	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	3	2.0	Petroleum Liquids	DFO	IC
2019	10	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	1	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	2	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	5	485.0	Natural Gas Steam Turbine	NG	ST
2019	10	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	1	225.8	Natural Gas Steam Turbine	NG	ST
2019	10	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	7	480.0	Natural Gas Steam Turbine	NG	ST
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	1	189.0	Conventional Steam Coal	BIT	ST
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	2	189.0	Conventional Steam Coal	BIT	ST
2019	12	195	Alabama Power Co	Electric Utility	Barry	AL	3	1	55.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Barry	AL	3	2	55.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Gadsden	AL	7	1	64.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Gadsden	AL	7	2	66.0	Natural Gas Steam Turbine	NG	ST
2019	12	56706	Chevron Technology Ventures	IPP	Questa Solar Facility	NM	57369	QST	1.0	Solar Photovoltaic	SUN	PV
2019	12	54802	Dynegy - Moss Landing LLC	IPP	Dynegy Moss Landing Power Plant	CA	260	6	754.0	Natural Gas Steam Turbine	NG	ST
2019	12	54802	Dynegy - Moss Landing LLC	IPP	Dynegy Moss Landing Power Plant	CA	260	7	755.0	Natural Gas Steam Turbine	NG	ST
2019	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2019	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	3	102.0	Natural Gas Steam Turbine	NG	ST
2019	12	55951	Exelon Nuclear	IPP	Oyster Creek	NJ	2388	1	607.7	Nuclear	NUC	ST
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	1	49.8	Conventional Steam Coal	SUB	ST
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	2	47.1	Conventional Steam Coal	SUB	ST
2019	12	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	CTG1	19.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	12686	Mississippi Power Co	Electric Utility	Jack Watson	MS	2049	3	107.0	Natural Gas Steam Turbine	NG	ST
2019	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	1	71.0	Natural Gas Steam Turbine	NG	ST
2019	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	1	38.0	Natural Gas Steam Turbine	NG	ST
2019	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	3	24.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	4	14.4	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	5	44.1	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	44.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	28.4	Natural Gas Fired Combustion Turbine	NG	GT
2020	1	21622	The University of Texas at Dallas	Commercial	University of Texas at Dallas	TX	54607	GEN1	3.5	Natural Gas Internal Combustion Engine	NG	IC
2020	1	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2020	1	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2020	1	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	78.0	Conventional Steam Coal	SUB	ST
2020	1	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	78.0	Conventional Steam Coal	SUB	ST
2020	1	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	78.0	Conventional Steam Coal	SUB	ST
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Avon Park	FL	624	P1	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Avon Park	FL	624	P2	24.0	Petroleum Liquids	DFO	GT
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Higgins	FL	630	P1	20.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Higgins	FL	630	P2	25.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Higgins	FL	630	P3	32.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, Inc	Electric Utility	Higgins	FL	630	P4	32.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	2	173.0	Conventional Steam Coal	BIT	ST
2020	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	3	173.0	Conventional Steam Coal	BIT	ST
2020	5	12653	GenOn Mid-Atlantic LLC	IPP	Dickerson	MD	1572	ST1	173.0	Conventional Steam Coal	BIT	ST
2020	5	16721	S D Warren Co. - Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN18	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co. - Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN19	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co. - Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN20	0.4	Conventional Hydroelectric	WAT	HY
2020	6	58177	Raven Power Holdings LLC	IPP	CP Crane Power, LLC	MD	1552	1	190.0	Conventional Steam Coal	SUB	ST
2020	6	58177	Raven Power Holdings LLC	IPP	CP Crane Power, LLC	MD	1552	2	195.0	Conventional Steam Coal	SUB	ST
2020	6	58177	Raven Power Holdings LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	BIT	ST
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL00	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL01	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL02	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL03	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL04	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL05	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL06	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1	Other Waste Biomass	OBG	FC
2020	12	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	3	332.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	4	335.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamos LLC	IPP	AES Alamos LLC	CA	315	6	495.0	Natural Gas Steam Turbine	NG	ST
2020	12	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	2	225.8	Natural Gas Steam Turbine	NG	ST
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	5	175.0	Natural Gas Steam Turbine	NG	ST
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	6	175.0	Natural Gas Steam Turbine	NG	ST

Table 6.6. Planned U.S. Electric Generating Unit Retirements

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	12	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	8	480.0	Natural Gas Steam Turbine	NG	ST
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	174.0	Natural Gas Steam Turbine	NG	ST
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	2	177.0	Natural Gas Steam Turbine	NG	ST
2020	12	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2020	12	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2020	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	2	90.0	Natural Gas Steam Turbine	NG	ST
2020	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	1	670.0	Conventional Steam Coal	SUB	ST
2021	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	1	76.0	Natural Gas Steam Turbine	NG	ST
2021	1	15248	Portland General Electric Co	Electric Utility	Boardman	OR	6106	1	585.0	Conventional Steam Coal	SUB	ST
2021	5	58435	Collinwood BioEnergy	Industrial	Collinwood BioEnergy Facility	OH	58439	CBE01	1.0	Other Waste Biomass	OBG	IC
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	58.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	3	80.0	Conventional Steam Coal	SUB	ST
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	3	86.0	Natural Gas Steam Turbine	NG	ST
2021	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	4	96.3	Conventional Steam Coal	SUB	ST
2021	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	2	164.0	Conventional Steam Coal	SUB	ST
2021	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	3	176.0	Conventional Steam Coal	SUB	ST
2021	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2022	1	59409	Eco Services Operations LLC	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	9	177	AES Hawaii Inc	Electric CHP	AES Hawaii	HI	10673	GEN1	180.0	Conventional Steam Coal	BIT	ST
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	4	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	2	682.0	Conventional Steam Coal	SUB	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY1	0.7	Conventional Hydroelectric	WAT	HY
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY2	0.7	Conventional Hydroelectric	WAT	HY
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT2	1.8	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT3	1.8	Landfill Gas	LFG	IC
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	STM	24.0	Natural Gas Fired Combined Cycle	NG	CA
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0	Natural Gas Fired Combined Cycle	NG	CA
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Laverne Battery	MN	58579	1	1.0	Batteries	MWH	BA
2023	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	6	167.8	Natural Gas Steam Turbine	NG	ST
2023	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	2	106.0	Natural Gas Steam Turbine	NG	ST
2024	7	1951	White Pine Electric Power LLC	IPP	White Pine Electric Power	MI	10148	GEN1	18.0	Natural Gas Steam Turbine	NG	ST
2024	7	1951	White Pine Electric Power LLC	IPP	White Pine Electric Power	MI	10148	GEN3	18.0	Natural Gas Steam Turbine	NG	ST
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	1	0.4	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	3	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	4	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	4	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	Natural Gas Steam Turbine	NG	ST
2025	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	1	0.2	Conventional Hydroelectric	WAT	HY
2025	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	2	0.2	Conventional Hydroelectric	WAT	HY
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	1	0.4	Conventional Hydroelectric	WAT	HY
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	2	0.3	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	2	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	2	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	2	55.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	3	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	5	52.0	Petroleum Liquids	DFO	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	6	48.0	Petroleum Liquids	DFO	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Carlsbad	NM	2453	5	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	2	183.0	Natural Gas Steam Turbine	NG	ST
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	2	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	3	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	2	670.0	Conventional Steam Coal	SUB	ST
2028	12	17539	South Carolina Electric&Gas Company	Electric Utility	McMeekin	SC	3287	1	125.0	Conventional Steam Coal	BIT	ST
2028	12	17539	South Carolina Electric&Gas Company	Electric Utility	McMeekin	SC	3287	2	125.0	Conventional Steam Coal	BIT	ST
2034	6	58944	Enerparc CA 1, LLC	IPP	Enerparc CA1 LLC	CA	59122	ECA11	1.5	Solar Photovoltaic	SUN	PV
2045		195	Alabama Power Co	Electric Utility	Holt Dam	AL	12	1	45.0	Conventional Hydroelectric	WAT	HY
2046	12	58421	Panda Patriot O&M LLC	IPP	Panda Patriot Generation Plant	PA	58426	GEN1	382.5	Natural Gas Fired Combined Cycle	NG	CS
2046	12	58421	Panda Patriot O&M LLC	IPP	Panda Patriot Generation Plant	PA	58426	GEN2	382.5	Natural Gas Fired Combined Cycle	NG	CS

NOTES:

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.
 Entity ID and Plant ID are official, unique identification numbers assigned by EIA; Generator IDs are assigned by plant owners and/or operators.
 Descriptions for the Energy Source Codes and the Prime Mover Codes listed in the table can be found in the Technical Notes.

Table 6.7.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels, January 2013-October 2016

Period	Coal	Natural Gas				Petroleum			
		Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Steam Turbine	Petroleum Liquids Fired Combustion Turbine	Internal Combustion Engine	
Annual Factors									
2013	59.7%	48.2%	4.9%	10.6%	6.1%	12.1%	0.8%	2.2%	
2014	61.0%	48.3%	5.2%	10.4%	8.5%	12.5%	1.1%	1.4%	
2015	54.7%	55.9%	6.9%	11.5%	8.9%	13.3%	1.1%	2.2%	
Year 2014									
January	71.2%	47.2%	6.6%	10.0%	7.8%	19.5%	3.8%	2.3%	
February	71.9%	42.5%	4.7%	9.2%	8.7%	12.0%	0.9%	1.5%	
March	61.7%	39.7%	4.7%	7.2%	7.1%	13.7%	1.1%	1.4%	
April	51.1%	40.3%	3.8%	7.2%	7.9%	9.4%	0.5%	1.0%	
May	54.1%	45.0%	5.0%	9.8%	7.8%	10.2%	0.6%	1.6%	
June	64.8%	51.1%	5.4%	11.8%	7.6%	14.8%	0.9%	1.3%	
July	67.9%	57.7%	6.2%	15.2%	9.7%	15.0%	1.0%	1.5%	
August	67.5%	61.0%	6.6%	16.9%	11.0%	14.4%	1.3%	1.5%	
Sept	59.2%	55.4%	5.7%	12.7%	9.5%	13.5%	0.7%	1.4%	
October	50.7%	49.0%	5.2%	10.6%	8.8%	8.6%	0.7%	1.3%	
November	56.0%	43.7%	4.5%	7.6%	8.3%	7.7%	0.8%	1.2%	
December	56.6%	46.2%	4.1%	5.9%	7.2%	10.7%	0.6%	1.1%	
Year 2015									
January	61.3%	52.6%	4.4%	7.6%	5.2%	12.4%	0.6%	2.5%	
February	64.9%	52.2%	6.2%	9.9%	5.7%	22.8%	1.9%	3.1%	
March	50.3%	50.7%	5.2%	8.3%	8.5%	7.9%	0.6%	1.9%	
April	43.3%	47.9%	5.7%	9.4%	6.6%	12.0%	0.9%	2.2%	
May	49.8%	50.2%	6.7%	9.3%	8.7%	12.6%	1.1%	2.0%	
June	62.6%	61.5%	8.3%	13.7%	11.2%	12.0%	1.0%	2.0%	
July	66.8%	67.2%	10.7%	19.4%	12.3%	15.5%	1.3%	2.4%	
August	64.9%	66.9%	8.9%	19.0%	12.3%	14.8%	1.2%	2.4%	
Sept	58.7%	61.4%	8.2%	14.2%	9.8%	15.9%	1.2%	2.1%	
October	47.0%	53.6%	6.7%	10.5%	8.1%	14.5%	1.0%	2.1%	
November	43.9%	50.9%	7.0%	8.4%	8.6%	10.5%	1.9%	1.8%	
December	43.6%	54.6%	5.0%	8.5%	8.5%	9.7%	1.1%	2.0%	
Year 2016									
January	55.4%	56.6%	4.5%	6.3%	NA	9.4%	0.5%	NA	
February	48.3%	53.9%	4.6%	6.4%	NA	9.9%	0.5%	NA	
March	35.6%	50.7%	7.2%	9.9%	NA	8.3%	1.3%	NA	
April	37.2%	48.3%	8.6%	12.1%	NA	9.1%	1.0%	NA	
May	41.1%	53.2%	7.7%	12.5%	NA	10.6%	1.3%	NA	
June	60.7%	64.6%	10.0%	17.3%	NA	12.5%	1.5%	NA	
July	69.1%	68.8%	14.3%	22.7%	NA	16.1%	2.5%	NA	
August	68.5%	71.3%	14.5%	21.0%	NA	14.3%	3.1%	NA	
Sept	59.7%	61.3%	9.4%	14.3%	NA	12.2%	1.4%	NA	
October	50.2%	48.1%	7.6%	11.2%	NA	8.2%	1.1%	NA	

Values for 2015 and prior years are final. Values for 2016 are preliminary. NA = Not Available

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

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-October 2016

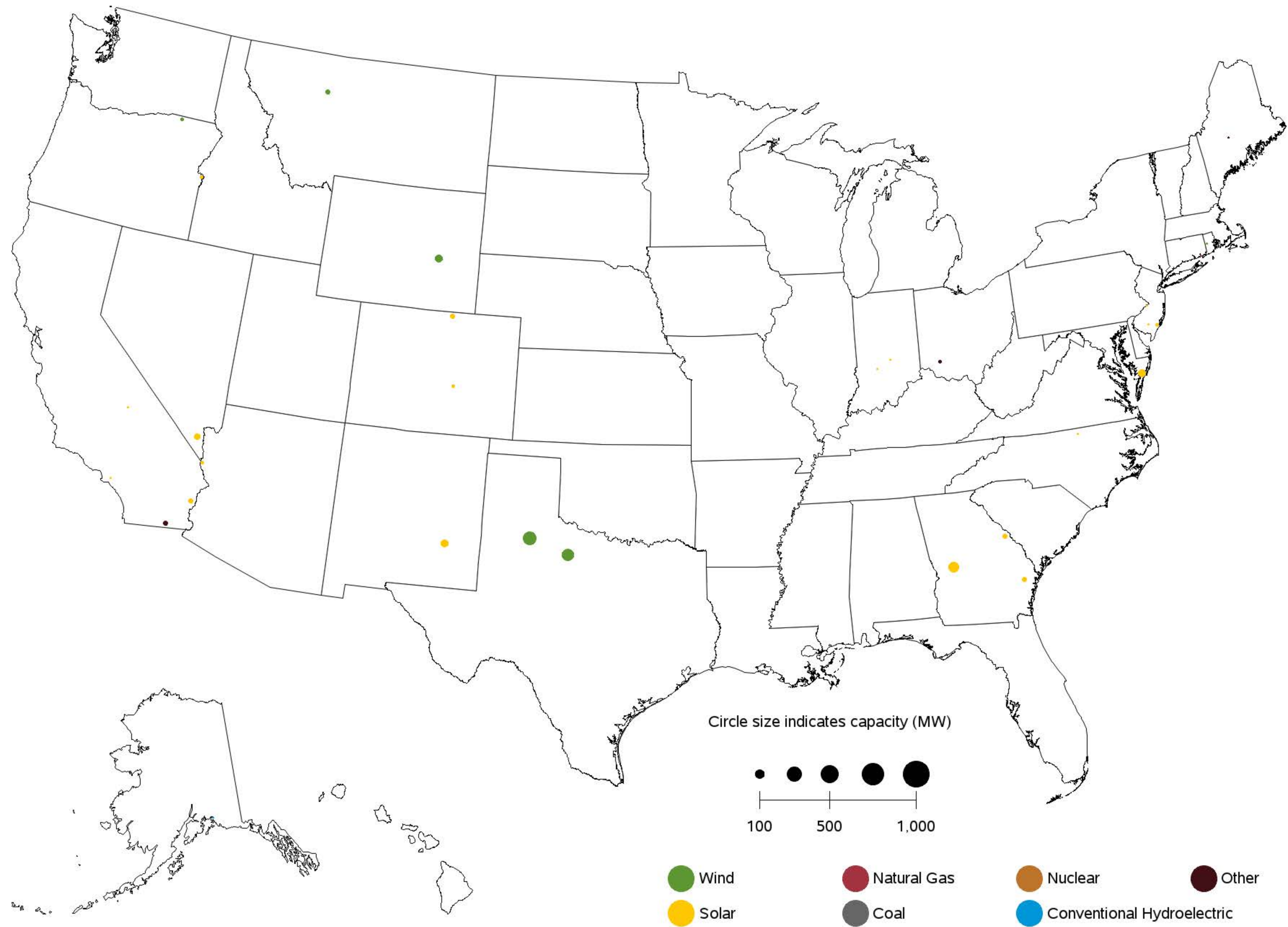
Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Municipal Solid Waste	Other Biomass Including Wood	Geothermal
Annual Factors								
2013	89.9%	38.9%	32.4%	NA	NA	68.9%	56.7%	73.6%
2014	91.7%	37.3%	34.0%	25.9%	19.8%	68.9%	58.9%	74.0%
2015	92.3%	35.8%	32.2%	25.8%	22.1%	68.7%	55.3%	74.3%
Year 2014								
January	99.1%	36.7%	40.3%	NA	NA	68.1%	60.0%	74.0%
February	94.0%	32.6%	34.8%	NA	NA	68.3%	59.5%	73.3%
March	84.5%	40.7%	39.8%	NA	NA	69.6%	59.7%	73.5%
April	78.8%	44.5%	43.2%	NA	NA	69.9%	49.5%	74.6%
May	85.2%	44.6%	34.9%	NA	NA	70.6%	48.2%	73.2%
June	95.4%	44.8%	36.5%	NA	NA	70.8%	63.0%	73.4%
July	97.5%	41.3%	27.0%	NA	NA	73.1%	63.4%	72.5%
August	96.4%	33.7%	22.5%	30.9%	25.4%	71.1%	62.8%	73.0%
Sept	94.6%	28.2%	26.1%	30.7%	26.3%	68.9%	61.2%	74.2%
October	84.5%	29.2%	31.6%	26.5%	21.1%	64.4%	56.5%	73.9%
November	91.3%	32.6%	42.3%	22.3%	13.8%	66.1%	62.1%	77.3%
December	99.6%	37.8%	30.4%	15.1%	5.6%	65.4%	60.8%	75.5%
Year 2015								
January	101.3%	40.7%	31.2%	16.8%	5.0%	65.1%	57.2%	75.9%
February	95.8%	41.4%	34.1%	22.1%	14.5%	64.3%	60.0%	76.4%
March	88.0%	40.8%	31.4%	26.7%	22.6%	63.0%	53.4%	76.8%
April	84.3%	39.4%	37.5%	30.9%	30.5%	66.8%	47.3%	72.4%
May	89.8%	33.9%	34.8%	31.2%	27.0%	68.5%	48.4%	76.6%
June	96.4%	35.8%	27.9%	31.7%	32.2%	69.2%	56.7%	74.1%
July	97.3%	35.8%	27.4%	31.4%	31.1%	73.1%	59.9%	74.7%
August	98.6%	32.5%	25.8%	31.3%	32.3%	71.5%	61.6%	73.9%
Sept	93.6%	28.3%	28.1%	26.6%	27.1%	68.8%	56.1%	67.9%
October	82.5%	28.3%	31.6%	22.8%	16.5%	68.3%	48.8%	72.4%
November	84.8%	33.8%	39.0%	20.7%	16.9%	72.4%	55.8%	75.4%
December	94.9%	39.4%	37.4%	17.5%	9.5%	73.0%	58.3%	75.3%
Year 2016								
January	98.8%	42.4%	34.2%	17.9%	6.8%	70.3%	51.2%	73.6%
February	95.6%	43.2%	39.9%	26.7%	19.5%	66.0%	54.0%	73.5%
March	90.1%	45.2%	40.4%	28.0%	19.6%	63.5%	47.8%	72.8%
April	87.8%	44.2%	39.0%	30.8%	20.9%	68.5%	36.4%	68.9%
May	90.7%	42.6%	34.3%	35.0%	28.9%	75.2%	39.0%	74.1%
June	94.5%	40.2%	30.6%	33.6%	33.5%	73.8%	47.2%	71.6%
July	94.7%	35.9%	32.0%	34.8%	36.9%	72.8%	52.4%	72.7%
August	96.3%	32.7%	24.5%	33.4%	29.2%	73.7%	54.9%	73.5%
Sept	91.0%	28.4%	30.7%	30.1%	30.2%	70.7%	47.4%	76.1%
October	81.9%	29.2%	36.7%	25.3%	19.1%	66.4%	38.0%	75.1%

Values for 2015 and prior years are final. Values for 2016 are preliminary. NA = Not Available

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

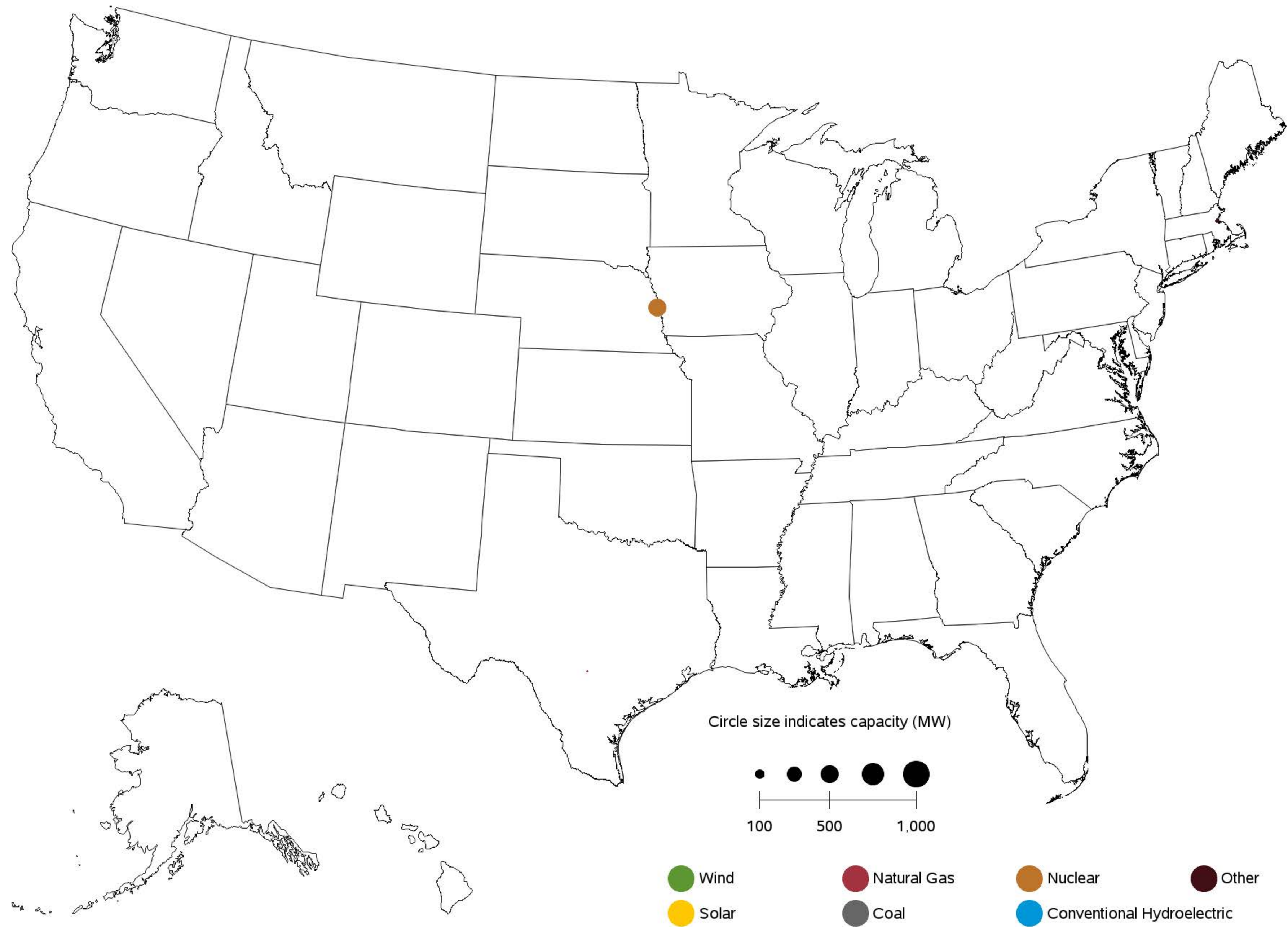
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.A. Utility-Scale Generating Units Added in October 2016



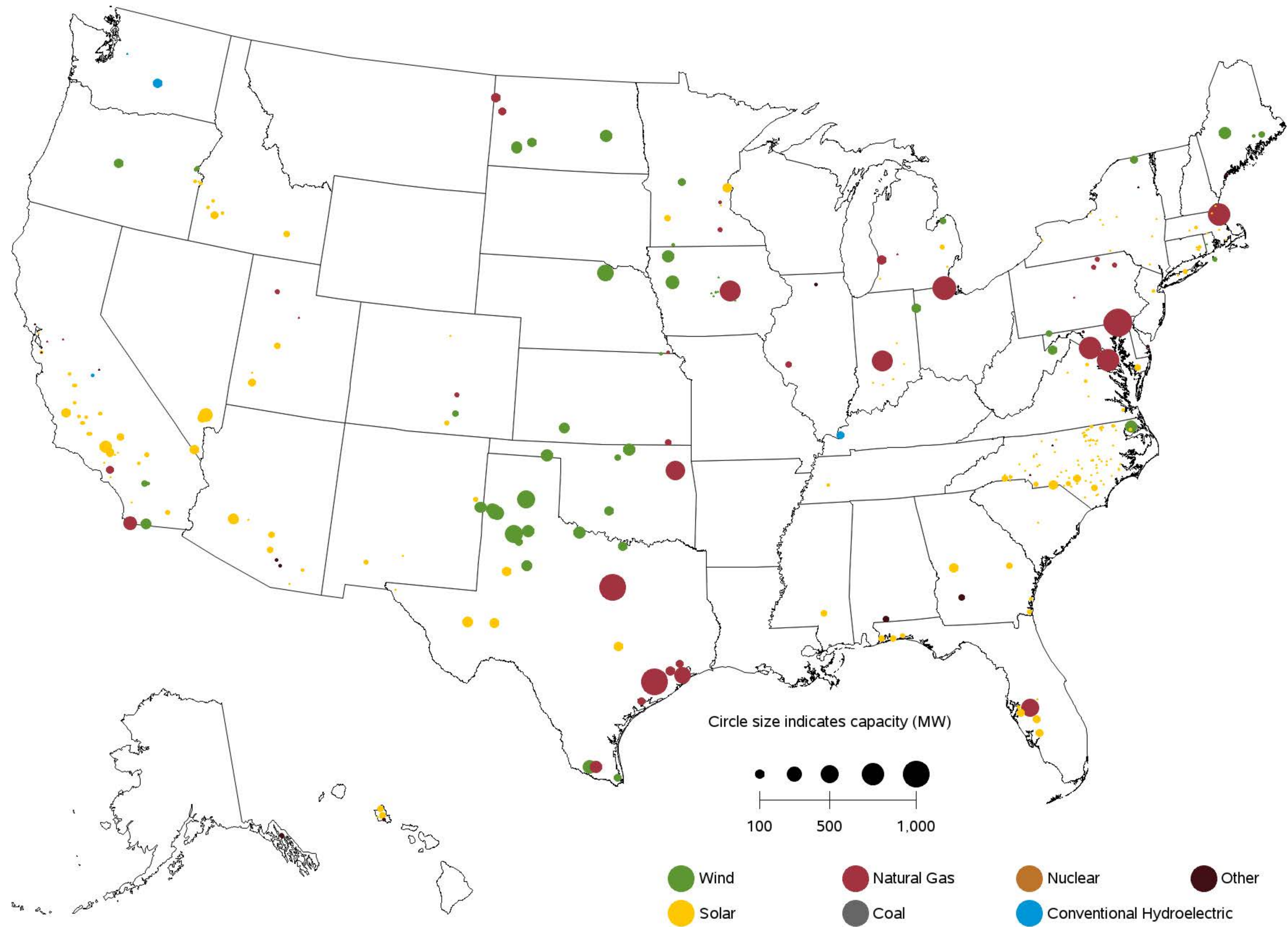
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in October 2016



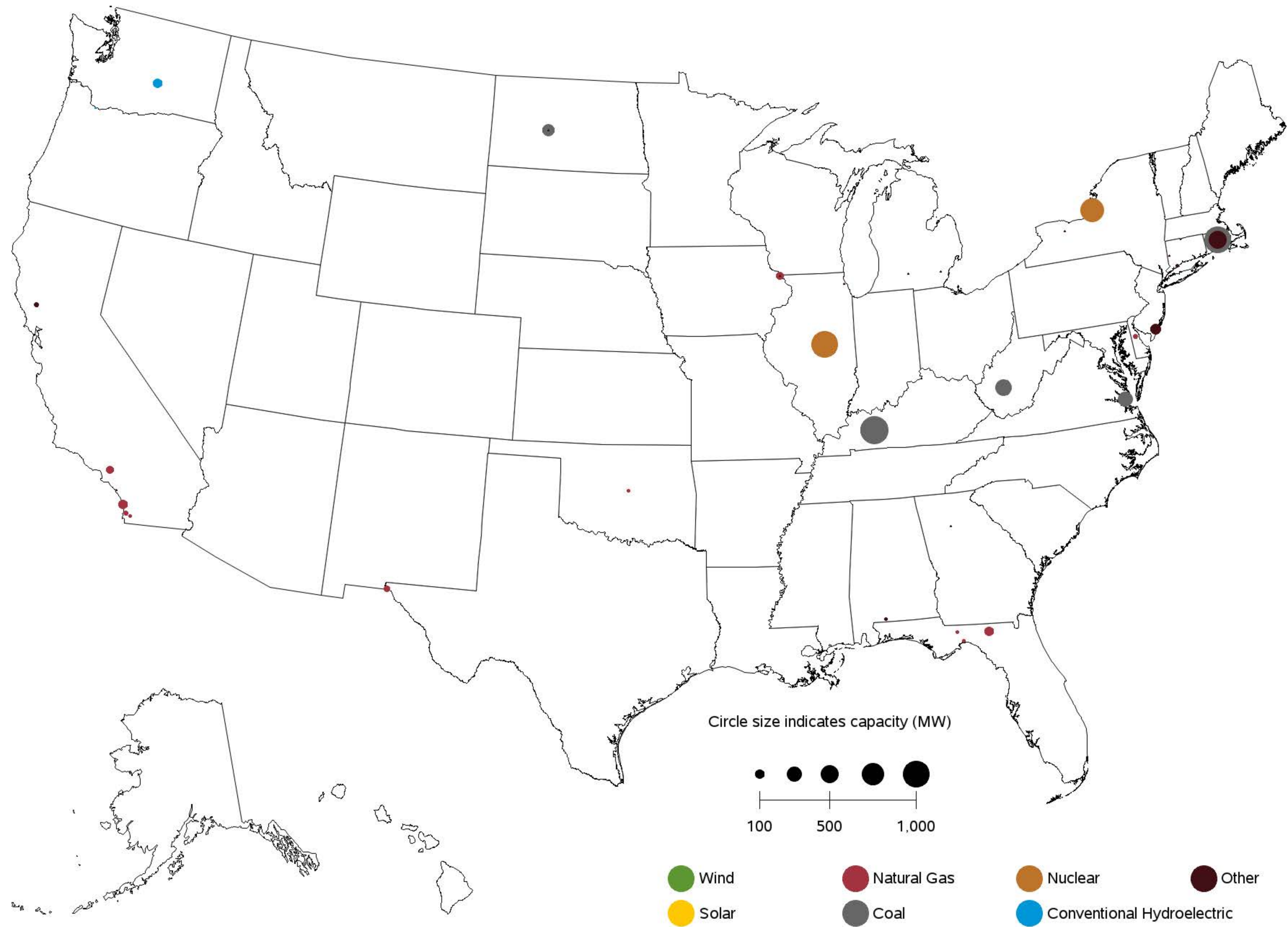
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from November 2016 to October 2017



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.'

Figure 6.1.D. Utility-Scale Generating Units Planned to Retire from November 2016 to October 2017



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 A.1.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:
Total (All Sectors) by Census Division and State, October 2016**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	5	5	0	2	0	0	21
Connecticut	0	56	0	2	0	0	101
Maine	0	32	0	5	0	0	27
Massachusetts	6	4	0	3	0	0	63
New Hampshire	0	206	0	2	0	0	50
Rhode Island	0	96	0	2	0	0	883
Vermont	0	608	0	198	0	0	57
Middle Atlantic	4	14	126	1	29	0	4
New Jersey	0	47	0	1	82	0	389
New York	0	18	0	2	0	0	4
Pennsylvania	4	21	125	1	25	0	25
East North Central	0	9	8	1	13	0	13
Illinois	0	4	0	2	87	0	115
Indiana	1	9	0	2	15	0	26
Michigan	2	39	27	2	0	0	25
Ohio	1	4	1	1	59	0	41
Wisconsin	0	47	0	3	0	0	20
West North Central	1	16	225	5	142	0	6
Iowa	2	24	225	11	0	0	31
Kansas	0	7	0	24	0	0	408
Minnesota	2	55	0	4	0	0	30
Missouri	1	3	0	8	0	0	15
Nebraska	2	79	0	16	0	0	23
North Dakota	2	51	0	38	142	0	0
South Dakota	0	121	0	22	0	0	0
South Atlantic	0	5	0	0	0	0	9
Delaware	0	215	0	3	0	0	0
District of Columbia	0	1,089	0	165	0	0	0
Florida	0	6	0	0	0	0	126
Georgia	0	47	0	1	0	0	21
Maryland	0	13	0	6	0	0	4
North Carolina	1	18	0	1	0	0	14
South Carolina	0	18	0	2	0	0	29
Virginia	1	12	0	1	0	0	20
West Virginia	0	0	0	1	0	0	34
East South Central	0	17	0	1	77	0	9
Alabama	0	128	0	1	123	0	15
Kentucky	0	3	0	2	0	0	11
Mississippi	0	4	0	1	0	0	0
Tennessee	0	6	0	1	0	0	15
West South Central	0	19	7	0	4	0	9
Arkansas	0	70	0	2	0	0	13
Louisiana	0	3	7	1	6	0	0
Oklahoma	0	11	0	1	0	0	16
Texas	0	27	70	1	6	0	56
Mountain	1	28	0	1	7	0	3
Arizona	0	27	0	0	0	0	2
Colorado	0	270	0	1	0	0	18
Idaho	181	447	0	5	0	0	8
Montana	4	109	0	58	0	0	5
Nevada	0	0	0	1	0	0	2
New Mexico	0	136	0	3	0	0	97
Utah	1	32	0	5	483	0	34
Wyoming	3	3	0	21	6	0	24
Pacific Contiguous	0	25	0	1	5	0	1
California	0	24	0	1	7	0	5
Oregon	0	55	0	1	0	0	2
Washington	0	78	0	4	0	0	1
Pacific Noncontiguous	6	5	0	14	122	0	13
Alaska	23	15	0	14	0	0	14
Hawaii	2	5	0	0	122	0	48
U.S. Total	0	5	4	0	5	0	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.

Table A.1.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Total (All Sectors) by Census Division and State, October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	8	3	0	4	1
Connecticut	0	0	0	44	7	0	5	1
Maine	0	0	0	0	2	0	21	6
Massachusetts	0	0	0	9	7	0	4	2
New Hampshire	0	0	0	0	12	0	26	2
Rhode Island	0	0	0	50	16	0	0	2
Vermont	0	0	0	25	13	0	0	30
Middle Atlantic	0	0	0	7	2	0	4	1
New Jersey	0	0	0	8	6	0	4	1
New York	0	0	0	18	2	0	7	1
Pennsylvania	0	0	0	21	2	0	7	1
East North Central	0	0	0	11	1	0	9	0
Illinois	0	0	0	25	1	0	30	0
Indiana	0	0	0	14	1	0	5	1
Michigan	0	0	0	75	3	0	11	1
Ohio	0	0	0	24	5	0	0	1
Wisconsin	0	0	0	139	4	0	46	1
West North Central	0	0	0	37	0	0	10	1
Iowa	0	0	0	0	0	0	0	1
Kansas	0	0	0	211	0	0	0	1
Minnesota	0	0	0	95	2	0	11	1
Missouri	0	0	0	41	3	0	0	1
Nebraska	0	0	0	105	1	0	0	2
North Dakota	0	0	0	0	0	0	31	1
South Dakota	0	0	0	0	1	0	0	2
South Atlantic	0	0	0	3	2	0	4	0
Delaware	0	0	0	25	28	0	0	3
District of Columbia	0	0	0	0	0	0	0	164
Florida	0	0	0	13	4	0	4	0
Georgia	0	0	0	3	3	0	0	0
Maryland	0	0	0	16	3	0	0	1
North Carolina	0	0	0	4	4	0	17	1
South Carolina	0	0	0	83	6	0	25	1
Virginia	0	0	0	75	3	0	7	1
West Virginia	0	0	0	0	1	0	0	1
East South Central	0	0	0	7	3	0	11	0
Alabama	0	0	0	0	4	0	0	1
Kentucky	0	0	0	0	10	0	0	1
Mississippi	0	0	0	0	3	0	235	1
Tennessee	0	0	0	20	7	0	0	1
West South Central	0	0	0	3	0	0	13	0
Arkansas	0	0	0	61	4	0	0	1
Louisiana	0	0	0	0	4	0	17	1
Oklahoma	0	0	0	0	0	0	75	1
Texas	0	0	0	3	0	0	15	0
Mountain	0	5	0	1	1	0	8	0
Arizona	0	0	0	2	2	0	0	0
Colorado	0	0	0	4	1	0	60	1
Idaho	0	46	0	0	5	0	53	5
Montana	0	0	0	0	3	0	0	3
Nevada	0	5	0	2	3	0	0	1
New Mexico	0	114	0	5	2	0	0	1
Utah	0	8	0	2	2	0	4	1
Wyoming	0	0	0	0	1	0	0	2
Pacific Contiguous	0	3	0	1	1	0	10	1
California	0	3	0	1	1	0	10	1
Oregon	0	12	0	28	2	0	28	1
Washington	0	0	0	0	1	0	25	1
Pacific Noncontiguous	0	0	0	25	5	0	0	4
Alaska	0	0	0	0	24	0	0	8
Hawaii	0	0	0	25	4	0	0	4
U.S. Total	0	3	0	1	0	0	3	0

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

Table A.1.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Total (All Sectors) by Census Division and State, Year-to-Date through October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	5	5	0	2	0	0	21
Connecticut	0	56	0	2	0	0	101
Maine	0	32	0	5	0	0	27
Massachusetts	6	4	0	3	0	0	63
New Hampshire	0	206	0	2	0	0	50
Rhode Island	0	96	0	2	0	0	883
Vermont	0	608	0	198	0	0	57
Middle Atlantic	4	14	126	1	29	0	4
New Jersey	0	47	0	1	82	0	389
New York	0	18	0	2	0	0	4
Pennsylvania	4	21	125	1	25	0	25
East North Central	0	9	8	1	13	0	13
Illinois	0	4	0	2	87	0	115
Indiana	1	9	0	2	15	0	26
Michigan	2	39	27	2	0	0	25
Ohio	1	4	1	1	59	0	41
Wisconsin	0	47	0	3	0	0	20
West North Central	1	16	225	5	142	0	6
Iowa	2	24	225	11	0	0	31
Kansas	0	7	0	24	0	0	408
Minnesota	2	55	0	4	0	0	30
Missouri	1	3	0	8	0	0	15
Nebraska	2	79	0	16	0	0	23
North Dakota	2	51	0	38	142	0	0
South Dakota	0	121	0	22	0	0	0
South Atlantic	0	5	0	0	0	0	9
Delaware	0	215	0	3	0	0	0
District of Columbia	0	1,089	0	165	0	0	0
Florida	0	6	0	0	0	0	126
Georgia	0	47	0	1	0	0	21
Maryland	0	13	0	6	0	0	4
North Carolina	1	18	0	1	0	0	14
South Carolina	0	18	0	2	0	0	29
Virginia	1	12	0	1	0	0	20
West Virginia	0	0	0	1	0	0	34
East South Central	0	17	0	1	77	0	9
Alabama	0	128	0	1	123	0	15
Kentucky	0	3	0	2	0	0	11
Mississippi	0	4	0	1	0	0	0
Tennessee	0	6	0	1	0	0	15
West South Central	0	19	7	0	4	0	9
Arkansas	0	70	0	2	0	0	13
Louisiana	0	3	7	1	6	0	0
Oklahoma	0	11	0	1	0	0	16
Texas	0	27	70	1	6	0	56
Mountain	1	28	0	1	7	0	3
Arizona	0	27	0	0	0	0	2
Colorado	0	270	0	1	0	0	18
Idaho	181	447	0	5	0	0	8
Montana	4	109	0	58	0	0	5
Nevada	0	0	0	1	0	0	2
New Mexico	0	136	0	3	0	0	97
Utah	1	32	0	5	483	0	34
Wyoming	3	3	0	21	6	0	24
Pacific Contiguous	0	25	0	1	5	0	1
California	0	24	0	1	7	0	5
Oregon	0	55	0	1	0	0	2
Washington	0	78	0	4	0	0	1
Pacific Noncontiguous	6	5	0	14	122	0	13
Alaska	23	15	0	14	0	0	14
Hawaii	2	5	0	0	122	0	48
U.S. Total	0	5	4	0	5	0	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.

Table A.1.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Total (All Sectors) by Census Division and State, Year-to-Date through October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	8	3	0	4	1
Connecticut	0	0	0	44	7	0	5	1
Maine	0	0	0	0	2	0	21	6
Massachusetts	0	0	0	9	7	0	4	2
New Hampshire	0	0	0	0	12	0	26	2
Rhode Island	0	0	0	50	16	0	0	2
Vermont	0	0	0	25	13	0	0	30
Middle Atlantic	0	0	0	7	2	0	4	1
New Jersey	0	0	0	8	6	0	4	1
New York	0	0	0	18	2	0	7	1
Pennsylvania	0	0	0	21	2	0	7	1
East North Central	0	0	0	11	1	0	9	0
Illinois	0	0	0	25	1	0	30	0
Indiana	0	0	0	14	1	0	5	1
Michigan	0	0	0	75	3	0	11	1
Ohio	0	0	0	24	5	0	0	1
Wisconsin	0	0	0	139	4	0	46	1
West North Central	0	0	0	37	0	0	10	1
Iowa	0	0	0	0	0	0	0	1
Kansas	0	0	0	211	0	0	0	1
Minnesota	0	0	0	95	2	0	11	1
Missouri	0	0	0	41	3	0	0	1
Nebraska	0	0	0	105	1	0	0	2
North Dakota	0	0	0	0	0	0	31	1
South Dakota	0	0	0	0	1	0	0	2
South Atlantic	0	0	0	3	2	0	4	0
Delaware	0	0	0	25	28	0	0	3
District of Columbia	0	0	0	0	0	0	0	164
Florida	0	0	0	13	4	0	4	0
Georgia	0	0	0	3	3	0	0	0
Maryland	0	0	0	16	3	0	0	1
North Carolina	0	0	0	4	4	0	17	1
South Carolina	0	0	0	83	6	0	25	1
Virginia	0	0	0	75	3	0	7	1
West Virginia	0	0	0	0	1	0	0	1
East South Central	0	0	0	7	3	0	11	0
Alabama	0	0	0	0	4	0	0	1
Kentucky	0	0	0	0	10	0	0	1
Mississippi	0	0	0	0	3	0	235	1
Tennessee	0	0	0	20	7	0	0	1
West South Central	0	0	0	3	0	0	13	0
Arkansas	0	0	0	61	4	0	0	1
Louisiana	0	0	0	0	4	0	17	1
Oklahoma	0	0	0	0	0	0	75	1
Texas	0	0	0	3	0	0	15	0
Mountain	0	5	0	1	1	0	8	0
Arizona	0	0	0	2	2	0	0	0
Colorado	0	0	0	4	1	0	60	1
Idaho	0	46	0	0	5	0	53	5
Montana	0	0	0	0	3	0	0	3
Nevada	0	5	0	2	3	0	0	1
New Mexico	0	114	0	5	2	0	0	1
Utah	0	8	0	2	2	0	4	1
Wyoming	0	0	0	0	1	0	0	2
Pacific Contiguous	0	3	0	1	1	0	10	1
California	0	3	0	1	1	0	10	1
Oregon	0	12	0	28	2	0	28	1
Washington	0	0	0	0	1	0	25	1
Pacific Noncontiguous	0	0	0	25	5	0	0	4
Alaska	0	0	0	0	24	0	0	8
Hawaii	0	0	0	25	4	0	0	4
U.S. Total	0	3	0	1	0	0	3	0

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

**Table A.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:
Electric Utilities by Census Division and State, October 2016**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	21	0	16	0	0	62
Connecticut	0	39	0	0	0	0	362
Maine	0	381	0	0	0	0	0
Massachusetts	0	40	0	16	0	0	131
New Hampshire	0	89	0	0	0	0	79
Rhode Island	0	30	0	0	0	0	0
Vermont	0	326	0	0	0	0	96
Middle Atlantic	0	17	0	8	0	0	2
New Jersey	0	261	0	200	0	0	0
New York	0	17	0	7	0	0	1
Pennsylvania	0	165	0	680	0	0	231
East North Central	1	16	0	1	0	0	13
Illinois	0	48	0	12	0	0	272
Indiana	1	7	0	2	0	0	26
Michigan	2	41	0	4	0	0	26
Ohio	3	5	0	2	0	0	12
Wisconsin	0	42	0	3	0	0	21
West North Central	1	16	0	5	0	0	6
Iowa	2	24	0	12	0	0	31
Kansas	0	7	0	25	0	0	0
Minnesota	2	96	0	4	0	0	40
Missouri	1	3	0	8	0	0	15
Nebraska	2	79	0	16	0	0	23
North Dakota	2	52	0	39	0	0	0
South Dakota	0	122	0	22	0	0	0
South Atlantic	0	1	0	0	0	0	10
Delaware	0	240	0	260	0	0	0
Florida	0	1	0	0	0	0	126
Georgia	0	5	0	0	0	0	21
Maryland	0	34	0	0	0	0	0
North Carolina	0	4	0	1	0	0	14
South Carolina	0	9	0	1	0	0	30
Virginia	0	4	0	0	0	0	19
West Virginia	0	0	0	0	0	0	81
East South Central	0	2	0	1	0	0	9
Alabama	0	0	0	4	0	0	15
Kentucky	0	3	0	1	0	0	11
Mississippi	0	6	0	1	0	0	0
Tennessee	0	1	0	0	0	0	15
West South Central	0	1	0	1	0	0	11
Arkansas	0	0	0	4	0	0	13
Louisiana	0	3	0	1	0	0	0
Oklahoma	0	5	0	1	0	0	16
Texas	0	1	0	1	0	0	57
Mountain	1	30	0	1	0	0	3
Arizona	0	27	0	1	0	0	2
Colorado	0	271	0	1	0	0	19
Idaho	0	447	0	16	0	0	8
Montana	147	1,659	0	61	0	0	5
Nevada	0	0	0	0	0	0	0
New Mexico	0	136	0	5	0	0	97
Utah	0	2	0	5	0	0	34
Wyoming	2	1	0	133	0	0	23
Pacific Contiguous	0	44	0	2	0	0	1
California	0	26	0	3	0	0	5
Oregon	0	0	0	0	0	0	2
Washington	0	960	0	6	0	0	1
Pacific Noncontiguous	0	3	0	14	0	0	14
Alaska	0	15	0	14	0	0	14
Hawaii	0	2	0	0	0	0	203
U.S. Total	0	2	0	0	0	0	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.

Table A.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Electric Utilities by Census Division and State, October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	47	3	0	0	21
Connecticut	0	0	0	142	142	0	0	205
Maine	0	0	0	0	0	0	0	381
Massachusetts	0	0	0	44	36	0	0	51
New Hampshire	0	0	0	0	0	0	0	18
Rhode Island	0	0	0	0	0	0	0	30
Vermont	0	0	0	0	0	0	0	36
Middle Atlantic	0	0	0	25	25	0	0	2
New Jersey	0	0	0	25	25	0	0	26
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	217
East North Central	0	0	0	28	2	0	0	1
Illinois	0	0	0	167	60	0	0	6
Indiana	0	0	0	35	19	0	0	1
Michigan	0	0	0	75	2	0	0	1
Ohio	0	0	0	55	51	0	0	2
Wisconsin	0	0	0	0	1	0	0	1
West North Central	0	0	0	0	0	0	5	1
Iowa	0	0	0	0	0	0	0	1
Kansas	0	0	0	0	0	0	0	2
Minnesota	0	0	0	0	2	0	0	1
Missouri	0	0	0	0	54	0	0	1
Nebraska	0	0	0	0	11	0	0	2
North Dakota	0	0	0	0	1	0	31	2
South Dakota	0	0	0	0	0	0	0	3
South Atlantic	0	0	0	7	4	0	0	0
Delaware	0	0	0	67	67	0	0	219
Florida	0	0	0	14	12	0	0	0
Georgia	0	0	0	2	2	0	0	0
Maryland	0	0	0	58	58	0	0	32
North Carolina	0	0	0	15	15	0	0	1
South Carolina	0	0	0	0	13	0	0	1
Virginia	0	0	0	122	1	0	0	0
West Virginia	0	0	0	0	0	0	0	1
East South Central	0	0	0	0	34	0	0	0
Alabama	0	0	0	0	0	0	0	1
Kentucky	0	0	0	0	34	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	0	0	0	0	1
West South Central	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	1
Louisiana	0	0	0	0	0	0	0	0
Oklahoma	0	0	0	0	0	0	0	1
Texas	0	0	0	0	0	0	0	1
Mountain	0	0	0	7	2	0	0	0
Arizona	0	0	0	6	6	0	0	0
Colorado	0	0	0	0	13	0	0	1
Idaho	0	0	0	0	110	0	0	7
Montana	0	0	0	0	0	0	0	7
Nevada	0	0	0	54	54	0	0	0
New Mexico	0	0	0	17	17	0	0	1
Utah	0	0	0	0	0	0	0	1
Wyoming	0	0	0	0	1	0	0	2
Pacific Contiguous	0	4	0	9	1	0	0	1
California	0	0	0	9	2	0	0	2
Oregon	0	207	0	68	6	0	0	1
Washington	0	0	0	0	1	0	0	1
Pacific Noncontiguous	0	0	0	38	22	0	0	4
Alaska	0	0	0	0	33	0	0	8
Hawaii	0	0	0	38	24	0	0	2
U.S. Total	0	3	0	5	0	0	4	0

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

Table A.2.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Electric Utilities by Census Division and State, Year-to-Date through October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	21	0	16	0	0	62
Connecticut	0	39	0	0	0	0	362
Maine	0	381	0	0	0	0	0
Massachusetts	0	40	0	16	0	0	131
New Hampshire	0	89	0	0	0	0	79
Rhode Island	0	30	0	0	0	0	0
Vermont	0	326	0	0	0	0	96
Middle Atlantic	0	17	0	8	0	0	2
New Jersey	0	261	0	200	0	0	0
New York	0	17	0	7	0	0	1
Pennsylvania	0	165	0	680	0	0	231
East North Central	1	16	0	1	0	0	13
Illinois	0	48	0	12	0	0	272
Indiana	1	7	0	2	0	0	26
Michigan	2	41	0	4	0	0	26
Ohio	3	5	0	2	0	0	12
Wisconsin	0	42	0	3	0	0	21
West North Central	1	16	0	5	0	0	6
Iowa	2	24	0	12	0	0	31
Kansas	0	7	0	25	0	0	0
Minnesota	2	96	0	4	0	0	40
Missouri	1	3	0	8	0	0	15
Nebraska	2	79	0	16	0	0	23
North Dakota	2	52	0	39	0	0	0
South Dakota	0	122	0	22	0	0	0
South Atlantic	0	1	0	0	0	0	10
Delaware	0	240	0	260	0	0	0
Florida	0	1	0	0	0	0	126
Georgia	0	5	0	0	0	0	21
Maryland	0	34	0	0	0	0	0
North Carolina	0	4	0	1	0	0	14
South Carolina	0	9	0	1	0	0	30
Virginia	0	4	0	0	0	0	19
West Virginia	0	0	0	0	0	0	81
East South Central	0	2	0	1	0	0	9
Alabama	0	0	0	4	0	0	15
Kentucky	0	3	0	1	0	0	11
Mississippi	0	6	0	1	0	0	0
Tennessee	0	1	0	0	0	0	15
West South Central	0	1	0	1	0	0	11
Arkansas	0	0	0	4	0	0	13
Louisiana	0	3	0	1	0	0	0
Oklahoma	0	5	0	1	0	0	16
Texas	0	1	0	1	0	0	57
Mountain	1	30	0	1	0	0	3
Arizona	0	27	0	1	0	0	2
Colorado	0	271	0	1	0	0	19
Idaho	0	447	0	16	0	0	8
Montana	147	1,659	0	61	0	0	5
Nevada	0	0	0	0	0	0	0
New Mexico	0	136	0	5	0	0	97
Utah	0	2	0	5	0	0	34
Wyoming	2	1	0	133	0	0	23
Pacific Contiguous	0	44	0	2	0	0	1
California	0	26	0	3	0	0	5
Oregon	0	0	0	0	0	0	2
Washington	0	960	0	6	0	0	1
Pacific Noncontiguous	0	3	0	14	0	0	14
Alaska	0	15	0	14	0	0	14
Hawaii	0	2	0	0	0	0	203
U.S. Total	0	2	0	0	0	0	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.

Table A.2.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Electric Utilities by Census Division and State, Year-to-Date through October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	47	3	0	0	21
Connecticut	0	0	0	142	142	0	0	205
Maine	0	0	0	0	0	0	0	381
Massachusetts	0	0	0	44	36	0	0	51
New Hampshire	0	0	0	0	0	0	0	18
Rhode Island	0	0	0	0	0	0	0	30
Vermont	0	0	0	0	0	0	0	36
Middle Atlantic	0	0	0	25	25	0	0	2
New Jersey	0	0	0	25	25	0	0	26
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	217
East North Central	0	0	0	28	2	0	0	1
Illinois	0	0	0	167	60	0	0	6
Indiana	0	0	0	35	19	0	0	1
Michigan	0	0	0	75	2	0	0	1
Ohio	0	0	0	55	51	0	0	2
Wisconsin	0	0	0	0	1	0	0	1
West North Central	0	0	0	0	0	0	5	1
Iowa	0	0	0	0	0	0	0	1
Kansas	0	0	0	0	0	0	0	2
Minnesota	0	0	0	0	2	0	0	1
Missouri	0	0	0	0	54	0	0	1
Nebraska	0	0	0	0	11	0	0	2
North Dakota	0	0	0	0	1	0	31	2
South Dakota	0	0	0	0	0	0	0	3
South Atlantic	0	0	0	7	4	0	0	0
Delaware	0	0	0	67	67	0	0	219
Florida	0	0	0	14	12	0	0	0
Georgia	0	0	0	2	2	0	0	0
Maryland	0	0	0	58	58	0	0	32
North Carolina	0	0	0	15	15	0	0	1
South Carolina	0	0	0	0	13	0	0	1
Virginia	0	0	0	122	1	0	0	0
West Virginia	0	0	0	0	0	0	0	1
East South Central	0	0	0	0	34	0	0	0
Alabama	0	0	0	0	0	0	0	1
Kentucky	0	0	0	0	34	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	0	0	0	0	1
West South Central	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	1
Louisiana	0	0	0	0	0	0	0	0
Oklahoma	0	0	0	0	0	0	0	1
Texas	0	0	0	0	0	0	0	1
Mountain	0	0	0	7	2	0	0	0
Arizona	0	0	0	6	6	0	0	0
Colorado	0	0	0	0	13	0	0	1
Idaho	0	0	0	0	110	0	0	7
Montana	0	0	0	0	0	0	0	7
Nevada	0	0	0	54	54	0	0	0
New Mexico	0	0	0	17	17	0	0	1
Utah	0	0	0	0	0	0	0	1
Wyoming	0	0	0	0	1	0	0	2
Pacific Contiguous	0	4	0	9	1	0	0	1
California	0	0	0	9	2	0	0	2
Oregon	0	207	0	68	6	0	0	1
Washington	0	0	0	0	1	0	0	1
Pacific Noncontiguous	0	0	0	38	22	0	0	4
Alaska	0	0	0	0	33	0	0	8
Hawaii	0	0	0	38	24	0	0	2
U.S. Total	0	3	0	5	0	0	4	0

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

Table A.3.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	2	0	1	0	0	23
Connecticut	0	78	0	2	0	0	106
Maine	0	14	0	1	0	0	28
Massachusetts	0	2	0	3	0	0	70
New Hampshire	0	711	0	0	0	0	59
Rhode Island	0	255	0	2	0	0	883
Vermont	0	0	0	0	0	0	71
Middle Atlantic	4	19	0	1	136	0	22
New Jersey	0	34	0	1	0	0	389
New York	0	45	0	2	0	0	31
Pennsylvania	4	22	0	1	136	0	25
East North Central	0	1	0	1	16	0	63
Illinois	0	0	0	2	0	0	96
Indiana	0	0	0	9	0	0	0
Michigan	0	0	0	2	0	0	90
Ohio	0	1	0	1	58	0	135
Wisconsin	0	0	0	0	0	0	93
West North Central	323	68	0	6	0	0	66
Iowa	0	113	0	5,274	0	0	374
Kansas	0	0	0	0	0	0	408
Minnesota	0	69	0	5	0	0	64
Missouri	323	2,029	0	481	0	0	0
South Dakota	0	558	0	0	0	0	0
South Atlantic	1	18	0	1	0	0	16
Delaware	0	294	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	161	0	5	0	0	0
Georgia	0	90	0	3	0	0	581
Maryland	0	13	0	5	0	0	4
North Carolina	117	105	0	0	0	0	262
South Carolina	0	2,088	0	10	0	0	217
Virginia	0	7	0	2	0	0	224
West Virginia	1	0	0	2	0	0	21
East South Central	0	115	0	0	0	0	670
Alabama	0	116	0	0	0	0	0
Kentucky	0	0	0	0	0	0	670
Mississippi	0	0	0	0	0	0	0
Tennessee	0	727	0	0	0	0	0
West South Central	0	0	0	0	0	0	11
Arkansas	0	0	0	0	0	0	275
Louisiana	0	0	0	1	0	0	0
Oklahoma	0	0	0	1	0	0	0
Texas	0	0	0	0	0	0	315
Mountain	5	16	0	1	0	0	30
Arizona	0	0	0	0	0	0	0
Colorado	96	0	0	7	0	0	68
Idaho	0	0	0	4	0	0	38
Montana	4	11	0	174	0	0	79
Nevada	0	0	0	8	0	0	232
New Mexico	0	0	0	2	0	0	0
Utah	95	424	0	59	0	0	317
Wyoming	83	0	0	815	0	0	297
Pacific Contiguous	0	24	0	1	0	0	24
California	0	210	0	2	0	0	30
Oregon	0	0	0	1	0	0	58
Washington	0	12	0	0	0	0	47
Pacific Noncontiguous	5	2	0	0	0	0	0
Alaska	118	0	0	0	0	0	0
Hawaii	0	2	0	0	0	0	0
U.S. Total	1	3	0	0	8	0	11

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.

Table A.3.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	8	4	0	3	1
Connecticut	0	0	0	41	7	0	5	1
Maine	0	0	0	0	2	0	11	7
Massachusetts	0	0	0	9	7	0	4	2
New Hampshire	0	0	0	0	15	0	26	2
Rhode Island	0	0	0	50	16	0	0	2
Vermont	0	0	0	25	30	0	0	44
Middle Atlantic	0	0	0	8	2	0	3	1
New Jersey	0	0	0	9	8	0	6	1
New York	0	0	0	18	2	0	4	1
Pennsylvania	0	0	0	23	2	0	7	1
East North Central	0	0	0	12	1	0	16	0
Illinois	0	0	0	24	1	0	0	0
Indiana	0	0	0	15	1	0	0	2
Michigan	0	0	0	0	5	0	16	1
Ohio	0	0	0	28	6	0	0	0
Wisconsin	0	0	0	139	9	0	0	1
West North Central	0	0	0	42	1	0	17	1
Iowa	0	0	0	0	1	0	0	1
Kansas	0	0	0	211	0	0	0	0
Minnesota	0	0	0	95	2	0	17	2
Missouri	0	0	0	50	3	0	0	5
Nebraska	0	0	0	105	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	1	0	0	1
South Atlantic	0	0	0	3	3	0	4	1
Delaware	0	0	0	28	31	0	0	4
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	25	6	0	3	3
Georgia	0	0	0	3	5	0	0	2
Maryland	0	0	0	17	3	0	0	1
North Carolina	0	0	0	5	5	0	20	3
South Carolina	0	0	0	83	38	0	202	11
Virginia	0	0	0	0	10	0	0	2
West Virginia	0	0	0	0	1	0	0	1
East South Central	0	0	0	8	7	0	0	0
Alabama	0	0	0	0	6	0	0	0
Kentucky	0	0	0	0	145	0	0	62
Mississippi	0	0	0	0	108	0	0	1
Tennessee	0	0	0	20	19	0	0	19
West South Central	0	0	0	3	0	0	73	0
Arkansas	0	0	0	61	32	0	0	1
Louisiana	0	0	0	0	40	0	0	1
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	3	0	0	106	0
Mountain	0	5	0	1	1	0	3	1
Arizona	0	0	0	1	1	0	0	0
Colorado	0	0	0	4	1	0	63	1
Idaho	0	46	0	0	5	0	0	5
Montana	0	0	0	0	3	0	0	3
Nevada	0	5	0	1	3	0	0	3
New Mexico	0	114	0	4	2	0	0	1
Utah	0	17	0	2	3	0	248	12
Wyoming	0	0	0	0	2	0	0	18
Pacific Contiguous	0	4	0	1	1	0	9	1
California	0	4	0	1	1	0	9	1
Oregon	0	0	0	30	3	0	28	2
Washington	0	0	0	0	1	0	25	1
Pacific Noncontiguous	0	0	0	32	5	0	0	3
Alaska	0	0	0	0	46	0	0	69
Hawaii	0	0	0	32	5	0	0	2
U.S. Total	0	3	0	1	0	0	2	0

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

Table A.3.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, Year-to-Date through October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	2	0	1	0	0	23
Connecticut	0	78	0	2	0	0	106
Maine	0	14	0	1	0	0	28
Massachusetts	0	2	0	3	0	0	70
New Hampshire	0	711	0	0	0	0	59
Rhode Island	0	255	0	2	0	0	883
Vermont	0	0	0	0	0	0	71
Middle Atlantic	4	19	0	1	136	0	22
New Jersey	0	34	0	1	0	0	389
New York	0	45	0	2	0	0	31
Pennsylvania	4	22	0	1	136	0	25
East North Central	0	1	0	1	16	0	63
Illinois	0	0	0	2	0	0	96
Indiana	0	0	0	9	0	0	0
Michigan	0	0	0	2	0	0	90
Ohio	0	1	0	1	58	0	135
Wisconsin	0	0	0	0	0	0	93
West North Central	323	68	0	6	0	0	66
Iowa	0	113	0	5,274	0	0	374
Kansas	0	0	0	0	0	0	408
Minnesota	0	69	0	5	0	0	64
Missouri	323	2,029	0	481	0	0	0
South Dakota	0	558	0	0	0	0	0
South Atlantic	1	18	0	1	0	0	16
Delaware	0	294	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	161	0	5	0	0	0
Georgia	0	90	0	3	0	0	581
Maryland	0	13	0	5	0	0	4
North Carolina	117	105	0	0	0	0	262
South Carolina	0	2,088	0	10	0	0	217
Virginia	0	7	0	2	0	0	224
West Virginia	1	0	0	2	0	0	21
East South Central	0	115	0	0	0	0	670
Alabama	0	116	0	0	0	0	0
Kentucky	0	0	0	0	0	0	670
Mississippi	0	0	0	0	0	0	0
Tennessee	0	727	0	0	0	0	0
West South Central	0	0	0	0	0	0	11
Arkansas	0	0	0	0	0	0	275
Louisiana	0	0	0	1	0	0	0
Oklahoma	0	0	0	1	0	0	0
Texas	0	0	0	0	0	0	315
Mountain	5	16	0	1	0	0	30
Arizona	0	0	0	0	0	0	0
Colorado	96	0	0	7	0	0	68
Idaho	0	0	0	4	0	0	38
Montana	4	11	0	174	0	0	79
Nevada	0	0	0	8	0	0	232
New Mexico	0	0	0	2	0	0	0
Utah	95	424	0	59	0	0	317
Wyoming	83	0	0	815	0	0	297
Pacific Contiguous	0	24	0	1	0	0	24
California	0	210	0	2	0	0	30
Oregon	0	0	0	1	0	0	58
Washington	0	12	0	0	0	0	47
Pacific Noncontiguous	5	2	0	0	0	0	0
Alaska	118	0	0	0	0	0	0
Hawaii	0	2	0	0	0	0	0
U.S. Total	1	3	0	0	8	0	11

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.

Table A.3.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, Year-to-Date through October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	8	4	0	3	1
Connecticut	0	0	0	41	7	0	5	1
Maine	0	0	0	0	2	0	11	7
Massachusetts	0	0	0	9	7	0	4	2
New Hampshire	0	0	0	0	15	0	26	2
Rhode Island	0	0	0	50	16	0	0	2
Vermont	0	0	0	25	30	0	0	44
Middle Atlantic	0	0	0	8	2	0	3	1
New Jersey	0	0	0	9	8	0	6	1
New York	0	0	0	18	2	0	4	1
Pennsylvania	0	0	0	23	2	0	7	1
East North Central	0	0	0	12	1	0	16	0
Illinois	0	0	0	24	1	0	0	0
Indiana	0	0	0	15	1	0	0	2
Michigan	0	0	0	0	5	0	16	1
Ohio	0	0	0	28	6	0	0	0
Wisconsin	0	0	0	139	9	0	0	1
West North Central	0	0	0	42	1	0	17	1
Iowa	0	0	0	0	1	0	0	1
Kansas	0	0	0	211	0	0	0	0
Minnesota	0	0	0	95	2	0	17	2
Missouri	0	0	0	50	3	0	0	5
Nebraska	0	0	0	105	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	1	0	0	1
South Atlantic	0	0	0	3	3	0	4	1
Delaware	0	0	0	28	31	0	0	4
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	25	6	0	3	3
Georgia	0	0	0	3	5	0	0	2
Maryland	0	0	0	17	3	0	0	1
North Carolina	0	0	0	5	5	0	20	3
South Carolina	0	0	0	83	38	0	202	11
Virginia	0	0	0	0	10	0	0	2
West Virginia	0	0	0	0	1	0	0	1
East South Central	0	0	0	8	7	0	0	0
Alabama	0	0	0	0	6	0	0	0
Kentucky	0	0	0	0	145	0	0	62
Mississippi	0	0	0	0	108	0	0	1
Tennessee	0	0	0	20	19	0	0	19
West South Central	0	0	0	3	0	0	73	0
Arkansas	0	0	0	61	32	0	0	1
Louisiana	0	0	0	0	40	0	0	1
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	3	0	0	106	0
Mountain	0	5	0	1	1	0	3	1
Arizona	0	0	0	1	1	0	0	0
Colorado	0	0	0	4	1	0	63	1
Idaho	0	46	0	0	5	0	0	5
Montana	0	0	0	0	3	0	0	3
Nevada	0	5	0	1	3	0	0	3
New Mexico	0	114	0	4	2	0	0	1
Utah	0	17	0	2	3	0	248	12
Wyoming	0	0	0	0	2	0	0	18
Pacific Contiguous	0	4	0	1	1	0	9	1
California	0	4	0	1	1	0	9	1
Oregon	0	0	0	30	3	0	28	2
Washington	0	0	0	0	1	0	25	1
Pacific Noncontiguous	0	0	0	32	5	0	0	3
Alaska	0	0	0	0	46	0	0	69
Hawaii	0	0	0	32	5	0	0	2
U.S. Total	0	3	0	1	0	0	2	0

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

**Table A.4.A. Relative Standard Error for Net Generation by Fuel Type:
Commercial Sector by Census Division and State, October 2016**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	68	0	32	0	0	764
Connecticut	0	152	0	63	0	0	0
Maine	0	604	0	232	0	0	0
Massachusetts	0	72	0	31	0	0	764
New Hampshire	0	266	0	253	0	0	0
Rhode Island	0	260	0	187	0	0	0
Vermont	0	1,348	0	2,967	0	0	0
Middle Atlantic	0	85	0	27	0	0	807
New Jersey	0	240	0	87	0	0	0
New York	0	91	0	27	0	0	807
Pennsylvania	0	230	0	120	0	0	0
East North Central	115	134	0	15	0	0	666
Illinois	128	339	0	21	0	0	666
Indiana	209	1,469	0	37	0	0	0
Michigan	0	28	0	19	0	0	0
Ohio	0	417	0	133	0	0	0
Wisconsin	0	10,468	0	67	0	0	0
West North Central	61	110	0	35	0	0	0
Iowa	104	381	0	78	0	0	0
Minnesota	613	118	0	64	0	0	0
Missouri	0	479	0	0	0	0	0
Nebraska	0	0	0	708	0	0	0
North Dakota	0	846	0	0	0	0	0
South Dakota	0	712	0	0	0	0	0
South Atlantic	53	104	0	50	0	0	406
District of Columbia	0	1,089	0	165	0	0	0
Florida	0	0	0	117	0	0	0
Georgia	0	50	0	0	0	0	0
Maryland	0	476	0	62	0	0	0
North Carolina	0	171	0	0	0	0	423
South Carolina	0	302	0	174	0	0	1,114
Virginia	166	212	0	390	0	0	0
East South Central	0	761	0	99	0	0	0
Mississippi	0	0	0	293	0	0	0
Tennessee	0	761	0	105	0	0	0
West South Central	0	1,209	0	23	0	0	0
Arkansas	0	0	0	704	0	0	0
Louisiana	0	0	0	84	0	0	0
Oklahoma	0	1,420	0	118	0	0	0
Texas	0	1,224	0	23	0	0	0
Mountain	0	757	0	22	0	0	382
Arizona	0	757	0	40	0	0	0
Colorado	0	0	0	0	0	0	382
Idaho	0	0	0	0	0	0	0
Nevada	0	0	0	56	0	0	0
New Mexico	0	0	0	43	0	0	0
Utah	0	0	0	52	0	0	0
Pacific Contiguous	0	270	0	12	0	0	273
California	0	356	0	12	0	0	273
Oregon	0	3,579	0	94	0	0	0
Washington	0	199	0	154	0	0	0
Pacific Noncontiguous	61	70	0	753	0	0	0
Alaska	61	106	0	753	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	39	45	0	8	0	0	185

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.

Table A.4.A. Relative Standard Error for Net Generation by Fuel Type:

Commercial Sector by Census Division and State, October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	90	30	0	49	24
Connecticut	0	0	0	0	0	0	0	62
Maine	0	0	0	0	42	0	49	37
Massachusetts	0	0	0	90	53	0	0	28
New Hampshire	0	0	0	0	73	0	0	99
Rhode Island	0	0	0	0	125	0	0	141
Vermont	0	0	0	0	279	0	0	386
Middle Atlantic	0	0	0	15	12	0	18	14
New Jersey	0	0	0	15	8	0	0	20
New York	0	0	0	112	27	0	32	18
Pennsylvania	0	0	0	77	48	0	0	75
East North Central	0	0	0	97	15	0	18	12
Illinois	0	0	0	0	150	0	0	22
Indiana	0	0	0	0	89	0	109	35
Michigan	0	0	0	0	13	0	17	13
Ohio	0	0	0	97	108	0	0	113
Wisconsin	0	0	0	0	60	0	0	53
West North Central	0	0	0	211	26	0	77	27
Iowa	0	0	0	0	60	0	0	64
Minnesota	0	0	0	0	49	0	77	43
Missouri	0	0	0	211	11	0	0	2
Nebraska	0	0	0	0	94	0	0	100
North Dakota	0	0	0	0	0	0	0	846
South Dakota	0	0	0	0	0	0	0	712
South Atlantic	0	0	0	20	12	0	18	19
Delaware	0	0	0	138	118	0	0	118
District of Columbia	0	0	0	0	0	0	0	164
Florida	0	0	0	132	52	0	0	66
Georgia	0	0	0	93	88	0	0	65
Maryland	0	0	0	69	55	0	0	57
North Carolina	0	0	0	21	22	0	0	20
South Carolina	0	0	0	0	0	0	0	203
Virginia	0	0	0	0	14	0	18	13
East South Central	0	0	0	98	98	0	0	96
Mississippi	0	0	0	0	0	0	0	293
Tennessee	0	0	0	98	98	0	0	102
West South Central	0	0	0	116	46	0	0	22
Arkansas	0	0	0	0	194	0	0	285
Louisiana	0	0	0	0	0	0	0	84
Oklahoma	0	0	0	0	0	0	0	118
Texas	0	0	0	116	47	0	0	21
Mountain	0	0	0	23	23	0	0	18
Arizona	0	0	0	39	39	0	0	35
Colorado	0	0	0	44	39	0	0	66
Idaho	0	0	0	0	138	0	0	138
Nevada	0	0	0	31	31	0	0	31
New Mexico	0	0	0	0	261	0	0	42
Utah	0	0	0	0	109	0	0	47
Pacific Contiguous	0	0	0	20	11	0	0	9
California	0	0	0	20	11	0	0	9
Oregon	0	0	0	0	93	0	0	76
Washington	0	0	0	0	90	0	0	94
Pacific Noncontiguous	0	0	0	0	7	0	0	11
Alaska	0	0	0	0	55	0	0	46
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	0	0	0	10	7	0	9	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.

Table A.4.B. Relative Standard Error for Net Generation by Fuel Type:

Commercial Sector by Census Division and State, Year-to-Date through October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	68	0	32	0	0	764
Connecticut	0	152	0	63	0	0	0
Maine	0	604	0	232	0	0	0
Massachusetts	0	72	0	31	0	0	764
New Hampshire	0	266	0	253	0	0	0
Rhode Island	0	260	0	187	0	0	0
Vermont	0	1,348	0	2,967	0	0	0
Middle Atlantic	0	85	0	27	0	0	807
New Jersey	0	240	0	87	0	0	0
New York	0	91	0	27	0	0	807
Pennsylvania	0	230	0	120	0	0	0
East North Central	115	134	0	15	0	0	666
Illinois	128	339	0	21	0	0	666
Indiana	209	1,469	0	37	0	0	0
Michigan	0	28	0	19	0	0	0
Ohio	0	417	0	133	0	0	0
Wisconsin	0	10,468	0	67	0	0	0
West North Central	61	110	0	35	0	0	0
Iowa	104	381	0	78	0	0	0
Minnesota	613	118	0	64	0	0	0
Missouri	0	479	0	0	0	0	0
Nebraska	0	0	0	708	0	0	0
North Dakota	0	846	0	0	0	0	0
South Dakota	0	712	0	0	0	0	0
South Atlantic	53	104	0	50	0	0	406
District of Columbia	0	1,089	0	165	0	0	0
Florida	0	0	0	117	0	0	0
Georgia	0	50	0	0	0	0	0
Maryland	0	476	0	62	0	0	0
North Carolina	0	171	0	0	0	0	423
South Carolina	0	302	0	174	0	0	1,114
Virginia	166	212	0	390	0	0	0
East South Central	0	761	0	99	0	0	0
Mississippi	0	0	0	293	0	0	0
Tennessee	0	761	0	105	0	0	0
West South Central	0	1,209	0	23	0	0	0
Arkansas	0	0	0	704	0	0	0
Louisiana	0	0	0	84	0	0	0
Oklahoma	0	1,420	0	118	0	0	0
Texas	0	1,224	0	23	0	0	0
Mountain	0	757	0	22	0	0	382
Arizona	0	757	0	40	0	0	0
Colorado	0	0	0	0	0	0	382
Idaho	0	0	0	0	0	0	0
Nevada	0	0	0	56	0	0	0
New Mexico	0	0	0	43	0	0	0
Utah	0	0	0	52	0	0	0
Pacific Contiguous	0	270	0	12	0	0	273
California	0	356	0	12	0	0	273
Oregon	0	3,579	0	94	0	0	0
Washington	0	199	0	154	0	0	0
Pacific Noncontiguous	61	70	0	753	0	0	0
Alaska	61	106	0	753	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	39	45	0	8	0	0	185

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.

Table A.4.B. Relative Standard Error for Net Generation by Fuel Type:

Commercial Sector by Census Division and State, Year-to-Date through October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	90	30	0	49	24
Connecticut	0	0	0	0	0	0	0	62
Maine	0	0	0	0	42	0	49	37
Massachusetts	0	0	0	90	53	0	0	28
New Hampshire	0	0	0	0	73	0	0	99
Rhode Island	0	0	0	0	125	0	0	141
Vermont	0	0	0	0	279	0	0	386
Middle Atlantic	0	0	0	15	12	0	18	14
New Jersey	0	0	0	15	8	0	0	20
New York	0	0	0	112	27	0	32	18
Pennsylvania	0	0	0	77	48	0	0	75
East North Central	0	0	0	97	15	0	18	12
Illinois	0	0	0	0	150	0	0	22
Indiana	0	0	0	0	89	0	109	35
Michigan	0	0	0	0	13	0	17	13
Ohio	0	0	0	97	108	0	0	113
Wisconsin	0	0	0	0	60	0	0	53
West North Central	0	0	0	211	26	0	77	27
Iowa	0	0	0	0	60	0	0	64
Minnesota	0	0	0	0	49	0	77	43
Missouri	0	0	0	211	11	0	0	2
Nebraska	0	0	0	0	94	0	0	100
North Dakota	0	0	0	0	0	0	0	846
South Dakota	0	0	0	0	0	0	0	712
South Atlantic	0	0	0	20	12	0	18	19
Delaware	0	0	0	138	118	0	0	118
District of Columbia	0	0	0	0	0	0	0	164
Florida	0	0	0	132	52	0	0	66
Georgia	0	0	0	93	88	0	0	65
Maryland	0	0	0	69	55	0	0	57
North Carolina	0	0	0	21	22	0	0	20
South Carolina	0	0	0	0	0	0	0	203
Virginia	0	0	0	0	14	0	18	13
East South Central	0	0	0	98	98	0	0	96
Mississippi	0	0	0	0	0	0	0	293
Tennessee	0	0	0	98	98	0	0	102
West South Central	0	0	0	116	46	0	0	22
Arkansas	0	0	0	0	194	0	0	285
Louisiana	0	0	0	0	0	0	0	84
Oklahoma	0	0	0	0	0	0	0	118
Texas	0	0	0	116	47	0	0	21
Mountain	0	0	0	23	23	0	0	18
Arizona	0	0	0	39	39	0	0	35
Colorado	0	0	0	44	39	0	0	66
Idaho	0	0	0	0	138	0	0	138
Nevada	0	0	0	31	31	0	0	31
New Mexico	0	0	0	0	261	0	0	42
Utah	0	0	0	0	109	0	0	47
Pacific Contiguous	0	0	0	20	11	0	0	9
California	0	0	0	20	11	0	0	9
Oregon	0	0	0	0	93	0	0	76
Washington	0	0	0	0	90	0	0	94
Pacific Noncontiguous	0	0	0	0	7	0	0	11
Alaska	0	0	0	0	55	0	0	46
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	0	0	0	10	7	0	9	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.

**Table A.5.A. Relative Standard Error for Net Generation by Fuel Type:
Industrial Sector by Census Division and State, October 2016**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	131	55	0	35	0	0	70
Connecticut	0	319	0	58	0	0	0
Maine	0	40	0	44	0	0	70
Massachusetts	312	7,748	0	102	0	0	756
New Hampshire	0	392	0	221	0	0	0
Middle Atlantic	32	30	126	25	28	0	251
New Jersey	0	501	0	68	82	0	0
New York	0	11	0	37	0	0	251
Pennsylvania	63	67	125	33	25	0	0
East North Central	14	39	117	17	18	0	68
Illinois	12	0	0	54	97	0	0
Indiana	564	7	0	28	14	0	0
Michigan	153	242	138	26	0	0	173
Ohio	161	319	287	45	166	0	0
Wisconsin	31	326	0	29	0	0	74
West North Central	23	168	225	23	142	0	64
Iowa	21	403	225	23	0	0	0
Kansas	0	0	0	81	0	0	0
Minnesota	61	204	0	55	0	0	64
Missouri	212	0	0	327	0	0	0
Nebraska	75	0	0	268	0	0	0
North Dakota	154	277	0	137	142	0	0
South Atlantic	18	65	0	7	0	0	32
Delaware	0	0	0	0	0	0	0
Florida	62	367	0	19	0	0	0
Georgia	36	109	0	18	0	0	435
Maryland	0	230	0	96	0	0	0
North Carolina	58	509	0	51	0	0	903
South Carolina	0	29	0	43	0	0	0
Virginia	24	107	0	27	0	0	534
West Virginia	0	0	0	0	0	0	21
East South Central	5	172	0	14	77	0	0
Alabama	114	284	0	20	123	0	0
Kentucky	0	0	0	70	0	0	0
Mississippi	0	0	0	35	0	0	0
Tennessee	0	378	0	18	0	0	0
West South Central	31	299	81	2	6	0	0
Arkansas	0	308	0	25	0	0	0
Louisiana	0	0	118	2	6	0	0
Oklahoma	34	83	0	74	0	0	0
Texas	0	1,055	70	2	11	0	0
Mountain	20	1,041	0	10	7	0	0
Colorado	247	637	0	104	0	0	0
Idaho	181	0	0	42	0	0	0
Montana	372	0	0	0	0	0	0
Nevada	0	0	0	26	0	0	0
New Mexico	0	2,843	0	123	0	0	0
Utah	0	1,434	0	20	483	0	0
Wyoming	83	364	0	12	6	0	0
Pacific Contiguous	0	36	0	4	7	0	0
California	0	40	0	4	7	0	0
Oregon	0	0	0	55	0	0	0
Washington	0	87	0	0	0	0	0
Pacific Noncontiguous	136	63	0	83	122	0	124
Alaska	0	27	0	83	0	0	0
Hawaii	136	67	0	0	122	0	124
U.S. Total	10	45	52	2	6	0	28

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.

Table A.5.A. Relative Standard Error for Net Generation by Fuel Type:

Industrial Sector by Census Division and State, October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	0	2	0	47	16
Connecticut	0	0	0	0	0	0	0	58
Maine	0	0	0	0	2	0	47	14
Massachusetts	0	0	0	0	195	0	0	95
New Hampshire	0	0	0	0	0	0	0	220
Middle Atlantic	0	0	0	53	7	0	0	14
New Jersey	0	0	0	132	132	0	0	52
New York	0	0	0	0	1	0	0	17
Pennsylvania	0	0	0	57	10	0	0	18
East North Central	0	0	0	142	6	0	12	7
Illinois	0	0	0	0	0	0	30	14
Indiana	0	0	0	0	47	0	0	11
Michigan	0	0	0	0	9	0	0	19
Ohio	0	0	0	142	12	0	0	34
Wisconsin	0	0	0	0	9	0	65	13
West North Central	0	0	0	0	7	0	66	14
Iowa	0	0	0	0	48	0	0	17
Kansas	0	0	0	0	103	0	0	74
Minnesota	0	0	0	0	6	0	66	21
Missouri	0	0	0	0	181	0	0	168
Nebraska	0	0	0	0	0	0	0	73
North Dakota	0	0	0	0	88	0	0	82
South Atlantic	0	0	0	0	2	0	7	2
Delaware	0	0	0	0	108	0	0	1
Florida	0	0	0	0	6	0	6	6
Georgia	0	0	0	0	3	0	0	4
Maryland	0	0	0	0	0	0	0	20
North Carolina	0	0	0	0	5	0	28	9
South Carolina	0	0	0	0	1	0	0	2
Virginia	0	0	0	0	3	0	0	7
West Virginia	0	0	0	0	0	0	0	8
East South Central	0	0	0	0	3	0	48	4
Alabama	0	0	0	0	5	0	0	7
Kentucky	0	0	0	0	4	0	0	28
Mississippi	0	0	0	0	3	0	235	8
Tennessee	0	0	0	0	8	0	0	5
West South Central	0	0	0	0	3	0	13	2
Arkansas	0	0	0	0	2	0	0	5
Louisiana	0	0	0	0	4	0	17	2
Oklahoma	0	0	0	0	19	0	107	22
Texas	0	0	0	0	9	0	15	2
Mountain	0	0	0	116	5	0	17	7
Colorado	0	0	0	0	269	0	77	60
Idaho	0	0	0	0	3	0	53	18
Montana	0	0	0	0	69	0	0	144
Nevada	0	0	0	116	116	0	0	26
New Mexico	0	0	0	0	0	0	0	123
Utah	0	0	0	0	0	0	0	7
Wyoming	0	0	0	0	0	0	0	13
Pacific Contiguous	0	0	0	81	5	0	14	3
California	0	0	0	81	14	0	14	4
Oregon	0	0	0	0	11	0	0	11
Washington	0	0	0	0	5	0	0	5
Pacific Noncontiguous	0	0	0	0	39	0	0	43
Alaska	0	0	0	0	138	0	0	52
Hawaii	0	0	0	0	39	0	0	49
U.S. Total	0	0	0	44	2	0	7	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.

Table A.5.B. Relative Standard Error for Net Generation by Fuel Type:

Industrial Sector by Census Division and State, Year-to-Date through October 2016

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	131	55	0	35	0	0	70
Connecticut	0	319	0	58	0	0	0
Maine	0	40	0	44	0	0	70
Massachusetts	312	7,748	0	102	0	0	756
New Hampshire	0	392	0	221	0	0	0
Middle Atlantic	32	30	126	25	28	0	251
New Jersey	0	501	0	68	82	0	0
New York	0	11	0	37	0	0	251
Pennsylvania	63	67	125	33	25	0	0
East North Central	14	39	117	17	18	0	68
Illinois	12	0	0	54	97	0	0
Indiana	564	7	0	28	14	0	0
Michigan	153	242	138	26	0	0	173
Ohio	161	319	287	45	166	0	0
Wisconsin	31	326	0	29	0	0	74
West North Central	23	168	225	23	142	0	64
Iowa	21	403	225	23	0	0	0
Kansas	0	0	0	81	0	0	0
Minnesota	61	204	0	55	0	0	64
Missouri	212	0	0	327	0	0	0
Nebraska	75	0	0	268	0	0	0
North Dakota	154	277	0	137	142	0	0
South Atlantic	18	65	0	7	0	0	32
Delaware	0	0	0	0	0	0	0
Florida	62	367	0	19	0	0	0
Georgia	36	109	0	18	0	0	435
Maryland	0	230	0	96	0	0	0
North Carolina	58	509	0	51	0	0	903
South Carolina	0	29	0	43	0	0	0
Virginia	24	107	0	27	0	0	534
West Virginia	0	0	0	0	0	0	21
East South Central	5	172	0	14	77	0	0
Alabama	114	284	0	20	123	0	0
Kentucky	0	0	0	70	0	0	0
Mississippi	0	0	0	35	0	0	0
Tennessee	0	378	0	18	0	0	0
West South Central	31	299	81	2	6	0	0
Arkansas	0	308	0	25	0	0	0
Louisiana	0	0	118	2	6	0	0
Oklahoma	34	83	0	74	0	0	0
Texas	0	1,055	70	2	11	0	0
Mountain	20	1,041	0	10	7	0	0
Colorado	247	637	0	104	0	0	0
Idaho	181	0	0	42	0	0	0
Montana	372	0	0	0	0	0	0
Nevada	0	0	0	26	0	0	0
New Mexico	0	2,843	0	123	0	0	0
Utah	0	1,434	0	20	483	0	0
Wyoming	83	364	0	12	6	0	0
Pacific Contiguous	0	36	0	4	7	0	0
California	0	40	0	4	7	0	0
Oregon	0	0	0	55	0	0	0
Washington	0	87	0	0	0	0	0
Pacific Noncontiguous	136	63	0	83	122	0	124
Alaska	0	27	0	83	0	0	0
Hawaii	136	67	0	0	122	0	124
U.S. Total	10	45	52	2	6	0	28

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.

Table A.5.B. Relative Standard Error for Net Generation by Fuel Type:

Industrial Sector by Census Division and State, Year-to-Date through October 2016 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	0	0	0	0	2	0	47	16
Connecticut	0	0	0	0	0	0	0	58
Maine	0	0	0	0	2	0	47	14
Massachusetts	0	0	0	0	195	0	0	95
New Hampshire	0	0	0	0	0	0	0	220
Middle Atlantic	0	0	0	53	7	0	0	14
New Jersey	0	0	0	132	132	0	0	52
New York	0	0	0	0	1	0	0	17
Pennsylvania	0	0	0	57	10	0	0	18
East North Central	0	0	0	142	6	0	12	7
Illinois	0	0	0	0	0	0	30	14
Indiana	0	0	0	0	47	0	0	11
Michigan	0	0	0	0	9	0	0	19
Ohio	0	0	0	142	12	0	0	34
Wisconsin	0	0	0	0	9	0	65	13
West North Central	0	0	0	0	7	0	66	14
Iowa	0	0	0	0	48	0	0	17
Kansas	0	0	0	0	103	0	0	74
Minnesota	0	0	0	0	6	0	66	21
Missouri	0	0	0	0	181	0	0	168
Nebraska	0	0	0	0	0	0	0	73
North Dakota	0	0	0	0	88	0	0	82
South Atlantic	0	0	0	0	2	0	7	2
Delaware	0	0	0	0	108	0	0	1
Florida	0	0	0	0	6	0	6	6
Georgia	0	0	0	0	3	0	0	4
Maryland	0	0	0	0	0	0	0	20
North Carolina	0	0	0	0	5	0	28	9
South Carolina	0	0	0	0	1	0	0	2
Virginia	0	0	0	0	3	0	0	7
West Virginia	0	0	0	0	0	0	0	8
East South Central	0	0	0	0	3	0	48	4
Alabama	0	0	0	0	5	0	0	7
Kentucky	0	0	0	0	4	0	0	28
Mississippi	0	0	0	0	3	0	235	8
Tennessee	0	0	0	0	8	0	0	5
West South Central	0	0	0	0	3	0	13	2
Arkansas	0	0	0	0	2	0	0	5
Louisiana	0	0	0	0	4	0	17	2
Oklahoma	0	0	0	0	19	0	107	22
Texas	0	0	0	0	9	0	15	2
Mountain	0	0	0	116	5	0	17	7
Colorado	0	0	0	0	269	0	77	60
Idaho	0	0	0	0	3	0	53	18
Montana	0	0	0	0	69	0	0	144
Nevada	0	0	0	116	116	0	0	26
New Mexico	0	0	0	0	0	0	0	123
Utah	0	0	0	0	0	0	0	7
Wyoming	0	0	0	0	0	0	0	13
Pacific Contiguous	0	0	0	81	5	0	14	3
California	0	0	0	81	14	0	14	4
Oregon	0	0	0	0	11	0	0	11
Washington	0	0	0	0	5	0	0	5
Pacific Noncontiguous	0	0	0	0	39	0	0	43
Alaska	0	0	0	0	138	0	0	52
Hawaii	0	0	0	0	39	0	0	49
U.S. Total	0	0	0	44	2	0	7	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.

**Table A.6.A. Relative Standard Error for Sales of Electricity to Ultimate Customers
by End-Use Sector, Census Division, and State, October 2016**

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	1	4	0	1
Connecticut	0	1	6	0	1
Maine	1	1	2	0	1
Massachusetts	1	1	9	0	1
New Hampshire	1	1	5	0	1
Rhode Island	0	0	0	0	0
Vermont	3	4	8	0	3
Middle Atlantic	0	0	1	0	0
New Jersey	0	0	3	0	0
New York	0	0	3	0	0
Pennsylvania	0	0	1	0	0
East North Central	0	1	1	0	1
Illinois	1	1	2	0	1
Indiana	1	2	3	0	1
Michigan	0	2	3	0	1
Ohio	1	1	2	0	1
Wisconsin	1	3	4	0	2
West North Central	1	2	3	0	1
Iowa	2	7	4	0	3
Kansas	3	2	6	0	2
Minnesota	1	4	5	0	2
Missouri	1	2	7	0	1
Nebraska	2	7	7	0	4
North Dakota	1	4	8	0	4
South Dakota	2	9	10	0	5
South Atlantic	1	0	1	0	0
Delaware	1	2	9	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	1	3	0	1
Maryland	0	1	5	0	0
North Carolina	2	1	3	0	1
South Carolina	2	1	3	0	1
Virginia	1	1	3	0	1
West Virginia	0	1	0	0	0
East South Central	1	1	2	0	1
Alabama	2	2	2	0	1
Kentucky	1	2	4	0	2
Mississippi	3	2	4	0	2
Tennessee	1	2	5	0	1
West South Central	1	1	1	0	1
Arkansas	2	2	4	0	2
Louisiana	2	1	1	0	1
Oklahoma	2	1	4	0	2
Texas	1	1	2	0	1
Mountain	1	2	2	0	1
Arizona	1	2	3	0	1
Colorado	2	5	6	0	3
Idaho	1	4	4	0	2
Montana	2	7	7	0	4
Nevada	1	3	1	0	1
New Mexico	3	8	7	0	4
Utah	2	5	2	0	2
Wyoming	2	6	3	0	2
Pacific Contiguous	0	1	2	0	1
California	0	1	2	0	1
Oregon	1	4	8	0	3
Washington	1	4	6	0	2
Pacific Noncontiguous	1	4	3	0	2
Alaska	2	9	11	0	5
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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

Table A.6.B. Relative Standard Error for Sales of Electricity to Ultimate Customers

by End-Use Sector, Census Division, and State, Year-to-Date through October 2016

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	0	3	0	0
Connecticut	0	1	4	0	1
Maine	0	1	1	0	0
Massachusetts	0	1	6	0	1
New Hampshire	0	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	1	3	6	0	2
Middle Atlantic	0	0	1	0	0
New Jersey	0	0	2	0	0
New York	0	0	2	0	0
Pennsylvania	0	0	0	0	0
East North Central	0	1	1	0	0
Illinois	0	1	1	0	0
Indiana	0	1	2	0	1
Michigan	0	1	2	0	1
Ohio	0	1	1	0	1
Wisconsin	0	2	3	0	1
West North Central	0	1	2	0	1
Iowa	1	5	3	0	2
Kansas	1	1	4	0	1
Minnesota	1	3	4	0	2
Missouri	0	1	5	0	1
Nebraska	1	5	5	0	2
North Dakota	1	3	6	0	3
South Dakota	1	7	7	0	3
South Atlantic	0	0	1	0	0
Delaware	0	1	6	0	1
District of Columbia	0	0	0	0	0
Florida	0	0	3	0	0
Georgia	1	1	2	0	1
Maryland	0	0	3	0	0
North Carolina	0	0	2	0	0
South Carolina	1	1	2	0	1
Virginia	0	0	2	0	0
West Virginia	0	0	0	0	0
East South Central	0	1	1	0	0
Alabama	1	1	1	0	1
Kentucky	1	1	3	0	1
Mississippi	1	1	3	0	1
Tennessee	0	1	3	0	1
West South Central	0	0	1	0	0
Arkansas	1	1	2	0	1
Louisiana	1	1	1	0	0
Oklahoma	1	1	3	0	1
Texas	0	0	1	0	0
Mountain	0	1	1	0	1
Arizona	0	2	2	0	1
Colorado	1	4	4	0	2
Idaho	0	3	2	0	1
Montana	1	6	5	0	2
Nevada	0	2	1	0	1
New Mexico	1	6	5	0	3
Utah	1	4	2	0	2
Wyoming	1	5	2	0	2
Pacific Contiguous	0	1	2	0	1
California	0	1	1	0	0
Oregon	1	3	5	0	2
Washington	0	3	4	0	2
Pacific Noncontiguous	1	3	2	0	1
Alaska	1	7	8	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	0	0	0

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

Table A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, October 2016

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	1	3	0	0
Connecticut	0	1	3	0	1
Maine	0	1	2	0	1
Massachusetts	1	1	5	0	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	2	4	7	0	2
Middle Atlantic	0	0	1	0	0
New Jersey	0	0	3	0	0
New York	0	0	2	0	0
Pennsylvania	0	1	1	0	0
East North Central	0	1	2	0	0
Illinois	1	1	3	0	1
Indiana	1	2	2	0	1
Michigan	0	1	4	0	1
Ohio	1	1	3	0	1
Wisconsin	1	2	5	0	2
West North Central	1	2	4	0	1
Iowa	2	6	7	0	3
Kansas	3	2	6	0	2
Minnesota	1	3	7	0	2
Missouri	1	2	6	0	1
Nebraska	2	6	10	0	4
North Dakota	2	4	8	0	3
South Dakota	2	7	12	0	4
South Atlantic	1	1	2	0	0
Delaware	1	3	11	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	1	4	0	1
Maryland	0	1	3	0	0
North Carolina	2	1	3	0	1
South Carolina	2	2	3	0	1
Virginia	1	1	4	0	1
West Virginia	0	1	0	0	0
East South Central	1	1	2	0	1
Alabama	2	2	3	0	1
Kentucky	2	3	4	0	2
Mississippi	3	3	5	0	2
Tennessee	1	2	5	0	1
West South Central	1	1	2	0	1
Arkansas	2	3	4	0	2
Louisiana	2	1	2	0	1
Oklahoma	2	2	6	0	2
Texas	1	1	2	0	1
Mountain	1	2	2	0	1
Arizona	1	3	4	0	1
Colorado	3	5	8	0	3
Idaho	1	4	5	0	2
Montana	2	5	14	0	3
Nevada	1	4	1	0	1
New Mexico	4	9	13	0	5
Utah	3	6	4	0	3
Wyoming	2	5	4	0	3
Pacific Contiguous	0	1	2	0	1
California	1	1	2	0	1
Oregon	1	3	9	0	2
Washington	1	3	8	0	2
Pacific Noncontiguous	1	2	2	0	1
Alaska	2	7	11	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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

Table A.7.B. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers

by End-Use Sector, Census Division, and State, Year-to-Date through October 2016

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	0	2	0	0
Connecticut	0	1	2	0	0
Maine	0	1	2	0	0
Massachusetts	0	1	4	0	1
New Hampshire	0	1	3	0	0
Rhode Island	0	0	0	0	0
Vermont	1	3	5	0	1
Middle Atlantic	0	0	1	0	0
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	1	0	0
East North Central	0	0	1	0	0
Illinois	0	1	2	0	0
Indiana	1	1	1	0	1
Michigan	0	1	3	0	1
Ohio	0	1	2	0	0
Wisconsin	0	2	4	0	1
West North Central	0	1	2	0	1
Iowa	1	4	4	0	2
Kansas	1	1	4	0	1
Minnesota	1	3	5	0	1
Missouri	1	1	4	0	1
Nebraska	1	5	6	0	2
North Dakota	1	3	6	0	2
South Dakota	1	5	8	0	3
South Atlantic	0	0	1	0	0
Delaware	1	2	7	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	3	0	0
Georgia	1	1	2	0	1
Maryland	0	0	2	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	2	0	0
West Virginia	0	1	0	0	0
East South Central	0	1	2	0	0
Alabama	1	1	2	0	1
Kentucky	1	2	3	0	1
Mississippi	1	2	4	0	1
Tennessee	1	2	4	0	1
West South Central	0	1	1	0	0
Arkansas	1	2	3	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	4	0	1
Texas	0	1	1	0	0
Mountain	0	1	2	0	1
Arizona	0	2	3	0	1
Colorado	1	4	6	0	2
Idaho	1	3	2	0	1
Montana	1	4	9	0	2
Nevada	0	3	1	0	1
New Mexico	1	6	9	0	3
Utah	1	4	2	0	2
Wyoming	1	5	3	0	2
Pacific Contiguous	0	1	1	0	0
California	0	1	1	0	0
Oregon	1	2	6	0	1
Washington	1	2	6	0	1
Pacific Noncontiguous	1	2	2	0	1
Alaska	2	5	8	0	3
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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

Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, October 2016

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	0	2	0	0
Connecticut	0	0	3	0	1
Maine	0	0	1	0	0
Massachusetts	1	0	4	0	1
New Hampshire	0	0	2	0	1
Rhode Island	0	0	0	0	0
Vermont	2	1	3	0	1
Middle Atlantic	0	0	0	0	0
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	1	0	0
East North Central	0	0	1	0	0
Illinois	1	0	2	0	0
Indiana	1	1	1	0	1
Michigan	0	1	2	0	0
Ohio	1	0	1	0	0
Wisconsin	1	1	2	0	1
West North Central	1	1	2	0	0
Iowa	1	2	4	0	1
Kansas	2	1	3	0	1
Minnesota	1	1	3	0	1
Missouri	1	1	3	0	1
Nebraska	1	2	5	0	1
North Dakota	1	1	3	0	1
South Dakota	2	3	4	0	2
South Atlantic	0	0	1	0	0
Delaware	1	1	4	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	2	0	0
Georgia	1	1	2	0	1
Maryland	0	0	2	0	0
North Carolina	1	1	1	0	1
South Carolina	1	1	1	0	1
Virginia	1	1	2	0	0
West Virginia	0	0	0	0	0
East South Central	1	1	1	0	0
Alabama	1	1	1	0	1
Kentucky	1	1	2	0	1
Mississippi	2	2	2	0	1
Tennessee	1	1	2	0	1
West South Central	1	1	1	0	0
Arkansas	1	2	2	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	3	0	1
Texas	1	1	1	0	0
Mountain	0	1	1	0	0
Arizona	0	1	2	0	0
Colorado	1	1	3	0	1
Idaho	1	1	2	0	1
Montana	2	3	8	0	1
Nevada	0	2	0	0	1
New Mexico	2	2	7	0	2
Utah	1	2	2	0	1
Wyoming	2	2	2	0	1
Pacific Contiguous	0	1	1	0	0
California	0	0	1	0	0
Oregon	1	1	3	0	1
Washington	1	2	3	0	1
Pacific Noncontiguous	1	2	1	0	1
Alaska	2	4	4	0	2
Hawaii	0	0	0	0	0
U.S. Total	0	0	0	0	0

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

Table A.8.B. Relative Standard Error for Average Price of Electricity to Ultimate Customers

by End-Use Sector, Census Division, and State, Year-to-Date through October 2016

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	0	3	0	0
Connecticut	0	1	4	0	1
Maine	0	1	2	0	1
Massachusetts	0	1	6	0	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	1	3	7	0	2
Middle Atlantic	0	0	1	0	0
New Jersey	0	0	3	0	0
New York	0	0	2	0	0
Pennsylvania	0	0	1	0	0
East North Central	0	1	1	0	0
Illinois	0	1	2	0	0
Indiana	0	2	2	0	1
Michigan	0	2	3	0	1
Ohio	0	1	2	0	1
Wisconsin	0	3	4	0	2
West North Central	0	2	3	0	1
Iowa	1	6	5	0	2
Kansas	1	1	5	0	1
Minnesota	1	4	6	0	2
Missouri	0	1	6	0	1
Nebraska	1	6	7	0	3
North Dakota	1	4	7	0	3
South Dakota	1	8	10	0	4
South Atlantic	0	0	1	0	0
Delaware	1	2	9	0	2
District of Columbia	0	0	0	0	0
Florida	0	1	4	0	0
Georgia	1	1	3	0	1
Maryland	0	0	4	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	0	1	3	0	0
West Virginia	0	1	0	0	0
East South Central	0	1	2	0	1
Alabama	1	1	2	0	1
Kentucky	1	2	4	0	1
Mississippi	1	2	4	0	1
Tennessee	0	2	5	0	1
West South Central	0	1	1	0	0
Arkansas	1	2	3	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	4	0	1
Texas	0	1	2	0	0
Mountain	0	2	2	0	1
Arizona	0	2	3	0	1
Colorado	0	5	6	0	2
Idaho	0	4	3	0	1
Montana	1	6	10	0	3
Nevada	0	3	1	0	1
New Mexico	1	8	9	0	4
Utah	0	5	3	0	2
Wyoming	1	6	3	0	2
Pacific Contiguous	0	1	2	0	1
California	0	1	2	0	1
Oregon	0	4	8	0	2
Washington	0	3	6	0	2
Pacific Noncontiguous	1	4	3	0	2
Alaska	2	8	11	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2016

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2016	1	01/10/2016 8:46 PM	01/11/2016 5:25 AM	8 Hours, 39 Minutes	ISO New England	NPCC	Maine: Connecticut: Massachusetts: Vermont: New Hampshire: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	59859
2016	1	01/22/2016 3:52 PM	01/24/2016 12:30 PM	44 Hours, 38 Minutes	Duke Energy Progress	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	150000
2016	1	01/23/2016 7:49 AM	01/23/2016 9:05 AM	1 Hours, 16 Minutes	FirstEnergy Corp. Jersey Central Power & Light	RFC	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	50900
2016	2	02/05/2016 11:21 AM	02/06/2016 3:48 PM	28 Hours, 27 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	115057
2016	2	02/13/2016 12:44 PM	02/13/2016 4:27 PM	3 Hours, 43 Minutes	Pacific Gas & Electric Co	SERC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	7	4300
2016	2	02/16/2016 8:35 AM	02/16/2016 5:28 PM	8 Hours, 53 Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RFC	Virginia: Roanoke County, Montgomery County, West Virginia: Kanawha County, Cabell County; Tennessee: Sullivan County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	52640
2016	2	02/19/2016 10:00 PM	02/20/2016 11:13 PM	25 Hours, 13 Minutes	Detroit Edison Co	RFC	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	145314
2016	2	02/24/2016 2:45 PM	02/25/2016 5:00 AM	14 Hours, 15 Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	400	284610
2016	2	02/25/2016 1:44 AM	02/25/2016 2:45 PM	13 Hours, 1 Minutes	ISO New England	NPCC	Connecticut: Maine: Massachusetts: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	114190
2016	2	02/26/2016 12:01 AM	ongoing	ongoing	California Department of Water Resources	WECC	California: San Bernardino County	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	0	0
2016	3	03/01/2016 3:00 PM	ongoing	ongoing	Puget Sound Energy	WECC	Washington: King County, Whatcom County, Kitsap County, Skagit County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	56000
2016	3	03/03/2016 11:00 AM	04/16/2016 7:47 PM	1,064 Hours, 47 Minutes	California Department of Water Resources	WECC	California: San Bernardino County;	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	0	0
2016	3	03/23/2016 5:00 AM	03/25/2016 11:59 PM	66 Hours, 59 Minutes	Xcel Energy/Public Service Company of Colorado	WECC	Colorado: Denver, City and County of[12];	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	0	0
2016	4	04/02/2016 11:08 AM	04/02/2016 11:33 AM	0 Hours, 25 Minutes	California Department of Water Resources	WECC	California	Uncontrolled loss or 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident- System Operations	360	0
2016	4	04/18/2016 5:05 AM	04/20/2016 7:55 AM	50 Hours, 50 Minutes	CenterPoint Energy	TRE	Texas: Harris County	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	415103
2016	4	04/27/2016 5:50 AM	04/28/2016 1:35 AM	19 Hours, 45 Minutes	CenterPoint Energy	TRE	Texas: Harris County	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	214864
2016	5	05/08/2016 9:12 AM	ongoing	ongoing	Peak Reliability	WECC	Washington: Clark County;	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	Unknown	Unknown
2016	5	05/10/2016 8:45 PM	05/13/2016 3:00 AM	54 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Tarrant County, Parker County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Distribution Interruption	Unknown	85000
2016	5	05/19/2016 9:36 PM	05/20/2016 1:00 AM	3 Hours, 24 Minutes	Pacificorp	WECC	Utah:	Uncontrolled loss or 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident- System Operations	461	85179
2016	5	05/20/2016 12:00 AM	05/22/2016 5:00 AM	53 Hours, 0 Minutes	Entergy Services, Inc.	SERC	Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more-Distribution Interruption	Unknown	85000
2016	5	05/20/2016 1:15 AM	ongoing	ongoing	Entergy Transmission - SOC	SERC	Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	Unknown	57184
2016	5	05/31/2016 7:30 AM	06/13/2016 7:27 AM	311 Hours, 57 Minutes	Upstate New York Power Producers	NPCC	New York: Tompkins County;	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	150	Unknown
2016	6	06/17/2016 3:40 PM	06/18/2016 8:34 AM	16 Hours, 54 Minutes	Southern Company	SERC	Georgia, Alabama, Mississippi, Florida	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather	304	91260
2016	7	07/05/2016 2:45 AM	07/06/2016 3:00 AM	24 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Tarrant County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	52000
2016	7	07/05/2016 5:30 PM	07/06/2016 4:00 PM	22 Hours, 30 Minutes	Northern States Power Co	MRO	Minnesota, Wisconsin	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	250000
2016	7	07/07/2016 4:20 AM	07/07/2016 8:00 AM	3 Hours, 40 Minutes	Kansas City Power & Light Co	SERC	Kansas: Johnson County; Missouri: Jackson County, Platte County, Cass County, Buchanan County, Atchison County, Andrew County, Clay County, Nodaway County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	58500
2016	7	07/08/2016 6:00 PM	ongoing	ongoing	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RFC	West Virginia: Virginia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62961
2016	7	07/08/2016 7:00 PM	07/09/2016 12:00 AM	5 Hours, 0 Minutes	Detroit Edison Co	RFC	Michigan: Wayne County, Oakland County, Macomb County, St. Clair County, Lapeer County, Tuscola County, Sanilac County, Huron County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	160895
2016	7	07/08/2016 8:50 PM	07/09/2016 7:25 PM	22 Hours, 35 Minutes	Duke Energy Carolinas	SERC	North Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	600	203345
2016	7	07/09/2016 5:45 PM	07/11/2016 2:00 PM	44 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62000

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2016

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2016	7	07/12/2016 2:10 PM	07/12/2016 8:33 PM	6 Hours, 23 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	450	218000
2016	7	07/13/2016 3:00 PM	ongoing	ongoing	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County	Public Appeal-System Operations	Unknown	Unknown
2016	7	07/14/2016 2:44 PM	07/15/2016 4:00 AM	13 Hours, 16 Minutes	American Electric Power - (SPP Reliability Region)	SPP	Oklahoma	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	96966
2016	7	07/14/2016 4:30 PM	07/16/2016 12:00 AM	31 Hours, 30 Minutes	Entergy Services, Inc.	SPP, SERC	Arkansas: Louisiana: Mississippi: Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	170244
2016	7	07/14/2016 5:30 PM	07/16/2016 8:00 PM	50 Hours, 30 Minutes	Oklahoma Gas & Electric Co	SPP	Oklahoma: Arkansas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	7300
2016	7	07/19/2016 3:45 PM	07/19/2016 7:25 PM	3 Hours, 40 Minutes	Pacificorp	WECC	Idaho	Islanding, Uncontrolled Loss 300+ MW-System Operations	485	Unknown
2016	7	07/19/2016 3:45 PM	07/19/2016 7:29 PM	3 Hours, 44 Minutes	Bonneville Power Administration	WECC	Idaho	Islanding, Uncontrolled Loss 300+ MW-System Operations	290	Unknown
2016	7	07/21/2016 7:21 PM	07/22/2016 12:09 AM	4 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Load Shed 100+ MW, Voltage Reduction-System Operations	200	266000
2016	7	07/22/2016 11:50 PM	07/23/2016 9:10 AM	9 Hours, 20 Minutes	ISO New England	NPCC	Massachusetts: Connecticut: Rhode Island: New Hampshire: Vermont: Maine	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57058
2016	7	07/23/2016 3:15 PM	07/23/2016 7:53 PM	4 Hours, 38 Minutes	CAmbria Cogen Company	RFC	Pennsylvania: Cambria County	Voltage Reduction-System Operations	87	Unknown
2016	7	07/23/2016 7:30 PM	07/24/2016 7:30 AM	12 Hours, 0 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Vermont: Rhode Island	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	101073
2016	7	07/25/2016 6:51 PM	07/26/2016 2:19 AM	7 Hours, 28 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	0	0
2016	7	07/26/2016 6:51 PM	07/27/2016 1:45 AM	6 Hours, 54 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	25	37100
2016	7	07/27/2016 6:50 PM	07/28/2016 1:38 AM	6 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	80	106300
2016	7	07/28/2016 6:51 PM	07/29/2016 2:02 AM	7 Hours, 11 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	22	21600
2016	7	07/29/2016 7:09 PM	07/29/2016 7:57 PM	0 Hours, 48 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico	Voltage Reduction-System Operations	0	0
2016	8	08/07/2016 6:39 PM	08/07/2016 8:27 PM	1 Hours, 48 Minutes	Peak Reliability	WECC	New Mexico: Bernalillo County:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	Unknown	Unknown
2016	8	08/10/2016 6:00 AM	ongoing	ongoing	California Department of Water Resources	WECC	California: Butte County:	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	0	0
2016	8	08/11/2016 4:30 PM	08/11/2016 7:15 PM	2 Hours, 45 Minutes	FirstEnergy Corp	RFC	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	62140
2016	8	08/13/2016 11:42 AM	08/13/2016 2:07 PM	2 Hours, 25 Minutes	Broad River Energy, LLC	SERC	South Carolina:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	506	0
2016	8	08/23/2016 5:00 PM	08/24/2016 12:05 AM	7 Hours, 5 Minutes	CenterPoint Energy	TRE	Texas: Harris County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	72200
2016	8	08/24/2016 6:13 PM	08/24/2016 7:14 PM	1 Hours, 1 Minutes	Puerto Rico Electric Power Authority	PR	Puerto Rico:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-System Operations	600	400000
2016	8	08/24/2016 7:18 PM	08/24/2016 7:47 PM	0 Hours, 29 Minutes	Peak Reliability	WECC	Washington: King County:	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	9232	Unknown
2016	8	08/31/2016 9:45 AM	08/31/2016 9:55 AM	0 Hours, 10 Minutes	Peak Reliability	WECC	Colorado:	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Transmission Interruption	0	0
2016	8	08/31/2016 2:52 PM	ongoing	ongoing	Peak Reliability	WECC	Washington: Clark County:	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	0	0
2016	9	09/01/2016 10:00 PM	ongoing	ongoing	Seminole Electric Cooperative Inc	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	100	Unknown
2016	9	09/02/2016 12:40 AM	09/04/2016 8:00 PM	67 Hours, 20 Minutes	City of Tallahassee - (FL)	FRCC	Florida: Leon County, Wakulla County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	450	75000
2016	9	09/02/2016 4:00 AM	09/02/2016 4:00 PM	12 Hours, 0 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Citrus County, Columbia County, Dixie County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Polk County, Seminole County, Sumter County, Su	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	225	90000
2016	9	09/02/2016 5:45 AM	09/03/2016 12:30 AM	18 Hours, 45 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57000

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2016

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2016	9	09/06/2016 6:12 PM	09/06/2016 9:24 PM	3 Hours, 12 Minutes	Peak Reliability	WECC	Washington: Clark County;	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	300	Unknown
2016	9	09/08/2016 8:30 AM	09/25/2016 12:00 AM	399 Hours, 30 Minutes	Upstate New York Power Producers	NPCC	New York: Tompkins County;	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	210	Unknown
2016	9	09/08/2016 2:49 PM	09/08/2016 3:03 PM	0 Hours, 14 Minutes	Peak Reliability	WECC	Washington:	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	0	0
2016	9	09/10/2016 9:42 AM	09/10/2016 9:57 AM	0 Hours, 15 Minutes	Peak Reliability	WECC	Washington: Clark County;	Load shedding or TOU implemented under emergency operational policy-Generation Inadequacy	135	Unknown
2016	9	09/11/2016 12:05 PM	09/11/2016 3:10 PM	3 Hours, 5 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Rhode Island: Vermont: Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	57960
2016	9	09/12/2016 12:30 PM	09/12/2016 5:56 PM	5 Hours, 26 Minutes	Public Service Company of New Mexico	WECC	New Mexico: Bernalillo County, Sandoval County, Santa Fe County, Valencia County;	Load shedding or TOU implemented under emergency operational policy-Generation Inadequacy	110	53753
2016	9	09/21/2016 2:30 PM	09/24/2016 2:30 AM	60 Hours, 0 Minutes	Puerto Rico Electric Power Authority		Puerto Rico:	Complete operational failure or shut-down of the transmission and/or distribution electrical system-System Operations	2750	1475000
2016	9	09/22/2016 10:56 AM	09/22/2016 11:41 AM	0 Hours, 45 Minutes	Cedar Falls Utilities	MRO	Iowa: Black Hawk County;	Complete operational failure or shut-down of the transmission and/or distribution electrical system-System Operations	69	19124
2016	10	10/02/2016 11:30 PM	10/05/2016 8:00 AM	56 Hours, 30 Minutes	Pacificorp	WECC	Utah:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Transmission Interruption	50	4000
2016	10	10/03/2016 3:09 PM	10/04/2016 7:00 PM	27 Hours, 51 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/05/2016 11:32 AM	10/05/2016 7:00 PM	7 Hours, 28 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/06/2016 9:50 AM	10/06/2016 7:00 PM	9 Hours, 10 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Public Appeal	Unknown	Unknown
2016	10	10/06/2016 7:30 PM	10/08/2016 6:00 PM	46 Hours, 30 Minutes	Florida Power & Light	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	5600	1200000
2016	10	10/07/2016 8:00 AM	10/09/2016 1:00 PM	53 Hours, 0 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Citrus County, Columbia County, Dixie County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Polk County, Seminole County, Sumter County, Su	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	413	165000
2016	10	10/07/2016 11:08 AM	10/07/2016 7:00 PM	7 Hours, 52 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	Unknown	Unknown
2016	10	10/07/2016 4:22 PM	10/12/2016 11:00 AM	114 Hours, 38 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	122	36384
2016	10	10/07/2016 10:45 PM	ongoing	ongoing	Seminole Electric Cooperative Inc	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	Unknown
2016	10	10/08/2016 1:10 AM	ongoing	ongoing	South Carolina Electric and Gas	SERC	South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	1050	290824
2016	10	10/08/2016 8:21 AM	10/13/2016 5:30 PM	129 Hours, 9 Minutes	Duke Energy Progress	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	Unknown
2016	10	10/10/2016 1:15 PM	10/10/2016 7:00 PM	5 Hours, 45 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	Unknown	Unknown
2016	10	10/28/2016 1:29 PM	10/28/2016 1:38 PM	0 Hours, 9 Minutes	Pacific Gas & Electric Co	WECC	California: Plumas County;	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Islanding	4	482

Note: Customers affected are estimates and are preliminary. Source: Form OE-417, 'Electric Emergency Incident and Disturbance Report.'

Table B.2 Major Disturbances and Unusual Occurrences, 2015

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2015	1	01/07/2015 5:00 PM	01/08/2015 8:35 AM	15 Hours, 35 Minutes	Memphis Light Gas and Water Division	SERC	Tennessee	Public appeal to reduce the use of electricity - Severe Weather - Winter	Unknown	Unknown
2015	1	01/07/2015 5:00 PM	01/08/2015 8:35 AM	15 Hours, 35 Minutes	Tennessee Valley Authority	SERC	Tennessee, Kentucky, Virginia, North Carolina, Georgia, Alabama, Missouri	Public appeal to reduce the use of electricity - Severe Weather - Winter	Unknown	Unknown
2015	2	02/06/2015 8:58 PM		. Hours, . Minutes	Pacific Gas & Electric Co	WECC	Northern California	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Wind	Unknown	65000
2015	2	02/16/2015 9:00 PM	02/18/2015 2:00 PM	41 Hours, 0 Minutes	Tennessee Valley Authority	SERC	Tennessee, Kentucky, Virginia, North Carolina, Georgia, Alabama, Missouri	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	Unknown	67189
2015	2	02/16/2015 9:41 PM	02/18/2015 7:00 AM	33 Hours, 19 Minutes	Southern Company	SERC	Northern/North Eastern, Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	620	186035
2015	2	02/17/2015 2:12 AM	02/18/2015 4:00 PM	37 Hours, 48 Minutes	Duke Energy Carolinas	SERC	North Carolina, South Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	Unknown	68000
2015	2	02/17/2015 9:00 AM	02/18/2015 11:00 PM	38 Hours, 0 Minutes	Duke Energy Progress	SERC	North Carolina, South Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	Unknown	52000
2015	2	02/18/2015 3:00 PM	02/20/2015 9:00 AM	42 Hours, 0 Minutes	Tennessee Valley Authority	SERC	Tennessee, Kentucky, Virginia, North Carolina, Georgia, Alabama, Missouri	Public appeal to reduce the use of electricity - Severe Weather - Winter	Unknown	Unknown
2015	2	02/20/2015 6:00 AM	02/20/2015 10:00 AM	4 Hours, 0 Minutes	Duke Energy Progress	SERC	North Carolina, South Carolina	System-wide voltage reductions of 3 percent or more - Severe Weather - Winter	Unknown	Unknown
2015	2	02/21/2015 8:34 AM	02/21/2015 12:45 PM	4 Hours, 11 Minutes	Tennessee Valley Authority	SERC	Fentress County, Tennessee	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	Unknown	50000
2015	2	02/26/2015 3:12 AM	02/26/2015 8:00 PM	16 Hours, 48 Minutes	Duke Energy Progress	SERC	North Carolina, South Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	Unknown	124000
2015	2	02/26/2015 3:30 AM	02/27/2015 12:00 PM	32 Hours, 30 Minutes	Duke Energy Carolinas	SERC	North Carolina	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Winter	400	103776
2015	3	03/15/2015 3:30 PM	03/15/2015 7:00 PM	3 Hours, 30 Minutes	Portland General Electric Co	WECC	Greater Portland & Salem, Oregon	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Wind	210	71000
2015	3	03/26/2015 3:21 PM	03/26/2015 4:59 PM	1 Hours, 38 Minutes	Pacific Gas & Electric Co	WECC	Contra Costa County, California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	15	Unknown
2015	4	04/03/2015 2:00 AM	04/03/2015 7:48 AM	5 Hours, 48 Minutes	Westar Energy Inc	SPP	Harvey, Reno, and Sedgwick Counties, Kansas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather - Thunderstorms	Unknown	70000
2015	4	04/06/2015 8:12 AM	04/06/2015 12:08 PM	3 Hours, 56 Minutes	Pacific Gas & Electric Co	WECC	Butte County, California	Loss of electric service to more than 50,000 customers for 1 hour or more - System Operations	Unknown	80000
2015	4	04/07/2015 12:30 PM	04/07/2015 5:34 PM	5 Hours, 4 Minutes	Potomac Electric Power Co	RFC	Unknown	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident - System Operations	Unknown	Unknown
2015	4	04/07/2015 3:34 PM	04/07/2015 3:46 PM	0 Hours, 12 Minutes	WAPA Sierra Nevada Region	WECC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	0	0
2015	4	04/17/2015 9:16 AM	04/17/2015 11:00 AM	1 Hours, 44 Minutes	Peak Reliability	WECC	Canada	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	9300	Unknown
2015	4	04/17/2015 9:30 PM	04/19/2015 11:50 PM	50 Hours, 20 Minutes	CenterPoint Energy	TRE	Houston, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	280982
2015	4	04/18/2015 9:00 PM	04/21/2015 4:00 AM	55 Hours, 0 Minutes	Oncor Electric Delivery Company LLC	TRE	Dallas, Fort Worth, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	89000
2015	4	04/24/2015 7:10 PM	04/26/2015 4:00 PM	44 Hours, 50 Minutes	Oncor Electric Delivery Company LLC	TRE	Dallas, Fort Worth, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	57000
2015	4	04/27/2015 10:30 AM	04/28/2015 6:45 PM	32 Hours, 15 Minutes	Entergy Services, Inc.	SERC	Louisiana and Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	199000
2015	5	05/18/2015 3:28 PM	05/18/2015 3:47 PM	0 Hours, 19 Minutes	Peak Reliability for BCHA	WECC	Washington	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - Severe Weather	275	0
2015	5	05/25/2015 6:00 PM	05/29/2015 7:15 AM	85 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	North Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	454000
2015	5	05/25/2015 8:30 PM		. Hours, . Minutes	Southwest Power Pool, Inc.	SPP	Texas, Louisiana, Arkansas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	57351
2015	5	05/25/2015 8:30 PM	05/26/2015 6:30 PM	22 Hours, 0 Minutes	American Electric Power - (SPP Reliability Region)	SPP	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	57531
2015	5	05/25/2015 10:45 PM	05/28/2015 1:25 AM	50 Hours, 40 Minutes	CenterPoint Energy	TRE	Fort Bend County, & Harris County, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	61000
2015	5	05/26/2015 5:30 AM	05/27/2015 7:00 PM	37 Hours, 30 Minutes	Entergy Services, Inc.	SERC	Texas, Louisiana, Arkansas, Mississippi	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	78515
2015	6	06/01/2015 7:19 PM	06/02/2015 8:36 AM	13 Hours, 17 Minutes	Pacific Gas & Electric Co	WECC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	5	484
2015	6	06/02/2015 6:58 PM	06/02/2015 7:24 PM	0 Hours, 26 Minutes	Pacific Gas & Electric Co	WECC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	5	727

Table B.2 Major Disturbances and Unusual Occurrences, 2015

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2015	6	06/03/2015 3:00 PM	06/05/2015 5:00 PM	50 Hours, 0 Minutes	ERCOT	TRE	Texas	Public appeal to reduce the use of electricity - System Operations	Unknown	Unknown
2015	6	06/07/2015 1:52 PM	06/07/2015 2:13 PM	0 Hours, 21 Minutes	Tennessee Valley Authority	SERC	Tennessee	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident - System Operations	Unknown	Unknown
2015	6	06/07/2015 1:54 PM	06/07/2015 2:13 PM	0 Hours, 19 Minutes	Memphis Light Gas and Water Division	SERC	Shelby County, Tennessee	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident and System-wide voltage reductions of 3 percent or more - System Operations	926	Unknown
2015	6	06/08/2015 12:00 AM		. Hours, . Minutes	California Department of Water Resources	WECC	Merced County, California	Fuel supply emergencies that could impact electric power system adequacy or reliability - System Operations	176	Unknown
2015	6	06/23/2015 5:06 PM	06/26/2015 4:00 PM	70 Hours, 54 Minutes	Delmarva Power & Light Company	RFC	New Castle County, Delaware	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	65000
2015	6	06/23/2015 5:30 PM	06/23/2015 7:00 PM	1 Hours, 30 Minutes	Exelon Corporation / PECO	RFC	Delaware County, PA; Chester County, PA	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	200000
2015	6	06/23/2015 6:00 PM	06/30/2015 6:00 PM	168 Hours, 0 Minutes	Atlantic City Electric Co	RFC	Gloucester County, Burlington County, Atlantic County, Cape May County, New Jersey	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	263000
2015	6	06/23/2015 6:18 PM	06/23/2015 8:30 PM	2 Hours, 12 Minutes	PJM Interconnection	RFC	New Jersey	Load shedding of 100 Megawatts or more implemented under emergency operational policy and Loss of electric service to more than 50,000 customers for 1 hour or more - System Operations	198	156338
2015	6	06/23/2015 6:26 PM		. Hours, . Minutes	Public Service Electric & Gas	NPCC	New Jersey	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	90	73000
2015	6	06/23/2015 6:30 PM	06/24/2015 5:00 AM	10 Hours, 30 Minutes	ISO New England	NPCC	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	62442
2015	6	06/26/2015 2:00 AM		. Hours, . Minutes	Kansas City Power & Light Co	SPP	Kansas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	110000
2015	6	06/27/2015 5:00 PM	06/30/2015 5:18 PM	72 Hours, 18 Minutes	Detroit Edison Co	RFC	Wayne County, Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	68000
2015	6	06/29/2015 7:21 PM	06/29/2015 7:42 PM	0 Hours, 21 Minutes	Peak Reliability	WECC	Washington	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - Severe Weather	0	0
2015	6	06/30/2015 10:50 AM	07/01/2015 9:00 PM	34 Hours, 10 Minutes	Pacific Gas & Electric Co	WECC	California	Public appeal to reduce the use of electricity - Severe Weather	Unknown	Unknown
2015	6	06/30/2015 2:00 PM	06/30/2015 9:00 PM	7 Hours, 0 Minutes	California ISO	WECC	California	Public appeal to reduce the use of electricity - Severe Weather	Unknown	Unknown
2015	7	07/03/2015 5:17 PM	07/03/2015 11:30 PM	6 Hours, 13 Minutes	ERCOT	TRE	Texas	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident - System Operations	350	30000
2015	7	07/13/2015 2:14 PM	07/16/2015 6:00 AM	63 Hours, 46 Minutes	Duke Energy Ohio Inc	RFC	Ohio, Kentucky	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	480	68339
2015	7	07/13/2015 7:40 PM	07/15/2015 12:15 PM	40 Hours, 35 Minutes	American Electric Power - (RFC Reliability Region)	RFC	Virginia	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	52739
2015	7	07/14/2015 3:29 PM	07/15/2015 11:55 AM	20 Hours, 26 Minutes	Entergy Services, Inc.	SPP	Arkansas	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident - Severe Weather	Unknown	Unknown
2015	7	07/14/2015 8:00 PM	07/15/2015 9:23 AM	13 Hours, 23 Minutes	Southern Company	SERC	Alabama	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	366	111644
2015	7	07/15/2015 2:00 AM	07/15/2015 2:55 AM	0 Hours, 55 Minutes	California Department of Water Resources	WECC	California	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident - System Operations	360	0
2015	7	07/16/2015 4:45 PM	07/16/2015 5:48 PM	1 Hours, 3 Minutes	American Electric Power - (SPP Reliability Region)	SPP	Texas	Load shedding of 100 Megawatts or more implemented under emergency operational policy - System Operations	117	17311
2015	7	07/18/2015 2:00 AM	07/19/2015 7:00 AM	29 Hours, 0 Minutes	Northern States Power Co	MRO	Hennepin and Ramsey County, Minnesota	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	250	250000
2015	7	07/18/2015 6:26 PM	07/18/2015 9:03 PM	2 Hours, 37 Minutes	Pacific Gas & Electric Co	WECC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	30	70
2015	7	07/18/2015 7:59 PM	07/18/2015 10:45 PM	2 Hours, 46 Minutes	Pacific Gas & Electric Co	WECC	California	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	160	78164
2015	7	07/21/2015 12:47 PM	07/21/2015 1:12 PM	0 Hours, 25 Minutes	Peak Reliability	WECC	Washington	Load shedding of 100 Megawatts or more implemented under emergency operational policy - System Operations	200	Unknown
2015	7	07/27/2015 3:52 AM	07/27/2015 4:36 AM	0 Hours, 44 Minutes	Pacific Gas & Electric Co	WECC	California	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	Unknown	484
2015	7	07/28/2015 12:05 PM	07/28/2015 12:26 PM	0 Hours, 21 Minutes	Puerto Rico Electric Power Authority	N/A	Puerto Rico	System-wide voltage reductions of 3 percent or more - System Operations	150	Unknown

Table B.2 Major Disturbances and Unusual Occurrences, 2015

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2015	7	07/29/2015 4:45 PM	07/29/2015 9:00 PM	4 Hours, 15 Minutes	Long Island Power Authority	NPCC	New York	Fuel supply emergencies that could impact electric power system adequacy or reliability - System Operations	500	0
2015	7	07/30/2015 9:50 AM	07/30/2015 7:00 PM	9 Hours, 10 Minutes	ERCOT	TRE	Texas	Public appeal to reduce the use of electricity - System Operations	Unknown	Unknown
2015	7	07/31/2015 10:55 AM		. Hours, . Minutes	Peak Reliability	WECC	Washington	Electrical system Separation (Islanding) where part or parts of a power grid remain(s) operational - System Operations	9	0
2015	8	08/02/2015 5:45 PM	08/04/2015 3:00 AM	33 Hours, 15 Minutes	Consumers Energy Co	RFC	Emmet County, Grand Traverse County, Leelanau County, Kalkaska County, Benzie County, Manistee County, Wexford County, Missaukee County, Mecosta County, Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	162000
2015	8	08/03/2015 12:30 AM	08/03/2015 2:00 AM	1 Hours, 30 Minutes	Exelon Corporation / ComEd	RFC	Illinois	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	115000
2015	8	08/03/2015 1:00 AM	08/05/2015 12:00 AM	47 Hours, 0 Minutes	Detroit Edison Co	RFC	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	72520
2015	8	08/04/2015 7:17 AM	08/05/2015 12:52 PM	29 Hours, 35 Minutes	ISO New England	NPCC	Massachusetts and Rhode Island	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	132000
2015	8	08/11/2015 7:30 PM	08/13/2015 4:05 AM	32 Hours, 35 Minutes	CenterPoint Energy	TRE	Houston, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	100000
2015	8	08/13/2015 3:15 PM	08/13/2015 7:00 PM	3 Hours, 45 Minutes	ERCOT	TRE	Williamson County, Texas	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system - Other	Unknown	Unknown
2015	8	08/27/2015 9:51 PM	08/28/2015 6:00 PM	20 Hours, 9 Minutes	Puerto Rico Electric Power Authority	WECC	Puerto Rico	Loss of electric service to more than 50,000 customers for 1 hour or more - System Operations	360	Unknown
2015	8	08/29/2015 10:00 AM		. Hours, . Minutes	Peak Reliability	WECC	Washington	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	500000
2015	8	08/29/2015 11:00 AM	09/04/2015 3:00 PM	148 Hours, 0 Minutes	Puget Sound Energy	WECC	King County, Skagit County, Whatcom County, Kitsap County, Pierce County, Thurston County, Island County, Washington	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	250	250000
2015	8	08/29/2015 1:00 PM	08/31/2015 7:00 AM	42 Hours, 0 Minutes	Seattle City Light	WECC	King County, Washington	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	1200	64000
2015	9	09/03/2015 2:33 AM	09/03/2015 6:25 AM	3 Hours, 52 Minutes	Lansing Board of Water & Light	RFC	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	50114
2015	9	09/20/2015 1:12 PM	09/20/2015 1:44 PM	0 Hours, 32 Minutes	California ISO	WECC	California	Load shedding of 100 Megawatts or more implemented under emergency operational policy - System Operations	150	Unknown
2015	10	10/13/2015 10:25 AM	10/13/2015 6:00 PM	7 Hours, 35 Minutes	ERCOT	TRE	Texas	Public appeal to reduce the use of electricity - Other	Unknown	Unknown
2015	10	10/13/2015 4:32 PM	10/13/2015 8:39 PM	4 Hours, 7 Minutes	California ISO	WECC	California	Public appeal to reduce the use of electricity - Other	41788	Unknown
2015	10	10/18/2015 7:00 AM	10/18/2015 11:29 PM	16 Hours, 29 Minutes	Pacific Gas & Electric Co	WECC	Central Coast area, California	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	88	55677
2015	10	10/23/2015 9:42 AM	10/23/2015 1:26 PM	3 Hours, 44 Minutes	Puerto Rico Electric Power Authority	N/A	Puerto Rico	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational / Load shedding of 100 Megawatts or more implemented under emergency operational policy / System-wide voltage reductions of 3 percent or more / Loss of electric service to more than 50,000 customers for 1 hour or more - System Operations	500	300000
2015	10	10/31/2015 12:45 AM	11/01/2015 4:05 PM	39 Hours, 20 Minutes	CenterPoint Energy	TRE	Harris County, Texas	Loss of electric service to more than 50,000 customers for 1 hour or more - Severe Weather	Unknown	130252

Note: Customers affected are estimates and are preliminary. Source: Form OE-417, 'Electric Emergency Incident and Disturbance Report.'

Appendix C

Technical notes

This appendix describes how the U. S. Energy Information Administration (EIA) collects, estimates, and reports electric power data in the EPM.

Data quality

The EPM is prepared by the Office of Electricity, Renewables & Uranium Statistics (ERUS), Energy Information Administration (EIA), U. S. Department of Energy. Quality statistics begin with the collection of the correct data. To assure this, ERUS performs routine reviews of the data collected and the forms on which it is collected. Additionally, to assure that the data are collected from the correct parties, ERUS routinely reviews the frames for each data collection.

Automatic, computerized verification of keyed input, review by subject matter specialists, and follow-up with nonrespondents assure quality statistics. To ensure the quality standards established by the EIA, formulas that use the past history of data values in the database have been designed and implemented to check data input for errors automatically. Data values that fall outside the ranges prescribed in the formulas are verified by telephoning respondents to resolve any discrepancies. All survey nonrespondents are identified and contacted.

Reliability of data

There are two types of errors possible in an estimate based on a sample survey: sampling and non-sampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Non-sampling errors can be attributed to many sources in the collection and processing of data. The accuracy of survey results is determined by the joint effects of sampling and non-sampling errors. Monthly sample survey data have both sampling and non-sampling error. Annual survey data are collected by a census and are not subject to sampling error.

Non-sampling errors can be attributed to many sources: (1) inability to obtain complete information about all cases in the sample (i.e., nonresponse); (2) response errors; (3) definitional difficulties; (4) differences in the interpretation of questions; (5) mistakes in recording or coding the data obtained; and (6) other errors of collection, response, coverage, and estimation for missing data. Note that for the cutoff sampling and model-based regression (ratio) estimation that we use, data 'missing' due to nonresponse, and data 'missing' due to being out-of-sample are treated in the same manner. Therefore missing data may be considered to result in sampling error, and variance estimates reflect all 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, in an effort to minimize their influence. See the Data Processing and Data System Editing section for each EIA form for an in-depth discussion of how the sampling and non-sampling errors are handled in each case.

Relative Standard Error: The relative standard error (RSE) statistic, usually given as a percentage, 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 the 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 or mean. Note that reported RSEs are always estimates themselves, and are usually, as here, reported as percentages. As an example, suppose that a net generation from coal value is estimated to be 1,507 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 may represent 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. Experiments were done to see if nonresponse should be treated differently, but it was decided to treat those cases the same as out-of-sample cases.

Relative Standard Error With Respect to a Superpopulation: The RSESP statistic is similar to the RSE (described above). Like the RSE, it is a statistic designed to estimate the variability of data and is usually given as a percentage. However, where the RSE is only designed to estimate the magnitude of sampling error, the RSESP more fully reflects the impact of variability from sampling and non-sampling errors. This is a more complete measure than RSE in that it can measure statistical variability in a complete census in addition to a sample^{21,24}. In addition to being a measure of data variability, the RSESP can also be useful in comparing different models that are applied to the same set of data²². This capability is used to test different regression models for imputation and prediction. This testing may include considerations such as comparing different regressors, the comparative reliability of different monthly samples, or the use of different geographical strata or groupings for a given model. For testing purposes, ERUS typically uses recent historical data that have been finalized. Typically, time-series graphics showing two or more models or samples are generated showing the RSESP values over time. In selecting models, consideration is given to total survey error as well as any apparent differences in robustness.

Imputation: For monthly data, if the reported values appeared to be in error and the data issue could not be resolved with the respondent, or if the facility was a nonrespondent, a regression methodology is used to impute for the facility. The same procedure is used to estimate ("predict") data for facilities not in the monthly sample. The regression methodology relies on other data to make estimates for erroneous or missing responses.

Estimation for missing monthly data is accomplished by relating the observed data each month to one or more other data elements (regressors) for which we generally have an annual census. Each year, when new annual regressor data are available, recent monthly relationships are updated, causing slight revisions to estimated monthly results. These revisions are made as soon as the annual data are released.

The basic technique employed is described in the paper "Model-Based Sampling and Inference¹⁶," on the EIA website. Additional references can be found on the InterStat website (<http://interstat.statjournals.net/>). The basis for the current methodology involves a 'borrowing of strength' technique for small domains.

Data revision procedure

ERUS has adopted the following policy with respect to the revision and correction of recurrent data in energy publications:

- Annual survey data are disseminated either as preliminary or final when first appearing in a data product. Data initially released as preliminary will be so noted in the data product. These data are typically released as final by the next dissemination of the same product; however, if final data are available at an earlier interval they may be released in another product.
- All monthly survey data are first disseminated as preliminary. These data are revised after the prior year's data are finalized and are disseminated as revised preliminary. No revisions are made to the published data before this or subsequent to these data being finalized unless significant errors are discovered.
- After data are disseminated as final, further revisions will be considered if they 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.
- The magnitudes of changes due to revisions experienced in the past will be included periodically in the data products, so that the reader can assess the accuracy of the data.

Data sources for Electric Power Monthly

Data published in the EPM are compiled from the following sources:

- Form EIA-923, "Power Plant Operations Report,"
- Form EIA 826, "Monthly Electric Utility Sales and Revenues with State Distributions Report,"
- Form EIA 860, "Annual Electric Generator Report,"
- Form EIA-860M, "Monthly Update to the Annual Electric Generator Report," and

- Form EIA 861, “Annual Electric Power Industry Report.”

For access to these forms and their instructions, please see:

<http://www.eia.gov/cneaf/electricity/page/forms.html>.

In addition to the above-named forms, the historical data published in the EPM for periods prior to 2008 are compiled from the following sources:

- FERC Form 423, “Monthly Report of 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-860A, “Annual Electric Generator Report–Utility,”
- Form EIA-860B, “Annual Electric Generator Report–Nonutility,”
- Form EIA-900, “Monthly Nonutility Power Report,”
- Form EIA-906, “Power Plant Report,” and
- Form EIA-920, “Combined Heat and Power Plant Report.”

See Appendix A of the historical Electric Power Annual reports to find descriptions of forms that are no longer in use. The publications can be found from the top of the current EPA under previous issues: <http://www.eia.gov/electricity/annual>.

Rounding rules for data: To round a number to n digits (decimal places), add one unit to the n th digit if the $(n+1)$ digit is 5 or larger and keep the n th digit unchanged if the $(n+1)$ digit is less than 5. The symbol for a number rounded to zero is (*).

Percent difference: The following formula is used to calculate percent differences:

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

where $x(t_1)$ and $x(t_2)$ denote the quantity at year t_1 and subsequent year t_2 .

Meanings of symbols appearing in tables: The following symbols have the meaning described below:

P Indicates a preliminary value.

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).

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 500 of the largest electric utilities (primarily investor owned and publicly owned) as well as a census of energy service providers with sales to ultimate consumers in deregulated States. Form EIA-861, 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.

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 price of electricity to ultimate consumers 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 energy providers to ultimate consumers 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 EPM April 2001, p.1.)

With the October 2004 issue of the 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 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.

Beginning with 2008 data and some annual 2007 data, the Form EIA-923 replaced Forms EIA-906, EIA-920, EIA-423, and FERC 423. In addition, several sections of the discontinued Form EIA-767 have been included in either the Form EIA-860 or Form EIA-923. See the following link for a detailed explanation. <http://www.eia.gov/cneaf/electricity/2008forms/consolidate.html>

The legislative authority to collect these data is defined in the Federal Energy Administration Act of 1974 (Public Law 93-275, Sec. 13(b), 5(a), 5(b), 52).

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 data are used as the frame from which the sample is selected and in some instances also as regressor data. Updates are made to the frame to reflect mergers that affect data processing.

With the revised definitions for the commercial and industrial sectors to include all data previously reported as 'other' data except transportation, and a separate transportation sector, all responses that would formerly have been reported under the "other" sector are now to be reported under one of the sectors that currently exist. This means there is probably a lower correlation, in general, between, say, commercial Form EIA-826 data for 2004 and commercial Form EIA-861 data for 2003 than there was between commercial Form EIA-826 data for 2003 and commercial Form EIA-861 data for 2002 or earlier years, although commercial and industrial definitions have always been somewhat nebulous due to power companies not having complete information on all customers.

Data submitted for January 2004 represent the first time respondents were to provide data specifically for the transportation end-use sector.

During 2003 transportation data were collected annually through Form EIA-861. Beginning in 2004 the transportation data were collected on a monthly basis via Form EIA-826. In order to develop an estimate of the monthly transportation data for 2003, values for both sales of electricity to ultimate customers and revenue from sales of electricity to ultimate customers were estimated using the 2004 monthly profile for the sales and revenues from the data collected via Form EIA-826. All monthly non-transportation data for 2003 (i.e. street lighting, etc.), which were previously reported in the "other" end-use sector on the Form EIA-826 have been prorated into the Commercial and Industrial end-use sectors based on the 2003 Form EIA-861 profile.

A monthly distribution factor was developed for the monthly data collected in 2004 (for the months of January through November). The transportation sales and revenues for December 2004 were assumed to be equivalent to the transportation sales and revenues for November 2004. The monthly distribution factors for January through November were applied to the annual values for transportation sales and revenues collected via Form EIA-861 to develop corresponding 2003 monthly values. The eleven month estimated totals from January through November 2003 were subtracted from the annual values obtained from Form EIA-861 in order to obtain the December 2003 values.

Data from the Form EIA-826 are used to determine estimates by sector at the State, Census division, and national level. State level sales and revenues estimates are first calculated. Then the ratio of revenue divided by sales is calculated to estimate the price of electricity to ultimate consumers at the State level. The estimates are accumulated separately to produce the Census division and U.S. level estimates¹.

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 price of electricity to ultimate consumers 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 price of electricity to ultimate consumers represents the cost per unit of electricity sold and is calculated by dividing electric revenue from ultimate consumers by the corresponding sales of electricity. The average price of electricity to ultimate consumers is calculated for all consumers and for each end-use sector.

The electric revenue used to calculate the average price of electricity to ultimate consumers 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 price of electricity to ultimate consumers 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, 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, "Annual Electric Generator Report," 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 generator level. Certain power plant environmental-related data are collected at the boiler level. These data include environmental equipment design parameters, boiler air emission standards, and boiler emission controls. The Form EIA-860 is made available in January to collect data related to the previous year.

Instrument and design history: The Form EIA-860 was originally implemented in January 1985 to collect data 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 EIA-411. In January 1999, the Form EIA-860 was renamed the Form EIA-860A, "Annual Electric Generator Report – Utility" and was implemented to collect data from electric utilities 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.

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.

The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

Estimation of form eia-860 data: EIA received forms from all 18,151 existing generators in the 2010 Form EIA-860 frame, so no imputation was required.

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
	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-860M

The Form EIA 860M, “Monthly Update to the Annual Electric Generator Report,” is a mandatory monthly survey that collects data on the status of proposed new generators or changes to existing generators for plants that report on Form EIA-860.

The Form EIA-860M has a rolling frame based upon planned changes to capacity as reported on the previous Form EIA-860. Respondents are added to the frame 12 months prior to the expected effective date for all new units or expected retirement date for existing units. For all other types of capacity changes (including retirements, uprates, derates, repowering, or other modifications), respondents are added 1 month prior to the anticipated modification change date. Respondents are removed from the frame at the completion of the changes or if the change date is moved back so that the plant no longer qualifies to be in the frame. Typically, 150 to 200 utilities per month are required to report for 175 to 250 plants (including 250 to 400 generating units) on this form. The unit characteristics of interest are changes to the previously reported planned operating month and year, prime mover type, capacity, and energy sources.

Instrument and design history: The data collected on Form EIA-860M was originally collected via phone calls at the end of each month. During 2005, the Form EIA-860M was introduced as a mandatory form using the Internet Data Collection (IDC) system.

The legislative authority to collect these data is defined in the Federal Energy Administration Act of 1974 (Public Law 93-275, Sec. 13(b), 5(a), 5(b), 52).

Data processing and data system editing: Approximately 150 to 200 utilities are requested to provide data each month on the Form EIA 860M. These data are collected via the IDC system and automatically checked for certain errors. Most of the quality assurance issues are addressed by the respondents as part of the automatic edit check process. In some cases, respondents are subsequently contacted about their explanatory overrides to the edit checks.

Sensitive data: Data collected on the Form EIA-860M are not considered to be sensitive.

Form EIA-861

The Form EIA 861, “Annual Electric Power Industry Report,” is a mandatory census of electric power industry participants in the United States. The survey is used to collect information on power sales and revenue data from approximately 3,300 respondents. About 3,200 are electric utilities and the remainder are nontraditional utilities such as energy service providers or the unregulated subsidiaries of electric utilities and power marketers.

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.

Data processing and data system editing: The Form EIA 861 is made available to the respondents in January of each year to collect data as of the end of the preceding calendar year. The data are edited when entered into the interactive on line system. Internal edit checks are performed to verify that current data total across and between schedules, and are comparable to data reported the previous year. Edit checks are also performed to compare data reported on the Form EIA 861 and similar data reported on the Form EIA 826. Respondents are telephoned to obtain clarification of reported data and to obtain missing data.

Data for the Form EIA 861 are collected at the owner level from all electric utilities including energy service providers in the United States, its territories, and Puerto Rico. Form EIA 861 data in this report are for the United States only.

Average price of electricity to ultimate consumers represents the cost per unit of electricity sold and is calculated by dividing electric revenue from ultimate consumers by the corresponding sales of electricity. The average price of electricity to ultimate consumers is calculated for all consumers and for each end-use sector.

The electric revenue used to calculate the average price of electricity to ultimate consumers 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 State and Federal income taxes and other taxes paid by the utility.

The average price of electricity to ultimate consumers reported in this publication by sector represents 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 to the electric power industry participant for providing electrical service.

Sensitive data: Data collected on the Form EIA-861 are not considered to be sensitive.

Form EIA-923

Form EIA-923, "Power Plant Operations Report," is a monthly collection of data on receipts and cost of fossil fuels, fuel stocks, generation, consumption of fuel for generation, and environmental data (e.g. emission controls and cooling systems). Data are collected from a monthly sample of approximately 1,900 plants, which includes a census of nuclear and pumped-storage hydroelectric plants. In addition approximately 4,050 plants, representing all other generators 1 MW or greater, are collected annually. In addition to electric power generating plants, respondents include fuel storage terminals without

generating capacity that receive shipments of fossil fuels 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. 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 all other plants, consumption is reported at the prime-mover level. For these plants, generation is reported either at the prime-mover level or, for noncombustible sources (e.g. wind, nuclear), at the prime-mover and energy source level. The source and disposition of electricity is reported annually for nonutilities at the plant level as is revenue from sales for resale. Environmental data are collected annually from facilities that have a steam turbine capacity of at least 10 megawatts.

Instrument and design history:

Receipts and cost and quality of fossil fuels

On July 7, 1972, the Federal Power Commission (FPC) issued Order Number 453 enacting the New Code of Federal Regulations, Section 141.61, legally 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. The FERC Form 423 replaced the FPC Form 423 in January 1983. The FERC Form 423 eliminated peaking units, for which data were previously collected on the FPC Form 423. 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. Starting with the January 1993 data, the FERC began to collect the data directly from the respondents.

The Form EIA-423 was originally implemented in January 2002 to collect monthly cost and quality data for fossil fuel receipts from owners or operators of nonutility electricity generating plants. 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 above) 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 non-regulated power producers. Its design closely followed that of the FERC Form 423.

Both the Form EIA-423 and FERC Form 423 were superseded by Schedule 2 of the Form EIA-923 in January of 2008. At the time, the Form EIA-923 maintained the 50-megawatt threshold for these data. In January 2013, the threshold was changed to 200 megawatts for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. The requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts.

Not all data are collected monthly on the Form EIA-923. Beginning with 2008 data, a sample of the respondents report monthly, with the remainder reporting annually. Until January 2013, monthly fuel receipts values for the annual surveys were imputed via regression. Prior to 2008, Schedule 2 annual data were not collected or imputed.

Generation, consumption, and stocks

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 Federal Power Commission (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 entities¹⁴. In 1998, the form 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 data¹⁵. In 2000, the form was modified to include the production of useful thermal output data.

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 combined heat and power plants; all other plants that generate electricity continue 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.

Forms EIA-906 and EIA-920 were superseded by survey Form EIA-923 beginning in January 2008 with the collection of annual 2007 data and monthly 2008 data.

Data processing and data system editing: Respondents are encouraged to enter data directly into a computerized database via the Internet Data Collection (IDC) system. A variety of automated quality control mechanisms are run during this process, such as range checks and comparisons with historical data. These edit checks are performed as the data are provided, and many problems that are encountered are resolved during the reporting process. Those plants that are unable to use the electronic reporting medium provide the data in hard copy, typically via fax. These data are manually entered into the computerized database. The data are subjected to the same edits as those that are electronically submitted.

If the reported data appear to be in error and the data issue cannot be resolved by follow up contact with the respondent, or if a facility is a nonrespondent, a regression methodology is used to impute for the facility. Beginning in January 2013, imputation is not performed for fuel receipts data reported on Schedule 2.

Imputation: For select survey data elements collected monthly, regression prediction, or imputation, is done for 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). Only approximately 0.02 percent of the national total generation for 2010 is imputed, although this will vary by State and energy source.

When gross generation is reported and net generation is not available, net generation is estimated by using a fixed ratio to gross generation by prime-mover type and installed environmental equipment. These ratios are:

Net Generation = (Factor) x Gross Generation
<u>Prime Movers:</u>
Combined Cycle Steam - 0.97
Combined Cycle Single Shaft - 0.97
Combined Cycle Combustion Turbine - 0.97
Compressed Air - 0.97
Fuel Cell - 0.99
Gas Turbine - 0.98
Hydroelectric Turbine - 0.99
Hydroelectric Pumped Storage - 0.99
Internal Combustion Engine - 0.98
Other - 0.97
Photovoltaic - 0.99
Steam Turbine - 0.97
Wind Turbine - 0.99
<u>Environmental Equipment:</u>
Flue Gas Desulfurization - 0.97
Flue Gas Particulate 0.99
All Others - 0.97

For stocks, a linear combination of the prior month's ending stocks value and the current month's consumption and receipts values are 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. These plants include independent power producers, electric utilities, and commercial and industrial combined heat and power producers. All plants with a total fossil-fueled nameplate capacity of 50 megawatts or more (excluding storage terminals, which do not produce electricity) were required to report receipts of fossil fuels. In January 2013, the threshold was changed to 200 megawatts for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. The requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The 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.

For coal, units for receipts are in tons and units for average heat contents (A) are in million Btu per ton. For petroleum, units for receipts are in barrels and units for average heat contents (A) are in million Btu per barrel.

For gas, units for receipts are in thousand cubic feet (Mcf) and units for average heat contents (A) are in million Btu per thousand cubic foot.

Power production, fuel stocks, and fuel consumption data: 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 Federal Power Commission (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 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 the production of useful thermal output data.

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 combined heat and power plants; all other plants that generate electricity continue 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 2004, Form EIA-920 superseded Form EIA-906 for those plants defined as combined heat and power plants; all other plants that generate electricity continue to report on Form EIA-906.

In January 2008, Form EIA-923 superseded both the Forms EIA-906 and EIA-920 for the collection of these data.

Methodology to estimate biogenic and non-biogenic municipal solid waste²: 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 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.

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 Tables 1 and 2, below).³

These values are used to allocate net generation published in the Electric Power Monthly generation 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
Biogenic	57	56	55	55	56	57	55	54	51	50
Non-biogenic	43	44	45	45	44	43	46	46	49	50

Table 2. Tonnage consumption for biogenic and non-biogenic municipal solid waste (percent)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Biogenic	77	77	76	76	75	67	65	65	64	64
Non-biogenic	23	23	24	24	25	34	35	35	36	36

Useful thermal output: With the implementation of the Form EIA-923, “Power Plant Operations Report,” in 2008, combined heat and power (CHP) plants are required to report total fuel consumed and electric power generation. Beginning with the January 2008 data, EIA will estimate the allocation of the total fuel consumed at CHP plants between electric power generation and useful thermal output.

First, an efficiency factor is determined for each plant and prime mover type. Based on data for electric power generation and useful thermal output 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 useful thermal output (UTO), divided by the total input in Btu. Electric power is converted to Btu at 3,412 Btu per kilowatt-hour.

Second, to calculate the amount of fuel for electric power, the gross generation in Btu is multiplied 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.

Conversion of petroleum coke to liquid petroleum: The quantity conversion is 5 barrels (of 42 U.S. gallons each) per short ton (2,000 pounds).

Conversion of propane gas to liquid petroleum: The quantity conversion is 1.53 Mcf (thousand cubic feet) per barrel (or 42 U.S. gallons each).

Conversion of synthesis gas from coal to coal: The quantity conversion is 98 Mcf (thousand cubic feet) per short ton (2,000 pounds).

Conversion of synthesis gas from petroleum coke to petroleum coke: The quantity conversion is 107.42 Mcf (thousand cubic feet) per short ton (2,000 pounds).

Issues within historical data series:

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 due 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. In January 2013, this estimation procedure was dropped.

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 the FERC 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. Furthermore, there may be a notable increase in fuel receipts beginning with January 2008 data.

Starting with the revised data for 2008, tables for total receipts begin to reflect estimation for all plants with capacity over 1 megawatt, to be consistent with other electric power data. Previous receipts data published have been 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 EPM (i.e., 1 megawatt and above), with associated relative standard errors, provides a more complete assessment of the market.

Generation and consumption

Beginning in 2008, a new method of allocating fuel consumption between electric power generation and useful thermal output (UTO) was implemented. This new methodology evenly distributes a combined heat and power (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 decreased while the fuel for UTO is increased 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: Most of the data collected on the Form EIA-923 are not considered business sensitive. However, the cost of fuel delivered to nonutilities, commodity cost of fossil fuels, and reported fuel stocks at the end of the reporting period 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)).

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:

$$CapacityFactor = \left(\frac{\sum_{x,m} Generation_{x,m}}{\sum_{x,m} Capacity_{x,m} * AvailableTime_{x,m}} \right)$$

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.

NERC classification

The Florida Reliability Coordinating Council (FRCC) separated itself from the Southeastern Electric Reliability Council (SERC) in the mid-1990s. In 1998, several utilities realigned from Southwest Power Pool (SPP) to SERC. Name changes altered both the Mid-Continent Area Power Pool (MAPP) to the Midwest Reliability Organization (MRO) and the Western Systems Coordinating Council (WSCC) to the Western Energy 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. Both the States of Alaska and Hawaii are not contiguous with the other continental States and have no electrical interconnections. At the close of calendar year 2005, the following reliability regional councils were dissolved: East Central Area Reliability Coordinating 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 from a delegation of authority from NERC to handle the regional responsibilities of the Electric Reliability Council of Texas (ERCOT). The revised delegation agreements covering all the regions were approved by the Federal Energy Regulatory Commission on March 21, 2008. Reliability Councils that are unchanged include: Florida Reliability Coordinating Council (FRCC), Northeast Power Coordinating Council (NPCC), and the Western Energy Coordinating Council (WECC)

The new NERC Regional Council 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).

Business classification

Nonutility power producers consist of corporations, persons, agencies, authorities, or other legal entities that own or operate facilities for electric generation but are not electric utilities. This includes qualifying cogenerators, small power producer, and independent power producers. Furthermore, 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 manufacturing, agricultural, forestry, transportation, finance, service and administrative industries, based on the Office of Management and Budget's Standard Industrial Classification (SIC) Manual. In 1997, the SIC Manual name was changed to North American Industry Classification System (NAICS). The following is a list of the main classifications and the category of primary business activity within each classification.

Agriculture, Forestry, and Fishing

- 111 Agriculture production-crops
- 112 Agriculture production, livestock and animal specialties
- 113 Forestry
- 114 Fishing, hunting, and trapping
- 115 Agricultural services

Mining

- 211 Oil and gas extraction
- 2121 Coal mining
- 2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

311 Food and kindred products
3122 Tobacco products
314 Textile and mill products
315 Apparel and other finished products made from fabrics and similar materials
316 Leather and leather products
321 Lumber and wood products, except furniture
322 Paper and allied products (other than 322122 or 32213)
322122 Paper mills, except building paper
32213 Paperboard mills
323 Printing and publishing
324 Petroleum refining and related industries (other than 32411)
32411 Petroleum refining
325 Chemicals and allied products (other than 325188, 325211, 32512, or 325311)
32512 Industrial organic chemicals
325188 Industrial Inorganic Chemicals
325211 Plastics materials and resins
325311 Nitrogenous fertilizers
326 Rubber and miscellaneous plastic products
327 Stone, clay, glass, and concrete products (other than 32731)
32731 Cement, hydraulic
331 Primary metal industries (other than 331111 or 331312)
331111 Blast furnaces and steel mills
331312 Primary aluminum
332 Fabricated metal products, except machinery and transportation equipment
333 Industrial and commercial equipment and components except computer equipment
3345 Measuring, analyzing, and controlling instruments, photographic, medical, and optical goods, watches and clocks
335 Electronic and other electrical equipment and components except computer equipment
336 Transportation equipment
337 Furniture and fixtures
339 Miscellaneous manufacturing industries

Transportation and Public Utilities

- 22 Electric, gas, and sanitary services
- 2212 Natural gas transmission
- 2213 Water supply
- 22131 Irrigation systems
- 22132 Sewerage systems
- 481 Transportation by air
- 482 Railroad transportation
- 483 Water transportation
- 484 Motor freight transportation and warehousing
- 485 Local and suburban transit and interurban highway passenger transport
- 486 Pipelines, except natural gas
- 487 Transportation services
- 491 United States Postal Service
- 513 Communications
- 562212 Refuse systems

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

- 512 Motion pictures
- 514 Business services
 - 514199 Miscellaneous services
- 541 Legal services
- 561 Engineering, accounting, research, management, and related services
- 611 Education services
- 622 Health services
- 624 Social services
- 712 Museums, art galleries, and botanical and zoological gardens
- 713 Amusement and recreation services
- 721 Hotels
- 811 Miscellaneous repair services
- 8111 Automotive repair, services, and parking
- 812 Personal services
- 813 Membership organizations
- 814 Private households

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

Monthly generation from small scale PV solar resources is an estimation of the generation produced from PV solar resources and not the results of a data collection effort for generation directly, with the exception of “Third Party Owned” or (TPO) solar installations which has direct data collection. TPO data however is not comprehensive. TPOs do not operate in every state, TPO collected data is not a large portion of the estimated amount, and the data has been collected for limited period of time. The generation estimate is based on data collected for PV solar capacity.

Capacity of PV solar resources is collected directly from respondents. These data are collected on several EIA forms and from several types of respondents. Monthly data for net-metered PV solar capacity is reported on the Form EIA-826. Form EIA-826 is a cutoff sample drawn from the annual survey Form EIA-861 which collects this data from all respondents. Using data from both of these surveys we have a regression model to impute for the non-sampled monthly capacity.

The survey instruments collect solar net metering capacity from reporting utilities by state and customer class. There are four customer classes: residential, commercial, industrial and transportation. However, the estimation process included only the residential, commercial and industrial customers.¹ Data for these customer classes were further classified by U.S. Census Regions, to ensure adequate number of customer observations in for each estimation group.

Estimation Model: The total PV capacity reported by utilities in the annual EIA-861 survey is the single primary input (regressor) to the monthly estimation of PV capacity by state. The model tested for each Census Region was of the form:

$$y_{i_{2015,m}} = \beta_1 x_{i_{2013}} + w_i^{-1/2} e_i, \text{ where}$$

$x_{i_{2013}}$ is the i^{th} utility's 2013 (or the last published year) solar PV capacity

$y_{i_{2015,m}}$ is the i^{th} utility's month m , 2015 (or the current year) reported solar PV capacity

w_i is the weight factor, which is the inverse of $x_{i_{2013}}$

β_1 is effectively the growth rate of reported month m solar PV capacity

e_i is the error term

The model checks for outliers and removes them from the regression equation inputs. The model calculates RSEs by sector, state, census region, and US total. Once we have imputed for all of the

monthly net-metered PV solar capacity we add to total net metered capacity, the PV solar capacity collected on the Form EIA-861 for distributed and dispersed resources that are not net metered.

We use a second model to estimate the generation using this capacity as an input. The original methodology was developed for the “Annual Energy Outlook” based on our “NEMS” modelled projections several years ago. The original method underwent a calibration project designed to develop PV production levels for the NEMS projections consistent with simulations of a National Renewable Energy Laboratory model called PVWatts, which is itself embedded in PC software under the umbrella of the NREL’s System Advisor Model (SAM).

The PVWatts simulations require, panel azimuth orientations and tilts, something that the NEMS projections do not include. Call the combinations of azimuths and tilts “orientations.” The orientation and solar insolation (specific to a location) have a direct effect on the PV production level. The calibration project selected the 100 largest population Metropolitan Statistical Areas (MSAs) and relied on weights derived from orientation data from California Solar Initiative dataset to develop typical outputs for each of the 100 MSAs. It then was expanded from an annual estimate to a monthly estimate. A further description of this model is located here. A listing of the MSAs are included in Appendix 1.

Using Form EIA-861 data for service territories, which lists the counties that each electric distribution company (EDC) provides service, and NREL solar insolation data by county a simple average of insolation values by EDC is calculated.

Using the estimation model, we produce by utility, by state and by sector an estimate of generation. All the utilities’ capacity and generation estimates are summed by state and sector and a KWh/KW rate by state and sector is calculated.

Capacity from the Form EIA-860 that is net metered is subtracted from the total capacity by state and sector as well as the capacity reported on the EIA-826 from TPOs, resulting in a new “net” capacity amount. This capacity amount is multiplied by the KWh/KW rate to produce the non-TPO generation estimate and then it is added to the TPO reported sales to ultimate customers from the EIA-826 to obtain a final estimate for generation and a blended KWh/KW rate is calculated. The estimate for generation is aggregated by US census regions and US totals. The RSEs for capacity are checked for level of error and if they pass, the summary data by state, US census region and US total are reported in the EPM.

Appendix 2 contains a flow diagram of the data inputs, data quality control checks and data analysis required to perform this estimation.

Appendix 1- MSAs

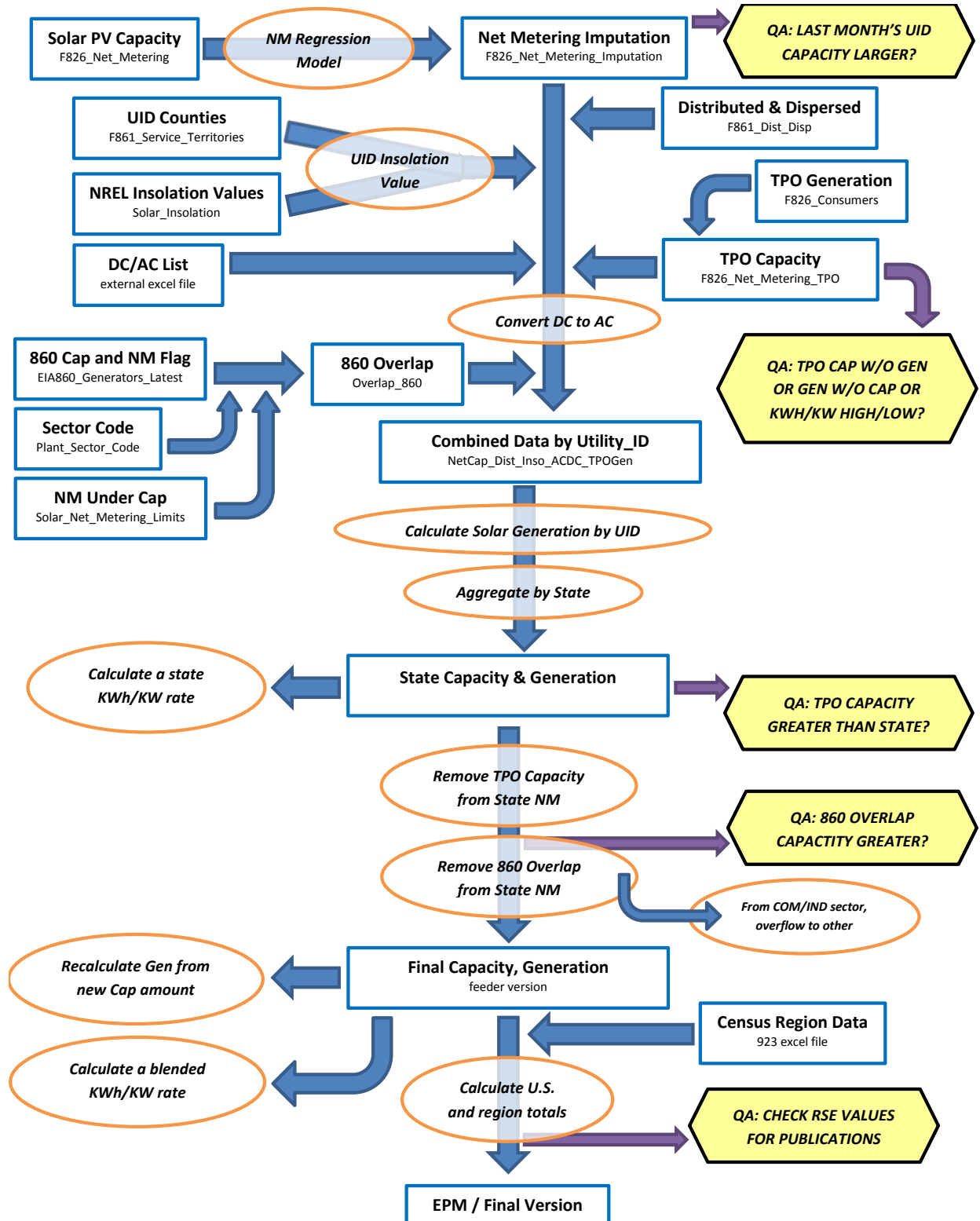
TMY3 (1991-2005) Weather Stations by MSA

Site	Weather Location	MSA
1	USA NY New York Central Park Obs.	New York-Newark-Jersey City, NY-NJ-PA MSA
2	USA CA Los Angeles Intl Airport	Los Angeles-Long Beach-Anaheim, CA MSA
3	USA IL Chicago Midway Airport	Chicago-Naperville-Elgin, IL-IN-WI MSA
4	USA TX Dallas-fort Worth Intl Airport	Dallas-Fort Worth-Arlington, TX MSA
5	USA TX Houston Bush Intercontinental	Houston-The Woodlands-Sugar Land, TX MSA
6	USA PA Philadelphia Int'l Airport	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA
7	USA VA Washington Dc Reagan Airport	Washington-Arlington-Alexandria, DC-VA-MD-WV MSA
8	USA FL Miami Intl Airport	Miami-Fort Lauderdale-West Palm Beach, FL MSA
9	USA GA Atlanta Hartsfield Intl Airport	Atlanta-Sandy Springs-Roswell, GA MSA
10	USA MA Boston Logan Int'l Airport	Boston-Cambridge-Newton, MA-NH MSA
11	USA CA San Francisco Intl Airport	San Francisco-Oakland-Hayward, CA MSA
12	USA AZ Phoenix Sky Harbor Intl Airport	Phoenix-Mesa-Scottsdale, AZ MSA
13	USA CA Riverside Municipal Airport	Riverside-San Bernardino-Ontario, CA MSA
14	USA MI Detroit City Airport	Detroit-Warren-Dearborn, MI MSA
15	USA WA Seattle Seattle-Tacoma Intl Airport	Seattle-Tacoma-Bellevue, WA MSA
16	USA MN Minneapolis-St. Paul Int'l Arp	Minneapolis-St. Paul-Bloomington, MN-WI MSA
17	USA CA San Diego Lindbergh Field	San Diego-Carlsbad, CA MSA
18	USA FL Tampa Int'l Airport	Tampa-St. Petersburg-Clearwater, FL MSA
19	USA MO St Louis Lambert Int'l Airport	St. Louis, MO-IL MSA
20	USA MD Baltimore-Washington Int'l Airport	Baltimore-Columbia-Towson, MD MSA
21	USA CO Denver Centennial [Golden - NREL]	Denver-Aurora-Lakewood, CO MSA
22	USA PA Pittsburgh Allegheny Co Airport	Pittsburgh, PA MSA
23	USA NC Charlotte Douglas Intl Airport	Charlotte-Concord-Gastonia, NC-SC MSA
24	USA OR Portland Hillsboro	Portland-Vancouver-Hillsboro, OR-WA MSA
25	USA TX San Antonio Intl Airport	San Antonio-New Braunfels, TX MSA
26	USA FL Orlando Intl Airport	Orlando-Kissimmee-Sanford, FL MSA
27	USA CA Sacramento Executive Airport	Sacramento-Roseville-Arden-Arcade, CA MSA
28	USA OH Cincinnati Municipal Airport	Cincinnati, OH-KY-IN MSA
29	USA OH Cleveland Hopkins Intl Airport	Cleveland-Elyria, OH MSA
30	USA MO Kansas City Int'l Airport	Kansas City, MO-KS MSA
31	USA NV Las Vegas McCarran Intl Airport	Las Vegas-Henderson-Paradise, NV MSA
32	USA OH Columbus Port Columbus Intl A	Columbus, OH MSA
33	USA IN Indianapolis Intl Airport	Indianapolis-Carmel-Anderson, IN MSA
34	USA CA San Jose Intl Airport	San Jose-Sunnyvale-Santa Clara, CA MSA
35	USA TX Austin Mueller Municipal Airport	Austin-Round Rock, TX MSA
36	USA TN Nashville Int'l Airport	Nashville-Davidson-Murfreesboro-Franklin, TN MSA

37	USA VA Norfolk Int'l Airport	Virginia Beach-Norfolk-Newport News, VA-NC MSA
38	USA RI Providence T F Green State	Providence-Warwick, RI-MA MSA
39	USA WI Milwaukee Mitchell Intl Airport	Milwaukee-Waukesha-West Allis, WI MSA
40	USA FL Jacksonville Craig	Jacksonville, FL MSA
41	USA TN Memphis Int'l Airport	Memphis, TN-MS-AR MSA
42	USA OK Oklahoma City Will Rogers	Oklahoma City, OK MSA
43	USA KY Louisville Bowman Field	Louisville/Jefferson County, KY-IN MSA
44	USA VA Richmond Int'l Airport	Richmond, VA MSA
45	USA LA New Orleans Alvin Callender	New Orleans-Metairie, LA MSA
46	USA CT Hartford Bradley Intl Airport	Hartford-West Hartford-East Hartford, CT MSA
47	USA NC Raleigh Durham Int'l	Raleigh, NC MSA
48	USA UT Salt Lake City Int'l Airport	Salt Lake City, UT MSA
49	USA AL Birmingham Municipal Airport	Birmingham-Hoover, AL MSA
50	USA NY Buffalo Niagara Intl Airport	Buffalo-Cheektowaga-Niagara Falls, NY MSA
51	USA NY Rochester Greater Rochester	Rochester, NY MSA
52	USA MI Grand Rapids Kent County Int'l Airport	Grand Rapids-Wyoming, MI MSA
53	USA AZ Tucson Int'l Airport	Tucson, AZ MSA
54	USA HI Honolulu Intl Airport	Urban Honolulu, HI MSA
55	USA OK Tulsa Int'l Airport	Tulsa, OK MSA
56	USA CA Fresno Yosemite Intl Airport	Fresno, CA MSA
57	USA CT Bridgeport Sikorsky Memorial	Bridgeport-Stamford-Norwalk, CT MSA
58	USA MA Worcester Regional Airport	Worcester, MA-CT MSA
59	USA NM Albuquerque Intl Airport	Albuquerque, NM MSA
60	USA NE Omaha Eppley Airfield	Omaha-Council Bluffs, NE-IA MSA
61	USA NY Albany County Airport	Albany-Schenectady-Troy, NY MSA
62	USA CA Bakersfield Meadows Field	Bakersfield, CA MSA
63	USA CT New Haven Tweed Airport	New Haven-Milford, CT MSA
64	USA TN Knoxville McGhee Tyson Airport	Knoxville, TN MSA
65	USA SC Greenville Downtown Airport	Greenville-Anderson-Mauldin, SC MSA
66	USA CA Oxnard Airport	Oxnard-Thousand Oaks-Ventura, CA MSA
67	USA TX El Paso Int'l Airport	El Paso, TX MSA
68	USA PA Allentown Lehigh Valley Intl	Allentown-Bethlehem-Easton, PA-NJ MSA
69	USA LA Baton Rouge Ryan Airport	Baton Rouge, LA MSA
70	USA TX McCallen Miller Intl Airport	McAllen-Edinburg-Mission, TX MSA
71	USA OH Dayton Int'l Airport	Dayton, OH MSA
72	USA SC Columbia Metro Airport	Columbia, SC MSA
73	USA NC Greensboro Piedmont Triad Int'l Airport	Greensboro-High Point, NC MSA
74	USA FL Sarasota Bradenton	North Port-Sarasota-Bradenton, FL MSA
75	USA AR Little Rock Adams Field	Little Rock-North Little Rock-Conway, AR MSA
76	USA SC Charleston Intl Airport	Charleston-North Charleston, SC MSA
77	USA OH Akron Akron-canton Reg. Airport	Akron, OH MSA
78	USA CA Stockton Metropolitan Airport	Stockton-Lodi, CA MSA

79	USA CO Colorado Springs Muni Airport	Colorado Springs, CO MSA
80	USA NY Syracuse Hancock Int'l Airport	Syracuse, NY MSA
81	USA FL Fort Myers Page Field	Cape Coral-Fort Myers, FL MSA
82	USA NC Winston-Salem Reynolds Airport	Winston-Salem, NC MSA
83	USA ID Boise Air Terminal	Boise City, ID MSA
84	USA KS Wichita Mid-continent Airport	Wichita, KS MSA
85	USA WI Madison Dane Co Regional Airport	Madison, WI MSA
86	USA MA Worcester Regional Airport	Springfield, MA MSA
87	USA FL Lakeland Linder Regional Airport	Lakeland-Winter Haven, FL MSA
88	USA UT Ogden Hinkley Airport	Ogden-Clearfield, UT MSA
89	USA OH Toledo Express Airport	Toledo, OH MSA
90	USA FL Daytona Beach Intl Airport	Deltona-Daytona Beach-Ormond Beach, FL MSA
91	USA IA Des Moines Intl Airport	Des Moines-West Des Moines, IA MSA
92	USA GA Augusta Bush Field	Augusta-Richmond County, GA-SC MSA
93	USA MS Jackson Int'l Airport	Jackson, MS MSA
94	USA UT Provo Muni	Provo-Orem, UT MSA
95	USA PA Wilkes-Barre Scranton Intl Airport	Scranton-Wilkes-Barre-Hazleton, PA MSA
96	USA PA Harrisburg Capital City Airport	Harrisburg-Carlisle, PA MSA
97	USA OH Youngstown Regional Airport	Youngstown-Warren-Boardman, OH-PA MSA
98	USA FL Melbourne Regional Airport	Palm Bay-Melbourne-Titusville, FL MSA
99	USA TN Chattanooga Lovell Field Airport	Chattanooga, TN-GA MSA
100	USA WA Spokane Int'l Airport	Spokane-Spokane Valley, WA MSA

Appendix 2 – Flow diagram of data sources and analysis



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 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. Published at <http://www.usu.edu/recycle/faq.htm>. Accessed December 2006.

³ 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.

Table C.1 Average Heat Content of Fossil-Fuel Receipts, October 2016

Census Division and State	Coal (Million Btu per Ton)	Petroleum Liquids (Million Btu per Barrel)	Petroleum Coke (Million Btu per Ton)	Natural Gas (Million Btu per Thousand Cubic Feet)
New England	23.56	6.29	--	1.03
Connecticut	--	5.67	--	1.03
Maine	24.86	6.23	--	1.01
Massachusetts	21.36	6.30	--	1.03
New Hampshire	25.97	5.70	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	25.02	6.13	--	1.03
New Jersey	26.72	5.66	--	1.04
New York	25.77	6.26	--	1.03
Pennsylvania	24.92	5.79	--	1.04
East North Central	20.17	5.77	27.32	1.04
Illinois	17.67	5.78	--	1.02
Indiana	22.70	5.75	--	1.06
Michigan	18.81	5.81	26.80	1.03
Ohio	24.42	5.77	27.53	1.07
Wisconsin	17.84	--	26.68	1.03
West North Central	16.69	5.77	--	1.05
Iowa	17.51	5.74	--	1.05
Kansas	17.25	--	--	1.04
Minnesota	17.42	5.82	--	1.05
Missouri	17.50	5.77	--	1.03
Nebraska	16.92	5.75	--	1.07
North Dakota	13.20	5.75	--	1.00
South Dakota	16.46	--	--	1.06
South Atlantic	23.68	5.83	27.77	1.03
Delaware	--	5.67	--	1.04
District of Columbia	--	--	--	--
Florida	23.39	5.67	28.02	1.02
Georgia	20.46	6.08	26.43	1.03
Maryland	25.37	5.81	--	1.04
North Carolina	24.74	5.79	--	1.04
South Carolina	25.27	5.80	--	1.03
Virginia	25.14	5.89	--	1.05
West Virginia	24.70	5.78	--	1.07
East South Central	20.64	5.79	28.30	1.03
Alabama	19.23	5.65	--	1.03
Kentucky	21.52	5.83	28.30	1.03
Mississippi	16.29	5.83	--	1.03
Tennessee	21.49	5.76	--	1.01
West South Central	15.99	5.80	28.22	1.03
Arkansas	17.52	5.90	--	1.03
Louisiana	16.03	5.90	28.22	1.04
Oklahoma	17.28	5.77	--	1.05
Texas	15.55	5.81	--	1.03
Mountain	18.72	5.73	--	1.04
Arizona	19.20	5.71	--	1.03
Colorado	18.61	5.67	--	1.10
Idaho	--	--	--	1.02
Montana	16.91	--	--	--
Nevada	21.38	5.77	--	1.04
New Mexico	18.73	5.66	--	1.04
Utah	21.30	5.80	--	1.04
Wyoming	17.47	5.88	--	1.00
Pacific Contiguous	17.79	6.00	--	1.04
California	23.00	--	--	1.03
Oregon	17.26	--	--	1.04
Washington	16.99	6.00	--	1.09
Pacific Noncontiguous	18.40	6.11	--	1.01
Alaska	14.00	5.90	--	1.01
Hawaii	19.49	6.11	--	--
U.S. Total	19.16	6.03	27.93	1.03

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

'Petroleum Liquids' include 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.

Notes: See Glossary for definitions. Values are preliminary. Data represents weighted values.

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

Table C.2. Comparison of Preliminary Monthly Data Versus Final Monthly Data at the U.S. Level, 2013 through 2015

Item	Mean Absolute Value of Percent Change Total (All Sectors)		
	2013	2014	2015
Net Generation			
Coal	0.31%	0.25%	0.33%
Petroleum Liquids	4.04%	2.32%	1.00%
Petroleum Coke	0.95%	2.96%	1.60%
Natural Gas	0.98%	0.42%	0.18%
Other Gases	5.81%	4.12%	3.90%
Hydroelectric	0.65%	0.49%	1.08%
Nuclear	0.00%	0.01%	0.01%
Other	0.56%	0.43%	0.80%
Total	0.19%	0.08%	0.23%
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.07%	0.13%	0.24%
Petroleum Liquids	3.49%	2.17%	2.28%
Petroleum Coke	1.03%	3.19%	1.50%
Natural Gas	0.99%	0.48%	0.32%
Fuel Stocks for Electric Power Sector			
Coal	0.25%	0.38%	0.40%
Petroleum Liquids	2.54%	4.25%	2.92%
Petroleum Coke	0.08%	0.61%	0.04%
Retail Sales			
Residential	0.26%	0.30%	0.30%
Commercial	0.22%	0.38%	0.18%
Industrial	3.20%	4.39%	2.92%
Transportation	1.45%	0.44%	0.37%
Total	0.90%	1.10%	0.93%
Revenue			
Residential	0.34%	0.43%	0.15%
Commercial	0.47%	0.47%	0.62%
Industrial	4.28%	5.66%	3.15%
Transportation	3.84%	1.92%	1.09%
Total	0.76%	1.01%	0.83%
Average Retail Price			
Residential	0.12%	0.12%	0.15%
Commercial	0.30%	0.20%	0.44%
Industrial	1.05%	1.20%	0.31%
Transportation	2.49%	2.18%	0.83%
Total	0.17%	0.16%	0.11%
Receipt of Fossil Fuels			
Coal	2.50%	2.20%	1.70%
Petroleum Liquids	0.79%	0.49%	1.86%
Petroleum Coke	2.30%	2.03%	2.47%
Natural Gas	0.47%	0.26%	0.25%
Cost of Fossil Fuels			
Coal	0.18%	0.18%	0.04%
Petroleum Liquids	0.14%	0.04%	0.25%
Petroleum Coke	1.22%	1.03%	1.42%
Natural Gas	0.02%	0.06%	0.14%

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and synthetic coal. Coal stocks exclude waste coal.

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

Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately. Excludes blast furnace gas and other gases.

Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.

Other generation includes geothermal, wood, waste, wind, and solar, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Fuel Stocks are end-of-month values.

See technical notes (<http://www.eia.gov/cneaf/electricity/epm/appenc.pdf>) for additional information on the Commercial, Industrial and Transportation sectors.

Cost of Fossil Fuels represent weighted values.

Notes: Mean absolute value of percent change is the unweighted average of the absolute percent changes.

Sources: U.S. Energy Information Administration, Form EIA-923 'Power Plant Operations Report'; Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report';

Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report'; Form EIA-906, 'Power Plant Report'; Form EIA-920 'Combined Heat and Power Plant Report'; and Federal Energy Regulatory Commission, FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants.'

Table C.3. Comparison of Preliminary Annual Data Versus Final Annual Data at the U.S. Level, 2013 through 2015

Item	2013			2014			2015		
	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change	Preliminary Annual Data	Final Annual Data	Percent Change
Net Generation (Thousand MWh)									
Coal	1,585,998	1,581,115	-0.31%	1,585,697	1,581,710	-0.25%	1,356,057	1,352,398	-0.27%
Petroleum Liquids	13,410	13,820	3.06%	18,708	18,276	-2.31%	17,456	17,372	-0.48%
Petroleum Coke	13,453	13,344	-0.81%	11,781	11,955	1.48%	10,987	10,877	-1.00%
Natural Gas	1,113,665	1,124,836	1.00%	1,121,928	1,126,609	0.42%	1,335,068	1,333,482	-0.12%
Other Gases	12,271	12,853	4.75%	11,578	12,022	3.83%	12,963	13,117	1.18%
Hydroelectric	264,713	263,884	-0.31%	252,540	253,193	0.26%	246,075	243,989	-0.85%
Nuclear	789,017	789,016	0.00%	797,067	797,166	0.01%	797,178	797,178	0.00%
Other	265,683	267,096	0.53%	293,636	292,674	-0.33%	311,597	309,189	-0.77%
Total	4,058,209	4,065,964	0.19%	4,092,935	4,093,606	0.02%	4,087,381	4,077,601	-0.24%
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	860,790	860,729	-0.01%	854,416	853,634	-0.09%	740,855	739,594	-0.17%
Petroleum Liquids (1,000 barrels)	22,751	23,231	2.11%	32,084	31,531	-1.72%	29,545	28,925	-2.10%
Petroleum Coke (1,000 tons)	4,893	4,852	-0.83%	4,325	4,412	2.02%	4,088	4,044	-1.07%
Natural Gas (1,000 Mcf)	8,512,483	8,596,299	0.98%	8,502,964	8,544,387	0.49%	10,048,346	10,016,576	-0.32%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	147,973	147,884	-0.06%	151,362	151,548	0.12%	197,128	195,548	-0.80%
Petroleum Liquids (1,000 barrels)	31,045	31,673	2.03%	32,139	33,505	4.25%	32,223	32,884	2.05%
Petroleum Coke (1,000 tons)	390	390	-0.01%	847	827	-2.29%	1,342	1,340	-0.15%
Retail Sales (Million kWh)									
Residential	1,391,102	1,394,812	0.27%	1,402,911	1,407,208	0.31%	1,399,884	1,404,096	0.30%
Commercial	1,338,464	1,337,079	-0.10%	1,357,505	1,352,158	-0.39%	1,358,419	1,360,752	0.17%
Industrial	954,731	985,352	3.21%	955,488	997,576	4.40%	958,563	986,508	2.92%
Transportation	7,525	7,625	1.32%	7,776	7,758	-0.24%	7,659	7,637	-0.29%
Total	3,691,822	3,724,868	0.90%	3,723,681	3,764,700	1.10%	3,724,525	3,758,992	0.93%
Revenue (Million Dollars)									
Residential	168,547	169,131	0.35%	175,404	176,178	0.44%	177,367	177,624	0.14%
Commercial	137,779	137,188	-0.43%	145,889	145,253	-0.44%	143,893	144,781	0.62%
Industrial	65,111	67,934	4.33%	67,019	70,855	5.72%	66,088	68,166	3.14%
Transportation	775	805	3.84%	798	810	1.51%	779	771	-1.12%
Total	372,213	375,058	0.76%	389,111	393,096	1.02%	388,127	391,342	0.83%
Average Retail Price (Cents/kWh)									
Residential	12.12	12.13	0.08%	12.50	12.52	0.13%	12.67	12.65	-0.16%
Commercial	10.29	10.26	-0.33%	10.75	10.74	-0.04%	10.59	10.64	0.44%
Industrial	6.82	6.89	1.09%	7.01	7.10	1.26%	6.89	6.91	0.22%
Transportation	10.30	10.55	2.49%	10.27	10.45	1.75%	10.17	10.09	-0.83%
Total	10.08	10.07	-0.13%	10.45	10.44	-0.08%	10.42	10.41	-0.10%
Receipt of Fossil Fuels									
Coal (1,000 tons)	803,206	823,222	2.49%	836,196	854,560	2.20%	769,866	782,929	1.70%
Petroleum Liquids (1,000 barrels)	20,348	20,413	0.32%	28,355	28,514	0.56%	24,512	24,320	-0.78%
Petroleum Coke (1,000 tons)	4,555	4,660	2.31%	5,091	5,195	2.03%	4,779	4,897	2.46%
Natural Gas (1,000 Mcf)	8,463,303	8,503,424	0.47%	8,423,883	8,431,423	0.09%	9,843,170	9,842,581	-0.01%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.35	2.34	-0.12%	2.37	2.37	0.02%	2.22	2.22	-0.03%
Petroleum Liquids (1,000 barrels)	20.59	20.56	-0.12%	19.89	19.89	-0.03%	11.48	11.49	0.10%
Petroleum Coke (1,000 tons)	2.16	2.17	0.70%	1.96	1.98	0.97%	1.87	1.84	-1.37%
Natural Gas (1,000 Mcf)	4.33	4.33	0.03%	4.99	4.99	0.01%	3.22	3.23	0.18%

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and synthetic coal. Coal stocks exclude waste coal.

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

Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately. Excludes blast furnace gas and other gases.

Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.

Other generation includes geothermal, wood, waste, wind, and solar, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Fuel Stocks are end-of-year values.

See technical notes (<http://www.eia.gov/cneaf/electricity/epm/appenc.pdf>) for additional information on the Commercial, Industrial and Transportation sectors.

Cost of Fossil Fuels represent weighted values.

Notes: The average revenue per kilowatt-hour is calculated by dividing revenue by sales. Totals may not equal sum of components because of independent rounding.

Percent changes refer to the difference between the preliminary data published in the Electric Power Monthly (EPM) and the final data published in the EPM. Values for 2015 are Final.

Sources: U.S. Energy Information Administration, Form EIA-923 'Power Plant Operations Report'; Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report';

Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report'; Form EIA-906, 'Power Plant Report'; Form EIA-920 'Combined Heat and Power Plant Report';

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

Table C.4. Unit of Measure Equivalents for Electricity

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

Source: U.S. Energy Information Administration

Glossary

Anthracite: The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980's, anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

Ash: Impurities consisting of silica, iron, aluminum, and other noncombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect its burning characteristics. Ash content is measured as a percent by weight of coal on a "received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Ash content: The amount of ash contained in the fuel (except gas) in terms of percent by weight.

Average Price of Electricity to Ultimate Consumers (formerly known as Average Revenue per Kilowatthour): The average revenue per kilowatthour of electricity sold by sector (residential, commercial, industrial, or other) and geographic area (State, Census division, and national), is calculated by dividing the total monthly revenue by the corresponding total monthly sales for each sector and geographic area.

Barrel: A unit of volume equal to 42 U.S. gallons.

Biomass: Organic non-fossil material of biological origin constituting a renewable energy resource.

Bituminous coal: A dense coal, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

British thermal unit: The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Btu: The abbreviation for British thermal unit(s).

Capacity: See Generator Capacity and Generator Name Plate Capacity (Installed).

Census Divisions: Any of nine geographic areas of the United States as defined by the U.S. Department of Commerce, Bureau of the Census. The divisions, each consisting of several States, are defined as follows:

- 1) *New England:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont;
- 2) *Middle Atlantic:* New Jersey, New York, and Pennsylvania;
- 3) *East North Central:* Illinois, Indiana, Michigan, Ohio, and Wisconsin;
- 4) *West North Central:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota;
- 5) *South Atlantic:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia;
- 6) *East South Central:* Alabama, Kentucky, Mississippi, and Tennessee;
- 7) *West South Central:* Arkansas, Louisiana, Oklahoma, and Texas;
- 8) *Mountain:* Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming;
- 9) *Pacific:* Alaska, California, Hawaii, Oregon, and Washington.

Note: Each division is a sub-area within a broader Census Region. In some cases, the Pacific division is subdivided into the Pacific Contiguous area (California, Oregon, and Washington) and the Pacific Noncontiguous area (Alaska and Hawaii).

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Coal synfuel: Coal-based solid fuel that has been processed by a coal synfuel plant; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

Coke (petroleum): A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

Combined cycle: An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbine-generators. The exiting heat from the combustion turbine(s) is routed to a conventional boiler or to a heat recovery steam generator for utilization by a steam turbine in the production of additional electricity.

Combined heat and power (CHP): Includes plants designed to produce both heat and electricity from a single heat source. *Note:* This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.

Consumption (fuel): The use of energy as a source of heat or power or as a raw material input to a manufacturing process.

Cost: The amount paid to acquire resources, such as plant and equipment, fuel, or labor services.

Demand (electric): The rate at which electric energy is delivered to or by a system, part of a system, or piece of equipment, at a given instant or averaged over any designated period of time.

Diesel: A distillate fuel oil that is used in diesel engines such as those used for transportation and for electric power generation.

Distillate fuel oil: *A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.*

1) *No. 1 Distillate:* A light petroleum distillate that can be used as either a diesel fuel (see No. 1 Diesel Fuel) or a fuel oil. See No. 1 Fuel Oil.

- *No. 1 Diesel fuel:* A light distillate fuel oil that has distillation temperatures of 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines, such as those in city buses and similar vehicles. See No. 1 Distillate above.
- *No. 1 Fuel oil:* A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See No. 1 Distillate above.

2) *No. 2 Distillate:* A petroleum distillate that can be used as either a diesel fuel (see No. 2 Diesel Fuel definition below) or a fuel oil. See No. 2 Fuel oil below.

- *No. 2 Diesel fuel:* A fuel that has distillation temperatures of 500 degrees Fahrenheit at the 10-percent recovery point and 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See No. 2 Distillate above.

3) *No. 4 Fuel*: A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.

- *No. 4 Diesel fuel and No. 4 Fuel oil*: See No. 4 Fuel above.

Electric industry restructuring: The process of replacing a monopolistic system of electric utility suppliers with competing sellers, allowing individual ultimate customers to choose their supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of vertically integrated electric utilities.

Electric plant (physical): A facility containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric power sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public-- i. e., North American Industry Classification System 22 plants.

Electric utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. Note: Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundle their generation, transmission, and distribution operations, "electric utility" currently has inconsistent interpretations from State to State.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity generation: The process of producing electric energy or the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatthours (kWh) or megawatthours (MWh).

Electricity generators: The facilities that produce only electricity, commonly expressed in kilowatthours (kWh) or megawatthours (MWh).

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy conservation features: This includes building shell conservation features, HVAC conservation features, lighting conservation features, any conservation features, and other conservation features incorporated by the building. However, this category does not include any demand-side management (DSM) program participation by the building. Any DSM program participation is included in the DSM Programs.

Energy efficiency: Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatthours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

Energy service provider: An energy entity that provides service to an ultimate consumer.

Energy source: Any substance or natural phenomenon that can be consumed or transformed to supply heat or power. Examples include petroleum, coal, natural gas, nuclear, biomass, electricity, wind, sunlight, geothermal, water movement, and hydrogen in fuel cells.

Energy-only service: Sales services for ultimate consumers for which the company provided only the energy consumed, where another entity provides delivery services.

Fossil fuel: An energy source formed in the earth's crust from decayed organic material. The common fossil fuels are petroleum, coal, and natural gas.

Franchised service area: A specified geographical area in which a utility has been granted the exclusive right to serve customers. A franchise allows an entity to use city streets, alleys and other public lands in order to provide, distribute, and sell services to the community.

Fuel: Any material substance that can be consumed to supply heat or power. Included are petroleum, coal, and natural gas (the fossil fuels), and other consumable materials, such as uranium, biomass, and hydrogen.

Gas: A fuel burned under boilers and by internal combustion engines for electric generation. These include natural, manufactured and waste gas.

Gas turbine plant: An electric generating facility in which the prime mover is a gas (combustion) turbine. A gas turbine typically consists of an air compressor and one or more combustion chambers where either liquid or gaseous fuel is burned. The resulting hot gases are passed through the turbine where they expand to drive both an electric generator and the compressor.

Generating unit: Any combination of physically connected generators, reactors, boilers, combustion turbines, or other prime movers operated together to produce electric power.

Generator: A machine that converts mechanical energy into electrical energy.

Generator capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.

Generator nameplate capacity (installed): The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

Geothermal: Pertaining to heat within the Earth.

Geothermal energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust. Water or steam extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

Gross generation: The total amount of electric energy produced by generating units and measured at the generating terminal in kilowatthours (kWh) or megawatthours (MWh).

Heat content: The amount or number of British thermal units (Btu) produced by the combustion of fuel, measured in Btu/unit of measure.

Hydroelectric power: The production of electricity from the kinetic energy of falling water.

Hydroelectric power generation: Electricity generated by an electric power plant whose turbines are driven by falling water. It includes electric utility and industrial generation of hydroelectricity, unless otherwise specified. Generation is reported on a net basis, i.e., on the amount of electric energy generated after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

Hydroelectric pumped storage: Hydroelectricity that is generated during peak loads by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Hydrogen: A colorless, odorless, highly flammable gaseous element. It is the lightest of all gases and the most abundant element in the universe, occurring chiefly in combination with oxygen in water and also in acids, bases, alcohols, petroleum, and other hydrocarbons.

Independent power producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an electric utility.

Industrial sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31-33); agriculture, forestry, and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); natural gas distribution (NAICS code 2212); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Interdepartmental service (electric): Interdepartmental service includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.

Internal combustion plant: A plant in which the prime mover is an internal combustion engine. An internal combustion engine has one or more cylinders in which the process of combustion takes place, converting energy released from the rapid burning of a fuel-air mixture into mechanical energy. Diesel or gas-fired engines are the principal types used in electric plants. The plant is usually operated during periods of high demand for electricity.

Investor-owned utility (IOU): A privately-owned electric utility whose stock is publicly traded. It is rate regulated and authorized to achieve an allowed rate of return.

Jet fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Kerosene: A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Light oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Lignite: The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Manufactured gas: A gas obtained by destructive distillation of coal, or by thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, and carbureted water gas

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One million watthours.

Municipal utility: A nonprofit utility, owned by a local municipality and operated as a department thereof, governed by a city council or an independently elected or appointed board; primarily involved in the distribution and/or sale of electric power to ultimate consumers.

Natural gas: A gaseous mixture of hydrocarbon compounds, the primary one being methane. Note: The Energy Information Administration measures wet natural gas and its two sources of production, associated/dissolved natural gas and nonassociated natural gas, and dry natural gas, which is produced from wet natural gas.

- 1) *Wet natural gas:* A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentane. Typical nonhydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, hydrogen sulfide, nitrogen and trace amounts of helium. Under reservoir conditions, natural gas and its associated liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil and are not distinguishable at the time as separate substances. Note: The Securities and Exchange Commission and the Financial Accounting Standards Board refer to this product as natural gas.
 - Associated-dissolved natural gas: Natural gas that occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved gas).
 - Nonassociated natural gas: Natural gas that is not in contact with significant quantities of crude oil in the reservoir.
- 2) *Dry natural gas:* Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Net generation: The amount of gross generation less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Note: Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross generation.

Net summer capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of May 1 through October 31). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Net winter capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of peak winter demand (period of November 1 through April 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

North American Electric Reliability Council (NERC): A council formed in 1968 by the electric utility industry to promote the reliability and adequacy of bulk power supply in the electric utility systems of North America. The NERC Regions are:

- 1) Texas Regional Entity (TRE),
- 2) Florida Reliability Coordinating Council (FRCC),
- 3) Midwest Reliability Organization (MRO),
- 4) Northeast Power Coordinating Council (NPCC),
- 5) ReliabilityFirst Corporation (RFC),
- 6) Southeastern Electric Reliability Council (SERC),
- 7) Southwest Power Pool (SPP), and the
- 8) Western Energy Coordinating Council (WECC).

North American Industry Classification System (NAICS): A set of codes that describes the possible purposes of a facility.

Nuclear electric power: Electricity generated by an electric power plant whose turbines are driven by steam produced by the heat from the fission of nuclear fuel in a reactor.

Other customers: Includes public street and highway lighting, other sales to public authorities, sales to railroads and railways, sales for irrigation, and interdepartmental sales.

Other generation: Electricity originating from these sources: manufactured, supplemental gaseous fuel, propane, and waste gasses, excluding natural gas; biomass; geothermal; wind; solar thermal; photovoltaic; synthetic fuel; purchased steam; and waste oil energy sources.

Percent change: The relative change in a quantity over a specified time period. It is calculated as follows: the current value has the previous value subtracted from it; this new number is divided by the absolute value of the previous value; then this new number is multiplied by 100.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum coke: See Coke (petroleum).

Photovoltaic energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Plant: A term commonly used either as a synonym for an industrial establishment or a generation facility or to refer to a particular process within an establishment.

Power: The rate at which energy is transferred. Electrical energy is usually measured in watts. Also used for a measurement of capacity.

Power production plant: All the land and land rights, structures and improvements, boiler or reactor vessel equipment, engines and engine-driven generator, turbo generator units, accessory electric equipment, and miscellaneous power plant equipment are grouped together for each individual facility.

Production (electric): Act or process of producing electric energy from other forms of energy; also, the amount of electric energy expressed in watthours (Wh).

Propane: A normally gaseous straight-chain hydrocarbon, (C₃H₈). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D 1835.

Public street and highway lighting service: Includes electricity supplied and services rendered for the purpose of lighting streets, highways, parks and other public places; or for traffic or other signal system service, for municipalities, or other divisions or agencies of State or Federal governments.

Railroad and railway electric service: Electricity supplied to railroads and interurban and street railways, for general railroad use, including the propulsion of cars or locomotives, where such electricity is supplied under separate and distinct rate schedules.

Receipts: Purchases of fuel.

Relative standard error: The standard deviation of a distribution divided by the arithmetic mean, sometimes multiplied by 100. It is used for the purpose of comparing the variabilities of frequency distributions but is sensitive to errors in the means.

Residential: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

Residual fuel oil: A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government

service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

Retail: Sales covering electrical energy supplied for residential, commercial, and industrial end-use purposes. Other small classes, such as agriculture and street lighting, also are included in this category.

Revenues: The total amount of money received by a firm from sales of its products and/or services, gains from the sales or exchange of assets, interest and dividends earned on investments, and other increases in the owner's equity except those arising from capital adjustments.

Sales: The transfer of title to an energy commodity from a seller to a buyer for a price or the quantity transferred during a specified period.

Service classifications (sectors): Consumers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial and other.

Service to public authorities: Public authority service includes electricity supplied and services rendered to municipalities or divisions or agencies of State and Federal governments, under special contracts or agreements or service classifications applicable only to public authorities.

Solar energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity. Electricity produced from solar energy heats a medium that powers an electricity-generating device.

State power authority: A nonprofit utility owned and operated by a state government agency, primarily involved in the generation, marketing, and/or transmission of wholesale electric power.

Steam-electric power plant (conventional): A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Stocks of fuel: A supply of fuel accumulated for future use. This includes coal and fuel oil stocks at the plant site, in coal cars, tanks, or barges at the plant site, or in separate storage sites.

Subbituminous coal: A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Sulfur: A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is

currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

Sulfur content: The amount of sulfur contained in the fuel (except gas) in terms of percent by weight.

Supplemental gaseous fuel supplies: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic fuel: A gaseous, liquid, or solid fuel that does not occur naturally. Synfuels can be made from coal (coal gasification or coal liquefaction), petroleum products, oil shale, tar sands, or plant products. Among the synfuels are various fuel gases, including but not restricted to substitute natural gas, liquid fuels for engines (e.g., gasoline, diesel fuel, and alcohol fuels) and burner fuels (e.g., fuel heating oils).

Terrawatt: One trillion watts.

Terrawatthour: One trillion kilowatthours.

Ton: A unit of weight equal to 2,000 pounds.

Turbine: A machine for generating rotary mechanical power from the energy of a stream of fluid (such as water, steam, or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction, or a mixture of the two.

Ultimate consumer: A consumer that purchases electricity for its own use and not for resale.

Useful thermal output: The thermal energy made available in a combined heat or power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

Waste coal: As a fuel for electric power generation, waste coal includes anthracite refuse or mine waste, waste from anthracite preparation plants, and coal recovered from previously mined sites.

Waste gases: As a fuel for electric power generation, waste gasses are those gasses that are produced from gasses recovered from a solid-waste or wastewater treatment facility, or the gaseous by-products of oil-refining processes.

Waste oil: As a fuel for electric power generation, waste oil includes recycled motor oil, and waste oil from transformers.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A Watt is equal to 1/746 horsepower.

Watt-hour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Wind energy: The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from the hub) that drive generators to produce electricity.

Year-to-date: The cumulative sum of each month's value starting with January and ending with the current month of the data.